

18. Data Distribution

18.1 Data Distribution Process

Data Distribution is a process of retrieving archived data and providing the data to requesters in response to the orders they submit or subscriptions they have entered into the system. The requesters may be classified in either of the following two categories:

- External to the system.
 - For example, scientists at Science Computing Facilities (SCFs) may have standing orders for the data products that are processed using their science software.
- Internal to the system.
 - For example, the Data Processing Subsystem depends on Data Distribution to distribute copies of archived science software and input data in support of data processing.

Data retrieved from the archives can be distributed to requesters using any of the following three general methods:

- Electronic pull.
- Electronic push.
- Hard (physical) media distribution on disks or tape cartridges.

Hard (physical) media distribution is accomplished through the Product Distribution System (PDS), which supports the distribution of data on the following types of media:

- 8mm tape cartridges.
- Digital Linear Tape (DLT).
- Compact disk (CD).
- DVD (formerly “digital video disk” or “digital versatile disk” now referred to as just "DVD").

The method of data distribution is dictated by the nature of the data distribution request. (The requester specifies the distribution method when ordering or subscribing to the data.)

Data Distribution now includes two general types of activities; i.e., Data Distribution (DDIST) operations and Order Manager (OM) operations. The Distributed Active Archive Center (DAAC) Distribution Technicians use the Data Distribution Operator graphical user interface (GUI) within the Data Server Subsystem to perform DDIST operations (i.e., electronic push or pull). They use the OM GUI in the Order Manager Subsystem (OMS) to manage orders.

Subsequent sections related to Data Distribution address the following topics:

- Section 18.2 An overview of the process for processing distribution requests through DDIST and step-by-step procedures for monitoring and controlling distribution requests.
- Section 18.3 An overview of the process for performing storage management server operations and step-by-step procedures for monitoring storage management server operations.
- Section 18.4 An overview of the process and step-by-step procedures for tuning DDIST system parameters related to DDIST operations.
- Section 18.5 An overview of the process and step-by-step procedures for monitoring/controlling Order Manager operations.
- Section 18.6 An overview of the process and step-by-step procedures for troubleshooting DDIST and Order Manager GUI problems.

18.2 Processing Distribution Requests through DDIST

The Distribution Technicians use the Data Distribution Operator GUI and the Storage Management Control GUI to monitor and control the retrieval of data from the archives and distribution to requesters using either of the following methods:

- Electronic pull.
- Electronic push.

The method of data distribution is dictated by the nature of the data distribution request. (The requester specifies the distribution method when ordering or subscribing to the data.)

If the requester specifies distribution in the electronic “pull” mode, data are retrieved from the archive and placed in the “pull area” on the data server staging disk. The requester is notified that the data are available for retrieval from that particular location for a set period of time. The requester initiates a file transfer procedure (ftp “get”) to move the data electronically (over a communications network) to the requester’s own system.

In response to a request for distribution in the electronic “push” mode, data are retrieved from the archive and placed on a data server staging disk. Then the retrieved data on the staging disk are transferred electronically (via ftp “put”) to the requester’s designated storage location (specified in the distribution request) under the control of the data server. The requester is notified when the data push has been completed.

Each procedure outlined has an **Activity Checklist** table that provides an overview of the task to be completed. The outline of the **Activity Checklist** is as follows:

Column one - **Order** shows the order in which tasks could be accomplished.

Column two - **Role** lists the Role/Manager/Operator responsible for performing the task.

Column three - **Task** provides a brief explanation of the task.

Column four - **Section** provides the Procedure (P) section number or Instruction (I) section number where details for performing the task can be found.

Column five - **Complete?** is used as a checklist to keep track of which task steps have been completed.

Table 18.2-1, below, provides an Activity Checklist for monitoring/controlling distribution requests.

Table 18.2-1. Monitoring/Controlling Distribution Requests - Activity Checklist

Order	Role	Task	Section	Complete?
1	Distribution Technician	Log in to System Hosts	(P) 18.2.1	
2	Distribution Technician	Launch the Data Distribution Operator and Storage Management Control GUIs	(P) 18.2.2	
3	Distribution Technician	Monitor/Control Data Distribution Requests	(P) 18.2.3	
4	Distribution Technician	Configure Data Distribution Polling	(P) 18.2.4	
5	Distribution Technician	Filter Data Distribution Requests	(P) 18.2.5	
6	Distribution Technician	Change the Priority of Data Distribution Requests	(P) 18.2.6	
7	Distribution Technician	Suspend/Resume Data Distribution Requests	(P) 18.2.7	
8	Distribution Technician	Cancel Data Distribution Requests	(P) 18.2.8	
9	Distribution Technician	Modify Preambles	(P) 18.2.9	

18.2.1 Log in to System Hosts

Logging in to system hosts is accomplished from a UNIX command line prompt. Table 18.2-2 presents (in a condensed format) the steps required to log in to system hosts. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

1 At the UNIX command line prompt enter:

setenv DISPLAY <client name>:0.0

- Use either the X terminal/workstation IP address or the machine-name for the client name.
- When using secure shell, the DISPLAY variable is set just once, before logging in to remote hosts. If it were to be reset after logging in to a remote host, the security features would be compromised.

2 If logging in to the PDS Server host, in the terminal window (at the command line prompt) start the log-in to the PDS Server by entering:

/tools/bin/ssh -l <PDS user ID> <PDS host name>

- Examples of PDS Server host names include **e0dig06**, **g0dig06**, **l0dig06**, and **n0dig06**.
- The **-l** option used with the ssh command allows logging in to the remote host (or the local host for that matter) with a different user ID (in this case the login ID is changed to a PDS user ID).
- **<PDS user ID>** refers the PDS user ID or PDSIS user ID.
 - The PDS user IDs **pds**, **pds_st**, and **pds_it** are used for PDS operations in the OPS, TS1, and TS2 modes respectively.
 - The PDSIS user IDs **pdsis**, **pdsis_ts1**, and **pdsis_ts2** are used for PDSIS operations in the OPS, TS1, and TS2 modes respectively.

• An alternative method is to enter:

/tools/bin/ssh <PDS user ID>@<PDS host name>

– For example:

/tools/bin/ssh pds@x0dig06

• Depending on the set-up it may or may not be necessary to include the path (i.e., /tools/bin/) with the ssh command. Using ssh alone is often adequate. For example:

ssh -l pds x0dig06

- or -

ssh pds@x0dig06

- If you receive the message, “Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?” enter **yes** (“y” alone will not work).
- If you have previously set up a secure shell passphrase and executed **sshremote**, a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears; continue with Step 3.
- If you have not previously set up a secure shell passphrase, go to Step 4.

3 If logging in to a system host other than the PDS Server host, in the terminal window (at the command line prompt) start the log-in to the appropriate host by entering:

/tools/bin/ssh <host name>

- The **-l** option can be used with the ssh command to allow logging in to the remote host (or the local host for that matter) with a different user ID. For example, to log in to x0acs06 as user cmops enter:

/tools/bin/ssh -l cmops x0acs06

- An alternative method of logging in with a different user ID is to enter:

/tools/bin/ssh <PDS user ID>@<PDS host name>

– For example:

/tools/bin/ssh cmops@x0acs06

- Depending on the set-up it may or may not be necessary to include the path (i.e., /tools/bin/) with the ssh command. Using ssh alone is often adequate. For example:

ssh x0acs06

- or -

ssh -l cmops x0acs06

- or -

ssh cmops@x0acs06

- Examples of Sun internal server host names include **e0acs06**, **g0acs06**, **l0acs06**, and **n0acs06**.
- Examples of Sun external server host names include **e0ins01**, **g0ins01**, **l0ins01**, and **n0ins01**.
- Examples of Access/Process Coordinators (APC) Server host names include **e0acg11**, **g0acg01**, **l0acg02**, and **n0acg01**.
- Examples of FSMS Server host names include **e0drg11**, **g0drg01**, **l0drg01**, and **n0drg01**.
- Examples of Operations Workstation host names include **e0acs03**, **g0acs02**, **l0acs01**, and **n0acs03**.
- Examples of Ingest Server host names include **e0icg11**, **g0icg01**, **l0acg02**, and **n0acg01**.

- If you receive the message, “Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?” enter **yes** (“y” alone will not work).
 - If you have previously set up a secure shell passphrase and executed **sshremote**, a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears; continue with Step 4.
 - If you have not previously set up a secure shell passphrase, go to Step 5.
- 4** If a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears, enter:
<passphrase>
- If a command line prompt is displayed, log-in is complete.
 - If the passphrase is unknown, press **Return/Enter**, which should cause a **<user@remotehost>'s password:** prompt to appear (after the second or third try if not after the first one), then go to Step 5.
 - If the passphrase is entered improperly, a **<user@remotehost>'s password:** prompt should appear (after the second or third try if not after the first one); go to Step 5.
- 5** If a prompt for **<user@remotehost>'s password:** appears, enter:
<password>
- A command line prompt is displayed.
 - Log-in is complete.

Table 18.2-2. Log in to System Hosts - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	setenv DISPLAY <client name>:0.0	enter text, press Enter
2	/tools/bin/ssh -l <pds user id> <pds host name> or /tools/bin/ssh <host name> (as applicable)	enter text, press Enter
3	<passphrase> (if applicable)	enter text, press Enter
4	<password> (if applicable)	enter text, press Enter

18.2.2 Launch the Data Distribution Operator and Storage Management Control GUIs

The **Data Distribution Operator GUI** is intended to run continually to allow the monitoring and management of data distribution requests. The **Storage Management Control GUI** is intended to be run as it is needed; e.g., in support of Storage Management configuration parameter modifications.

The **Data Distribution Operator** and **Storage Management Control** GUIs are invoked from a UNIX command line prompt. Table 18.2-3 presents (in a condensed format) the steps required to launch the **Data Distribution Operator** and **Storage Management Control** GUIs. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Access a terminal window logged in to the Operations Workstation.
 - Examples of Operations Workstation host names include **e0acs03**, **g0acs02**, **l0acs01**, and **n0acs03**.
 - For detailed instructions refer to the **Log in to System Hosts** procedure (Section 18.2.1).

- 2 In the terminal window, at the command line prompt enter:

cd /usr/ecs/<MODE>/CUSTOM/utilities

 - **<MODE>** is current mode of operation.
 - TS1 - Science Software Integration and Test (SSI&T)
 - TS2 - New Version Checkout
 - OPS - Normal Operations
 - “utilities” is the directory containing the **Data Distribution Operator GUI** and **Storage Management Control** GUI start-up scripts (e.g., EcDsDdistGuiStart, EcDsStmgtGuiStart).

- 3 Start the **Data Distribution Operator GUI** by entering:

EcDsDdistGuiStart <MODE>

 - The **Data Distribution Operator GUI** is launched.
 - The **Data Distribution Operator GUI Distrib’n Requests** tab is displayed.

- 4 Start the **Storage Management Control GUI** by entering:

EcDsStmgtGuiStart <MODE>

 - The **Storage Management Control GUI** is launched.
 - The **Storage Management Control GUI Storage Config.** tab is displayed.

Table 18.2-3. Launch the Data Distribution Operator and Storage Management Control GUIs - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	UNIX window (Operations Workstation)	single-click or use procedure in Section 18.2.1
2	cd /usr/ecs/<MODE>/CUSTOM/utilities	enter text, press Enter

Table 18.2-3. Launch the Data Distribution Operator and Storage Management Control GUIs - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
3	EcDsDdistGuiStart <MODE>	enter text, press Enter
4	EcDsStmgtGuiStart <MODE>	enter text, press Enter

18.2.3 Monitor/Control Data Distribution Requests

The Distribution Technician monitors and manages data distribution requests primarily via the **Data Distribution - Track Activity** window of the **Distrib'n Requests** tab on the **Data Distribution Operator GUI**. From the **Data Distribution - Track Activity** window the DAAC Distribution Technician can perform the following functions:

- View data distribution requests.
- Change the priority of a selected distribution request.
- Cancel or suspend a request.
- Resume processing of a suspended request.
- Filter on all or specific requests by...
 - Request ID.
 - Requester.
 - All Requests.
 - Media Type.
 - State (current status).

Table 18.2-4 presents (in a condensed format) the steps required to monitor/control data distribution requests. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Data Distribution Operator GUI** (refer to Section 18.2.2).
 - The **Data Distribution Operator GUI** is displayed.
- 2 Configure Data Distribution polling (refer to Section 18.2.4).
 - DDist Polling Rate is set.
 - Error Retry Rate is set (if applicable).
- 3 Observe the distribution request information displayed on the **Distrib'n Requests** tab of the **Data Distribution Operator GUI**.
 - By default, all current distribution requests are shown in the **Data Distribution Requests** list of the **Data Distribution - Track Activity** window (**Distrib'n Requests** tab).
 - Note that Data Distribution controls much of the data retrieval from the archive (excluding retrieval for Data Pool insert); therefore, there may be a lot of activity on

the **Data Distribution - Track Activity** screen, especially if data processing is operating at or near capacity.

- Consequently, it may be useful to restrict the number of distribution requests displayed by filtering them as described in the next step of this procedure.
 - Horizontal and vertical scroll bars allow viewing data that are not readily visible in the window.
 - **Single-click** on any of the column headers of the **Data Distribution - Track Activity** screen to sort the listed requests in order by the column selected.
 - For example, **single-click** on the **Submission Time** column header to list requests in the order in which the requests were submitted (i.e., oldest first).
 - The **Refresh** button provides a means of updating the data on the screen.
 - An alternative is to execute the following menu path from the pull-down menu:
View → Refresh
 - The **Find** button provides a means of performing a keyword search of the distribution requests.
 - To perform a keyword search, in the text entry box to the right of the **Find** button enter: <text> then **single-click** on the **Find** button. Request(s) that have the search text are highlighted.
 - The **Operator Messages** field at the bottom of the GUI displays messages concerning events occurring in distribution operations.
 - Error messages are described in Table 18.6-3, Data Distribution Operator GUI User Messages and Table 18.6-4, Storage Management User Messages.
 - To select (highlight) all requests being displayed in the **Data Distribution - Track Activity** window execute the following menu path from the pull-down menu:
Selected → Select All
 - To deselect all highlighted requests being displayed in the **Data Distribution - Track Activity** window execute the following menu path from the pull-down menu:
Selected → Deselect All
 - To access more detailed information concerning the status of a distribution request, **single-click** on the distribution request in the **Data Distribution - Track Activity** window then execute the following menu path from the pull-down menu:
View→ Detailed
 - The detailed information is displayed in the **Operator Messages** field at the bottom of the GUI.
- 4 If the list of data distribution requests shown in the **Data Distribution - Track Activity** window needs to be filtered, filter data distribution requests (refer to Section 18.2.5).
- Only requests that meet the specified filter criteria appear in the list in the **Data Distribution - Track Activity** window.

- 5 Observe the distribution request information displayed on the **Distrib'n Requests** tab of the **Data Distribution Operator GUI**.
- 6 If necessary, change the priority of a data distribution request (refer to Section 18.2.6).
 - Priority of the request, as displayed in the **Priority** column of the **Data Distribution Requests** list, changes from its original value to the newly selected priority.
 - A check mark is displayed in the **Mod** column of the **Data Distribution Requests** list to indicate that the request has been changed.
- 7 If necessary, suspend data distribution request(s) (refer to Section 18.2.7).
 - Status of request(s), as displayed in the **State** column of the **Data Distribution Requests** list, change(s) to the appropriate state(s).
 - Check mark(s) is (are) displayed in the **Mod** column of the **Data Distribution Requests** list to indicate that changes have been made to the request(s).
- 8 If necessary, resume processing of suspended request(s) (refer to Section 18.2.7).
 - Status of request(s), as displayed in the **State** column of the **Data Distribution Requests** list, change(s) to the appropriate state(s).
 - Check mark(s) is (are) displayed in the **Mod** column of the **Data Distribution Requests** list to indicate that changes have been made to the request(s).
- 9 If necessary, cancel a data distribution request (refer to Section 18.2.8).
 - Status of the request, as displayed in the **State** column of the **Data Distribution Requests** list, changes from its original value to "Canceled."
 - A check mark is displayed in the **Mod** column of the **Data Distribution Requests** list to indicate that the request has been changed.
- 10 If the system creates an open intervention with respect to a request (e.g., due to the failure of a request), respond to the intervention.
 - For detailed instructions refer to the **View Open Intervention Information on the OM GUI** procedure (Section 18.5.2).
- 11 If it becomes necessary to reprocess or check on a data distribution request that has failed, been cancelled, or been shipped, check/resubmit the request.
 - For detailed instructions refer to the **Monitor/Control Distribution Request Information on the OM GUI** procedure (Section 18.5.3).
- 12 If it is necessary to update the data displayed in the **Data Distribution - Track Activity** window, **single-click** on the **Refresh** button.
 - Current data concerning data distribution requests is displayed in the **Data Distribution - Track Activity** window.

- 13 If it is necessary to access more detailed information concerning the status of a particular distribution request, first **single-click** on (highlight) the distribution request in the **Data Distribution - Track Activity** window.
- 14 To complete accessing more detailed information concerning the status of a particular distribution request execute the following menu path from the pull-down menu:
View→ Detailed
- Information is displayed in the **Operator Messages** field at the bottom of the GUI.
- 15 If there is a data distribution failure, perform the applicable procedure(s) in the **Troubleshooting DDIST and Order Manager GUI Problems** section (Section 18.6).
- 16 Repeat Steps 4 through 15 as necessary to monitor data distribution requests.
- 17 If necessary, exit from the **Data Distribution Operator GUI** by executing the following menu path:
File → Exit
- The **Data Distribution Operator GUI** disappears.

Table 18.2-4. Monitor/Control Data Distribution Requests - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	Launch the Data Distribution Operator GUI (if necessary)	Use procedure in Section 18.2.2
2	Configure Data Distribution polling	Use procedure in Section 18.2.4
3	Observe distribution request information	read text
4	Filter data distribution requests if necessary	Use procedure in Section 18.2.5
5	Observe distribution request information	read text
6	Change the priority of a data distribution request if necessary	Use procedure in Section 18.2.6
7	Suspend data distribution request(s) if necessary	Use procedure in Section 18.2.7
8	Resume processing of suspended request(s) if necessary	Use procedure in Section 18.2.7
9	Cancel a data distribution request if necessary	Use procedure in Section 18.2.8
10	View open intervention information on the OM GUI if necessary	Use procedure in Section 18.5.2

Table 18.2-4. Monitor/Control Data Distribution Requests - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
11	Check/resubmit a completed request if necessary	Use procedure in Section 18.5.3
12	Refresh button (as necessary)	single-click
13	<distribution request> (in the Data Distribution - Track Activity window) (as necessary to access detailed information concerning request status)	single-click
14	View→ Detailed (as necessary to access detailed information concerning request status)	single-click
15	Repeat Steps 4 through 14 as necessary	
16	File → Exit (to exit from the Data Distribution Operator GUI)	single-click

18.2.4 Configure Data Distribution Polling

The procedure to **Configure Data Distribution Polling** is performed as part of the **Monitor/Control Data Distribution Requests** procedure (Section 18.2.3). The **Options** menu on the **Data Distribution Operator GUI** provides the Distribution Technician with a means of switching the Data Distribution database polling function on or off. In addition, there are several parameters that the technician can modify:

- **DDist Polling Rate**
 - How often (in seconds) the system updates the information displayed in the Data Distribution - Track Activity window.
- **Error Retry Rate**
 - Amount of time (in seconds) that the system waits before trying to poll the Data Server after a failed attempt.
- **Select Confirmation Min**
 - Number of records that triggers a confirmation dialogue box for a selected action.
- **Overdue Limit**
 - Time limit (in hours) for declaring requests “overdue.”

Table 18.2-5 presents (in a condensed format) the steps required to configure Data Distribution polling. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

1 Execute the following menu path:

Options → System Settings

- The **Refresh Options** dialogue box is displayed.

- 2 If the DDist Polling state is to be changed (from off to on or vice versa), **single-click** on the **DDist Polling On** button.
 - If the button does not have a check mark in it, clicking on it turns DDist Polling on.
 - If the button already has a check mark in it, clicking on it turns DDist Polling off.
- 3 If the polling rate value is to be changed, in the **DDist Polling Rate** field enter:
<polling rate>
 - The default value for polling rate is 30 seconds.
- 4 If an error retry rate value is to be specified, in the **Error Retry Rate** field enter:
<error retry rate>
 - The value for error retry rate is specified as a number of seconds.
- 5 If it is necessary to specify a number of records that would trigger a confirmation dialogue box if selected, in the **Select Confirmation Min** field enter:
<number of records>
 - When specifying a common action for a multiple requests that have been highlighted (e.g., when “resuming” a large group of suspended requests), a dialogue box is displayed to confirm that the action should be applied to all of the requests in the group.
 - The **Select Confirmation Min** field specifies the minimum number of records for displaying the confirmation dialogue box.
 - The default value is 100. If 100 requests (or more) are selected for a particular action, a dialogue box is displayed to confirm the action. If 99 requests (or fewer) are selected for a particular action, no confirmation dialogue box is displayed.
- 6 If it is necessary to specify a time limit for declaring requests “overdue,” in the **Overdue Limit** field enter:
<hours>
 - Requests that exceed the number of hours specified in the **Overdue Limit** field are marked “Yes” in the **Overdue** column on the **Data Distribution - Track Activity** window.
- 7 When the appropriate data have been entered in the **Refresh Options** dialogue box fields, **single-click** on the appropriate button from the following selections:
 - **Ok** - to apply the selections and dismiss the **Refresh Options** dialogue box.
 - **Cancel** - to dismiss the **Refresh Options** dialogue box without applying the selections.
- 8 Return to the **Monitor/Control Data Distribution Requests** procedure (Section 18.2.3).

Table 18.2-5. Configure Data Distribution Polling - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Options → System Settings	single-click
2	DDist Polling On button (if applicable)	single-click
3	<polling rate> (if applicable)	enter text
4	<error retry rate> (if applicable)	enter text
5	<number of records> (if applicable)	enter text
6	<hours> (if applicable)	enter text
7	Ok button	single-click
8	Return to the procedure to Monitor/Control Data Distribution Requests	Use procedure in Section 18.2.3

18.2.5 Filter Data Distribution Requests

The procedure to **Filter Data Distribution Requests** is performed as part of the **Monitor/Control Data Distribution Requests** procedure (Section 18.2.3). The **Data Distribution Operator GUI** provides the Distribution Technician with a means of filtering data distribution requests.

The distribution requests to be displayed in the **Data Distribution Requests** list (**Data Distribution - Track Activity** window) can be filtered using the **Distribution Filter Requests** dialogue box. The filtering can be done on the basis of the following criteria, either individually or in combination:

- Request ID.
- Requester.
- Media Type.
- State [of the request].

Table 18.2-6 presents (in a condensed format) the steps required to filter data distribution requests. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

1 Execute the following menu path:

View → Filter

- The **Distribution Filter Requests** dialogue box is displayed.
- If data distribution requests are to be filtered on the basis of...
 - **Request ID**, perform Steps 2 and 3.
 - **Requester**, perform Steps 4 and 5.
 - **All Requests**, perform Step 6.
 - **Media Type**, perform Step 7.
 - **State**, perform Step 8.

- 2 If a specific distribution request is desired and the request ID is known, **single-click** on the **Request ID** radio button.
- 3 If a specific distribution request is desired and the request ID is known, in the text box adjacent to the **Request ID** radio button enter:
<request ID>
- 4 If data distribution requests submitted by a particular requester are desired, **single-click** on the **Requester** radio button.
- 5 If data distribution requests submitted by a particular requester are desired, in the text box adjacent to the **Requester** radio button enter:
<requester>
 - In the text box the requester must be identified exactly as known to the Data Server Subsystem.
- 6 If all data distribution requests are to be displayed in the **Data Distribution Requests** list, **single-click** on the **All Requests** radio button.
 - The **All Requests** button is particularly useful for restoring the **Data Distribution Requests** list after reviewing a previously filtered set of requests.
 - Go to Step 9.
- 7 If a list of data distribution requests filtered by media type(s) is needed, in the **Media Type** section of the **Filter Requests** dialogue box **single-click** on the type(s) of media to be displayed in the **Data Distribution - Track Activity** window.
 - Options are: **8 MM, CDROM, DLT, DVD, FtpPull, FtpPush, scp, All, None.**
 - **8 MM** (tape), **CDROM** (Compact Disk – Read-Only Memory), **DLT** (Digital Linear Tape), and **DVD** are handled through PDS not DDIST.
 - **FtpPull, FtpPush** and **scp** (secure copy distribution) are handled through DDIST.
 - One media type or several media types may be selected.
 - If other filters (e.g., requester or state) are to be applied, it is possible to **single-click** on the **Apply** button to implement the media type filter and leave the **Filter Requests** dialogue box open.
- 8 If a list of data distribution requests filtered by state(s) is needed, **single-click** on the applicable button(s) in the **State** section of the **Filter Requests** dialogue box.
 - Options are: **Pending, Active, Staging, Transferring, Cancelled, Suspended, Suspended with Errors, Waiting for Shipment, Shipped, Failed, All, None.**
 - One button or several buttons may be selected.
 - If other filters (e.g., requester or media type) are to be applied, it is possible to **single-click** on the **Apply** button to implement the state filter and leave the **Filter Requests** dialogue box open.

- 9 When all filter criteria have been selected, **single-click** on the appropriate button from the following selections:
- **OK** - to implement the selections and dismiss the **Distribution Filter Requests** dialogue box.
 - The **Data Distribution - Track Activity** window reappears; only requests that meet the specified filter criteria appear in the list.
 - **Apply** - to implement the selections without dismissing the **Distribution Filter Requests** dialogue box.
 - The **Distribution Filter Requests** dialogue box remains open.
 - **Cancel** - to dismiss the **Distribution Filter Requests** dialogue box without implementing the selections.
 - The previously available **Data Distribution Requests** list is shown in the **Data Distribution - Track Activity** window.
- 10 Return to the **Monitor/Control Data Distribution Requests** procedure (Section 18.2.3).

Table 18.2-6. Filter Data Distribution Requests - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	View → Filter	single-click
2	Request ID radio button (if applicable)	single-click
3	< request ID > (in Request ID text box) (if applicable)	enter text
4	Requester radio button (if applicable)	single-click
5	< requester > (in Requester text box) (if applicable)	enter text
6	All Requests radio button (if applicable)	single-click
7	< media types > (in Media Type section) (if applicable)	single-click
8	< state > button(s) (in State section) (if applicable)	single-click
9	OK button	single-click
10	Return to the procedure to Monitor/Control Data Distribution Requests	Use procedure in Section 18.2.3

18.2.6 Change the Priority of Data Distribution Requests

The procedure to **Change the Priority of Data Distribution Requests** is performed as part of the **Monitor/Control Data Distribution Requests** procedure (Section 18.2.3). The **Change Priority** area of the **Data Distribution - Track Activity** window on the **Data Distribution Operator GUI** allows the Distribution Technician to change the priority of data distribution requests.

Table 18.2-7 presents (in a condensed format) the steps required to change the priority of data distribution requests. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If the list of data distribution requests shown in the **Data Distribution - Track Activity** window of the **Data Distribution Operator GUI** needs to be filtered, filter data distribution requests (refer to Section 18.2.5).
 - Only requests that meet the specified filter criteria appear in the list in the **Data Distribution - Track Activity** window.
- 2 In the **Data Distribution Requests** list **single-click** on (highlight) the row corresponding to the distribution request to be assigned a different priority.
 - The selected data distribution request is highlighted.
- 3 **Single-click** and **hold** the **Change Priority** option button to display a menu of priorities, **move** the mouse cursor to the desired selection (highlighting it), then **release** the mouse button.
 - Options are: **Xpress, Vhigh, High, Normal, Low.**
 - Selected code is displayed on the **Change Priority** option button when the mouse button is released.
- 4 To implement the priority change **single-click** on the **Apply** button to the right of the priority option button.
- 5 **Single-click** on the **Refresh** button to update the data displayed on the screen.
 - Priority of the request, as displayed in the **Priority** column of the **Data Distribution Requests** list, changes from its original value to the newly selected priority.
 - A check mark is displayed in the **Mod** column of the **Data Distribution Requests** list to indicate that the request has been changed.
- 6 Repeat the preceding steps as necessary to change the priority of additional data distribution requests.
- 7 Return to the **Monitor/Control Data Distribution Requests** procedure (Section 18.2.3).

Table 18.2-7. Change the Priority of Data Distribution Requests - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Filter data distribution requests (if necessary)	Use procedure in Section 18.2.5
2	<distribution request> (in Data Distribution Requests list)	single-click
3	<priority> (Change Priority option button)	single-click
4	Apply button	single-click
5	Refresh button (if applicable)	single-click
6	Repeat the preceding steps as necessary	
7	Return to the procedure to Monitor/Control Data Distribution Requests	Use procedure in Section 18.2.3

18.2.7 Suspend/Resume Data Distribution Requests

Under certain circumstances it may be advisable to suspend the processing of a data distribution request and resume it at a later time. For example, if there is a very large request that is taking up resources and causing other requests to back up waiting (especially requests from data processing that must be filled to allow processing to proceed), the request should be suspended. Processing of the request might be resumed at a time when the demand on data distribution was relatively light. Another example is that of a request that has been suspended by the system due to a system error. Processing of the request should be resumed after the conditions that caused the error have been corrected.

The procedure to **Suspend/Resume Data Distribution Requests** is performed as part of the **Monitor/Control Data Distribution Requests** procedure (Section 18.2.3). The **Data Distribution Operator GUI** provides the Distribution Technician with a means of suspending or resuming data distribution requests.

Table 18.2-8 presents (in a condensed format) the steps required to suspend/resume data distribution requests. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1** If the list of data distribution requests shown in the **Data Distribution - Track Activity** window of the **Data Distribution Operator GUI** needs to be filtered, filter data distribution requests (refer to Section 18.2.5).
 - Only requests that meet the specified filter criteria appear in the list in the **Data Distribution - Track Activity** window.

- If data distribution request are to be...
 - **Suspended**, perform Steps 2 through 6.
 - **Resumed**, perform Steps 7 through 11.
- 2 If all new requests displayed in the **Data Distribution Requests** list are to be suspended, click on the **Suspend New Requests** button.
 - The data distribution requests are suspended.
 - Go to Step 6.
 - 3 If a single request displayed in the **Data Distribution Requests** list is to be suspended, in the **Data Distribution Requests** list **single-click** on (highlight) the row corresponding to the request.
 - The selected data distribution request is highlighted.
 - 4 If a single request displayed in the **Data Distribution Requests** list is to be suspended, **single-click** on the **Suspend** button.
 - The selected data distribution request is suspended.
 - 5 **Single-click** on the **Refresh** button to update the data displayed on the screen.
 - Status of request(s), as displayed in the **State** column of the **Data Distribution Requests** list, change(s) from original value to “Suspended.”
 - Check mark(s) is (are) displayed in the **Mod** column of the **Data Distribution Requests** list to indicate that changes have been made to the request(s).
 - 6 If there are no suspended requests to be resumed at this time, return to the **Monitor/Control Data Distribution Requests** procedure (Section 18.2.3).
 - 7 If processing of all new requests displayed in the **Data Distribution Requests** list is to be resumed, **single-click** on the **Resume New Requests** button.
 - The data distribution requests resume processing.
 - Go to Step 10.
 - 8 If processing of a single request displayed in the **Data Distribution Requests** list is to be resumed, in the **Data Distribution Requests** list **single-click** on the row corresponding to the request.
 - The selected data distribution request is highlighted.
 - 9 If processing of a single request displayed in the **Data Distribution Requests** list is to be resumed, **single-click** on the **Resume** button.
 - The selected data distribution request resumes processing.

- 10** **Single-click** on the **Refresh** button to update the data displayed on the screen.
- Status of request(s), as displayed in the **State** column of the **Data Distribution Requests** list, changes from “Suspended” to whatever state(s) is (are) appropriate for the continuation of request processing (depending on each request’s status when it was suspended).
 - Check mark(s) is (are) displayed in the **Mod** column of the **Data Distribution Requests** list to indicate that changes have been made to the request(s).
- 11** Return to the **Monitor/Control Data Distribution Requests** procedure (Section 18.2.3).

Table 18.2-8. Suspend/Resume Data Distribution Requests - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Filter data distribution requests (if necessary)	Use procedure in Section 18.2.5
2	Suspend New Requests button (if applicable)	single-click
3	<distribution request> (in Data Distribution Requests list) (if applicable)	single-click
4	Suspend button (if applicable)	single-click
5	Refresh button (if applicable)	single-click
6	Return to the procedure to Monitor/Control Data Distribution Requests (if applicable)	Use procedure in Section 18.2.3
7	Resume New Requests button (if applicable)	single-click
8	<distribution request> (in Data Distribution Requests list) (if applicable)	single-click
9	Resume button (if applicable)	single-click
10	Refresh button (if applicable)	single-click
11	Return to the procedure to Monitor/Control Data Distribution Requests	Use procedure in Section 18.2.3

18.2.8 Cancel Data Distribution Requests

The procedure to **Cancel Data Distribution Requests** is performed as part of the **Monitor/Control Data Distribution Requests** procedure (Section 18.2.3). The **Data Distribution Operator GUI** provides the Distribution Technician with a means of canceling data distribution requests.

Table 18.2-9 presents (in a condensed format) the steps required to cancel data distribution requests. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If the list of data distribution requests shown in the **Data Distribution - Track Activity** window of the **Data Distribution Operator GUI** needs to be filtered, filter data distribution requests (refer to Section 18.2.5).
 - Only requests that meet the specified filter criteria appear in the list in the **Data Distribution - Track Activity** window.
- 2 In the **Data Distribution Requests** list **single-click** on (highlight) the row corresponding to the distribution request to be canceled.
 - The selected data distribution request is highlighted.
- 3 **Single-click** on the **Cancel** button near the bottom of the **Distrib'n Requests** tab.
 - The selected data distribution request is canceled.
- 4 **Single-click** on the **Refresh** button to update the data displayed on the screen.
 - Status of the request, as displayed in the **State** column of the **Data Distribution Requests** list, changes from its original value to "Canceled."
 - A check mark is displayed in the **Mod** column of the **Data Distribution Requests** list to indicate that the request has been changed.
- 5 Return to the **Monitor/Control Data Distribution Requests** procedure (Section 18.2.3).

Table 18.2-9. Cancel Data Distribution Requests - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Filter data distribution requests (if necessary)	Use procedure in Section 18.2.5
2	<distribution request> (in Data Distribution Requests list)	single-click
3	Cancel button	single-click
4	Refresh button	single-click
5	Return to the procedure to Monitor/Control Data Distribution Requests	Use procedure in Section 18.2.3

18.2.9 Modify Preambles

The **Preamble Editor** tab on the **Data Distribution Operator GUI** allows the Distribution Technician to review and/or modify the text of preambles to the following types of documents:

- Packing list.
- Successful e-mail.
- Failed e-mail.

The preambles are accessible in the `/usr/ecs/<MODE>/CUSTOM/data/DSS` directory on the Distribution Server host (Sun internal server host). The directory contains preambles for the

different types of distribution. For example, the file EcDsDdFtpPushEMSuccessPreamble.txt (in the /usr/ecs/<MODE>/CUSTOM/data/DSS directory) would be an “ftp push successful e-mail” preamble file.

The following three types of distribution only are currently relevant to DDIST distribution:

- Ftp pull.
- Ftp push.
- Secure distribution (scp).

Consequently, preambles for those types of distribution are the only preambles that are currently applicable.

Table 18.2-10 presents (in a condensed format) the steps required to modify preambles. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1** If necessary, launch the **Data Distribution Operator GUI** (refer to Section 18.2.2).
 - The **Data Distribution Operator GUI** is displayed.
- 2** **Single-click** on the **Data Distribution Operator GUI Preamble Editor** tab.
 - The **Preamble Editor** screen is displayed.
- 3** **Single-click** on (highlight) the media type for which the preamble is to be modified in the **Media Type** window.
 - Options are: **8MM**, **CDROM**, **DLT**, **DVD**, **FtpPull**, **FtpPush**, and **scp**.
 - The selected media type is highlighted.
- 4** **Single-click** and **hold** the **Preamble Type** option button to display a menu of types of preambles, **move** the mouse cursor to the desired selection (highlighting it), then **release** the mouse button.
 - Options are: **Packing List**, **Successful Email**, and **Failed Email**.
 - The selected preamble type is displayed on the **Preamble Type** option button.
 - The selected preamble is displayed in the **Preamble Text** window.
 - If the **Preamble Text** window is blank, either there is no current preamble of the specified type or the preamble file is empty. Proceed to Step 5 and create a new preamble.
- 5** In the **Preamble Text** window enter:
<text>
 - Enter modifications to the preamble text as necessary.

- The following editing functions are available from the **Edit** pull-down menu or by clicking on the right mouse button:
 - **Cut.**
 - **Copy.**
 - **Paste.**
- 6 **Single-click** on the appropriate button from the following selections:
- **Save** - to save the preamble text as modified.
 - **Reset** - to discard any changes and revert to the original (unmodified) preamble text.
 - **Clear** - to remove all text from the **Preamble Text** window.
 - When the **Clear** button has been selected, a **Preamble Save Confirmation Dialogue Box** is displayed.
- 7 If the **Preamble Save Confirmation Dialogue Box** is displayed, **single-click** on the appropriate button from the following selections:
- **Yes** - to save the preamble text as modified.
 - **No** - to revert to the original (unmodified) preamble text.

Table 18.2-10. Modify Preambles - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Data Distribution Operator GUI (if necessary)	Use procedure in Section 18.2.2
2	Preamble Editor tab	single-click
3	<media type> (in Media Type window)	single-click
4	<preamble type> (Preamble Type option button)	single-click
5	<text> (in Preamble Text window)	enter text
6	Save button	single-click
7	Yes button (if applicable)	single-click

18.3 Monitoring Storage Management Server Operations

Distribution Technicians use the Storage Management Control GUI primarily to monitor Storage Management server operations. Configuring Storage Management polling and deleting files from cache are activities that are included in the overall process.

Table 18.3-1, below, provides an Activity Checklist for monitoring Storage Management server operations.

Table 18.3-1. Monitoring Storage Management Server Operations - Activity Checklist

Order	Role	Task	Section	Complete?
1	Distribution Technician	Configure Storage Management Polling	(P) 18.3.1	
2	Distribution Technician	Delete Files from Cache	(P) 18.3.2	
3	Distribution Technician	View Storage Management Event Log Information	(P) 18.3.3	
4	Distribution Technician	Monitor Storage Management Server Operations	(P) 18.3.4	

18.3.1 Configure Storage Management Polling

The **Storage Management Control GUI Options** menu provides the Distribution Technician with a means of switching the **Operator Notification Timer Polling** on or off: In addition, the technician can modify the following parameters:

- Database Polling Rate.
 - How often (in seconds) the system updates the information displayed on the GUI.
- Error Retry Rate.
 - Amount of time (in seconds) that the system waits before trying to poll the database server after a failed attempt.

Table 18.3-2 presents (in a condensed format) the steps required to configure Storage Management polling. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If necessary, launch the **Storage Management Control** GUI (refer to Section 18.2.2).
 - The **Storage Management Control** GUI is displayed.
- 2 Execute the following menu path:
Options → System Settings
 - The **Session Settings** dialogue box is displayed.
- 3 To change the **Operator Notification Timer Polling** state (from off to on or vice versa), **single-click** on the **Polling** button.
 - If **OFF** is displayed in the **Polling** field , **single-clicking** on the adjacent button turns Polling on.

- If **ON** is displayed in the **Polling** field , **single-clicking** on the adjacent button turns Polling off.
- 4 To change the database polling rate for the **Operator Notification Timer** in the **Database Polling Rate** field enter:
<value>
 - <value> is expressed in seconds.
 - The default value is 30 seconds.
 - 5 To change the error retry rate for the **Operator Notification Timer**, in the **Error Retry Rate** field enter:
<value>
 - <value> is expressed in seconds.
 - 6 When the appropriate data have been entered in the **Session Settings** dialogue box fields, **single-click** on the appropriate button from the following selections:
 - **Ok** - to apply the selections and dismiss the **Session Settings** dialogue box.
 - **Apply** - to apply the selections without dismissing the **Session Settings** dialogue box.
 - **Cancel** - to dismiss the **Session Settings** dialogue box without applying the selections.

Table 18.3-2. Configure Storage Management Polling - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Storage Management Control GUI (if necessary)	Use procedure in Section 18.2.2
2	Options → System Settings	single-click
3	Either <on> or <off> (Polling button) (as applicable)	single-click
4	<value> (in Database Polling Rate field)	enter text
5	<value> (in Error Retry Rate field)	enter text
6	Ok button	single-click

18.3.2 Delete Files from Cache

The **Storage Management Control** GUI's **Cache Stats.** tab displays all of the files that are in the cache areas, including the Pull Monitor and other staging areas. The data displayed on the **Cache Stats.** tab reports general statistics on the selected cache and allows the operator to manually delete expired files in cache areas.

A just-enough-cache cleanup strategy is used in Storage Management. A principal effect of the strategy is that caches (including the Pull Area) generally remain full because each cache manager (including the cache manager that is configured as the Pull Monitor or Pull Area Manager) automatically identifies and removes just enough old files to accommodate new ones. Consequently, it is likely that manual cache cleanup will not be performed very often. The procedure that follows is provided as a guide for those rare occasions when it is necessary to manually delete files from cache.

Table 18.3-3 presents (in a condensed format) the steps required to delete files from cache. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If necessary, launch the **Storage Management Control** GUI (refer to Section 18.2.2).
 - The **Storage Management Control** GUI is displayed.
- 2 **Single-click** on the **Cache Stats.** tab.
 - The **Cache Stats.** tab is displayed.
- 3 To define the size of a “page” of data displayed in the **Cache Information** table on the **Cache Stats.** tab type the number of rows per page in the **Max Rows Returned** text box.
 - **Max Rows Returned** defines the size of a “page” of data displayed in the **Cache Information** table on the **Cache Stats.** tab.
 - For example, setting **Max Rows Returned** to 50 would cause data to be displayed in the **Cache Information** table in pages (groups) of 50 rows of data.
 - If there were 500 files in the selected cache and **Max Rows Returned** were set to 50, there would be 10 pages of data available for display, with the first 50 items being displayed in the **Cache Information** table.
 - The **Prev** and **Next** buttons provide means of displaying additional pages of data.
- 4 To view the contents of a particular cache (e.g., **FTP Pull Cache**) **single-click** and **hold** on the option button to the right of the **Cache** field, **move** the mouse cursor to the desired selection (highlighting it), then **release** the mouse button.
 - The selected cache is displayed in the **Cache** field of the **Cache Stats.** tab.
 - The following cache statistics are displayed in the **Cache Statistics** area:
 - **Current Utilization.**
 - **Used Space (Blocks).**
 - **Free Space (Blocks).**
 - **Total Space (Blocks).**
 - **Number of Resident Files.**
 - **Maximum File Size (Blocks).**
 - **Minimum File Size (Blocks).**
 - **Average File Size (Blocks).**

- The following information concerning the files in the selected cache is listed in the **Cache Information** table:
 - **Filename.**
 - **File Size.**
 - **Expiration** [date/time].
 - **Last Accessed.**
 - **Delete Flag** [displays either N or Y].
 - **State.**

NOTE: The only view currently accessible using the **Text** (view) option button is **Text**. The **Graphic** view is not currently available.

- 5 Observe cache statistics/information displayed on the **Cache Stats.** tab.
 - As previously mentioned, cache statistics are displayed in the **Cache Statistics** area of the GUI and information concerning the files in the selected cache is listed in the **Cache Information** table.
 - The **Refresh** button can be used to update the data on (refresh) the screen.
 - The **Prev** and **Next** buttons provide means of displaying additional pages of data.
 - The **Operator Messages** field at the bottom of the GUI displays messages concerning events (i.e., information, warnings, or errors) occurring in **Storage Management Control** GUI operations.
 - Error messages are described in Table 18.6-4, Storage Management User Messages.
- 6 If deleting files, **single-click** on the row(s) corresponding to the file(s) to be deleted in the **Cache Information** table on the **Cache Stats.** tab.
 - Multiple rows may be selected.
- 7 If deleting files, **single-click** on the **Mark Delete** button near the bottom of the **Cache Stats.** tab.
 - **Y** is displayed in the **Delete Flag** field for the row in the **Cache Information** table.
- 8 If any file that should be left in the cache has been inadvertently marked **Delete**, first **single-click** on the row corresponding to the file.
- 9 If any file that should be left in the cache has been inadvertently marked **Delete**, **single-click** on the **Unmark Delete** button near the bottom of the **Cache Stats.** tab.
 - **N** is displayed in the **Delete Flag** field for the row in the **Cache Information** table.
- 10 If it becomes necessary to exit from the **Storage Management Control** GUI execute the following menu path:
File → Exit

Table 18.3-3. Delete Files from Cache - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Storage Management Control GUI (if necessary)	Use procedure in Section 18.2.2
2	Cache Stats. tab	single-click
3	<cache> (in Cache field)	single-click
4	Observe cache statistics/information (Cache Stats. tab)	read text
5	<file> (to delete) (Cache Information table)	single-click
6	Mark Delete button	single-click
7	<file> (to preserve) (Cache Information table) (if applicable)	single-click
8	Unmark Delete button (if applicable)	single-click
9	File → Exit (when applicable)	single-click

18.3.3 View Storage Management Event Log Information

The **Storage Events** tab on the **Storage Management Control** GUI provides the Distribution Technician with the ability to search the Event Log and obtain reports on events that have occurred in Storage Management. It is possible to review the following information concerning any particular Storage Management event:

- Number.
- Date.
- Level.
- Type.
- Message.

The following search criteria can be used individually or in combination to view entries in the Event Log:

- Date Interval.
- Event Type.
- Event Level.
- Message.

Table 18.3-4 presents (in a condensed format) the steps required to view Storage Management Event Log information. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If necessary, launch the **Storage Management Control** GUI (refer to Section 18.2.2).
 - The **Storage Management Control** GUI is displayed.
- 2 **Single-click** on the **Storage Events** tab.
 - The **Storage Events** screen is displayed.
 - If Event Log entries are to be displayed on the basis of a particular...
 - Time period, perform Step 3. (If no time period is specified, log entries for the current day will be displayed.)
 - Event type, perform Step 4.
 - Event level, perform Step 5.
 - Message, perform Step 6.
 - Any of the preceding criteria (time period, event type, event level, or message) may be used individually or in combination to view entries in the Event Log.
- 3 To view Event Log entries for a particular time period, enter the desired data start date in the **Date Interval: Begin** field in the following format:
<MM/DD/YYYY>
 - The **Tab** key may be pressed to move from field to field.
 - Another method of changing date settings (other than typing the numbers) is to **single-click** in the **Date Interval: Begin** field and **single-click** on the up/down buttons adjacent to the **Date Interval: Begin** field until the correct date is indicated.
- 4 To view Event Log entries for a particular time period, enter the desired data ending date in the **Date Interval: End** field in the following format:
<MM/DD/YYYY>
 - The **Tab** key may be pressed to move from field to field.
 - Another method of changing date settings (other than typing the numbers) is to **single-click** in the **Date Interval: End** field and **single-click** on the up/down buttons adjacent to the **Date Interval: End** field until the correct date is indicated.
- 5 To view log entries for a particular **event type**, **single-click** and **hold** on the **Event Type** option button, **move** the mouse cursor to the desired selection (highlighting it), then **release** the mouse button.
 - Options are: **Any, Device, Cache, Software, COTS, Sybase, Pulldisk, Unknown.**
 - The selected event type is displayed on the **Event Type** option button.
- 6 To view log entries for a particular **event level**, **single-click** and **hold** on the **Event Level** option button, **move** the mouse cursor to the desired selection (highlighting it), then **release** the mouse button.
 - Options are: **Any, Information, Warning, Error, Severe, Fatal, Unknown.**
 - The selected event level is displayed on the **Event Level** option button.

- 7 To view log entries for a particular **message** in the **Message** field enter:
<message>
- 8 **Single-click** on the **Search** button to search the event log for events that meet the specified criteria.
- The search results are displayed in the **Event Log** table of the **Storage Management Control GUI Storage Events** tab.
- 9 Observe event information displayed in the **Event Log** table.
- Log entries are displayed in the **Event Log** table of the GUI.
 - **Single-click** on any of the column headers of the **Event Log** table to sort the listed events in order by the column selected.
 - For example, **single-click** on the **Message** column header to list the events in alphabetical order by message text.
 - The **Operator Messages** field at the bottom of the GUI displays messages concerning events (i.e., information, warnings, or errors) occurring in **Storage Management Control GUI** operations.
 - Error messages are described in Table 18.6-4, Storage Management User Messages.
- 10 If it becomes necessary to clear entries in the Event Log Search Parameter fields, **single-click** on the **Clear Parameters** button.
- Entries in the Event Log Search Parameter fields are cleared.
- 11 If it becomes necessary to purge entries from the Event Log, **single-click** on (highlight) each row corresponding to an event to be deleted in the **Event Log** table.
- Multiple entries may be selected.
- 12 If it becomes necessary to purge entries from the Event Log, **single-click** on the **Purge Selected** button.
- Selected entries are deleted from the Event Log.
- 13 If a new Event Log search is to be performed on the basis of a particular...
- time period, return to Step 3.
 - event type, return to Step 5.
 - event level, return to Step 6.
 - message, return to Step 7.
- 14 If it becomes necessary to exit from the **Storage Management Control GUI** execute the following menu path:
File → Exit

Table 18.3-4. View Storage Management Event Log Information - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Storage Management Control GUI (if necessary)	Use procedure in Section 18.2.2
2	Storage Events tab	single-click
3	<MM/DD/YYYY> (in Date Interval: Begin field) (if applicable)	enter text
4	<MM/DD/YYYY> (in Date Interval: End field) (if applicable)	enter text
5	<event type> (Event Type option button) (if applicable)	single-click
6	<event level> (Event Level option button) (if applicable)	single-click
7	<message> (in Message field)	enter text
8	Search button	single-click
9	Observe event information (Event Log table)	read text
10	Clear Parameters button (if applicable)	single-click
11	<event> (in Event Log table) (if applicable)	single-click
12	Purge Selected button (if applicable)	single-click
13	Return to applicable step to perform a new Event Log search	
14	File → Exit (when applicable)	single-click

18.3.4 Monitor Storage Management Server Operations

The **Request Status** tab on the **Storage Management Control** GUI provides the Distribution Technician with the ability to monitor processing activity in all of the storage management servers for a given mode. The **Request Status Information** table lists the requests that are currently being serviced by storage management servers and those that have been completed within the last 24 hours. It is possible to review the following information concerning any particular storage management request:

- Operation [type of operation represented by the request].
- Request ID.
- Progress [stage of processing on which the request is currently working (may include a numeric progress indication)].
- Status.
- Priority.
- When Submitted [time and date when the request was received by the Storage Management server that is responsible for the request].
- Last Updated [time and date when the status was last updated for the request].

Using the **Request Status** tab the Distribution Technician can detect stalled requests or servers that appear to be idle.

Table 18.3-5 presents (in a condensed format) the steps required to monitor storage management server operations. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If necessary, launch the **Storage Management Control** GUI (refer to Section 18.2.2).
 - The **Storage Management Control** GUI is displayed.
- 2 **Single-click** on the **Storage Management Control** GUI **Request Status** tab.
 - The **Request Status** tab is displayed.
- 3 Observe information displayed on the **Request Status** tab of the **Storage Management Control** GUI.
 - The **Request Status Information** table displays the following information:
 - **Operation.**
 - **Request ID.**
 - **Progress.**
 - **Status.**
 - **Priority.**
 - **When Submitted.**
 - **Last Updated.**
 - By default, all storage management server requests for the last 24 hours are shown in the **Request Status Information** table of the **Request Status** tab.
 - Note that virtually all data inserted into or retrieved from the archive is controlled by storage management servers; consequently there may be a lot of activity on the **Request Status** tab.
 - Consequently, it may be useful to restrict the number of requests displayed by filtering them as described in the next step of this procedure.
 - **Single-clicking** on any of the column headers of the **Request Status Information** table causes the listed requests to be sorted in order by the column selected.
 - For example, **single-clicking** on the **Last Updated** column header causes the requests to be listed in order from the least recently updated to the most recently updated.
 - The **Operator Messages** field at the bottom of the GUI displays messages concerning events (i.e., information, warnings, or errors) occurring in **Storage Management Control** GUI operations.
 - Error messages are described in Table 18.6-4, Storage Management User Messages.

- 4 If the list of Storage Management requests shown in the **Request Status Information** table needs to be filtered, **single-click** and **hold** the **Filtering** pull-down menu to display a menu of filtering options, **move** the mouse cursor to the appropriate selection (highlighting it), then **release** the mouse button.
 - The **Filtering** pull-down menu offers the following options for filtering Storage Management requests:
 - Options are: **Server**, **Operation**, **Processing State**, and **Submitter**.
 - **Server** controls what activity is displayed by limiting the list to the requests being/having been serviced by a specific server. Selecting **All** displays all requests throughout the Storage Management CSCI. Other selections include the individual archive servers, cache manager servers, ftp servers, request manager server, and staging disk servers.
 - **Operation** allows the Distribution Technician to focus on a specific type of operation. The list of operations is dynamically generated to reflect those operations for which requests are currently in queue, for example (among others): **All, scp, CMLink, ArStore, FtpPull, FtpPush**.
 - **Processing State** allows the Distribution Technician to differentiate among requests that are being actively processed; have been completed, either successfully or to a retryable error state; or have been suspended and are awaiting the outcome of another event. The following selections are available: **All, Processing, Suspended, Completed**.
 - **Submitter** allows the Distribution Technician to see the status of requests submitted by a specific client process. The list of possible clients is dynamically generated to reflect the list of clients with outstanding requests for example (among others): **All, DSDD, SDSV, this**, individual ftp server, individual archive server, and individual staging disk server.
- 5 Observe the Storage Management requests displayed in the **Request Status Information** table.
- 6 Repeat Steps 4 and 5 as necessary to monitor Storage Management requests.
- 7 If it becomes necessary to exit from the **Storage Management Control** GUI execute the following menu path:
File → Exit

Table 18.3-5. Monitor Storage Management Server Operations - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Storage Management Control GUI (if necessary)	Use procedure in Section 18.2.2
2	Request Status tab	single-click
3	Observe request status information (Request Status Information table)	read text
4	<filtering option> (Filtering pull-down menu) (If applicable)	single-click
5	Observe request status information (Request Status Information table)	read text
6	Repeat Steps 4 and 5 (as necessary)	
7	File → Exit (when applicable)	single-click

18.4 Tuning Data Server Subsystem Configuration Parameters

The values assigned to system parameters affect the functioning and performance of the system. When certain parameters are modified, the system operates differently. Changes to some other parameters may not appear to affect the system although there may in fact be subtle effects. In any case before system parameters are modified it is essential to understand what will happen to system functioning and performance.

Many system parameters may be subject to control by Configuration Management (CM). When making or requesting a change to system parameters, the CM process at the particular site must be followed (if applicable).

Values are assigned to Storage Management and Data Distribution parameters in the following databases:

- Configuration Registry database.
- Storage Management and Data Distribution database.

With respect to Storage Management servers the Registry contains database connectivity information only. All other configuration information is in the Storage Management and Data Distribution database and is typically entered or modified using the **Storage Management Control GUI**.

Table 18.4-1, below, provides an Activity Checklist for tuning DDIST system parameters.

Table 18.4-1. Tuning DDIST System Parameters - Activity Checklist

Order	Role	Task	Section	Complete?
1	Distribution Technician	Modify System Parameters in the Storage Management and Data Distribution Database Using the Storage Management Control GUI	(P) 18.4.1	
2	Distribution Technician	Modify System Parameters in the Storage Management and Data Distribution Database Using ISQL	(P) 18.4.2	
3	Distribution Technician	Modify Parameters in the DsDdThreadPool Table Using ISQL	(P) 18.4.3	

Modifying System Parameters in the Configuration Registry Database

The Configuration Registry Server provides a single interface (via a Sybase server) for retrieving configuration attribute-value pairs for system servers from the Configuration Registry database. When system servers are started, they access the Configuration Registry Database to obtain needed configuration parameters.

The Database Administrator has access to a Configuration Registry GUI for viewing and editing configuration data in the database. Therefore, it is necessary to coordinate with the Database Administrator when changes to configuration parameters are needed. Also, as previously mentioned, changes to configuration-controlled parameters are subject to approval through the site CM process.

Default and adjusted values assigned to system parameters vary from site to site. For guidance concerning the assignment of values to parameters included in the Configuration Registry refer to document 910-TDA-022, *Custom Code Configuration Parameters for ECS*. The document is available at <http://cmdm-ldo.raytheon.com/baseline/> under “Technical Documents.”

The following parameters are examples of parameters whose values may be modified to enhance system functioning or performance:

- AppLogSize [parameter applies to all servers].
 - Maximum size of the application log (ALOG) file for a particular application.
 - Recommended size varies considerably depending the nature of the application for which the file is being written.
- AppLogLevel [parameter applies to all servers].
 - Level of detail provided in the ALOG file for a particular application.
 - Acceptable values are 0, 1, 2, or 3.
 - A setting of “0” provides the most data.
- DebugLevel [parameter applies to all servers].
 - Level of detail provided in the debug log file for a particular application.

- Normally acceptable values are 0, 1, 2, or 3.
- A setting of "0" turns off logging; a setting of "3" provides a significant amount of data.
- STMGT offers "enhanced" debugging based on bitmaps including Level 7 (the 4 bit), which provides detailed database debugging, and Level 15 (the 8 bit), which frequently dumps the in-memory request queue (in the Request Manager). [Both Level 7 and Level 15 quickly create enormous log files.]
- DBMaxConnections [EcDsDistributionServer and EcDsDdistGui parameter].
 - Maximum number of database open connections (e.g., 15) allowed a particular application.
 - Increasing the assigned value may prevent other applications from getting access to the database.
- FtpPushThreshold [EcDsDistributionServer parameter].
 - Maximum number of bytes (e.g., 15000000000) per ftp push request.
 - The FtpPushThreshold should always be greater than the size of the largest input granule used by the Planning and Data Processing Subsystems (PDPS) to ensure that PDPS distribution requests are processed without manual intervention.
 - When a distribution request exceeds a threshold (e.g., FtpPushThreshold or FtpPullThreshold), the request is suspended in DDIST.
- FtpPullThreshold [EcDsDistributionServer parameter].
 - Maximum number of bytes (e.g., 20000000000) per ftp pull request.
- MaxThreads [EcDsDistributionServer parameter].
 - Worker threads (created at start up) used to process active requests.
 - Needs to be greater than or equal to the sum of all priority thread limits.
- RETRIEVAL_CHUNK_SIZE [EcDsDistributionServer parameter].
 - Number of per-request archived files (e.g., 40) to be retrieved from the archive server.
 - Must be greater than zero (0).
 - Should not be greater than half the number of service threads used by the STMGT cache managers for archive reading.
- SocketLimit [EcDsDistributionServer parameter].
 - Number of connections (e.g., 620) to a server through the Hubble Space Telescope (HST) sockets middleware.
 - Too low a number misses connections.
 - Too high a number may adversely affect the memory of the server's host.
- CheckSumStoreFreq [EcDsStArchiveServer parameter].
 - Percentage of StoreFile requests to be checksummed.
- CheckSumRetrieveFreq [EcDsStCacheManagerServer parameter].
 - Percentage of checksummed files to be checksummed for file retrieve requests.

When the value assigned to a parameter has been changed and saved in the Configuration Registry, the modified value does not take effect until the affected server has been restarted. For example, if the debug level for the Distribution Server log has been changed from "2" to "3" in

the Configuration Registry, the modification does not affect the recording of data in the log until after a warm restart of the Distribution Server (at which time the server would read the parameters in the Configuration Registry).

Checksum Status

It is possible to have a checksum calculated for each file stored (inserted) in the archive. In addition, there is an option for having a checksum computed for each file retrieved from the archive and validating it by comparing it with the checksum previously computed.

The extent of check-summing is determined by the values assigned to the following two configuration parameters in the Configuration Registry:

- CheckSumStoreFreq.
- CheckSumRetrieveFreq.

CheckSumStoreFreq is an archive server (EcDsStArchiveServer) parameter that specifies the percentage of StoreFile requests to be checksummed. CheckSumRetrieveFreq is a cache manager server (EcDsStCacheManagerServer) parameter that specifies the percentage of file retrieve requests to be checksummed. The recommended value for both parameters is 100 (i.e., calculate a checksum for 100% of requests). If either value needs to be modified, coordinate the change with the Database Administrator.

Tuning System Parameters in the Storage Management and Data Distribution Database

Staging Area Size and Read-Only Cache Size

Cache and staging disk space requirements are defined in separate columns in different database tables in the Storage Management and Data Distribution Database.

- The TotalStagingSpace column in the DsStStagingDiskServer table contains the overall size of the space (in blocks) available for a staging disk.
 - It should reflect the available disk space in the file partition that is configured.
- The TotalCacheSpace column in the DsStCache table contains the overall size (in blocks) of a cache.
 - TotalCacheSpace is seen as "Original Cache Space" from the **Storage Management Control GUI**.
 - The value assigned to the cache manager that is configured as the Pull Monitor (Pull Area Manager) should be the size (in blocks) of the partition that houses the Pull Area.
 - If the value assigned to the Pull Monitor (Pull Area Manager) is changed while there are files in the Pull Area, the value should be higher than the cumulative size of files in the cache.

NOTE: In Storage Management configurations, capacity ("space") is consistently specified in blocks. File size is specified in bytes.

The change in the specification of staging disk/cache space is an effect of the way cache structure has been modified. Currently cache has its own path as shown in the following comparison of staging disk and cache paths:

- EcDsStCacheManagerServerACM1 cache path:
 - /usr/ecs/OPS/CUSTOM/apc/x0acg01/data/staging/cache (The cache area is no longer identified as "user1".)
- EcDsStStagingDiskServerACM1 root path:
 - /usr/ecs/OPS/CUSTOM/apc/x0acg01/data/staging//disks (Now each staging disk has a unique number (e.g., disk1132), even across servers.)

The cache and staging disk space parameters are modified using the **Storage Management Control GUI**. [Refer to the **Modify System Parameters in the Storage Management and Data Distribution Database Using the Storage Management Control GUI** procedure (Section 18.4.1).]

Setting Expiration Thresholds for Cache Managers

A just-enough-cache cleanup strategy is used in Storage Management. A principal effect of the strategy is that caches (including the Pull Area) generally remain full because each cache manager (including the cache manager that is configured as the Pull Monitor or Pull Area Manager) identifies and removes just enough old files to accommodate new ones.

In the DsStCache database table there is an ExpirationThreshold column that contains the number of hours it takes for files to expire in the cache area managed by each cache manager. The ExpirationThreshold for the cache manager that is configured as the Pull Monitor (i.e., EcDsStCacheManagerServerPULL) specifies the number of hours it takes for files to expire in the Pull Area.

When setting the ExpirationThreshold for each cache manager the following factors should be taken into consideration:

- ExpirationThreshold specifies the number of hours a lien will be held against a cached file.
- If a lien expires and space is required, the lien will be automatically removed unless the ConfirmDelete flag (for expired files) is set to "Yes."
- ExpirationThreshold entries are typically set at 72 (hours) but may be set at some other value (usually in the range of 24 - 72).
 - Too short a time limits the ability of users to get their data before it is deleted (if ConfirmDelete is set to "No").
 - Too long a time increases the chance of filling up the cache.
- The ConfirmDelete column in the DsStCache table is a flag that indicates whether to automatically delete upon reaching the ExpirationThreshold.
 - Typically set to "No" (do not require confirmation before deleting).

- Files are pulled to the Pull Area by the Pull Monitor (Pull Area Manager); they are not pushed there by the ftp server.
- The Fault Level and Warning Level parameters are ignored.

Expiration thresholds and ConfirmDelete flags for expired files are modified using the **Storage Management Control GUI**. [Refer to the **Modify System Parameters in the Storage Management and Data Distribution Database Using the Storage Management Control GUI** procedure (Section 18.4.1).]

Storage Management Service Thread Allocation

Service threads process requests submitted to the applicable server (e.g., EcDsStRequestManagerServer, EcDsStArchiveServer, EcDsStCacheManager-Server, EcDsStStagingDiskServer, EcDsStFtpServer). The number of service threads assigned to a server should be set on the basis of the resources available and the server throughput.

The DsStServiceThreadConfig database table contains the number, types, and priorities of service threads for Storage Management servers.

- The following columns in the DsStServiceThreadConfig database table indicate the number of service threads assigned to each priority:
 - XpressThreads
 - VhighThreads
 - HighThreads
 - NormalThreads
 - LowThreads
- The PoolType column identifies the type of threads within a certain pool. (i.e., Service Threads, Read Threads, Write Threads) applicable to the server.
 - In Storage Management Read Threads and Write Threads apply to the archive servers only.
- The NumThreads column contains the number of threads in a particular pool.

Table 18.4-2 lists representative default values as listed in the DsStServiceThreadConfig database table. In the table ServerId 1 refers to EcDsStArchiveServerACM4 and ServerId 2 refers to EcDsStArchiveServerDRP3.

Table 18.4-2. Representative Default Values Listed in the DsStServiceThreadConfig Database Table (1 of 2)

ServerId	PoolType	Num Threads	Xpress Threads	Vhigh Threads	High Threads	Normal Threads	Low Threads
1	ReadThreadPool	30	0	10	10	0	10
1	ThreadPool	30	0	10	10	0	10
1	WriteThreadPool	30	0	10	10	0	10
2	ReadThreadPool	10	0	0	0	0	10

Table 18.4-2. Representative Default Values Listed in the DsStServiceThreadConfig Database Table (2 of 2)

ServerId	PoolType	Num Threads	Xpress Threads	Vhigh Threads	High Threads	Normal Threads	Low Threads
2	ThreadPool	50	0	10	10	0	30
2	WriteThreadPool	100	0	20	70	0	10

Storage Management service thread-related values are modified using the **Storage Management Control GUI**. [Refer to the **Modify System Parameters in the Storage Management and Data Distribution Database Using the Storage Management Control GUI** procedure (Section 18.4.1).]

Data Distribution Priority Thread Allocation

Data Distribution (DDIST) has been enhanced to support a DAAC-configurable number of thread pools with each pool having a separate thread limit. The pools are defined in a DDIST database table called DsDdThreadPool. Each row in the table contains a unique pool identifier, a thread pool name, and the number of threads (thread limit) associated with the pool. Table 18.4-3 shows an example of DsDdThreadPool table contents.

Table 18.4-3. Example of DsDdThreadPool Table Contents

ThreadPoolId	ThreadPoolName	ThreadLimit
13	SUB_LARCINGMGR	15
14	DEFAULT	10
15	PRODUCTION	20
16	SUB_ASTERGDS	10
17	SUB_NOAASOAP	20
18	SUB_JSMITH	20
19	PDS	30
20	USER_FTPPUSH	35
21	USER_FTPPULL	10
22	S4POPS	20
23	SUB_PRIVUSER	80
24	SUB_REGUSER	60

The DsDdThreadPool table in the example (Table 18.4-3) defines the following 12 pools:

- SUB_LARCINGMGR (15 threads maximum).
- DEFAULT (10 threads maximum).
- PRODUCTION (20 threads maximum).

- SUB_ASTERGDS (10 threads maximum).
- SUB_NOAASOAP (20 threads maximum).
- SUB_JSMITH (20 threads maximum).
- PDS (30 threads maximum).
- USER_FTPPUSH (35 threads maximum).
- USER_FTPPULL (10 threads maximum).
- S4POPS (20 threads maximum).
- SUB_PRIVUSER (80 threads maximum).
- SUB_REGUSER (60 threads maximum).

There must always be a DEFAULT pool present in the DsDdThreadPool table because a distribution request that fails to match any of the other rules for assigning requests to thread pools is automatically assigned to the DEFAULT pool.

The rules for assigning requests to thread pools are specified in the DsDdAssignmentRule table. The rules are DAAC-configurable and are based on request attributes. The following attributes are used for establishing a thread pool assignment:

- ECSUserId.
- Priority.
- EsdtType.
- MediaType.
- EmailAddress.
- NumberOfGranules.

Each row in the DsDdAssignmentRule table defines an assignment rule. Table 18.4-4 shows an example of DsDdAssignmentRule table contents.

Table 18.4-4. Example of DsDdAssignmentRule Table Contents (1 of 2)

SeqNum	Thread PoolId	ECSUserId	Priority	Esdt Type	Media Type	EmailAddress	NumberOf Granules
50	14	ANY	ANY	ANY	scp	ANY	ANY
100	15	\$EcDpPrEM	ANY	ANY	ANY	ANY	ANY
200	16	aster_gds	NORMAL	ANY	ANY	ANY	ANY
300	13	LarclngMgr	NORMAL	ANY	ANY	ANY	ANY
400	17	NOAA/SOAP	ANY	ANY	ANY	ANY	ANY
500	18	jsmith	NORMAL	ANY	ANY	ANY	ANY
600	19	\$PDS3	ANY	ANY	ANY	ANY	ANY
900	22	s4opsaaf	ANY	ANY	ANY	ANY	ANY
1000	22	s4opsaar	ANY	ANY	ANY	ANY	ANY
1100	22	s4opsamf	ANY	ANY	ANY	ANY	ANY
1200	22	s4opsamr	ANY	ANY	ANY	ANY	ANY
1300	22	s4opsdpf	ANY	ANY	ANY	ANY	ANY
1400	22	s4opstmf	ANY	ANY	ANY	ANY	ANY

Table 18.4-4. Example of DsDdAssignmentRule Table Contents (2 of 2)

SeqNum	Thread PoolId	ECSUserId	Priority	Esdt Type	Media Type	EmailAddress	NumberOf Granules
1500	22	s4opstmr	ANY	ANY	ANY	ANY	ANY
1600	23	PrivUser	ANY	ANY	FtpPush	userops@x0ins02.daac.ecs.nasa.gov	2
1700	24	RegUser	ANY	ANY	ANY	ANY	ANY
1800	17	NoneUser	ANY	ANY	ANY	ANY	ANY
1900	20	ANY	ANY	ANY	FtpPush	ANY	ANY
2000	21	ANY	ANY	ANY	FtpPull	ANY	ANY

For each new request, the rules (in the DsDdAssignmentRule table) are evaluated in order by SeqNum until a rule is found where all conditions evaluate to true, in which case the request is assigned to the pool specified in the ThreadPoolId column. A rule evaluates to true if the values of all request attributes (i.e., ECSUserId, Priority, EsdtType, MediaType, EmailAddress, and NumberOfGranules) match the values contained in the rule's row in the table. Note that a value of "ANY" automatically evaluates to true for that attribute. So, in the example, any request with the ECSUserId "s4opsaaf" is allocated to ThreadPoolId 22 (i.e., the S4POPS thread pool in Table 2) and any FtpPull request that does not meet the conditions specified for any other assignment rule are allocated to ThreadPoolId 21 (the USER_FTPPULL thread pool). Any request that fails to match the rules for any of the thread pool IDs in the assignment rule table is assigned to the DEFAULT thread pool.

In addition to enforcing rules for assigning requests to thread pools (as specified in the DsDdAssignmentRule table) Data Distribution has another mechanism for preventing certain types of requests from monopolizing distribution resources. The mechanism is called dynamic FTP server assignment and it involves using a set of rules in the DsDdAssignmentRuleHWCI table to evaluate each distribution request and allocate it to the appropriate Data Distribution FTP server.

The rules for assigning a distribution request to a specific FTP server (identified by HWCI) are DAAC-configurable and are based on request attributes. The following attributes are used for making an HWCI assignment:

- ECSUserId.
- SeniorClient.
- MediaType.
- EsdtType.
- PushDest.
- EmailAddress.

Each row in the DsDdAssignmentRuleHWCI table defines an HWCI assignment rule. Table 18.4-5 shows an example of DsDdAssignmentRuleHWCI table contents.

Table 18.4-5. Example of DsDdAssignmentRuleHWCI Table Contents

SeqNum	HWCI	ECSUserId	Senior Client	Media Type	Esdt Type	PushDest	EmailAddress
100	DRP1	\$PDS	ANY	ANY	ANY	ANY	ANY
200	DRP1	ANY	PD	ANY	ANY	ANY	ANY
300	DRP1	ANY	IN	ANY	ANY	ANY	ANY
400	DRP1	\$PDS3	ANY	ANY	ANY	ANY	ANY
500	DRP2	PrivUser	ANY	FtpPush	ANY	ANY	ANY
600	DRP1	RegUser	ANY	FtpPush	ANY	ANY	ANY
700	DRP1	s4opsaaf	ANY	FtpPush	ANY	ANY	ANY
800	DRP1	s4opsaar	ANY	FtpPush	ANY	ANY	ANY
900	DRP1	s4opsamf	ANY	FtpPush	ANY	ANY	ANY
1000	DRP1	s4opsamr	ANY	FtpPush	ANY	ANY	ANY
1100	DRP2	s4opsdpf	ANY	FtpPush	ANY	ANY	ANY
1200	DRP1	s4opstmf	ANY	FtpPush	ANY	ANY	ANY
1400	DRP1	s4opstmr	ANY	FtpPush	ANY	ANY	ANY
1500	DRP1_auto	ANY	ANY	scp	ANY	ANY	ANY

In the example shown in Table 18.4-5, FtpPush requests from either PrivUser or s4opsdpf that do not have a senior client of either “PD” or “IN” are assigned to DRP2 (EcDsStFtpServerDRP2). All other requests are allocated to DRP1 (EcDsStFtpServerDRP1).

When DDIST receives a request, a stored procedure executes to assign the request to the appropriate thread pool based on the rules contained in the DsDdAssignmentRule table (Table 18.4-4).

- Once all threads in a given thread pool have been allocated, new requests assigned to that pool are put in a "pending" state until a thread becomes available.
- Requests are no longer automatically assigned to threads in other pools if there are no available threads in their assigned pool.
- Pending requests for each pool are activated in first-in-first-out order by request priority.

Another stored procedure executes to map the request to an HWCI based on the rules contained in the DsDdAssignmentRuleHWCI table (Table 18.4-5).

DAACs may adjust configurations by updating the DsDdThreadPool, DsDdAssignmentRule, and DsDdAssignmentRuleHWCI tables.

- Assignment rules may be added, deleted or updated at any time without warm-starting DDIST.
 - Changes to assignment rules take effect immediately upon being entered in the database.
 - All new requests entering DDIST are subject to the updated rules.

- The ThreadLimit attribute in the DsDdThreadPool table may be dynamically changed as well.
 - The DDIST server reloads thread limits every 90 seconds so thread limit changes take effect within 90 seconds after being entered.
 - New thread pools can be added by inserting rows in the DsDdThreadPool table.
 - However, they are not used until the DDIST server is warm-started.
 - A thread pool can be deleted as long as there are no rules in the DsDdAssignmentRule table that point to the thread pool and all requests that have been assigned to the thread pool have been completed and have migrated out of the DDIST database.

When DDIST is warm-started, all requests are reassigned to thread pools based on the current set of rules.

If necessary, it is possible to reassign requests after they have been assigned to a thread pool. The following process is used:

- Update the rules in the DsDdAssignmentRule table as necessary to ensure that the request will be assigned to the desired thread pool.
- Warm-start DDIST (EcDsDistributionServer).

There is no GUI support for making changes to either the thread pool configuration or the FTP server assignment. Thread pool configuration or FTP server assignment changes are made by a DAAC DBA using the isql interface to update the DsDdThreadPool, DsDdAssignmentRule and/or DsDdAssignmentRuleHWCI tables in the database.

The following guidelines are provided for tuning DDIST priority thread allocation:

- In most cases, each FtpPush destination site should have its own thread pool.
- For each FtpPush destination, the DAAC should determine the number of concurrent file transfers it takes to fully utilize the available network bandwidth.
 - The number represents a parameter called "MaxTransfers."
- For subscription-based FtpPush distribution, the thread limit for the associated thread pool should be set to 130% of MaxTransfers (rounded up).
 - This should provide a sufficient number of threads to utilize the available network bandwidth plus allow for one or more threads to be concurrently staging data out of the AMASS cache.
- For non-subscription-based FtpPush distribution, the thread limit for the associated thread pool should be set to 200% of MaxTransfers (rounded up).
 - This should provide sufficient threads to utilize the available network bandwidth plus allow for staging of data from archive tapes.
- The total number of threads in DsDdThreadPool (i.e., sum of ThreadLimit for all rows) represents the maximum number of threads that can be active concurrently n DDIST.
 - The total must be less than the number of worker threads configured for DDIST.

- The default number of worker threads configured for DDIST is 228.
- Although DDIST thread pools can be configured around request attributes other than priority, it is important to remember that STMGT CacheManager thread pools are organized by priority; consequently, it is important to ensure that STMGT thread pools are configured to optimally handle the likely mix of request priorities.
- During warm-start, it takes DDIST 0.83 second to recover each active or pending request; consequently, for a 2000-request backlog, it takes DDIST approximately 28 minutes to reach the end of start monitoring and begin accepting new requests.
 - However, note that DDIST immediately begins to work off its request backlog as requests are assigned to thread pools.

Methods for modifying thread pools and thread-pool-assignment rules are described in the **Modify System Parameters in the Storage Management and Data Distribution Database Using ISQL** procedure (Section 18.4.2) and the **Modify Parameters in the DsDdThreadPool Table Using ISQL** procedure (Section 18.4.3).

18.4.1 Modify System Parameters in the Storage Management and Data Distribution Database Using the Storage Management Control GUI

The effects on system functioning and performance must be considered before modifying system parameters. In addition, when making or requesting a change to system parameters, the CM process at the particular site must be followed (if applicable). Depending on circumstances (e.g., operator permissions) at a particular site, it may be necessary to request that someone else make parameter modifications using the **Storage Management Control** GUI. The procedure that follows is provided to assist Distribution Technicians who have to make parameter modifications using the **Storage Management Control** GUI.

Table 18.4-6 presents (in a condensed format) the steps required to modify system parameters in the Storage Management and Data Distribution Database using the **Storage Management Control** GUI. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If necessary, launch the **Storage Management Control** GUI (refer to Section 18.2.2).
 - The **Storage Management Control** GUI is displayed.
- 2 If necessary, **single-click** on the **Storage Config.** tab.
- 3 **Single-click** on the appropriate server type in the **Configuration Parameter Reporting** window on the **Storage Config.** tab.
 - The selected server type is highlighted in the **Configuration Parameter Reporting** window on the **Storage Config.** tab.

- The following server types are listed in the **Configuration Parameter Reporting** window on the **Storage Config.** tab:
 - **SMM** (8mm Stacker Server).
 - **ARCHIVE** (Archive Server).
 - **CACHE MANAGER** (Cache Management Server).
 - **CDROM** (CDROM Device Server).
 - **DLT** (DLT Stacker Server).
 - **DTF** (DTF Device Server).
 - **FTP** (FTP Server).
 - **REQUEST MANAGER** (Request Manager Server).
 - **STAGING DISK** (Staging Disk Server).
- Associated servers are listed in the server information window on the **Storage Config.** tab.

4 Single-click on the appropriate server in the server information window on the **Storage Config.** tab.

- The selected server is highlighted in the server information window on the **Storage Config.** tab.
- For example, if **CACHE MANAGER** were selected from the **Configuration Parameter Reporting** window on the **Storage Config.** tab, the following servers might be listed in the server information window:
 - EcDsStCacheManagerServerACM1.
 - EcDsStCacheManagerServerDRP3.
 - EcDsStCacheManagerServerPULL.
 - EcDsStCacheManagerServerWKS1.

5 Single-click on the **Modify Server/View Stackers** button.

- The applicable server configuration dialogue box is displayed.
- For example, if **CACHE MANAGER** had been selected, the **Cache Manager Server Configuration** dialogue box would be displayed. The **Cache Manager Server Configuration** dialogue box displays data in the following fields (as applicable):
 - **Server Name.**
 - **RPC** [remote procedure call] Tag.
 - **Original Cache Space (blocks).**
 - **Available Cache Space (blocks)** [cannot be modified from GUI].
 - **Allocation Block Size (bytes).**
 - **Description** [e.g., "Cache Manager"].
 - **Expiration Threshold (hours).**
 - **Expired Files Confirm Delete** [option button with Yes and No as the options].
 - **Disk Capacity: Fault Level** [currently ignored].
 - **Disk Capacity: Warning Level** [currently ignored].

- **File I/O Block Size (bytes)** [typically set to 4194304 (4MB)].
- **Retries** [typically set to 5].
- **Sleeptime (seconds)** [typically set to 2].
- **Service Threads** [number of worker threads that are allocated within the server instance to process requests - modified through the Allocate by Priority button].
- **Pull Area Manager** [option button with Yes and No as the options].
- **Cache Path.**
- **User Request Directory.**
- **FTP Notification File.**
- **FTP Notification Freq (Sec).**
- Refer to the installation instructions for the applicable software release to find recommended values for the configuration of Storage Management servers.
 - Installation instructions for each software release are available at <http://cmdm-ldo.raytheon.com/baseline/> under "Pre-Ship Reviews."

6 In the appropriate field(s) of the server configuration dialogue box enter:

<value>

7 If service-thread (or read-thread or write-thread) priority allocations are to be modified, **single-click** on the corresponding **Allocate by Priority** button.

- The appropriate **Allocate by Priority** window (e.g., the **Service Threads: Allocate by Priority** window) is displayed.

8 If thread priority allocations are being modified, in the appropriate field(s) of the **Allocate by Priority** window enter:

<value>

- When entering desired values in the appropriate fields of the **Allocate by Priority** window, start with the **Total** field.
- Lower-priority threads may be used to service higher priority requests, but never vice versa.
- By default, all service threads are created as low priority service threads, since they may be pre-empted by any priority request.
- The number of low threads is automatically re-calculated whenever the number of any of the other thread types is changed.
 - Consequently, the total of the numbers in each of the five different thread type fields equals the number in the **Total** field.

9 If thread priority allocations are being modified, **single-click** on the appropriate button from the following selections:

- **OK** - to approve the new value(s) and dismiss the **Allocate by Priority** window.
 - The **Cache Manager Server Configuration** dialogue box is displayed.

- **Cancel** - to return to the **Cache Manager Server Configuration** dialogue box without saving the new value(s).
 - The **Cache Manager Server Configuration Dialogue Box** is displayed.

NOTE: Sometimes when a secondary window (such as Service Threads: Allocate by Priority Window) has been accessed to modify parameters (e.g., to configure service threads), changes that were previously made in the primary window (such as the Cache Manager Server Configuration Dialogue Box) are lost. Consequently, it is recommended that either values be changed in the secondary window first or that changes already made in the primary window be verified after the secondary window has been closed.

- 10 When new values have been entered in all fields to be modified, **single-click** on the appropriate button from the following selections:
 - **OK** - to approve the new value(s) and dismiss the configuration dialogue box.
 - The **Storage Config.** screen is displayed.
 - **Cancel** - to return to the **Storage Config.** screen without saving the new value(s).
 - The **Storage Config.** screen is displayed.
- 11 Repeat Steps 3 through 10 as necessary.

Table 18.4-6. Modify System Parameters in the Storage Management and Data Distribution Database Using the Storage Management Control GUI - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Storage Management Control GUI (if necessary)	Use procedure in Section 18.2.2
2	Storage Config. tab	single-click
3	<server type> (in Configuration Parameter Reporting window)	single-click
4	<server name> (in the server information window)	single-click
5	Modify Server/View Stackers button	single-click
6	<value> [in appropriate field(s) of the server configuration dialogue box]	enter text
7	Allocate by Priority button (if applicable)	single-click
8	<value> [in appropriate field(s) of the Allocate by Priority window]	enter text
9	OK (if applicable)	single-click
10	OK	single-click
11	Repeat Steps 3 through 10 (as necessary)	

18.4.2 Modify System Parameters in the Storage Management and Data Distribution Database Using ISQL

The effects on system functioning and performance must be considered before modifying system parameters. In addition, when making or requesting a change to system parameters, the CM process at the particular site must be followed (if applicable). Depending on circumstances at a particular site it may be necessary to request that the Database Administrator modify parameters in the Storage Management and Data Distribution database. The procedures that follow are provided to assist Distribution Technicians who have to make the database modifications themselves.

The procedures vary somewhat depending on what database table is to be modified. For example:

- Modifications can be made to the DsDdAssignmentRule or DsDdAssignmentRuleHWCI table at any time as described in the **Modify System Parameters in the Storage Management and Data Distribution Database Using ISQL** procedure that follows.
 - If the Distribution Server is running when the table is updated, the changes will take effect immediately (i.e., any new distribution requests will be allocated to a thread pool using the updated rules).
 - Consequently, rule changes to one of the tables must be self-consistent and are typically made within the scope of a single Sybase transaction.
- Modifications to the DsDdThreadPool table must be made while the Distribution Server is idle, as described in the **Modify Parameters in the DsDdThreadPool Table Using ISQL** procedure (Section 18.4.3).

Table 18.4-7 presents (in a condensed format) the steps required to modify system parameters in the Storage Management and Data Distribution Database using isql. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

NOTE: If modifications to the DsDdThreadPool table are to be made, go to the **Modify Parameters in the DsDdThreadPool Table Using ISQL** procedure (Section 18.4.3).

- 1 Access a terminal window logged in to the Access/Process Coordinators (APC) Server host.
 - Examples of APC Server host names include **e0acg11**, **g0acg01**, **l0acg02**, and **n0acg01**.
 - For detailed instructions refer to the **Log in to System Hosts** procedure (Section 18.2.1).

- 2 At the UNIX command line prompt enter:
isql -U <user ID> -S <database server>
 - <user ID> is the database user's identification; e.g., **stmgt_role**.
 - <database server> is the database server; e.g., **x0acg01_srvr**.
 - For example:
isql -U stmgt_role -S x0acg01_srvr

- 3 At the **Password:** prompt enter:
<database password>
 - <database password> is the password for logging in to the database using the specified <user ID>.
 - A **1>** prompt is displayed, indicating that a connection has been made with the database.

- 4 At the **1>** prompt enter:
use <database name>
 - The <database name> is likely to be one of the following names:
 - **stmgtdb1** [OPS mode].
 - **stmgtdb1_TS1** [TS1 mode].
 - **stmgtdb1_TS2** [TS2 mode].
 - A **2>** prompt is displayed.

- 5 At the **2>** prompt enter:
go
 - A **1>** prompt is displayed.

- 6 At the **1>** prompt enter:
select * from <table name>
 - For example:
select * from DsDdAssignmentRule
 - Alternatively, at the **1>** prompt enter:
select <column name> from <table name>
 - For example:
select ThreadPoolId from DsDdAssignmentRule

- Another alternative is to enter:
select <column name 1>,<column name 2>[,<column name 3>,...] from <table name>
 - For example:
select ThreadPoolId,Priority from DsDdAssignmentRule
- A 2> prompt is displayed.

7 At the 2> prompt enter:

go

- Table contents are displayed.
 - If * (wildcard) was specified, all entries in the table are displayed.
 - If specific columnNames were entered, the data associated with those columns only are displayed.
- For example:

1> select * from DsDdAssignmentRule

2> go

```
SeqNum   ThreadPoolId ECSUserId
Priority   EsdtType
MediaType
EmailAddress
NumberOfGranules
```

```
-----
-----
-----
```

```
-----
100      15 $EcDpPrEM
ANY      ANY
ANY
ANY
200      16 aster_gds
NORMAL   ANY
ANY
ANY
300      13 LarcIngMgr
NORMAL   ANY
ANY
ANY
ANY
```

600	19 \$PDS3
ANY	ANY
ANY	
ANY	
ANY	
900	22 s4opsaaf
ANY	ANY
ANY	
ANY	
ANY	
1000	22 s4opsaar
ANY	ANY
ANY	
ANY	
ANY	
1100	22 s4opsamf
ANY	ANY
ANY	
ANY	
ANY	
1200	22 s4opsamr
ANY	ANY
ANY	
ANY	
ANY	
1300	22 s4opsdpf
ANY	ANY
ANY	
ANY	
ANY	
1400	22 s4opstmf
ANY	ANY
ANY	
ANY	
ANY	
1500	22 s4opstmr
ANY	ANY
ANY	
ANY	
ANY	
1700	24 RegUser
ANY	ANY
ANY	
ANY	
ANY	

1800	17 NoneUser
ANY	ANY
ANY	
ANY	
ANY	
1900	20 ANY
ANY	ANY
FtpPush	
ANY	
ANY	
2000	21 ANY
ANY	ANY
FtpPull	
ANY	
ANY	
400	17 NOAA/SOAP
ANY	ANY
ANY	
ANY	
ANY	
601	19 \$PDS
ANY	ANY
ANY	
ANY	
ANY	
500	18 sjones
NORMAL	ANY
ANY	
ANY	
ANY	
1600	23 PrivUser
ANY	ANY
FtpPush	
userops@x0ins02.daac.ecs.nasa.gov	
2	

(19 rows affected)

- 8** If updating a row in a database table, at the **1>** prompt enter:
update <table name> set <column name 1>=<value 1> where <column name 2>=<value 2>
- For example:
update DsDdAssignmentRule set ECSUserId="jsmith" where ThreadPoolId=18
 - The effect of the modification shown in the example would be to change the ECSUserId in the row(s) of the database table containing ThreadPoolId 18 from "sjones" to "jsmith."
 - Subsequently all distribution requests with an ECSUserId of "jsmith" would be assigned to ThreadPoolId 18.
 - Distribution requests with an ECSUserId of "sjones" would no longer be assigned to ThreadPoolId 18.
 - Go to Step 12.
- 9** If deleting a row in a database table, at the **1>** prompt enter:
delete <table name> where <column name 1>=<value 1>
- For example:
1> delete DsDdAssignmentRule where ThreadPoolId=16
 - The effect of the modification shown in the example would be to delete any database row(s) with "16" in the ThreadPoolId column.
 - Go to Step 12.
- 10** If adding a row in a database table, at the **1>** prompt enter:
insert <table name> (<column name 1>,<column name 2>,<column name 3>...)
- For example:
**1> insert DsDdAssignmentRule
(SeqNum,ThreadPoolId,ECSUserId,Priority,EsdtType,MediaType,
EmailAddress,NumberOfGranules)**
- 11** If adding a row in a database table, at the **2>** prompt enter:
values (<value 1>,<value 2>,<value 3>...)
- For example:
2> values (1550,23,"MODAPS","HIGH","ANY","FtpPush","ANY","ANY")

12 At the > prompt (e.g., **2>** or **3>**) enter:

go

- The effect of the modification shown in the examples in Steps 10 and 11 would be to insert in the DsDdAssignmentRule database table a row containing the following values:
 - 1550 (SeqNum column).
 - 23 (ThreadPoolId column).
 - MODAPS (ECSUserId column).
 - HIGH (Priority column).
 - ANY (EsdtType column).
 - FtpPush (MediaType column).
 - ANY (EmailAddress column).
 - ANY (NumberOfGranules column).
- If modifying the DsDdAssignmentRule table (as shown in the examples in this procedure) the following attributes must be specified for each row:
 - SeqNum.
 - ThreadPoolId.
 - ECSUserId.
 - Priority.
 - EsdtType.
 - MediaType.
- SeqNum.
 - Determines the order in which a rule is evaluated.
 - Integer whose value is greater than or equal to zero.
 - Each rule must have a unique sequence number.
 - Rules are evaluated in order from the lowest sequence number to the highest sequence number.
 - It is recommended that sequence numbers not be created consecutively (e.g., instead of numbering 1, 2, 3, use 100, 200, 300) so new rules can be inserted without having to renumber subsequent rules.
- ThreadPoolId.
 - Unique identifier of the thread pool to be assigned if the rule is the first one to evaluate to true.
 - Integer with a value greater than zero.
 - Must match one of the values in the ThreadPoolId column in the DsDdThreadPool table.
 - Multiple rules can assign the same ThreadPoolId.
- ECSUserId.
 - User identifier associated with a distribution request.
 - String of up to 24 characters in length.
 - If the user identifier of a distribution request matches the string, the attribute evaluates to true.

- If the string is set to the reserved word "ANY," the attribute always evaluates to true.
- String comparisons are case-sensitive.
- Priority.
 - Request priority associated with a distribution request.
 - String that must be set to one of the following six values: "XPRESS", "VHIGH", "HIGH", "NORMAL", "LOW", or "ANY".
 - If the priority of a distribution request matches the string then the attribute evaluates to true.
 - If the string is set to the reserved word "ANY," the attribute always evaluates to true.
 - String comparisons are case-sensitive.
- EsdtType.
 - Data type associated with a distribution request.
 - String of up to twelve (12) characters in length.
 - Must be set to a valid ESDT name and version number or the reserved words "MULTIPLE" or "ANY."
 - When an ESDT name and version number are specified, the string has the form "Name.Version" (e.g., "MOD021KM.003").
 - A distribution request has its EsdtType set to "MULTIPLE" if granules from more than one ESDT are being distributed. If the data type of a distribution request matches the string, the attribute evaluates to true.
 - If the string is set to the reserved word "ANY," the attribute always evaluates to true.
 - String comparisons are case-sensitive.
- MediaType.
 - Type of distribution medium to be used in fulfilling a distribution request.
 - String that must be set to one of the following seven values: "FtpPush", "FtpPull", "8MM", "CDROM", "DLT", "scp", "ANY."
 - If the "media type" of a distribution request matches the string then the attribute evaluates to true.
 - If the string is set to the reserved word "ANY," the attribute always evaluates to true.
 - String comparisons are case-sensitive.
 - Currently "8MM", "CDROM", and "DLT" never appear in distribution requests because media requests are redirected to PDS.
- EmailAddress.
 - An e-mail address that can be used to distinguish among different accounts with the same ECSUserId (e.g., to map specific ECSGuest requests to the appropriate thread pools).

- The e-mail address is especially useful when a particular ECSGuest user submits so many requests that it is necessary to control how much of the distribution capacity those requests can utilize at any given time.
- If the "e-mail address" associated with a distribution request matches the string, the attribute evaluates to true.
- If the string is set to the reserved word "ANY," the attribute always evaluates to true.
- String comparisons are case-sensitive.
- NumberOfGranules.
 - Number of granules in a distribution request.
 - The NumberOfGranules criterion can be used to map distribution requests to thread pools based on the size (in terms of granules) of the request.
 - NumberOfGranules is useful in controlling the distribution capacity available to large requests versus small requests. So it can be used to avoid having small requests back up behind large requests.
 - If the "NumberOfGranules" of a distribution request matches the value stored in the database, the attribute evaluates to true.
 - If the value of NumberOfGranules in the database is set to the reserved word "ANY," the attribute always evaluates to true.

13 To start verification of the update at the **1>** prompt enter:

select * from <table name>

- Alternatively, use one of the options described in Step 6.

14 At the **2>** prompt enter:

go

- Table contents are displayed.
- Specified value(s) should have been updated.
- For example:

1> select * from DsDdAssignmentRule

2> go

```
SeqNum    ThreadPoolId ECSUserId
Priority   EsdtType
MediaType
EmailAddress
NumberOfGranules
```

```
-----
-----
-----
-----
-----
```

100	15 \$EcDpPrEM
ANY	ANY
ANY	
ANY	
200	16 aster_gds
NORMAL	ANY
ANY	
ANY	
300	13 LarcIngMgr
NORMAL	ANY
ANY	
ANY	
ANY	
600	19 \$PDS3
ANY	ANY
ANY	
ANY	
ANY	
900	22 s4opsaaf
ANY	ANY
ANY	
ANY	
ANY	
1000	22 s4opsaar
ANY	ANY
ANY	
ANY	
ANY	
1100	22 s4opsamf
ANY	ANY
ANY	
ANY	
ANY	
1200	22 s4opsamr
ANY	ANY
ANY	
ANY	
ANY	
1300	22 s4opsdpf
ANY	ANY
ANY	
ANY	
ANY	

1400	22 s4opstmf
ANY	ANY
ANY	
ANY	
1500	22 s4opstmr
ANY	ANY
ANY	
ANY	
1700	24 RegUser
ANY	ANY
ANY	
ANY	
1800	17 NoneUser
ANY	ANY
ANY	
ANY	
1900	20 ANY
ANY	ANY
FtpPush	
ANY	
ANY	
2000	21 ANY
ANY	ANY
FtpPull	
ANY	
ANY	
400	17 NOAA/SOAP
ANY	ANY
ANY	
ANY	
601	19 \$PDS
ANY	ANY
ANY	
ANY	
500	18 jsmith
NORMAL	ANY
ANY	
ANY	
ANY	

1600 23 PrivUser
 ANY ANY
 FtpPush
 userops@x0ins02.daac.ecs.nasa.gov
 2

(19 rows affected)

- The preceding example indicates that the DsDdAssignmentRule table has been updated (from what was shown in the example in Step 7) to change the ECSUserId from “sjones” to “jsmith” in the row containing “18” for ThreadPoolId.

15 To exit from isql at the 1> prompt enter:

quit

- The connection with the database is discontinued.
- A UNIX command line prompt is displayed.

Table 18.4-7. Modify System Parameters in the Storage Management and Data Distribution Database Using the ISQL - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	UNIX window (APC Server)	single-click or use procedure in Section 18.2.1
2	isql -U <user ID> -S <database server>	enter text, press Enter
3	<database password>	enter text, press Enter
4	select * from <table name> * from <table name>	enter text, press Enter
5	go	enter text, press Enter
6	select * from <table name>	enter text, press Enter
7	go	enter text, press Enter
8	update <table name> set <column name 1>=<value 1> where <column name 2>=<value 2> (if applicable)	enter text, press Enter
9	delete <table name> where <column name 1>=<value 1> (if applicable)	enter text, press Enter
10	insert <table name> (<column name 1>,<column name 2>,<column name 3>...) (if applicable)	enter text, press Enter
11	values (<value 1>,<value 2>,<value 3>...) (if applicable)	enter text, press Enter
12	go	enter text, press Enter
13	select * from <table name>	enter text, press Enter

Table 18.4-7. Modify System Parameters in the Storage Management and Data Distribution Database Using the ISQL - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
14	go	enter text, press Enter
15	quit	enter text, press Enter

18.4.3 Modify Parameters in the DsDdThreadPool Table Using ISQL

Modifications to the DsDdThreadPool table must be made while the Distribution Server is idle, as described in the procedure that follows.

Table 18.4-8 presents (in a condensed format) the steps required to modify parameters in the DsDdThreadPool table using isql. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If any rule in the DsDdAssignmentRule table references a thread pool that is going to be deleted from the DsDdThreadPool table, update the rules in the DsDdAssignmentRule table so that no additional requests will be assigned to the thread pool that is to be deleted.
 - Refer to the **Modify System Parameters in the Storage Management and Data Distribution Database Using ISQL** procedure (Section 18.4.2).
 - Thread pool assignment rules are defined by the rows in the DsDdAssignmentRule table.
 - A thread pool should not be deleted while any rule in the DsDdAssignmentRule table references that thread pool.

- 2 If any request in the DsDdRequest table references a thread pool that is to be deleted, wait until all requests that are currently assigned to the thread pool have been completed before continuing.
 - A thread pool should not be deleted while there is a request in the DsDdRequest table that references the thread pool.

- 3 When there are no current requests assigned to any thread pool to be deleted (if any), make a request to the Operations Controller/System Administrator to bring down (stop) the Distribution Server (EcDsDistributionServer) in the appropriate mode.
 - If a new pool is added to DsDdThreadPool and new rules are added to DsDdAssignmentRule while the Distribution Server is running and the new rules result in a request being assigned to the new pool, the request will be suspended with a DsEDdMissingPool error code.
 - The suspended request cannot be resumed until the Distribution Server is warm-started.

- 4 Wait until the Distribution Server has stopped.
- 5 If a thread pool is to be deleted, use isql to set the ThreadLimit in the DsDdThreadPool table to zero.
 - Refer to the **Modify System Parameters in the Storage Management and Data Distribution Database Using ISQL** procedure (Section 18.4.2).
- 6 If a thread pool is to be added to the DsDdThreadPool table or an existing thread pool is to be modified, modify the DsDdThreadPool table using isql.
 - Refer to the **Modify System Parameters in the Storage Management and Data Distribution Database Using ISQL** procedure (Section 18.4.2).
 - Each thread pool is defined by a row in the DsDdThreadPool table.
 - The following attributes must be specified for each row in the DsDdThreadPool table:
 - ThreadPoolId.
 - ThreadPoolName.
 - ThreadLimit.
 - ThreadPoolId.
 - Unique identifier for the thread pool.
 - Integer with a value greater than zero.
 - Each row in DsDdThreadPool must have a unique ThreadPoolId.
 - ThreadPoolName.
 - Name of the thread pool.
 - String with a length less than or equal to 24 characters.
 - Each row in DsDdThreadPool must have a unique ThreadPoolName.
 - ThreadLimit.
 - Number of threads available for processing requests assigned to the thread pool.
 - Integer with a value greater than or equal to zero.
 - If the ThreadLimit for a given thread pool is zero, any requests that are assigned to the thread pool will remain in the pending state until the ThreadLimit is set to a value greater than zero.
 - If the ThreadLimit for a given thread pool is updated from a non-zero value to zero, no new requests assigned to the thread pool will be activated; however, any currently active requests will be allowed to complete.
 - The total of the thread limits for all thread pools must be less than the number of worker threads configured for DDIST.
 - The default worker thread configuration for DDIST is 228 threads.
- 7 When the appropriate modifications to the DsDdThreadPool table have been made using isql, make a request to the Operations Controller/System Administrator to perform a warm start of the Distribution Server (EcDsDistributionServer) in the appropriate mode.
- 8 If a thread pool is to be deleted (i.e., the ThreadLimit in the DsDdThreadPool table has been set to zero), wait until all completed requests that were assigned to the thread pool have been subject to garbage collection from the DsDdRequest table before continuing.

- A waiting time of 24 hours should be adequate.
- 9 If a thread pool is to be deleted (i.e., the ThreadLimit in the DsDdThreadPool table has been set to zero) and the waiting period has expired, use isql to delete the relevant row from DsDdThreadPool table.
- Refer to the **Modify System Parameters in the Storage Management and Data Distribution Database Using ISQL** procedure (Section 18.4.2).

Table 18.4-8. Modify Parameters in the DsDdThreadPool Table Using ISQL - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	Update the rules in the DsDdAssignmentRule table so that no additional requests will be assigned to the thread pool that is to be deleted (if applicable)	Use procedure in Section 18.4.2
2	Wait until all requests that are currently assigned to the thread pool have been completed before continuing (if applicable)	wait
3	Make a request to the Operations Controller/System Administrator to bring down the Distribution Server in the appropriate mode (if applicable)	contact Operations Controller
4	Wait until the Distribution Server has stopped	wait
5	Use isql to set the ThreadLimit in the DsDdThreadPool table to zero (if applicable)	Use procedure in Section 18.4.2
6	Modify the DsDdThreadPool table using isql	Use procedure in Section 18.4.2
7	Make a request to the Operations Controller/System Administrator to perform a warm start of the Distribution Server in the appropriate mode (if applicable)	contact Operations Controller
8	Wait until all completed requests that were assigned to the thread pool have been subject to garbage collection from the DsDdRequest table (if applicable)	wait
9	Use isql to delete the relevant row from DsDdThreadPool table (if applicable)	Use procedure in Section 18.4.2

18.5 Monitoring/Controlling Order Manager Operations

The **Order Manager (OM) GUI** provides system operators with access to the Order Manager database. The GUI is based on web standards. It performs most of its functions by accessing the database directly, in contrast to most current system operator GUIs, which interface with servers. The GUI allows operators to view and modify requests that the Order Manager Server has placed

on hold because they require operator intervention. In addition, operators can resubmit requests or portions of a request that failed.

The **OM GUI** incorporates many of the functions of the **Data Distribution Operator GUI** with the expectation that the **OM GUI** can provide an efficient, centralized interface. Note that the **Data Distribution Operator GUI** is still functional, as is the **ECS Data Order Tracking GUI**, which also shares a number of functions with the **OM GUI**.

New operator GUI security standards require the following two levels of permissions for the **OM GUI**:

- Full Capability.
- Limited Capability.

Full-capability operators have the ability to configure parameters and perform all other actions that can be accomplished with the **OM GUI**. Limited-capability operators are able to view a lot of information; however, on the limited-capability GUI some buttons and links have been disabled so it is not possible to perform certain actions or access certain pages.

Order Manager activities in which the Distribution Technician is likely to be involved are performed using the following **OM GUI** pages:

- Request Management.
 - Open Interventions.
 - HEG Interventions.
 - Completed Actions & Interventions.
 - Distribution Requests.
 - FTP PushDistribution Requests.
 - Staging Requests.
 - Operator Alerts.
- FtpPush Monitor.
 - FTP Push Requests.
 - Suspended Destinations.
- Archive Data.
 - Historical Distribution Requests.
- OM Status Pages.
 - OM Queue Status.
 - HEG Order Status.
 - Staging Status: Media Type.
 - Staging Status: FTP Push Destination.
 - Pending HEG Granules.
- OM Configuration.
 - Aging Parameters.
 - Server/Database.
 - Media.
 - Media Creation.
 - FTP Push Policy.

- Help.
 - About HelpOnDemand.
 - Help.
- Physical Media Distribution.
 - Open Interventions.
 - Device Configuration.
 - Printer Configuration.
 - PM Configuration.
 - Reports.
 - Media Creation Actions.
- Logs.
 - OM GUI Log Viewer.

Table 18.5-1, below, provides an Activity Checklist for monitoring/controlling Order Manager operations.

**Table 18.5-1. Monitoring/Controlling Order Manager Operations -
Activity Checklist (1 of 6)**

Order	Role	Task	Section	Complete?
1	Distribution Technician [full-capability or limited-capability]	Launch the Order Manager GUI	(P) 18.5.1	
2	Distribution Technician [full-capability or limited-capability]	View Open Intervention Information on the OM GUI	(P) 18.5.2	
3	Distribution Technician [full-capability or limited-capability]	Set Refresh Options on OM GUI Pages	(P) 18.5.2.1	
4	Distribution Technician [full-capability only]	Respond to an Open Intervention	(P) 18.5.2.2	
5	Distribution Technician [full-capability (limited-capability: monitor only)]	Monitor/Control Distribution Request Information on the OM GUI	(P) 18.5.3	
6	Distribution Technician [full-capability or limited-capability]	Filter Data Displayed on the Distribution Requests Pages	(P) 18.5.3.1	
7	Distribution Technician [full-capability only]	Change the Priority of a Distribution Request Using the OM GUI	(P) 18.5.3.2	

**Table 18.5-1. Monitoring/Controlling Order Manager Operations -
Activity Checklist (2 of 6)**

Order	Role	Task	Section	Complete?
8	Distribution Technician [full-capability only]	Suspend, Resume, Cancel, Resubmit, or Stop a Distribution Request Using the OM GUI	(P) 18.5.3.3	
9	Distribution Technician [full-capability only]	Edit Values Assigned to FtpPush Parameters	(P) 18.5.3.4	
10	Distribution Technician [full-capability only]	Annotate a Physical Media Distribution (PMD) Request from the Distribution Request Details Page	(P) 18.5.3.5	
11	Distribution Technician [full-capability or limited-capability]	View Open HEG Intervention Information on the OM GUI	(P) 18.5.4	
12	Distribution Technician [full-capability only]	Respond to an Open HEG Intervention	(P) 18.5.4.1	
13	Distribution Technician [full-capability or limited-capability]	View Pending HEG Granules	(P) 18.5.5	
14	Distribution Technician [full-capability or limited-capability]	View Operator Alerts on the OM GUI	(P) 18.5.6	
15	Distribution Technician [full-capability or limited-capability]	View Completed Operator Actions and Interventions on the OM GUI	(P) 18.5.7	
16	Distribution Technician [full-capability or limited-capability]	Filter Data Displayed on the Completed Operator Actions and Interventions Page	(P) 18.5.7.1	
17	Distribution Technician [full-capability or limited-capability]	View Historical Distribution Requests on the OM GUI	(P) 18.5.8	
18	Distribution Technician [full-capability (limited-capability view only)]	View and Respond to Suspended FTP Push Distribution Destinations	(P) 18.5.9	

**Table 18.5-1. Monitoring/Controlling Order Manager Operations -
Activity Checklist (3 of 6)**

Order	Role	Task	Section	Complete?
19	Distribution Technician [full-capability (limited-capability view only)]	View and Respond to Destination Details on the OM GUI	(P) 18.5.9.1	
20	Distribution Technician [full-capability (limited-capability check only)]	Check/Modify OM Queue Status	(P) 18.5.10	
21	Distribution Technician [full-capability (limited-capability check only)]	Check/Modify HEG Order Status	(P) 18.5.10.1	
22	Distribution Technician [full-capability or limited-capability]	Check Staging Status	(P) 18.5.10.2	
23	Distribution Technician [full-capability (limited-capability check only)]	Check/Modify Values Assigned to OM Parameters	(P) 18.5.11	
24	Distribution Technician [full-capability (limited-capability check only)]	Check/Modify Values Assigned to Aging Parameters	(P) 18.5.11.1	
25	Distribution Technician [full-capability (limited-capability check only)]	Check/Modify Values Assigned to OMS Server or Database Parameters	(P) 18.5.11.2	
26	Distribution Technician [full-capability (limited-capability check only)]	Check/Modify Values Assigned to Media Parameters	(P) 18.5.11.3	
27	Distribution Technician [full-capability (limited-capability check only)]	Check/Modify Values Assigned to Media Creation Parameters	(P) 18.5.11.4	

**Table 18.5-1. Monitoring/Controlling Order Manager Operations -
Activity Checklist (4 of 6)**

Order	Role	Task	Section	Complete?
28	Distribution Technician [full-capability (limited-capability check only)]	Check/Modify FTP Push Policy Configuration	(P) 18.5.12	
29	Distribution Technician [full-capability only]	Add Destinations to the Frequently Used Destinations List	(P) 18.5.12.1	
30	Distribution Technician [full-capability only]	Modify Values Assigned to Parameters of Frequently Used Destinations	(P) 18.5.12.2	
31	Distribution Technician [full-capability or limited-capability]	View the OM GUI Log	(P) 18.5.13	
32	Distribution Technician [full-capability or limited-capability]	View PMD Open Intervention Information on the OM GUI	(P) 18.5.14	
33	Distribution Technician [full-capability only]	Respond to a PMD Open Intervention	(P) 18.5.14.1	
34	Distribution Technician [full-capability (limited-capability check only)]	Check/Modify PMD Configuration	(P) 18.5.15	
35	Distribution Technician [full-capability (limited-capability check only)]	Check/Modify PMD Device Configuration	(P) 18.5.15.1	
36	Distribution Technician [full-capability or limited-capability]	Filter Data Displayed on the PMD Device Configuration Page	(P) 18.5.15.2	
37	Distribution Technician [full-capability (limited-capability check only)]	Check/Modify PMD Printer Configuration	(P) 18.5.15.3	
38	Distribution Technician [full-capability (limited-capability check only)]	Check/Modify PMD Production Module Configuration	(P) 18.5.15.4	

**Table 18.5-1. Monitoring/Controlling Order Manager Operations –
Activity Checklist (5 of 6)**

Order	Role	Task	Section	Complete?
39	Distribution Technician [full-capability or limited-capability]	Check PMD Reports	(P) 18.5.16	
40	Distribution Technician [full-capability only]	Monitor/Control PMD Media Creation Using the OM GUI	(P) 18.5.17	
41	Distribution Technician [full-capability only]	Activate PMD Requests	(P) 18.5.17.1	
42	Distribution Technician [full-capability only]	Fail a PMD Request	(P) 18.5.17.2	
43	Distribution Technician [full-capability only]	Annotate a PMD Action	(P) 18.5.17.3	
44	Distribution Technician [full-capability only]	Confirm Mount Media for PMD	(P) 18.5.17.4	
45	Distribution Technician [full-capability only]	Fail Mount Media for PMD	(P) 18.5.17.5	
46	Distribution Technician [full-capability only]	Confirm Media Collection Complete for PMD	(P) 18.5.17.6	
47	Distribution Technician [full-capability only]	Fail PMD Media Collection	(P) 18.5.17.7	
48	Distribution Technician [full-capability only]	Activate QC for PMD Requests	(P) 18.5.17.8	
49	Distribution Technician [full-capability only]	Mark PMD Request Shipped	(P) 18.5.17.9	
50	Distribution Technician [full-capability only]	Confirm PMD Media Dismounted	(P) 18.5.17.10	
51	Distribution Technician [full-capability only]	Confirm PMD Package Assembled	(P) 18.5.17.11	
52	Distribution Technician [full-capability only]	Mark PMD Package Not Assembled	(P) 18.5.17.12	

**Table 18.5-1. Monitoring/Controlling Order Manager Operations -
Activity Checklist (6 of 6)**

Order	Role	Task	Section	Complete?
53	Distribution Technician [full-capability only]	Print PMD Outputs	(P) 18.5.17.13	
54	Distribution Technician [full-capability only]	Use the OM PDS Cleanup Manager	(P) 18.5.18	
55	Distribution Technician [full-capability only]	Use the Order Manager (OM) Command Line Utility and the OMS Configuration CI	(P) 18.5.19	
56	Distribution Technician [full-capability only]	Prepare Input Files for Use with the OM Command Line Utility	(P) 18.5.19.1	
57	Distribution Technician [full-capability only]	Run the OM Command Line Utility	(P) 18.5.19.2	
58	Distribution Technician [full-capability only]	Prepare Input Files for Use with the OMS Configuration CI	(P) 18.5.19.3	
59	Distribution Technician [full-capability only]	Start the OMS Configuration CI	(P) 18.5.19.4	
60	Distribution Technician [full-capability only]	Process Input Files Specified for Synergy III Exceptions	(P) 18.5.19.5	
61	Distribution Technician [full-capability only]	Configure How Long Order-Tracking Information is Kept in the OMS Database	(P) 18.5.19.6	
62	Distribution Technician [full-capability only]	Switch Between Synergy IV and Synergy III Operations	(P) 18.5.19.7	
63	Distribution Technician [full-capability only]	Get OMS Configuration CI Help	(P) 18.5.19.8	

18.5.1 Launch the Order Manager GUI

Launching the **Order Manager GUI** is accomplished using the Netscape browser. Table 18.5-2 presents (in a condensed format) the steps required to launch the **Order Manager GUI**. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Access a terminal window logged in to a host (e.g., the Operations Workstation or Sun external server) that has access to the Netscape web browser.
 - Examples of Operations Workstation host names include **e0acs03**, **g0acs02**, **l0acs01**, and **n0acs03**.
 - Examples of Sun external server host names include **e0ins01**, **g0ins01**, **l0ins01**, and **n0ins01**.
 - For detailed instructions refer to the **Log in to System Hosts** procedure (Section 18.2.1).

- 2 In the terminal window, at the command line prompt, enter:
netscape &
 - It may be necessary to type the path as well as the netscape command (e.g., **/tools/bin/netscape &**).
 - It may be necessary to respond to dialogue boxes, especially if the browser is already being used by someone else who has logged in with the same user ID.
 - The Netscape web browser is displayed.

- 3 If a bookmark has been created for the **OM GUI**, select the appropriate bookmark from those listed on the browser's **Bookmarks** button (or the **Communicator** → **Bookmarks** pull-down menu).
 - The security login **Prompt** is displayed.

- 4 If no bookmark has been created for the **OM GUI**, in the browser's **Location (Go To)** field enter:
http://<host>:<port>/<path>/
 - For example:
http://x0dps01.daac.ecs.nasa.gov:54321/cgi-bin/
 - The security login **Prompt** is displayed.

- 5 In the **User Name** box of the security login **Prompt** enter:
<user name>

- 6 In the **Password** box of the security login **Prompt** enter:
<password>

NOTE: If the security login prompt reappears after the first time the user name and password have been entered (and the **OK** button has been clicked), it may not be due to a data entry problem. Try again to log in using the same user name and password. Sometimes it is necessary to enter the user name and password for the GUI more than once.

- 7 **Single-click** on the appropriate button from the following selections:
 - **OK** - to complete the log-in and dismiss the dialogue box.
 - The dialogue box is dismissed.
 - The **Order Manager Page** [**“Home” Page**] is displayed.
 - **Cancel** - to dismiss the dialogue box without logging in.
 - The dialogue box is dismissed.
 - The Netscape web browser is displayed.

Table 18.5-2. Launch the Order Manager GUI - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	UNIX window with access to Netscape browser (Operations Workstation, Interface Server 02, etc.)	single-click or use procedure in Section 18.2.1
2	netscape &	enter text, press Enter
3	<OM GUI bookmark> (if available)	single-click
4	http://<host>:<port>/<path>/ (if necessary)	enter text, press Enter
5	<user name>	enter text
6	<password>	enter text
7	OK	single-click

18.5.2 View Open Intervention Information on the OM GUI

The **Open Interventions** page provides the full-capability operator with a means of viewing and responding to open interventions. (The limited-capability operator can view but cannot work on (respond to) open interventions.)

Table 18.5-3 presents (in a condensed format) the steps required to view open intervention information on the **OM GUI**. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **Request Management** link in the navigation frame of the **OM GUI**.
 - The **Request Management** menu is expanded.
- 3 **Single-click** on the **Open Interventions** link in the navigation frame of the **OM GUI**.
 - The **Open Interventions** page is displayed.
 - The **Listing** table has the following columns:

- **Order Id.**
- **Request Id.**
- **Media.**
- **Status.**
- **Worked by.**
- **Created.**
- **Acknowledged.**
- **Explanation(s).**

- 4 Observe information displayed in the **Listing** table of the **Open Interventions** page.
- The **Show _____ rows at a time** window provides a means of selecting the maximum number of rows of data to be displayed at a time.
 - For example, if **Show _____ rows at a time** is being displayed, selecting **50** from the option button would result in the display of a page of data containing up to 50 rows of data.
 - **Single-clicking** on a link (underlined word) in the column header row of the table causes table contents to be sorted on that column.
 - For example, clicking on the **Created** link causes the table to be organized by “Creation Time,” with the most recent request requiring intervention in the top row of the table.
 - **Single-clicking** on a specific Order ID brings up a screen containing more detailed data concerning that particular order.
 - The ECS Order page displays the following types of data concerning the order: Request ID(s), Order Type, Order Source, Ext. RequestId, Receive Date, Last Update, Description, Start Date, User ID, Status, Ship Date, Order Home DAAC.
 - If the order is a bundled order (Order Type “Bundled Order” or “BO”), the **ECS Order** page includes a link to the **Spatial Subscription Server GUI**.
 - **Single-clicking** on the  icon in the **OM GUI** navigation frame causes the **Open Interventions** page to be redisplayed.
 - **Single-clicking** on a specific Request ID in the **Listing** table of the **Open Interventions** page brings up a screen containing detailed data concerning the intervention for that particular request (refer to Steps 5 and 6).
 - Horizontal and vertical scroll bars appear when necessary to allow viewing data that are not readily visible in the window.
 - If **AutoRefresh** is **ON**, the **Open Interventions** page refreshes automatically as often as specified in the **Refresh screen every x minutes** window.
 - If a different refresh option is preferred, perform the **Set Refresh Options on OM GUI Pages** procedure (Section 18.5.2.1).
 - To manually update (refresh) the data on the screen, **single-click** on the  icon in the **OM GUI** navigation frame.
 - The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.

- The **first**, **previous**, **next**, and **last** links provide means of displaying additional pages of data.
- 5 **Single-click** on a specific Request ID in the **Listing** table of the **Open Interventions** page to bring up a screen containing detailed data concerning the intervention for that particular request.
- For example, clicking on Request ID **0401572481** brings up an **Open Intervention Detail** page (i.e., **Intervention for Request 0401572481**).
- 6 Observe information displayed on the **Open Intervention Detail** page.
- The following items are displayed on the **Open Intervention Detail** page.
 - **User ID.**
 - **email.**
 - **Order ID.**
 - **Request ID.**
 - **Size (est, MB).**
 - **Media Type.**
 - **Priority.**
 - **Explanation(s).**
 - **Worked by.**
 - **Created.**
 - **Acknowledged.**
 - **Status.**
 - **User String:**
 - **Worked by:**
 - **assign link or change link.**
 - **Granule List: DBID; ESDT; Size (MB); Status; RESUBMIT** (button); **Explanation; Action; Fail** button(s) (if applicable).
 - **Request Attributes: Change Media to:** option button; **Change Priority to:** option button; **Disable limit checking** box; **Update FtpPush Parameters** box (if applicable).
 - **Request Level Disposition: Keep on hold; Submit; Fail Request; Partition;** (Partition) **Interval: *d* days *h* hours** boxes.
 - **OPERATOR NOTES.**
 - **Apply** button.
 - **Reset** button.
 - **Single-clicking** on the **←** icon in the **OM GUI** navigation frame causes the **Open Interventions** page to be redisplayed.
- 7 To work on the intervention being displayed on the **Open Intervention Detail** page, perform the **Respond to an Open Intervention** procedure (Section 18.5.2.2).

- 8 To view the details of another open intervention first **single-click** on the  icon in the **OM GUI** navigation frame then return to Step 4.
 - The **Open Intervention Detail** page is dismissed.
 - The **Open Interventions** page is displayed.

- 9 To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
 - A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.

- 10 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
 - **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-3. View Open Intervention Information on the OM GUI - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	Request Management link (Order Manager Page [“Home” Page])	single-click
3	Open Interventions link	single-click
4	Observe information displayed in the Listing table of the Open Interventions page	read text
5	< Request ID > (in the Listing table of the Open Interventions page)	single-click
6	Observe information displayed on the Open Intervention Detail page	read text
7	Work on the intervention (if appropriate)	Use procedure in Section 18.5.2.2
8	 icon in the OM GUI navigation frame (if applicable)	single-click
9	Return to Step 4 (if applicable)	
10	Log Out link (when applicable)	single-click
11	OK (when applicable)	single-click

18.5.2.1 Set Refresh Options on OM GUI Pages

Buttons at the bottom of **OM GUI** pages provide the Distribution Technician (whether full-capability or limited capability operator) with a means of setting refresh options. Table 18.5-4 presents (in a condensed format) the steps required to set refresh options on **OM GUI** pages. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Observe the **AutoRefresh Control Panel** at the bottom of the **OM GUI** page.
 - One of the following **AutoRefresh** statuses is displayed:
 - **ON.**
 - **OFF.**

- 2 If applicable, **single-click** on the appropriate radio button in the **AutoRefresh Control Panel** at the bottom of the **OM GUI** page.
 - The following **AutoRefresh** options are available:
 - **on.**
 - **off.**
 - It is useful to “auto refresh” when working with current orders/requests that are expected to change status at any time and it is desirable to see the new status right away.
 - It is useful to suspend refresh when a large volume of orders/requests is being processed and it is desirable to preserve the orders/requests displayed on the current screen.

- 3 To change the refresh rate (assuming **AutoRefresh** is **ON**), **single-click** on the **Refresh screen every x minutes** option button to display a menu of numbers of minutes then **single-click** on the desired selection.
 - The following choices are available:
 - **1.**
 - **5.**
 - **10.**
 - **15.**
 - **30.**
 - **45.**
 - **60.**
 - Selected number is displayed in the **Refresh screen every x minutes** window.

- 4 Return to the procedure that recommended setting refresh options on OM GUI pages.

Table 18.5-4. Set Refresh Options on OM GUI Pages - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Observe the AutoRefresh Control Panel	read text
2	AutoRefresh option (i.e., on button or off button on the AutoRefresh Control Panel) (if applicable)	single-click
3	<minutes> (Refresh screen every x minutes option button) (if applicable)	single-click
4	Return to the procedure that recommended setting refresh options on OM GUI pages	

18.5.2.2 Respond to an Open Intervention

The **Open Intervention Detail** page provides the full-capability operator with a means of performing the following kinds of interventions (limited-capability operators are not allowed to work on open interventions):

- Select a different granule to replace a granule that is unavailable.
- Fail selected granule(s).
- Disable limit checking.
- Change the distribution medium for a request.
- Resubmit a request.
- Fail a request.
- Partition (divide) a request.

Table 18.5-5 presents (in a condensed format) the steps required to respond to an open intervention. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

NOTE: The response to an intervention may require coordination between the Distribution Technician and a User Services representative, especially when determining a more suitable type of distribution medium, selecting a replacement granule, or taking any other action that would require contacting the person who submitted the order. In fact, depending on the circumstances and DAAC policy it may be appropriate for User Services to assume responsibility for the eventual disposition of some interventions.

- 1 Observe the information displayed in the **Worked by** column of the **Open Intervention Detail** page.
 - If the **Open Intervention Detail** page is not being displayed on the **OM GUI**, go to the **View Open Intervention Information on the OM GUI** procedure (Section 18.5.2).

- If someone is already working on the intervention, that person is identified in the **Worked by:** field of the **Open Intervention Detail** page.
 - In general working on an intervention is left to the person who has already been signed up to work on it unless the change is coordinated with that person or they are going to be unavailable (e.g., due to illness or vacation).
 - If necessary (e.g., due to illness, vacation, or prior coordination), it is possible to override the assignment of a person to work on an intervention.
- 2 To assign oneself to work on the intervention, first **single-click** on the **assign** or **change** link in the **Worked by:** field on the **Open Intervention Detail** page.
 - If someone has been assigned to work on the intervention a **change** link is displayed; if no one has been assigned to work on the intervention an **assign** link is displayed.
 - **Single-clicking** on the **assign** or **change** link causes a text box to be displayed.
 - 3 To continue the process of assigning oneself to work on the intervention, in the text box displayed beside the **assign** or **change** link in the **Worked by:** field enter:
<user ID>
 - If necessary, overwrite the ID of the previously assigned person.
 - 4 To continue the process of assigning oneself to work on the intervention, **single-click** on the green button with the checkmark next to the text box in the **Worked by:** field.
 - 5 If no granule in the request is to be “failed” or if all granules in the request are to be “failed,” skip Steps 6 through 11 and go to Step 12.
 - 6 If a granule is to be replaced (e.g., because of an “Invalid UR/Granule Not Found” entry in the **Explanation** column of the **Granule List**), in the **DBID** text box enter:
<Database ID>
 - The DBID for a replacement granule can be determined by doing a search using the EDG.
 - 7 To continue the process of specifying a replacement granule, **single-click** on the **Apply** button associated with the DBID.
 - A dialogue box is displayed to confirm the change to the granule.
 - 8 To continue the process of specifying a replacement granule, **single-click** on the appropriate button from the following selections:
 - **OK** - to confirm the specification of a replacement granule and dismiss the dialogue box.
 - The dialogue box is dismissed.
 - The **Open Intervention Detail** page is displayed.
 - **Cancel** - to dismiss the dialogue box without specifying a replacement granule.
 - The dialogue box is dismissed.

- The **Open Intervention Detail** page is displayed.
- 9 If a granule is to be “failed” (e.g., because of an “Invalid UR/Granule Not Found” entry in the **Explanation** column of the **Granule List**), **single-click** on the **Fail** button in **Action** column of the row for the granule in the **Granule List**.
- A dialogue box is displayed to confirm the change to the granule.

NOTE: “Failing” a granule is a permanent action and cannot be canceled after having been confirmed.

- 10 To continue the process of failing a granule, **single-click** on the appropriate button from the following selections:
- **OK** - to confirm the failure of the granule and dismiss the dialogue box.
 - The dialogue box is dismissed.
 - The **Open Intervention Detail** page is displayed.
 - **Cancel** - to dismiss the dialogue box without failing the granule.
 - The dialogue box is dismissed.
 - The **Open Intervention Detail** page is displayed.
- 11 Repeat Steps 6 through 10 (as necessary) to replace or fail any additional granules.
- 12 If limit checking should be disabled, **single-click** on the **Disable limit checking** box.
- If the **Disable limit checking** attribute is selected and subsequently applied, the request size limit checking is disabled.
 - The **Disable limit checking** option makes it possible to override the standard media capacity limits for a particular media type and is most likely to be applied to a non-physical media type (i.e., ftp push or ftp pull).
 - The **Disable limit checking** option should be used for unusually large requests only.
- 13 If the distribution medium should be changed, **single-click** on the **Change Media to:** box to display a menu of media then **single-click** on the desired selection.
- The following choices are available: - -, **FtpPull**, **FtpPush**, **CDROM**, **DLT**, **DVD**, **8MM**, **scp**.
 - Selected medium is displayed in the **Change Media to:** box.
- 14 If the priority of the request should be changed, **single-click** on the option button associated with the **Change Priority to:** box to display a menu of priorities then **single-click** on the desired selection.
- The following choices may be available (the current priority will not be listed): - -, **LOW**, **NORMAL**, **HIGH**, **VHIGH**, **XPRESS**.
 - Selected priority is displayed in the **Change Priority to:** box.

- 15 If the values assigned to ftp push parameters should be changed, **single-click** on the **Update FtpPush Parameters** box.
- The **Update FtpPush Parameters** option appears when applicable (i.e., when the current distribution medium for the request is ftp push).
 - The **Update FtpPush Parameters** option provides a means of editing the existing ftp push information when the intervention is closed.
- 16 If a note should be entered concerning the request, in the **OPERATOR NOTES** text box enter:
<text>
- For example, the note may explain the reason for resubmitting the request.
- 17 To select the disposition for the request **single-click** on the appropriate button from the following selections:
- **Keep on hold** - to delay applying any intervention action (keep the intervention open) and dismiss the **Open Intervention Detail** page.
 - Placing an intervention on hold does not allow changing the request's attributes, but saves the operator notes and allows opening the intervention at a later time (essentially, the intervention is being “saved”).
 - **Submit** - to apply the intervention actions (if any) specified in the **Granule List** and **Request Attributes** sections of the **Open Intervention Detail** page and dismiss the **Open Intervention Detail** page.
 - **Fail Request** - to fail the entire request (including all granules) and dismiss the **Open Intervention Detail** page.
 - **Partition** - to start the process of partitioning a request that exceeds maximum request size.
- 18 If the **Partition** button was selected in the preceding step and distribution of the granules should be spread over a period of time, in the corresponding text box(es) enter:
<number of days>
<number of hours>

NOTE: There are **Apply** and **Reset** buttons at the bottom of the **Open Intervention Detail** page. The **Reset** button does not cancel any changes made to the request or changes made to the DBIDs (changed or failed). It simply resets the form buttons for the **Request Level Disposition** section to their original states.

- 19 **Single-click** on the **Apply** button.
- A **Close Confirmation** page is displayed.
 - The **Close Confirmation** page displays the actions to be taken; for example, the following types of actions may be listed: **Disposition** [e.g., keep on hold, submit, fail, or partition], **Limit Checking Disabled** [yes, no, or blank], **New Media** [no, yes: (type), or blank], **New Priority** [no, yes: (type), or blank].

- If the intervention involved changing the medium from an electronic medium to a physical medium, text boxes for entering the following types of shipping information are displayed on the **Close Confirmation** page: **Address 1, Address 2, Address 3, City, State/Province, Country, Zip/Postal Code**,
- If the intervention involved changing the medium to ftp push or updating the values assigned to ftp push parameters, text boxes for the following ftp push parameters are displayed on the **Close Confirmation** page: **Ftp node** [Destination host name], **Ftp Address** [FTP user name], **Password, Confirm Password, User String** [message to be sent to the user], **Destination Directory** [full path].
- If it was necessary to fail a request or granule(s) within a request, the **Close Confirmation** page includes options for either appending additional text to the default e-mail message to be sent to the requester or choosing not to send an e-mail message to the requester. An **Additional e-mail text** text box for appending text (if desired) to the standard e-mail text is displayed on the **Close Confirmation** page; a **Don't send e-mail** box to suppress the sending of an e-mail message is displayed on the **Close Confirmation** page.

20 If the intervention involved changing the medium from an electronic medium to a physical medium, in the corresponding text boxes enter:

<**Address 1**>

<**Address 2**>

<**Address 3**>

<**City**>

<**State/Province**>

<**Country**>

<**Zip/Postal Code**>

21 If the intervention involved changing the medium to ftp push or updating the values assigned to ftp push parameters, perform the **Edit Values Assigned to FtpPush Parameters** procedure (Section 18.5.3.4).

22 If the intervention involved failing a request or granule(s) within a request, partitioning a request, or modifying the granules in a request, and additional text is to be appended to the corresponding standard e-mail text, in the **Additional e-mail text** text box on the **Close Confirmation** page enter:

<**text**>

23 If the intervention involved failing a request or granule(s) within a request, partitioning a request, or modifying the granules in a request, and no e-mail message is to be sent,

single-click on the **Don't send e-mail** box on the **Close Confirmation** page to suppress the sending of an e-mail message indicating request/granule failure.

- Unless the **Don't send e-mail** box is checked, an e-mail message indicating request/granule failure will be sent to the requester.

24 **Single-click** on the appropriate button from the following selections:

- **OK** - to apply the specified intervention actions (if any) and dismiss the **Close Confirmation** page.
 - The **Close Confirmation** page is dismissed.
 - An **Intervention Closed** page is displayed
- **Cancel** - to dismiss the **Close Confirmation** page without applying the specified intervention actions.
 - The **Close Confirmation** page is dismissed.
 - A warning dialogue box is displayed with the message “WARNING: The disposition and actions you have taken for this intervention will be lost. Continue?”

25 If a warning dialogue box is displayed with the message “WARNING: The disposition and actions you have taken for this intervention will be lost. Continue?” **single-click** on the appropriate button from the following selections:

- **OK** - to dismiss the warning dialogue box and the **Close Confirmation** page and return to the **Open Intervention Detail** page.
- **Cancel** - to dismiss the warning dialogue box and return to the **Close Confirmation** page.

26 To exit from the **Intervention Closed** page, click on the **OK** button.

- The **Intervention Closed** page is dismissed.
- The **Open Interventions** page is displayed.

27 To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.

- A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.

28 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:

- **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
- **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-5. Respond to an Open Intervention - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	Observe the information displayed in the Worked by column	read text
2	assign or change link (if applicable)	single-click
3	<user ID> (if applicable)	enter text
4	green button with the checkmark (next to the text box in the Worked by: field) (if applicable)	single-click
5	<Database ID> (DBID text box) (if applicable)	enter text
6	Apply button (if applicable)	single-click
7	OK button (if applicable)	single-click
8	Fail button (in Action column of the row for the granule) (if applicable)	single-click
9	OK button (if applicable)	single-click
10	Repeat Steps 5 through 9 (as necessary)	
11	Disable limit checking box (if applicable)	single-click
12	<medium> (Change Media to: option list) (if applicable)	single-click
13	<priority> (Change Priority to: option list) (if applicable)	single-click
14	Update FtpPush Parameters box (if applicable)	single-click
15	<text> (OPERATOR NOTES text box) (if applicable)	enter text
16	Keep on hold button (if applicable)	single-click
17	Submit button (if applicable)	single-click
18	Fail Request button (if applicable)	single-click
19	Partition button (if applicable)	single-click
20	<number of days> (day(s) text box) (if applicable)	enter text
21	<number of hours> (hours text box) (if applicable)	enter text
22	Apply button	single-click
23	<Address 1> (Address 1 text box) (if applicable)	enter text
24	<Address 2> (Address 2 text box) (if applicable)	enter text
25	<Address 3> (Address 3 text box) (if applicable)	enter text
26	<City>(City text box) (if applicable)	enter text
27	<State/Province> (State/Province text box) (if applicable)	enter text
28	<Country> (Country text box) (if applicable)	enter text

Table 18.5-5. Respond to an Open Intervention - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
29	<Zip/Postal Code> (Zip/Postal Code text box) (if applicable)	enter text
30	Edit values assigned to FtpPush parameters (if applicable)	Use procedure in Section 18.5.3.4
31	<text> (Additional e-mail text text box) (if applicable)	enter text
32	Don't send e-mail button (if applicable)	single-click
33	OK button (to dismiss the Close Confirmation page)	single-click
34	OK button (to dismiss the warning dialogue box) (if applicable)	single-click
35	OK button (to exit from the Intervention Closed page) (when applicable)	single-click
36	Log Out link (when applicable)	single-click
37	OK (to complete logging out) (when applicable)	single-click

18.5.3 Monitor/Control Distribution Request Information on the OM GUI

The following three **OM GUI** pages provide the full-capability operator with a means of viewing distribution request information on the **OM GUI** and a means of taking actions with respect to distribution requests:

- **Distribution Requests** page.
- **Staging Distribution Requests** page.
- **FtpPush Distribution Requests** page.

The pages allow the full-capability operator to take the following kinds of actions with respect to distribution requests:

- Change the priority of a distribution request while granules for the request still need to be staged or while granules for the request still need to be pushed.
- Resubmit a request in a terminal state (e.g., aborted, cancelled, terminated, or shipped).
- Suspend a request that still needs to be staged or while granules for the request still need to be pushed.
- Resume a request that was suspended by the OM GUI operator or while the processing of new requests by the OMS is suspended.
- Cancel a request that is not in a terminal state and while granules for the request still need to be staged or pushed.

The limited-capability operator can use the **Distribution Requests** page to view distribution request information but is not allowed to take action on distribution requests.

Table 18.5-6 presents (in a condensed format) the steps required to monitor/control distribution request information on the OM GUI. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **Request Management** link in the navigation frame of the **OM GUI**.
 - The **Request Management** menu is expanded.
- 3 Click on the **Distribution Requests** link in the navigation frame of the **OM GUI**.
 - The **Distribution Requests** page is displayed.
 - The **Current Filters** area of the **Distribution Requests** page describes how the current listing of distribution requests has been filtered.
 - It is important to check the filter settings when opening any of the distribution requests pages because changes to the filter settings tend to persist, even from one session to another.
 - To filter the **Distribution Requests Listing** in a different way, perform the **Filter Data Displayed on the Distribution Requests Pages** procedure (Section 18.5.3.1).
 - The **Options** area of the **Distribution Requests** page has the following buttons and selection boxes:
 - **Change Filter** button [refer to the **Filter Data Displayed on the Distribution Requests Pages** procedure (Section 18.5.3.1)].
 - **Bulk Cancel** button [for canceling selected intervention(s)].
 - **Bulk Resubmit** button [for resubmitting selected intervention(s)].
 - **Select All Bulk** box [for selecting all eligible requests for either **Bulk Cancel** or **Bulk Resubmit**].
 - **Select None** box [for selecting none of the eligible requests for either **Bulk Cancel** or **Bulk Resubmit**].
 - The **Listing** table has the following columns:
 - **Sel** [check boxes for marking items to be resubmitted or canceled].
 - **Ord Typ/Prc Mod** [Order Type/Processing Mode] [Order types include “Regular,” “BO” (Bundled Order), “MM” (Machine-to-Machine Gateway), and “HEG” (HDFEOS-to-GeoTiff (HEG) Converter Tool)].
 - **OrderID/RequestID**.
 - **Request Size (MB)**.
 - **Gran Cnt** [Granule Count].
 - **Media**.
 - **Priority**.

- **Request Status.**
 - **ESDT.**
 - **UserID.**
 - **Resub Cnt** [Resubmit Count].
 - **Created.**
 - **Last Update.**
 - **Actions** [Actions (e.g., Resubmit, Cancel, Suspend, or Resume) for which the request is eligible.].
- 4 Observe information displayed in the **Listing** table of the **Distribution Requests** page.
- The **Show _____ rows at a time** window provides a means of selecting the maximum number of rows of data to be displayed at a time.
 - For example, if **Show _____ rows at a time** is being displayed, selecting **50** from the option button would result in the display of a page of data containing up to 50 rows of data.
 - **Single-clicking** on a link in the column header row of the table causes table contents to be sorted on that column.
 - For example, clicking on the **Created** link causes the table to be organized by date, with the most recent distribution request in the top row of the table.
 - **Single-clicking** on a specific Order ID or Request ID brings up a screen containing more detailed data concerning that particular order or request.
 - For example, clicking on Order ID **0402176057** brings up an ECS Order page (i.e., ECS ORDER **0402176057**) that displays the following types of data concerning the order: Request ID(s), Order Type, Order Source, Ext. RequestId, Receive Date, Last Update, Description, Start Date, User ID, Status, Ship Date, Order Home DAAC.
 - If the order is a bundled order (Order Type “Bundled Order” or “BO”), the **ECS Order** page includes a link to the **Spatial Subscription Server GUI**.
 - **Single-clicking** on the  icon in the **OM GUI** navigation frame causes the **Request Management** page **Distribution Requests** page to be redisplayed.
 - For example, clicking on Request ID **0800013350** brings up a **Distribution Request Detail** page (i.e., **DISTRIBUTION REQUEST 0800013350**) that displays the following types of data (as applicable) concerning the request: UserID; E-mail; Request Size (MB); # Granules; # Granules Staged; # Granules FTP Pushed; Destination. Receive Date/Time; Start Date/Time; Last Update; End Date/Time; Due Date; Allocated Device; OrderId; Order Type; Ext. RequestId; Priority; Request Status; Destination; Edit FtpPush Parameters [button]; Host Name, Resubmit Count; Media Type; Resource Class; Actions [Action button(s) (e.g., Resubmit, Stop, Cancel, Suspend, and/or Resume)]; User String; Device Allocated Date/Time, Volume List: Volume Name, Status, Action; Explanation, Production Module, Last Update; Request Notes [text box and Apply button]; Mailing Address: Title; First Name; Middle Initial; Last Name; Email; Organization; Address; City; State/Province; Country; Zip/Postal code; Telephone; Fax; Shipping Address: Title; First Name; Middle Initial; Last Name; Email; Address; City; State/Province; Country; Zip/Postal code; Telephone; Fax;

Billing Address: Title; First Name; Middle Initial; Last Name; Email; Organization; Address; City; State/Province; Country; Zip/Postal code; Telephone; Fax; Request Granules/Failed Granules: (e.g., DB ID; DPL ID; ESDT; Size (MB); Proc Mode; HEG Line Item; Volume Name; [Granule] Status; Completion Time; Explanation).

- **Single-clicking** on a specific User ID brings up a screen that shows user profile information for that user, including the following types of data:
 - **Contact Information:** Name, E-Mail Address, Organization, User ID, User Verification Key, Affiliation, Project, Home DAAC, Primary area of study, Account Information, Date created, Expiration date, Privilege level, NASA user, Access privilege, V0 Gateway user type, V0 Gateway category.
 - **Contact Address:** Address, City, State/Province, Country, Zip/Postal code, Telephone, Fax.
 - **DAR [Data Acquisition Request] Information:** Aster category, DAR expedited data, Shipping Address, Title, First Name, Middle Initial, Last Name, Email, Address, City, State/Province, Country, Zip/Postal code, Telephone, Fax.
 - **Billing Address** [Same fields as Shipping Address]
 - Horizontal and vertical scroll bars appear when necessary to allow viewing data that are not readily visible in the window.
 - If **AutoRefresh** is **ON**, the **Distribution Requests** page refreshes automatically as often as specified in the **Refresh screen every x minutes** window.
 - If a different refresh option is preferred, perform the **Set Refresh Options on OM GUI Pages** procedure (Section 18.5.2.1).
 - To manually update (refresh) the data on the screen, click on the **Reload Page** link.
 - The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.
 - The **first**, **previous**, **next**, and **last** links provide means of displaying additional pages of data.
 - The **Go directly to row...** window provides a means of displaying a page of data starting with a particular row of the table.
 - For example, if **Go directly to row _____ of 415 rows** is being displayed, typing **315** in the window and clicking on the **ok** button would result in the display of a page of data containing rows 315 through 364.
- 5** If the list of distribution requests shown in the **Listing** table of the **Distribution Requests** page needs to be filtered (e.g., a request to be viewed is not listed in the table), filter the data.
- For detailed instructions refer to the **Filter Data Displayed on the Distribution Requests Pages** procedure (Section 18.5.3.1).
- 6** Observe information displayed in the **Listing** table of the **Distribution Requests** page.

- 7 To change the priority of a distribution request (when applicable), perform the **Change the Priority of a Distribution Request Using the OM GUI** procedure (Section 18.5.3.2).
- 8 To either suspend a distribution request or resume processing of a suspended request (when applicable), perform the **Suspend, Resume, Cancel, Resubmit, or Stop a Distribution Request Using the OM GUI** procedure (Section 18.5.3.3).
- 9 To cancel a distribution request (when applicable), perform the **Suspend, Resume, Cancel, Resubmit, or Stop a Distribution Request Using the OM GUI** procedure (Section 18.5.3.3).
- 10 To review and/or respond to an open intervention for a particular distribution request first **single-click** on the **Open Intervention** link in the **Request Status** column for the request in the **Listing** table.
- 11 To review and/or respond to an open intervention go to the procedure **View Open Intervention Information on the OM GUI** procedure (Section 18.5.2).
- 12 To reprocess a distribution request that has failed, been cancelled, or been shipped (when applicable), perform the **Suspend, Resume, Cancel, Resubmit, or Stop a Distribution Request Using the OM GUI** procedure (Section 18.5.3.3).
- 13 To stop the processing of a Physical Media Distribution (PMD) request that is transferring or has at least one volume being verified, perform the **Suspend, Resume, Cancel, Resubmit, or Stop a Distribution Request Using the OM GUI** procedure (Section 18.5.3.3).
- 14 To edit the values assigned to ftp push parameters for a particular distribution request (when applicable), perform the **Edit Values Assigned to FtpPush Parameters** procedure (Section 18.5.3.4).
- 15 To add a comment to a particular distribution request (when applicable), perform the **Annotate a Physical Media Distribution (PMD) Request from the Distribution Request Details Page** procedure (Section 18.5.3.5).
- 16 To view operator alerts, perform the **View Operator Alerts on the OM GUI** procedure (Section 18.5.6).
- 17 To view the **Staging Distribution Requests** page, first (if it has not been expanded already) **single-click** on the **FtpPush Monitor** link in the navigation frame of the **OM GUI**.
 - The **FtpPush Monitor** menu is expanded (as applicable).

- 18** To view the **Staging Distribution Requests** page **single-click** on the **Staging Requests** link in the navigation frame of the **OM GUI**.
- The **Staging Distribution Requests** page is displayed.
 - The **Staging Distribution Requests** page displays the same types of information (for each request in the list) and has the same kinds of links as the **Distribution Requests** page; however, the **Staging Distribution Requests** page has a couple of differences:
 - The **Resource Class** column shows each request’s archive resource demand in terms of one of the following values: **C** [Cheap], **M** [Moderate], **E** [Expensive].
 - Sorting the table by **Resource Class** (by clicking on the **Resource Class** column header) provides a convenient way to determine which request(s) is (are) having the most significant effects on archive resources. That may lead to suspending or canceling certain requests.
 - The **Gran Cnt/Staging Complete** column shows the number of granules associated with the request and the number of granules that have completed staging.
- 19** To view the **FtpPush Distribution Requests** page, first (if it has not been expanded already) **single-click** on either **Request Management** or the **FtpPush Monitor** link in the navigation frame of the **OM GUI**.
- The **Request Management** or **FtpPush Monitor** menu is expanded (as applicable).
- 20** To view the **FtpPush Distribution Requests** page **single-click** on the **FtpPush Distribution Requests** link in the navigation frame of the **OM GUI**.
- The **FtpPush Distribution Requests** page is displayed.
 - The **FtpPush Distribution Requests** page displays the same types of information (for each request in the list) and has the same kinds of links as the **Distribution Requests** page; however, there are several differences:
 - There is no **Media** column (all requests use the same type of medium – ftp push).
 - The **Destination** column shows the name of the destination.
 - The **Gran Cnt/FtpPush Complete** column shows the number of granules associated with the request and the number of granules that have completed ftp push.
 - The **Resource Class** column shows each request’s archive resource demand (as on the **Staging Distribution Requests** page).
 - To filter the list of distribution requests shown in the **Listing** table of the **FtpPush Distribution Requests** page perform the **Filter Data Displayed on the Distribution Requests Pages** procedure (Section 18.5.3.1).
- 21** If there is an **OM GUI** failure, perform the applicable procedure(s) in the **Troubleshooting DDIST and Order Manager GUI Problems** section (Section 18.6).
- 22** Repeat Steps 4 through 21 as necessary to monitor distribution requests.

- 23 To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
- A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
- 24 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-6. Monitor/Control Distribution Request Information on the OM GUI - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	Request Management link (if necessary)	single-click
3	Distribution Requests link	single-click
4	Observe information displayed in the Listing table of the Distribution Requests page	read text
5	Filter the data displayed in the table (if necessary)	Use procedure in Section 18.5.3.1
6	Observe information displayed in the Listing table of the Distribution Requests page	read text
7	Change the priority of a distribution request (when applicable)	Use procedure in Section 18.5.3.2
8	Suspend a distribution request or resume processing of a suspended request (when applicable)	Use procedure in Section 18.5.3.3
9	Cancel a distribution request (when applicable)	Use procedure in Section 18.5.3.3
10	Open Intervention link (when applicable)	single-click
11	Review and/or respond to an open intervention (when applicable)	Use procedure in Section 18.5.2
12	Reprocess a distribution request that has failed, been cancelled, or been shipped (when applicable)	Use procedure in Section 18.5.3.3
13	Edit values assigned to ftp push parameters for a particular distribution request (when applicable)	Use procedure in Section 18.5.3.4
14	Add a comment to a particular distribution request (when applicable)	Use procedure in Section 18.5.3.5
15	View operator alerts (when applicable)	Use procedure in Section 18.5.6
16	FtpPush Monitor link (to view the Staging Distribution Requests page) (when applicable)	single-click

Table 18.5-6. Monitor/Control Distribution Request Information on the OM GUI - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
17	Staging Requests link (to view the Staging Distribution Requests page) (when applicable)	single-click
18	Either Request Management or the FtpPush Monitor link (to view the FtpPush Distribution Requests page) (when applicable)	single-click
19	FtpPush Distribution Requests link (to view the FtpPush Distribution Requests page) (when applicable)	single-click
20	Troubleshoot OM GUI failure (when applicable)	Use applicable procedure(s) in Section 18.6
21	Repeat Steps 4 through 20 (as necessary)	
22	Log Out link (when applicable)	single-click
23	OK button (to complete logging out) (when applicable)	single-click

18.5.3.1 Filter Data Displayed on the Distribution Requests Pages

The **Change Filter** buttons in the **Options** area of many different OM GUI pages [including the **Distribution Requests** page, **Staging Distribution Requests** page, or the **FtpPush Distribution Requests** page] provide the Distribution Technician (whether full-capability or limited capability operator) with a means of filtering data displayed on the screen.

Table 18.5-7 presents (in a condensed format) the steps required to filter data displayed on the **Distribution Requests** page, **Staging Distribution Requests** page, or the **FtpPush Distribution Requests** page. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

NOTE: By default, distribution requests are filtered by “creation time” within the last 24 hours, all statuses, and all media types. However, changes made to the filter settings tend to persist, even from one session to another. To restore the default filtering criteria **single-click** on the **Apply Defaults** button in the filter pop-up window.

NOTE: The session ID provides a means of tracking which GUI pages are accessed and what filter options are used during a particular session. Such data is especially important when several operators are using the OM GUI in the same mode at the same time. For example, an individual operator’s previously selected filter options can be retrieved from the session data so the filter options do not have to be reentered every time the same type of search is performed.

- 1 **Single-click** on the **Change Filter** button in the **Options** area of the **Distribution Requests** page, **Staging Distribution Requests** page, or the **FtpPush Distribution Requests** page.
 - A **Distribution Requests Filters** pop-up window is displayed.
 - The Distribution Requests Filters pop-up window contains fields for changing various filters.
 - The **Distribution Requests Filters**, **Staging Distribution Requests Filters**, and **FtpPush Distribution Requests Filters** pop-up windows are similar except the **FtpPush Distribution Requests Filters** pop-up window has no **Media Type Select List** window (because all requests on the page are ftp push requests).

NOTE: The pop-up window may not open enough to display all of the features of the filters. If the three buttons (i.e., **Set Defaults**, **Apply Defaults**, and **Close Window**) at the bottom of the window are not visible, **single-click** and hold on one of the bottom corners of the window and pull down with the mouse to expand the window and reveal the buttons.

- 2 If the distribution request(s) associated with a particular Individual Filter only should be displayed on the **Distribution Requests** page, **Staging Distribution Requests** page, or the **FtpPush Distribution Requests** page, in the corresponding text box enter:

<Order ID>

<Request ID>

<E-Mail>

<First Name>

<Last Name>

- The following text boxes are available for Individual Filters: **Order ID**, **Request ID**, **E-Mail**, **First Name**, **Last Name**.
- If a value is entered in one of the text boxes in the preceding list, the other four text boxes are disabled.
 - To clear a field in which a value has been entered and enable all fields, either delete the entered value or **single-click** on the **Clear** button.

- 3 If a value was entered in one of the text boxes in Step 2, **single-click** on the **Apply Individual Filters** button.

- The **Distribution Requests** page, **Staging Distribution Requests** page, or the **FtpPush Distribution Requests** page refreshes.
- Only requests that meet the specified filter criteria appear in the **Listing** table.

NOTE: Whenever Combined Filters are applied, Status, Media Type, and Order Type options must be specified (except for the **FtpPush Distribution Requests** page filter, which has no Media Type filter because ftp push is assumed).

- 4 If the relevant distribution request(s) has (have) creation time outside the range indicated in the **Start Month, Start Day, Start Year, Start Hour, Start Minute, End Month, End Day, End Year, End Hour, and End Minute** boxes, as necessary **single-click** on each date/time option button to display a drop-down list of month, day, year, hour, or minute options then **single-click** on the desired selection.
- Selected number is displayed in each date/time box.
 - Filtering by “Creation Time” may be combined with other filtering options (refer to Steps 5 through 9).
- 5 If distribution requests with particular status(es) only should be displayed on the **Distribution Requests** page, **Staging Distribution Requests** page, or the **FtpPush Distribution Requests** page, **single-click** on the desired status(es) in the **Status Select List** window to highlight or unhighlight them (while holding down either the **Shift** key or the **Ctrl** key if highlighting multiple selections).
- To quickly deselect all highlighted statuses, **single-click** on the **Status Select – None** button (clears all selections so individual statuses can be selected).
 - To quickly select all statuses, **single-click** on the **Status Select – All** button (all items are highlighted).
 - The following choices are available: **Abort, Aborted, Active, Bundling, Canceled, Cancelled, Expired, Not Found, Operator Intervention, Partitioned, Pending, Prep for Distribution, Queued, SDSRV Staging, Shipped, Subset Staging, Staging, Subsetting, Terminated, Transferring, Waiting for Shipment.**
 - Selected status(es) is (are) highlighted in the **Status Select List** window; undesired status(es) is (are) not highlighted in the **Status Select List** window.
 - A vertical scroll bar allows viewing data that are not readily visible in the **Status Select List** window.
 - Filtering by “Status” may be combined with other filtering options (refer to Steps 4 through 9).
 - Whenever Combined Filters are applied, Status, Media Type, and Order Type options must be specified (except for the **FtpPush Distribution Requests** page filter, which requires no Media Type because ftp push is assumed).
 - If all filtering criteria have been selected, go to Step 9.
- 6 If distribution requests for particular type(s) of medium only should be displayed on the **Distribution Requests** page or the **Staging Distribution Requests** page, **single-click** on the desired medium/media in the **Media Type Select List** window to highlight or unhighlight them (while holding down either the **Shift** key or the **Ctrl** key if highlighting multiple selections).
- To quickly deselect all highlighted media, **single-click** on the **Media Type Select – None** button (clears all selections so individual media can be selected).
 - To quickly select all media, **single-click** on the **Media Type Select – All** button (all items are highlighted).

- The following Media Type choices are available: **FtpPull, FtpPush, CDROM, DLT, DVD, 8MM, scp** [secure copy distribution].
- Selected medium/media is (are) highlighted in the **Media Type Select List** window; undesired medium/media is (are) not highlighted in the **Media Type Select List** window.
- A vertical scroll bar allows viewing data that are not readily visible in the **Media Type Select List** window.
- Filtering by “Media Type” may be combined with other filtering options (refer to Steps 4 through 9).
 - Whenever Combined Filters are applied, Status, Media Type, and Order Type options must be specified (except for the **FtpPush Distribution Requests** page filter, which requires no Media Type because ftp push is assumed).
- If all filtering criteria have been selected, go to Step 9.

7 If distribution requests for particular type(s) of order only should be displayed on the **Distribution Requests** page or the **Staging Distribution Requests** page, **single-click** on the desired order type in the **Order Type Select** list window to highlight or unhighlight them (while holding down either the **Shift** key or the **Ctrl** key if highlighting multiple selections).

- To quickly deselect all highlighted media, **single-click** on the **Order Type Select – None** button (clears all selections so individual media can be selected).
- To quickly select all media, **single-click** on the **Order Type Select – All** button (all items are highlighted).
- The following examples illustrate the kinds of Order Type choices that may be available:
 - **Regular.**
 - **BO** [Bundled Order].
 - **MM** [Machine-to-Machine Gateway].
 - **HEG** [HDFEOS-to-GeoTiff (HEG) Converter Tool].
- Selected order type(s) is (are) highlighted in the **Order Type Select** list window; undesired order type(s) is (are) not highlighted in the **Order Type Select** list window.
- A vertical scroll bar allows viewing data that are not readily visible in the **Order Type Select** list window.
- Filtering by “Order Type” may be combined with other filtering options (refer to Steps 4 through 9).
 - Whenever Combined Filters are applied, Status, Media Type, and Order Type options must be specified (except for the **FtpPush Distribution Requests** page filter, which requires no Media Type because ftp push is assumed).
- If all filtering criteria have been selected, go to Step 9.

8 If the distribution requests associated with a particular User ID only should be displayed on the **Distribution Requests** page, **Staging Distribution Requests** page, or the **FtpPush Distribution Requests** page, in the **User ID** text box enter:

<User ID>

- 9 If value(s) was (were) specified for any of the filters in Steps 4 through 8, **single-click** on the **Apply Combined Filters** button.
 - The **Distribution Requests** page, **Staging Distribution Requests** page, or the **FtpPush Distribution Requests** page refreshes.
 - Only requests that meet the specified filter criteria appear in the **Listing** table.
- 10 When all relevant filtering criteria have been applied (as described in Steps 2 through 9), **single-click** on the **Close Window** button.
 - The **Distribution Requests Filters** window is dismissed.
- 11 Return to the procedure that recommended filtering data displayed on the **Distribution Requests** pages.

Table 18.5-7. Filter Data Displayed on the Distribution Requests Pages - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Change Filter button	single-click
2	<Order ID> (Order ID text box) (if applicable)	enter text
3	<Request ID> (Request ID text box) (if applicable)	enter text
4	<E-Mail> (E-Mail text box) (if applicable)	enter text
5	<First Name> (First Name text box) (if applicable)	enter text
6	<Last Name> (Last Name text box) (if applicable)	enter text
7	Apply Individual Filters button (if applicable)	single-click
8	<date/time values> (Start Month, Start Day, Start Year, Start Hour, Start Minute, End Month, End Day, End Year, End Hour, and End Minute option buttons) (as applicable)	single-click
9	<status> (Status Select List option list) (if applicable)	single-click
10	<medium> (Media Type Select List option list) (if applicable)	single-click
11	<order type> (Order Type Select List option list) (if applicable)	single-click
12	<User ID> (User ID text box) (if applicable)	enter text
13	Apply Combined Filters button (if applicable)	single-click
14	Close Window button (when applicable)	single-click
15	Return to the Monitor/Control Distribution Request Information on the OM GUI procedure	Use procedure in Section 18.5.3

18.5.3.2 Change the Priority of a Distribution Request Using the OM GUI

The **Change the Priority of a Distribution Request Using the OM GUI** procedure is performed as part of the **Monitor/Control Distribution Request Information on the OM GUI** procedure (Section 18.5.3). The priority of an S4 (Synergy IV) request can be changed while granules for the request still need to be staged or pushed.

The **Priority** column in the **Distribution Requests** table of the **Distribution Requests** page, **Staging Distribution Requests** page, the **FtpPush Distribution Requests** page or the **Destination Details** page on the **OM GUI** allows the full-capability operator to change the priority of distribution requests that are in a state that allows the priority to be changed. The **Priority** line of the **Distribution Request Details** page provides the full-capability operator with an alternative means of changing the priority of the particular distribution request.

The limited-capability operator is not allowed to change the priority of distribution requests.

Table 18.5-8 presents (in a condensed format) the steps required to change the priority of a distribution request using the OM GUI. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If the list of distribution requests shown in the **Distribution Requests** table needs to be filtered to include the distribution request for which the priority is to be changed, filter the data.
 - For detailed instructions refer to the **Filter Data Displayed on the Distribution Requests Pages** procedure (Section 18.5.3.1).
- 2 **Single-click** on the option button in the **Priority** column of the row associated with the request to display a menu of priorities then **single-click** on the desired selection.
 - Selected priority is displayed in the **Priority** column.
 - An alternative is to bring up the relevant **Distribution Request Detail** page (by clicking on the Request ID in the **Distribution Requests** table), **single-click** on the option button on the **Priority** line to display a menu of priorities, then **single-click** on the desired selection.
- 3 To implement the priority change **single-click** on the **Apply** button adjacent to the text box displaying the desired priority.
 - “Priority changed” is displayed in the **Priority** column for the row associated with the request.
- 4 Repeat the preceding steps as necessary to change the priority of additional distribution requests.
- 5 Return to the **Monitor/Control Distribution Request Information on the OM GUI** procedure (Section 18.5.3).

Table 18.5-8. Change the Priority of a Distribution Request Using the OM GUI - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Filter the data displayed in the Distribution Requests table (if necessary)	Use procedure in Section 18.5.3.1
2	<priority> (option button in the Priority column of the row associated with the request)	single-click
3	Apply button (adjacent to the text box displaying the desired priority)	single-click
4	Repeat the preceding steps (to change the priority of additional distribution requests) (as necessary)	enter text
5	Return to the Monitor/Control Distribution Request Information on the OM GUI procedure	Use procedure in Section 18.5.3

18.5.3.3 Suspend, Resume, Cancel, Resubmit, or Stop a Distribution Request Using the OM GUI

The **Action** column in the **Distribution Requests** table of the **Distribution Requests** page, **Staging Distribution Requests** page, the **FtpPush Distribution Requests** page, or the **Destination Details** page on the **OM GUI** provides the full-capability operator with a means of taking the following kinds of actions with respect to distribution requests:

- Suspend a request that still needs to be staged or while granules for the request still need to be pushed.
- Resume a request that was suspended by the OM GUI operator or while the processing of new requests by the OMS is suspended.
- Cancel a request that is not in a terminal state and while granules for the request still need to be staged or while granules for the request still need to be pushed.
- Resubmit a request in a terminal state (e.g., aborted, cancelled, terminated, or shipped).

The **Distribution Request Details** page provides the full-capability operator with an alternative means of taking the preceding kinds of actions with respect to a particular distribution request.

The limited-capability operator is not allowed to suspend, resume, cancel, resubmit, or stop distribution requests.

Table 18.5-9 presents (in a condensed format) the steps required to suspend, resume, cancel, resubmit, or stop a distribution request using the OM GUI. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

NOTE: If a distribution request is to be canceled or if a completed distribution request is to be resubmitted, proper justification and authorization are necessary. Canceling or resubmitting requests may require coordination between the Distribution

Technician and a User Services representative, especially when changing the type of distribution medium, specifying a replacement granule, or taking any other action that would require the approval of the person who submitted the order. In fact, depending on the circumstances and DAAC policy it may be appropriate for User Services to assume responsibility for canceling or resubmitting some requests.

- 1 If the list of distribution requests shown in the **Distribution Requests** table needs to be filtered to include the distribution request on which action is to be taken, filter the data.
 - For detailed instructions refer to the **Filter Data Displayed on the Distribution Requests Pages** procedure (Section 18.5.3.1).

- 2 To suspend, resume, cancel, resubmit, or stop a distribution request, **single-click** on the appropriate button in the **Action** column for the row associated with the request (or the appropriate button in the **Action** row of the **Distribution Request Detail** page).
 - The following choices are among those that may be available (buttons are available only for actions that are appropriate for the request):
 - **Suspend** [request that still needs to be staged or granules for the request still need to be pushed]; a **Suspend Request** dialogue box is displayed.
 - **Resume** [request that was suspended by the OM GUI operator or while the processing of new requests by the OMS is suspended]; a **Resume Request Confirmation** dialogue box is displayed.
 - **Cancel** [request that is not in a terminal state and while granules for the request still need to be staged or while granules for the request still need to be pushed]; a **Cancel Request Confirmation** dialogue box is displayed.
 - **Resubmit** [request in a terminal state (e.g., aborted, cancelled, terminated, or shipped)]; a **Resubmit Request Confirmation** dialogue box is displayed.
 - **Stop** [physical media distribution (PMD) request that is transferring or has at least one volume being verified]; a **Stop Request Confirmation** dialogue box is displayed.
 - An alternative is to bring up the relevant **Distribution Request Detail** page (by clicking on the Request ID in the **Distribution Requests** table), then clicking on the appropriate button.

- 3 If a **Suspend Request** dialogue box is displayed, **single-click** on the **OK** button:
 - The dialogue box is dismissed.
 - The initial page [i.e., the **Distribution Requests** page, **Staging Distribution Requests** page, the **FtpPush Distribution Requests** page, or the **Destination Details** page] is displayed.
 - “Suspended” is displayed in the **Action** column for the row associated with the request.

NOTE: The **Resume Request Confirmation** dialogue box, **Cancel Request Confirmation** dialogue box, or **Stop Request Confirmation** dialogue box may not open enough to display the buttons at the bottom of the window. If the **Apply...Action** and **Cancel...Action** buttons at the bottom of the window are not visible, **single-click** and hold on one of the bottom corners of the window and pull down with the mouse to expand the window and reveal the buttons.

4 If a **Resume Request Confirmation** dialogue box, **Cancel Request Confirmation** dialogue box, or **Stop Request Confirmation** dialogue box is displayed, in the **Worker** text box enter:

<user ID>

- <user ID> refers to either the user ID of the person making the request to resume, cancel, or stop the request.

5 If a **Resume Request Confirmation** dialogue box, **Cancel Request Confirmation** dialogue box, or **Stop Request Confirmation** dialogue box is displayed, in the **Reason for Action** text box enter:

<reason>

- <reason> is the justification for resuming, canceling, or stopping the request.

6 If a **Resume Request Confirmation** dialogue box , **Cancel Request Confirmation** dialogue box , or **Stop Request Confirmation** dialogue box is displayed, **single-click** on the appropriate button from the following selections:

- **Apply** [**“Resume,” “Cancel,” or “Stop”**] **Action** - to apply the specified action and dismiss the dialogue box.
 - The action (i.e., “resume,” “cancel,” or “stop” as applicable) is applied.
 - The dialogue box is dismissed.
 - The initial page [i.e., the **Distribution Requests** page, **Staging Distribution Requests** page, the **FtpPush Distribution Requests** page, or the **Destination Details** page] is displayed.
 - The action (i.e., “Resumed,” “Canceled,” or “Stopping”) is displayed in the **Action** column for the row associated with the request.
- **Cancel** [**“Resume” or “Cancel”**] **Action** - to dismiss the dialogue box without applying the specified action.
 - The dialogue box is dismissed.
 - The initial page [i.e., the **Distribution Requests** page, **Staging Distribution Requests** page, the **FtpPush Distribution Requests** page, **Distribution Request Details** page, **Distribution Request Details** page, or the **Destination Details** page] is displayed.

- 7 If a **Resubmit Request Confirmation** dialogue box is displayed, first **single-click** on the appropriate button from the following selections:
 - **OK** - to create an open intervention and dismiss the dialogue box.
 - The dialogue box is dismissed.
 - The **Open Intervention Detail (Intervention for Request x)** page is displayed.
 - **Cancel** - to dismiss the dialogue box without resubmitting the request.
 - The dialogue box is dismissed.
 - The initial page [i.e., the **Distribution Requests** page, **Staging Distribution Requests** page, the **FtpPush Distribution Requests** page, or the **Destination Details** page] is displayed.

- 8 If a **Resubmit Request Confirmation** dialogue box was displayed and **OK** was clicked in response to the **Resubmit Request Confirmation** dialogue box, respond to the open intervention.
 - For detailed instructions refer to the **Respond to an Open Intervention** procedure (Section 18.5.2.2).

- 9 Repeat the preceding steps as necessary to act on additional distribution requests.

- 10 Return to the **Monitor/Control Distribution Request Information on the OM GUI** procedure (Section 18.5.3).

Table 18.5-9. Suspend, Resume, Cancel, Resubmit, or Stop a Distribution Request Using the OM GUI - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	Filter the data displayed in the Distribution Requests table (if necessary)	Use procedure in Section 18.5.3.1
2	Suspend button (in the Action column for the row associated with the request) (if applicable)	single-click
3	Resume button (in the Action column for the row associated with the request) (if applicable)	single-click
4	Cancel button (in the Action column for the row associated with the request) (if applicable)	single-click
5	Resubmit button (in the Action column for the row associated with the request) (if applicable)	single-click
6	OK button (in Suspend Request dialogue box) (if applicable)	enter text
7	<name> (or <user ID>) (in the Worker text box) (if applicable)	enter text
8	<reason> (in the Reason for Action text box) (if applicable)	enter text
9	Apply Action (in Resume Request Confirmation dialogue box or Cancel Request Confirmation dialogue box) (if applicable)	enter text

Table 18.5-9. Suspend, Resume, Cancel, Resubmit, or Stop a Distribution Request Using the OM GUI - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
10	OK (in Resubmit Request Confirmation dialogue box) (if applicable)	enter text
11	Respond to the open intervention (if applicable)	Use procedure in Section 18.5.2.2
12	Repeat the preceding steps (to act on additional distribution requests) (as necessary)	enter text
13	Return to the Monitor/Control Distribution Request Information on the OM GUI procedure	Use procedure in Section 18.5.3

18.5.3.4 Edit Values Assigned to FtpPush Parameters

The **Edit Values Assigned to FtpPush Parameters** procedure is performed as part of other procedures [e.g., **Respond to an Open Intervention** (Section 18.5.2.2) or **Monitor/Control Distribution Request Information on the OM GUI** (Section 18.5.3)].

The **Edit FtpPush Parameters** button on the **Distribution Request Details** page provides the full-capability operator with a means of editing the FtpPush parameters for a particular distribution request. The limited-capability operator is not allowed to edit values assigned to FtpPush parameter values for distribution requests using the **OM GUI**.

Table 18.5-10 presents (in a condensed format) the steps required to edit values assigned to FtpPush parameters. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If the list of distribution requests shown in the **Distribution Requests** table needs to be filtered to include the distribution request for which the values assigned to FtpPush parameters are to be changed, filter the data.
 - For detailed instructions refer to the **Filter Data Displayed on the Distribution Requests Pages** procedure (Section 18.5.3.1).
- 2 If the **Edit FtpPush Parameters** page is not already open, **single-click** on the applicable Request ID in the **Distribution Requests** table.
 - The corresponding **Distribution Request Detail** page is displayed.
- 3 If the **Edit FtpPush Parameters** page is not already open, **single-click** on the **Edit FtpPush Parameters** button on the **Distribution Request Detail** page.
 - The **Edit FtpPush Parameters** page is displayed.

- 4 In the corresponding text boxes (as necessary) enter:
- <Ftp node>
 - <Ftp Address>
 - <Password>
 - <Confirm Password>
 - <User String>
 - <Destination Directory>
- <Ftp node> is the destination host name.
 - <Ftp Address> is the FTP user name.
 - <User String> is a message to be sent to the user.
 - <Destination Directory> is the full path to the target directory on the host.
- 5 **Single-click** on the appropriate button from the following selections:
- **Change This Request** - to apply the specified FtpPush parameter values to the current request only and dismiss the **Edit FtpPush Parameters** page.
 - The **Edit FtpPush Parameters** page is dismissed.
 - **Change All Requests** - to apply the specified FtpPush parameter values to all requests for the listed destination and dismiss the **Edit FtpPush Parameters** page.
 - The **Edit FtpPush Parameters** page is dismissed.
 - **Cancel** - to cancel all changes to FtpPush parameters and dismiss the **Edit FtpPush Parameters** page.
 - The **Edit FtpPush Parameters** page is dismissed.
- 6 Return to the procedure that recommended editing the FtpPush parameters.

Table 18.5-10. Edit Values Assigned to FtpPush Parameters - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	Filter the data displayed in the Distribution Requests table (if necessary)	Use procedure in Section 18.5.3.1
2	<Request ID> (in the Distribution Requests table) (if necessary)	single-click
3	Edit FtpPush Parameters button (on the Distribution Request Detail page) (if necessary)	single-click
4	<Ftp node> (in the Ftp node text box) (if applicable)	enter text
5	<Ftp Address> (in the Ftp Address text box) (if applicable)	enter text
6	<Password> (in the Password text box) (if applicable)	enter text

Table 18.5-10. Edit Values Assigned to FtpPush Parameters - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
7	<Password> (in the Confirm Password text box) (if applicable)	enter text
8	<User String> (in the User String text box) (if applicable)	enter text
9	<Destination Directory> (in the Destination Directory text box) (if applicable)	enter text
10	Change This Request button or Change All Requests button (as applicable)	single-click
11	Return to the procedure that recommended editing the values assigned to FtpPush parameters.	

18.5.3.5 Annotate a Physical Media Distribution (PMD) Request from the Distribution Request Details Page

The **Annotate a Physical Media Distribution (PMD) Request from the Distribution Request Details Page** procedure is performed as part of other procedures [e.g., **Monitor/Control Distribution Request Information on the OM GUI** (Section 18.5.3)].

The **Request Notes** area on the **Distribution Request Details** page provides the full-capability operator with a means of adding a comment to a particular physical media distribution request. The limited-capability operator is not allowed to annotate distribution requests using the **OM GUI**.

Table 18.5-11 presents (in a condensed format) the steps required to annotate a PMD request from the **Distribution Request Details** page.. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1** If the list of distribution requests shown in the **Distribution Requests** table needs to be filtered to include the distribution request to be annotated, filter the data.
 - For detailed instructions refer to the **Filter Data Displayed on the Distribution Requests Pages** procedure (Section 18.5.3.1).
- 2** If the **Distribution Request Detail** page is not already open, **single-click** on the applicable Request ID in the **Distribution Requests** table.
 - The corresponding **Distribution Request Detail** page is displayed.
- 3** In the **Request Notes** text box enter:
 <text>

- 4 **Single-click** on the **Apply** button adjacent to the **Request Notes** text box.
 - The annotation is applied to the distribution request.
- 5 Return to the procedure that referenced annotating a PMD request.

Table 18.5-11. Annotate a Physical Media Distribution (PMD) Request from the Distribution Request Details Page - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Filter the data displayed in the Distribution Requests table (if necessary)	Use procedure in Section 18.5.3.1
2	<Request ID> (in the Distribution Requests table) (if necessary)	single-click
3	<text> (in the Request Notes text box)	enter text
4	Apply button (adjacent to the Request Notes text box)	single-click
5	Return to the procedure that referenced annotating a PMD request.	

18.5.4 View Open HEG Intervention Information on the OM GUI

New for Synergy V, the OMS GUI displays Operator Interventions involving HEG orders. Several new features have been added for HEG processing and HEG Interventions dispositions are different from previous types of interventions.

Since HEG processing involves “line items,” these are displayed when viewing a HEG intervention. Although a HEG order may contain a mix of granule types (i.e., those with and without line items), if there are any to display, an additional column is shown in the granule list. The column shows the number of line items and a link to view the Line Item details.

The Open HEG Interventions page provides the Distribution Technician (whether full-capability or limited capability operator) with a means of viewing HEG interventions. The page is hard-coded to display HEG interventions only.

Table 18.5-12 presents (in a condensed format) the steps required to view open HEG intervention information on the **OM GUI**. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.

- 2 If it has not been expanded already, **single-click** on the **Request Management** link in the navigation frame of the **OM GUI**.
 - The **Request Management** menu is expanded.

- 3 **Single-click** on the **HEG Interventions** link in the navigation frame of the **OM GUI**.
 - The **Open HEG Interventions** page is displayed.
 - The **Current Filters** area of the **Open HEG Interventions** page describes how the current listing of distribution requests has been filtered.
 - It is important to check the filter settings when opening the **Open HEG Interventions** page because changes to the filter settings tend to persist, even from one session to another.
 - To filter the **Open HEG Interventions Listing** in a different way, perform the **Filter Data Displayed on the Distribution Requests Pages** procedure (Section 18.5.3.1).
 - The **Options** area of the **Open HEG Interventions** page has the following buttons and selection boxes:
 - **Change Filter** button [refer to the **Filter Data Displayed on the Distribution Requests Pages** procedure (Section 18.5.3.1)].
 - **Bulk Submit** button [for submitting selected intervention(s)].
 - **Bulk Fail** button [for failing selected intervention(s)].
 - **Select All** box [for selecting all eligible requests for either **Bulk Submit** or **Bulk Fail**].
 - **Select None** box [for selecting none of the eligible requests for either **Bulk Submit** or **Bulk Fail**].
 - The **Listing** table has the following columns:
 - **Sel** [check boxes for marking items to be submitted or failed].
 - **Order ID.**
 - **Request ID.**
 - **Media.**
 - **Request Size (MB).**
 - **Status.**
 - **Worked By.**
 - **Created** [date/time].
 - **Acknowledged.**
 - **Explanation(s).**

- 4 Observe information displayed in the **Listing** table of the **Open HEG Interventions** page.
 - The **Show _____ rows at a time** window provides a means of selecting the maximum number of rows of data to be displayed at a time.
 - For example, if **Show _____ rows at a time** is being displayed, selecting **50** from the option button would result in the display of a page of data containing up to 50 rows of data.

- **Single-clicking** on a link (underlined word) in the column header row of the table causes table contents to be sorted on that column.
 - For example, clicking on the **Created** link causes the table to be organized by “Creation Time,” with the most recent request requiring intervention in the top row of the table.
- **Single-clicking** on a specific Order ID brings up a screen containing more detailed data concerning that particular order.
- Clicking on a specific Request ID in the **Listing** table of the **Open HEG Interventions** page brings up a screen containing detailed data concerning the intervention for that particular request (refer to Steps 4 and 5).
- Horizontal and vertical scroll bars appear when necessary to allow viewing data that are not readily visible in the window.
- If **AutoRefresh** is **ON**, the **Open HEG Interventions** page refreshes automatically as often as specified in the **Refresh screen every x minutes** window.
 - If a different refresh option is preferred, perform the **Set Refresh Options on OM GUI Pages** procedure (Section 18.5.2.1).
- To manually update (refresh) the data on the screen, **single-click** on the ↻ icon in the **OM GUI** navigation frame.
- The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.
- The **first**, **previous**, **next**, and **last** links provide means of displaying additional pages of data.

5 **Single-click** on a specific Request ID in the **Listing** table of the **Open HEG Interventions** page to bring up a screen containing detailed data concerning the intervention for that particular request.

- For example, clicking on Request ID **0800013233** brings up an **Open HEG Intervention Detail** page (i.e., **Intervention for Request 0800013233**).

6 Observe information displayed on the **Open HEG Intervention Detail** page.

- The following items are displayed on the **Open HEG Intervention Detail** page.
 - **Order ID.**
 - **Request ID.**
 - **Input Size (est, MB).**
 - **Media Type.**
 - **Priority.**
 - **Explanation(s).**
 - **Worked by.**
 - **assign** link or **change** link.
 - **User ID.**
 - **Created.**
 - **Acknowledged.**
 - **Request Status.**

- **Input Granule List: GranuleId; DPL ID; ESDT; Type; Processing Instructions; In Size (MB); Out Size (MB); Status; Explanation; Action** [accept/fail boxes, select all box (as applicable)] **Submit Actions** button (if applicable).
 - **Request Level Disposition: Keep on hold; Submit; Resubmit and retry processing of failed granules; Fail Request.**
 - **OPERATOR NOTES.**
 - **Apply** button.
 - **reset** button.
 - **Single-clicking** on the  icon in the **OM GUI** navigation frame causes the **Open HEG Interventions** page to be redisplayed.
- 7** To bring up a screen containing detailed data concerning the processing instructions for a particular granule ID **single-click** on the **View...** link associated with the specific GranuleID in the **Input Granule List** of the **Open HEG Intervention Detail** page.
- For example, clicking on the **View...** [processing instructions] link associated with Granule ID **121960** brings up a window containing the **Processing Instructions for Request ID 0800013233::ECS Granule ID 121960::DPL Granule ID 36718.**
 - To close the **Processing Instructions for Request ID ...** window, **single-click** on the **Close Window** button.
 - The **Processing Instructions** column does not contain processing instructions; it contains a link to them.
 - To view the processing instructions for a particular line item click on the **View...** link associated with the specific line item in the **Line Items for HEG Request X: Granule ID Y** window.
 - A **Processing Instructions for Line Item ID X** window is displayed; it contains the processing instructions for the line item.
 - To close the **Processing Instructions for Line Item ID X** window, click on the **Close Window** button.
- 8** To work on the intervention being displayed on the **Open HEG Intervention Detail** page, perform the **Respond to an Open HEG Intervention** procedure (Section 18.5.4.1).
- 9** To view the details of another open intervention first **single-click** on the  icon in the **OM GUI** navigation frame then return to Step 3.
- The **Open HEG Intervention Detail** page is dismissed.
 - The **Open HEG Interventions** page is displayed.
- 10** To fail intervention(s) first **single-click** in either the **Select All** check box (if all interventions are to be failed) in the **Options** area of the **Open HEG Interventions** page or the individual check box(es) in the **Sel** column associated with specific intervention(s).
- A checkmark is displayed in each selected check box.

- 11 To complete the process of failing intervention(s) **single-click** on the **Bulk Fail** button in the **Options** area of the **Open HEG Interventions** page.
 - The selected intervention(s) is/are failed.
- 12 To submit intervention(s) first **single-click** in either the **Select All** check box (if all interventions are to be submitted) in the **Options** area of the **Open HEG Interventions** page or the individual check box(es) in the **Sel** column associated with specific intervention(s).
 - A checkmark is displayed in each selected check box.
- 13 To complete the process of submitting intervention(s) **single-click** on the **Bulk Submit** button in the **Options** area of the **Open HEG Interventions** page.
 - The selected intervention(s) is/are submitted.
- 14 To start the process of logging out (when applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
 - A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
- 15 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
 - **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-12. View Open HEG Intervention Information on the OM GUI - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	Request Management link (Order Manager Page [“Home” Page])	single-click
3	HEG Interventions link	single-click
4	Observe information displayed in the Listing table of the Open HEG Interventions page	read text
5	< Request ID > (in the Listing table of the Open HEG Interventions page)	single-click
6	Observe information displayed on the Open HEG Intervention Detail page	read text

Table 18.5-12. View Open HEG Intervention Information on the OM GUI - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
7	View... link associated with the specific granule ID (DBID) (in the Granule List of the Open HEG Intervention Detail page) (if applicable)	single-click
8	Work on the intervention (if appropriate)	Use procedure in Section 18.5.4.1
9	← icon in the OM GUI navigation frame (if applicable)	single-click
10	Return to Step 5 (if applicable)	
11	Either the Select All check box or individual check box(es) in the Sel column [to fail intervention(s) – if applicable]	single-click
12	Bulk Fail button (in the Options area of the Open HEG Interventions page) (to fail interventions - if applicable)	single-click
13	Either the Select All check box or individual check box(es) in the Sel column [to submit intervention(s) - if applicable]	single-click
14	Bulk Submit button (in the Options area of the Open HEG Interventions page) (to submit interventions - if applicable)	single-click
15	Log Out link (when applicable)	single-click
16	OK (when applicable)	single-click

18.5.4.1 Respond to an Open HEG Intervention

The **Open HEG Intervention Detail** page provides the full-capability operator with a means of performing the following kinds of interventions:

- Fail selected granule(s).
- Accept selected granule(s).
- Fail a request.

Table 18.5-13 presents (in a condensed format) the steps required to respond to an open HEG intervention. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Observe the information displayed in the **Worked by** column of the **Open HEG Intervention Detail** page.
 - If the **Open HEG Intervention Detail** page is not being displayed on the **OM GUI**, go to the **View Open HEG Intervention Information on the OM GUI** procedure (Section 18.5.4).

- If someone is already working on the intervention, that person is identified in the **Worked by:** field of the **Open HEG Intervention Detail** page.
 - In general working on an intervention is left to the person who has already been signed up to work on it unless the change is coordinated with that person or they are going to be unavailable (e.g., due to illness or vacation).
 - If necessary (e.g., due to illness, vacation, or prior coordination), it is possible to override the assignment of a person to work on an intervention.
- 2 To assign oneself to work on the intervention, first **single-click** on the **assign** or **change** link in the **Worked by:** field on the **Open HEG Intervention Detail** page.
 - If someone has been assigned to work on the intervention a **change** link is displayed; if no one has been assigned to work on the intervention an **assign** link is displayed.
 - **Single-clicking** on the **assign** or **change** link causes a text box to be displayed.
 - 3 To continue the process of assigning oneself to work on the intervention, in the text box displayed beside the **assign** or **change** link in the **Worked by:** field enter:
<user ID>
 - If necessary, overwrite the ID of the previously assigned person.
 - 4 To continue the process of assigning oneself to work on the intervention, **single-click** on the green button with the checkmark next to the text box in the **Worked by:** field.
 - 5 If no granule in the request is to be “failed” or if all granules in the request are to be “failed,” skip Steps 6 and 7 and go to Step 8.
 - 6 If “fail” and/or “accept” actions are to be taken with respect to one or more granules in the request (e.g., “fail” a granule because of an “Invalid UR” entry in the **Explanation** column of the **Granule List**), first **single-click** in the appropriate box(es) from the following selections in **Action** column of the **Granule List**:
 - **Fail** – to fail the individual granule in the row containing the **Fail** box.
 - **Accept** – to accept an individual granule in the row containing the **Accept** box.
 - **Select All** – to select all actions for granules with **Accept/Fail** boxes in the **Action** column.
 - 7 To continue the process of taking “fail” or “accept” actions with respect to one or more granules in the request, **single-click** on the **Submit Actions** button.

NOTE: Granule replacement is not permitted for a HEG intervention.

- 8 If a note should be entered concerning the request, in the **OPERATOR NOTES** text box enter:
<text>
- For example, the note may explain the reason for making a particular type of intervention.
- 9 To select the disposition for the request **single-click** on the appropriate button from the following selections:
- **Keep on hold** - to delay applying any intervention action (keep the intervention open) and dismiss the **Open HEG Intervention Detail** page.
 - Placing an intervention on hold does not allow changing the request's attributes, but saves the operator notes and allows opening the intervention at a later time (essentially, the intervention is being “saved”).
 - **Submit** - to submit the request with any changes. Failed granules remain failed and are not reprocessed.
 - **Resubmit and retry processing of failed granules** – to submit the request with any changes and retry HEG processing of failed granules.
 - **Fail Request** - to fail the entire request (including all granules) and dismiss the **Open HEG Intervention Detail** page.

NOTE: There are **Apply** and **reset** buttons at the bottom of the **Open HEG Intervention Detail** page. The **reset** button does not cancel any changes made to the request or changes made to the DBIDs (changed or failed). It simply resets the form buttons for the **Request Level Disposition** section to their original states.

- 10 **Single-click** on the **Apply** button.
- A **Close Confirmation** page is displayed.
 - The **Close Confirmation** page displays the disposition to be taken [e.g., keep on hold, submit, or fail].
- 11 If the intervention involved failing a request or granule(s) within a request, and additional text is to be appended to the corresponding standard e-mail text, in the **Additional e-mail text** text box on the **Close Confirmation** page enter:
<text>
- 12 If the intervention involved failing a request or granule(s) within a request, and no e-mail message is to be sent, **single-click** on the **Don't send e-mail** box on the **Close Confirmation** page to suppress the sending of an e-mail message indicating request/granule failure.
- Unless the **Don't send e-mail** box is checked, an e-mail message indicating request/granule failure will be sent to the requester.

- 13** **Single-click** on the appropriate button from the following selections:
- **OK** - to apply the specified intervention actions (if any) and dismiss the **Close Confirmation** page.
 - The **Close Confirmation** page is dismissed.
 - An **Intervention Closed** page is displayed
 - **Cancel** - to dismiss the **Close Confirmation** page without applying the specified intervention actions.
 - The **Close Confirmation** page is dismissed.
 - A warning dialogue box is displayed with the message “WARNING: The disposition and actions you have taken for this intervention will be lost. Continue?”
- 14** If a warning dialogue box is displayed with the message “WARNING: The disposition and actions you have taken for this intervention will be lost. Continue?” **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the warning dialogue box and the **Close Confirmation** page and return to the **Open HEG Intervention Detail** page.
 - **Cancel** - to dismiss the warning dialogue box and return to the **Close Confirmation** page.
- 15** To exit from the **Intervention Closed** page, click on the **OK** button.
- The **Intervention Closed** page is dismissed.
 - The **Open HEG Interventions** page is displayed.
- 16** To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
- A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
- 17** To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-13. Respond to an Open HEG Intervention - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Observe the information displayed in the Worked by column	read text
2	assign or change link (if applicable)	single-click
3	<user ID> (if applicable)	enter text
4	green button with the checkmark (next to the text box in the Worked by: field) (if applicable)	single-click
5	Fail or Accept or Select All check box (in Action column of the row for the granule) (if applicable)	single-click
6	Repeat Step 5 (as necessary)	
7	Submit Actions button (if applicable)	single-click
8	<text> (OPERATOR NOTES text box) (if applicable)	enter text
9	Keep on hold button (if applicable)	single-click
10	Submit button (if applicable)	single-click
11	Resubmit and retry processing of failed granules button (if applicable)	single-click
12	Fail Request button (if applicable)	single-click
13	Apply button	single-click
14	<text> (Additional e-mail text text box) (if applicable)	enter text
15	Don't send e-mail button (if applicable)	single-click
16	OK button (to dismiss the Close Confirmation page)	single-click
17	OK button (to dismiss the warning dialogue box) (if applicable)	single-click
18	OK button (to exit from the Intervention Closed page) (when applicable)	single-click
19	Log Out link (when applicable)	single-click
20	OK (to complete logging out) (when applicable)	single-click

18.5.5 View Pending HEG Granules

New for Synergy V, the OMS GUI displays pending HEG granules. The Pending HEG Granules page provides the Distribution Technician (whether full-capability or limited capability operator) with a means of viewing pending HEG granules.

Table 18.5-14 presents (in a condensed format) the steps required to view pending HEG granules on the OM GUI. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.

- 2 If it has not been expanded already, single-click on the **OM Status Pages** link in the navigation frame of the OM GUI.
 - The **Request Management** menu is expanded.

- 3 **Single-click** on the **Pending HEG Granules** link in the navigation frame of the **OM GUI**.
 - The **Pending HEG Granules** page is displayed.
 - The **Options** area of the **Pending HEG Granules** page has the following button and selection boxes:
 - **Bulk Cancel** button [for canceling selected pending HEG granule(s)].
 - **Select All** box [for selecting all eligible items for **Bulk Cancel**].
 - **Select None** box [for selecting none of the eligible items for **Bulk Cancel**].
 - The **Listing** table has the following columns:
 - **Sel** [check boxes for marking items to be canceled].
 - **HEG PID.**
 - **RequestId.**
 - **ECS GranuleId.**
 - **DPL ID.**
 - **ESDT.**
 - **Gran Size(MB).**
 - **Submitted to HEG** [date/time].
 - **Processing Instructions.**
 - **Action.**

- 4 Observe information displayed in the **Listing** table of the **Pending HEG Granules** page.
 - The **Show _____ rows at a time** window provides a means of selecting the maximum number of rows of data to be displayed at a time.
 - For example, if **Show _____ rows at a time** is being displayed, selecting **50** from the option button would result in the display of a page of data containing up to 50 rows of data.
 - Clicking on a specific Request ID in the **Listing** table of the **Pending HEG Granules** page brings up a screen containing detailed data concerning that particular request.
 - Horizontal and vertical scroll bars appear when necessary to allow viewing data that are not readily visible in the window.
 - If **AutoRefresh** is **ON**, the **Pending HEG Granules** page refreshes automatically as often as specified in the **Refresh screen every x minutes** window.
 - If a different refresh option is preferred, perform the **Set Refresh Options on OM GUI Pages** procedure (Section 18.5.2.1).

- To manually update (refresh) the data on the screen, click on the ↻ icon in the **OM GUI** navigation frame.
 - The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.
 - The **first**, **previous**, **next**, and **last** links provide means of displaying additional pages of data.
- 5 **Single-click** on a specific Request ID in the **Listing** table of the **Pending HEG Granules** page to bring up a screen containing detailed data concerning that particular request.
 - 6 To view the processing instructions for a particular granule **single-click** on the **View...** link in the **Processing Instructions** column in the **Listing** table of the **Pending HEG Granules** page to bring up a **Processing Instructions** window.
 - A **Processing Instructions** window is displayed; it contains the processing instructions for the line item.
 - To close the **Processing Instructions** window, click on the **Close Window** button.
 - 7 To cancel pending HEG granule(s) first **single-click** in either the **Select All** check box (if all pending HEG granules are to be failed) in the **Options** area of the **Pending HEG Granules** page or the individual check boxes in the **Sel** column associated with the specific pending HEG granules.
 - A checkmark is displayed in each selected check box.
 - 8 To complete the process of canceling pending HEG granule(s) **single-click** on the **Bulk Cancel** button in the **Options** area of the **Pending HEG Granules** page.
 - The specified pending HEG granules are failed.
 - 9 Repeat Steps 4 through 8 as necessary to view pending HEG granules.
 - 10 To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
 - A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
 - 11 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
 - **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-14. View Pending HEG Granules - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	Request Management link	single-click
3	Operator Alerts link	single-click
4	Observe information displayed in the Listing table of the Operator Alerts page	read text
5	details link in the Alert Info column (if applicable)	single-click
6	Repeat Steps 4 and 5 (as necessary)	
7	Return to the Monitor/Control Distribution Request Information on the OM GUI procedure (if applicable)	Use procedure in Section 18.5.3
8	Log Out link (when applicable)	single-click
9	OK button (to complete logging out) (when applicable)	single-click

18.5.6 View Operator Alerts on the OM GUI

“Alerts” are non-fatal warnings or errors that do not cause an Operator Intervention, but do provide valuable information concerning distribution resources. An example might be a suspended FTP Push destination.

The **Operator Alerts** page provides the Distribution Technician (whether full-capability or limited capability operator) with a means of viewing operator alerts. The following types of operator alerts can be displayed:

- FTP Push Destination Alerts (problems with the destination not sufficient to cause an Operator Intervention).
 - When one of the following errors occurs, an ftp push alert is generated: Ftp Push login/password failure; destination host not reachable; destination disk space is full; Ftp Push operation timed out; number of consecutive failures for the destination exceeds the configured max number.
 - If the ftp push destination resolves the problem, the alert is automatically cleared.
- Data Pool File System Alerts.
 - When the DPL file system is made unavailable or has no free space, an alert regarding that file system is generated.
 - The alert is automatically cleared away when the DPL file system is made available or finds more free space.
- Archive Server Alerts.
 - When Order Manager Server detects that Archive Server (Quick Server) is down, it automatically suspends that Archive Server and queues the archive alert with explanation “Access to AMASS file system Failed”.
 - If the Quick Server is brought back up, the archive server is automatically resumed and the alert goes away on its own.

- If the Order Manager Server detects that the number of staging failures for that archive server exceeds the configured Max Archive Failure, it automatically suspends that Archive Server and queues the archive alert with the explanation “Max Retry Reached”
- Archive server needs to be manually resumed on the OM Queue Status page to make the alert go away.
- ECS Server Alerts (warnings about SDSRV, PDS, or OMS resource errors).
 - An alert is generated when the Order Manager Server detects that the PDS or SDSRV is down.
 - The alert is automatically cleared when the OMS Server detects that PDS or SDSRV is running again.

Table 18.5-15 presents (in a condensed format) the steps required to view operator alerts on the OM GUI. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **Request Management** link in the navigation frame of the **OM GUI**.
 - The **Request Management** menu is expanded.
- 3 **Single-click** on the **Operator Alerts** link in the navigation frame of the **OM GUI**.
 - The **Operator Alerts** page is displayed.
 - The **Listing** table has the following columns:
 - **Alert Info.**
 - **Explanation.**
 - **Creation Time.**
- 4 Observe information displayed in the **Listing** table of the **Operator Alerts** page.
 - The following types of operator alerts are displayed on the **Operator Alerts** page:
 - **FTP Push Destination Alerts** (problems with the destination not sufficient to cause an Operator Intervention).
 - **Data Pool File System Alerts.**
 - **Archive Server Alerts.**
 - **ECS Server Alerts** (warnings about SDSRV or PDS errors).
 - By default all types of alerts are displayed in the **Listing** table on the **Operator Alerts** page.

- To filter the **Listing** table in a different way, **single-click** on the option button associated with the **Display _____ alerts** box then **single-click** on the desired selection.
 - The following choices are available: **ALL, Archive, Data Pool, FTP Push, PDS, SDSRV.**
 - The selected filter is displayed in the **Display _____ alerts** box.
 - The **Operator Alerts** page is refreshed and the filter is applied, so the specified type(s) of alert(s) is (are) displayed in the **Listing** table on the **Operator Alerts** page.
- The list of alerts is sorted in ascending order by date (i.e., the oldest Alerts appear first).
- The **Show _____ rows at a time** window provides a means of selecting the maximum number of rows of data to be displayed at a time.
 - For example, if **Show _____ rows at a time** is being displayed, selecting **50** from the option button would result in the display of a page of data containing up to 50 rows of data.
- Horizontal and vertical scroll bars appear when necessary to allow viewing data that are not readily visible in the window.
- If **AutoRefresh** is **ON**, the **Operator Alerts** page refreshes automatically as often as specified in the **Refresh screen every x minutes** window.
 - If a different refresh option is preferred, perform the **Set Refresh Options on OM GUI Pages** procedure (Section 18.5.2.1).
- To manually update (refresh) the data on the screen, **single-click** on the ↻ icon in the **OM GUI** navigation frame.
- The Netscape browser **Edit → Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.
- The **first, previous, next, and last** links provide means of displaying additional pages of data (if applicable).
- The following message is displayed at the bottom of the **Operator Alerts** page:
Note: All operator alerts are also sent as email to: *address*.
 - To change the e-mail address for receiving operator alerts, **single-click** on the **Change** link adjacent to the message and change the value of the **Global Configured Email** parameter [for details refer to the **Check/Modify Values Assigned to OMS Server or Database Parameters** procedure (Section 18.5.11.2)].

- 5** To view detailed information concerning the cause and/or requests affected by the alert, **single-click** on the corresponding **details** link in the **Alert Info** column.
- A page describing the alert is displayed.

NOTE: Unlike an operator intervention, no specific action can be taken to close an alert. The Order Manager Server automatically clears each alert when the condition(s) that caused it go to a satisfactory state.

- 6 Repeat Steps 4 and 5 as necessary to view operator alerts.
- 7 Return to the procedure for **Monitoring/Controlling Distribution Request Information on the OM GUI** (if applicable).
- 8 To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
 - A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
- 9 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
 - **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-15. View Operator Alerts on the OM GUI - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	Request Management link	single-click
3	Operator Alerts link	single-click
4	Observe information displayed in the Listing table of the Operator Alerts page	read text
5	details link in the Alert Info column (if applicable)	single-click
6	Repeat Steps 4 and 5 (as necessary)	
7	Return to the Monitor/Control Distribution Request Information on the OM GUI procedure (if applicable)	Use procedure in Section 18.5.3
8	Log Out link (when applicable)	single-click
9	OK button (to complete logging out) (when applicable)	single-click

18.5.7 View Completed Operator Actions and Interventions on the OM GUI

The **Completed Operator Actions and Interventions** page provides the Distribution Technician (whether full-capability or limited capability operator) with a means of viewing completed action/intervention information on the OM GUI.

Table 18.5-16 presents (in a condensed format) the steps required to view completed operator actions and interventions on the OM GUI. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **Request Management** link in the navigation frame of the **OM GUI**.
 - The **Request Management** menu is expanded.
- 3 **Single-click** on the **Completed Operator Actions & Interventions** link in the navigation frame of the **OM GUI**.
 - The **Completed Operator Actions and Interventions** page is displayed.
 - The table has the following columns:
 - **Order Id.**
 - **Request Id.**
 - **User ID.**
 - **Size (MB).**
 - **Media.**
 - **Worked by.**
 - **Created.**
 - **Completed.**
 - **Disposition.**
- 4 Observe information displayed in the table of the **Completed Operator Actions and Interventions** page.
 - By default, data concerning up to 50 requests with completed operator actions and interventions (and “completion time” within the last 24 hours) are displayed at a time.
 - It is important to check the filter settings when opening the **Completed Operator Actions and Interventions** page because changes to the filter settings tend to persist, even from one session to another.
 - To filter the table in a different way, perform the **Filter Data Displayed on the Completed Operator Actions and Interventions Page** procedure (Section 18.5.7.1).
 - **Single-clicking** on a link in the column header row of the table causes table contents to be sorted on that column.
 - For example, clicking on the **Worked By** link causes the table to be organized alphabetically by the IDs of the people who worked on the interventions in the list.

- **Single-clicking** on a specific Order ID or Request ID brings up a screen containing more detailed data concerning that particular order or request.
 - Horizontal and vertical scroll bars appear when necessary to allow viewing data that are not readily visible in the window.
 - To manually update (refresh) the data on the screen, **single-click** on the ↻ icon in the **OM GUI** navigation frame.
 - The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.
 - The **first**, **previous**, **next**, and **last** links provide means of displaying additional pages of data.
- 5** If the desired request with completed intervention is not listed in the table of the **Completed Operator Actions and Interventions** page, filter the data.
- For detailed instructions refer to the **Filter Data Displayed on the Completed Operator Actions and Interventions Page** procedure (Section 18.5.7.1).
- 6** If request filtering was necessary, return to Step 4.
- 7** **Single-click** on a specific Request ID in the table of the **Completed Operator Actions and Interventions** page to bring up a screen containing more detailed data concerning that particular request.
- For example, clicking on Request ID **0300004074** brings up a **Completed Intervention/Action Detail** (i.e., **Completed Operator Action for Request 0300004074**) page.
- 8** Observe information displayed on the **Completed Intervention/Action Detail (Completed Intervention/Action for Request *x*)** page.
- The following items are displayed on the **Completed Intervention/Action Detail** page.
 - **User Id.**
 - **email.**
 - **Priority.**
 - **Order Id.**
 - **Size (MB).**
 - **Media.**
 - **Worked by.**
 - **Created.**
 - **Completed.**
 - **Disposition.**
 - **Explanation.**
 - **Granule List: DBID, ESDT Type, Size (MB), Status, Processing Instructions, Explanation.**
 - **OPERATOR NOTES.**

- Use the  icon in the **OM GUI** navigation frame to redisplay the **Completed Operator Actions and Interventions** page.
- 9 Return to Step 4 to view information concerning another completed intervention (if applicable).
 - 10 To start the process of logging out (when applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
 - A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
 - 11 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
 - **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-16. View Completed Operator Actions and Interventions on the OM GUI - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	Request Management link	single-click
3	Completed Operator Actions & Interventions link	single-click
4	Observe information displayed in the table of the Completed Operator Actions and Interventions page	read text
5	Filter requests displayed in the table of the Completed Operator Actions and Interventions page (if necessary)	Use procedure in Section 18.5.7.1
6	Return to Step 4 (if applicable)	
7	< Request ID > (table on the Completed Operator Actions and Interventions page)	single-click
8	Observe information displayed on the Completed Intervention/Action Detail (Completed Intervention/Action for Request x) page	read text
9	Return to Step 4 to view information concerning another intervention (if applicable)	
10	Log Out link (when applicable)	single-click
11	OK button (to complete logging out) (when applicable)	single-click

18.5.7.1 Filter Data Displayed on the Completed Operator Actions and Interventions Page

Features at the top of the **Completed Operator Actions and Interventions** page provide the Distribution Technician (whether full-capability or limited capability operator) with a means of filtering data displayed on the **Completed Operator Actions and Interventions** page. By default, data concerning up to 50 requests with completed operator actions or interventions (and “completion time” within the last 24 hours) are displayed at a time.

Table 18.5-17 presents (in a condensed format) the steps required to filter data displayed on the completed operator actions and interventions page. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

NOTE: The session ID provides a means of tracking which GUI pages are accessed and what filter options are used during a particular session. Such data is especially important when several operators are using the OM GUI in the same mode at the same time. For example, an individual operator’s previously selected filter options can be retrieved from the session data so the filter options do not have to be reentered every time the same type of search is performed.

NOTE: By default, completed operator actions and interventions are filtered by “completion time,” providing access to all interventions completed within the last 24 hours. However, changes made to the filter settings tend to persist, even from one session to another. To restore the default filtering criteria **single-click** on the **Reset** button in the **Filter** area near the top of the **Completed Operator Actions and Interventions** page.

NOTE: Completed operator actions and interventions are not permanently available on the **Completed Operator Actions and Interventions** page. If filtering does not cause data concerning the desired intervention(s) to be displayed, check the **Delete Complete Interventions After** and **Delete Complete Actions After** parameters to see if the window of opportunity has already closed. (For detailed instructions refer to the procedure for **Checking/Modifying OM Configuration Parameters**.)

- 1 If interventions of particular type(s) only should be displayed on the **Completed Operator Actions and Interventions** page, **single-click** on the desired type(s) in the **Intervention Type** window to highlight or unhighlight it/them (while holding down either the **Shift** key or the **Ctrl** key if highlighting multiple selections).
 - To quickly deselect all highlighted types, click on the **Intervention Type – None** button (clears all selections so individual types can be selected).
 - To quickly select all types, click on the **Intervention Type – All** button (all items are highlighted).

- The following choices are available:
 - **Collect Media for QC.**
 - **Dismount Media from Production.**
 - **HEG Error.**
 - **Media Creation Error.**
 - **Mount Media for Production.**
 - **Mount Media for QC.**
 - **Operator Intervention.**
 - **QC Failed.**
 - **Synergy III Request.**
 - Selected type(s) is (are) highlighted in the **Intervention Type** window; undesired type(s) is (are) not highlighted in the **Intervention Type** window.
 - A vertical scroll bar allows viewing data that are not readily visible in the **Intervention Type** window.
 - Filtering by “Intervention Type” may be combined with other filtering options (refer to Steps 2 and 3).
 - If all filtering criteria have been selected, go to Step 4.
- 2** If interventions “worked by” a particular individual only should be displayed on the **Completed Operator Actions and Interventions** page, **single-click** on the **Worked by:** option button to display a menu of individuals then **single-click** on the desired selection.
- In addition to a list of individuals, the **Worked by:** option button has an **ALL** option.
 - Selected individual (or “**ALL**”) is displayed on the **Worked by:** option button.
 - Filtering by the individual who worked on interventions may be combined with filtering by “Completion Time” (refer to Step 3).
 - If “Completion Time” filtering criteria are not going to be selected, go to Step 4.
- 3** If the intervention(s) to be viewed has (have) “Completion Time” outside the range indicated in the **Start Month, Start Day, Start Year, Start Hour, Start Minute, End Month, End Day, End Year, End Hour, and End Minute** boxes, as necessary **single-click** on each date/time option button to display a drop-down list of month, day, year, hour, or minute options then **single-click** on the desired selection.
- Selected number is displayed in each date/time box.
- 4** When all relevant filtering criteria have been selected (as described in Steps 2 and 3), **single-click** on the **Apply** button.
- The **Completed Operator Actions and Interventions** page refreshes.
 - Only requests that meet the specified filter criteria appear in the **Listing** table on the **Completed Operator Actions and Interventions** page.
- 5** Return to the **View Completed Operator Actions and Interventions on the OM GUI** procedure (Section 18.5.7).

Table 18.5-17. Filter Data Displayed on the Completed Operator Actions and Interventions Page - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Filter link	single-click
2	<individual> (Worked by: option button) (if applicable)	single-click
3	<date/time values> (Start Month, Start Day, Start Year, Start Hour, and Start Minute option buttons) (as applicable)	single-click
4	<date/time values> (End Month, End Day, End Year, End Hour, and End Minute option buttons) (as applicable)	single-click
5	Apply button	single-click
6	Return to the View Completed Operator Actions and Interventions on the OM GUI procedure	Use procedure in Section 18.5.7

18.5.8 View Historical Distribution Requests on the OM GUI

The **Historical Distribution Requests** page provides the Distribution Technician (whether full-capability or limited capability operator) with a means of viewing historical distribution request information on the **OM GUI**.

Table 18.5-18 presents (in a condensed format) the steps required to view historical distribution requests on the **OM GUI**. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **Archive Data** link in the navigation frame of the **OM GUI**.
 - The **Archive Data** menu is expanded.
- 3 **Single-click** on the **Historical Distribution Requests** link in the navigation frame of the **OM GUI**.
 - The **Historical Distribution Requests** page is displayed.
 - The **Listing** table has the following columns:
 - **Ord Typ/Proc Mod.**
 - **OrderId/RequestId.**
 - **Request Size (MB).**
 - **Gran Cnt.**

- **Media.**
- **Request Status.**
- **ESDT.**
- **UserID.**
- **Resub Cnt.**
- **Created.**
- **Last Update.**

- 4 Observe information displayed in the **Listing** table of the **Historical Distribution Requests** page.
 - By default, data concerning up to 50 requests with completed interventions (and “completion time” within the last 24 hours) are displayed at a time.
 - It is important to check the filter settings when opening the **Historical Distribution Requests** page because changes to the filter settings tend to persist, even from one session to another.
 - To filter the **Historical Distribution Requests Listing** in a different way, perform the **Filter Data Displayed on the Completed Operator Actions and Interventions Page** procedure (Section 18.5.7.1).
 - **Single-clicking** on a link in the column header row of the table causes table contents to be sorted on that column.
 - For example, clicking on the **Request Status** link causes the table to be organized alphabetically by the status of the requests in the list.
 - **Single-clicking** on a specific Order ID or Request ID brings up a screen containing more detailed data concerning that particular order or request.
 - Horizontal and vertical scroll bars appear when necessary to allow viewing data that are not readily visible in the window.
 - To manually update (refresh) the data on the screen, **single-click** on the  icon in the **OM GUI** navigation frame.
 - The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.
 - The **first**, **previous**, **next**, and **last** links provide means of displaying additional pages of data.
- 5 If the desired request with completed intervention is not listed in the **Listing** table of the **Historical Distribution Requests** page, filter the data.
 - For detailed instructions refer to the **Filter Data Displayed on the Completed Operator Actions and Interventions Page** procedure (Section 18.5.7.1).
- 6 If request filtering was necessary, return to Step 4.
- 7 Return to Step 4 to view information concerning another order or request (if applicable).

- 8 To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
 - A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.

- 9 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
 - **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-18. View Historical Distribution Requests on the OM GUI - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	Archive Data link	single-click
3	Historical Distribution Requests link	single-click
4	Observe information displayed in the Listing table of the Historical Distribution Requests page	read text
5	Filter requests displayed in the Listing table of the Historical Distribution Requests page (if necessary)	Use procedure in Section 18.5.7.1
6	Return to Step 4 (if applicable)	
7	Return to Step 4 to view information concerning another order or request (if applicable)	
8	Log Out link (when applicable)	single-click
9	OK button (to complete logging out) (when applicable)	single-click

18.5.9 View and Respond to Suspended FTP Push Distribution Destinations

The **Suspended** Destinations page provides the full-capability operator with a means of viewing suspended FTP push destinations and a means of taking the following kinds of actions with respect to suspended FTP push destinations:

- Resume suspended destinations.
- Suspend active destinations.
- View details of active or suspended destinations.

Table 18.5-19 presents (in a condensed format) the steps required to view and respond to suspended ftp push distribution destinations. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **FtpPush Monitor** link in the navigation frame of the **OM GUI**.
 - The **FtpPush Monitor** menu is expanded.
- 3 If the **Suspended Destinations** page is not already being displayed, **single-click** on the **Suspended Destinations** link in the navigation frame of the **OM GUI**.
 - The **Suspended Destinations** page is displayed.
- 4 Observe information displayed on the **Suspended Destinations** page.
 - The **Suspended Destinations** page has the following columns:
 - **Destination Name**.
 - **Host Name**.
 - **Time of Suspension** (if applicable, date and time when the destination was suspended).
 - **Granules Queued Count** (number of granules that are queued).
 - **Granules Queued Size MB** (total size in MB of all granules that are queued).
 - **Suspend Reason** (why the destination was suspended).
 - **Resume** (buttons for resuming the destination).
 - Horizontal and vertical scroll bars appear when necessary to allow viewing data that are not readily visible in the window.
 - To manually update (refresh) the data on the screen, **single-click** on the  icon in the **OM GUI** navigation frame.
 - The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.
- 5 To resume a suspended destination, **single-click** on the **Resume** button in the destination's **Resume** column.
 - The destination is resumed.
 - The **Suspended Destinations** page refreshes and the resumed destination is no longer on the list of suspended destinations.

- 6 To start the process of either suspending an active destination or viewing destination details (for an active or suspended destination), in one of the corresponding text fields enter:
- <Destination Name>
- or -
- <FTP Node>
- 7 To suspend an active destination (after making the appropriate entry in either the **Destination Name** text field or the **FTP Node** text field), **single-click** on the **Suspend** button in the **Active Destination** area.
- The destination is suspended.
 - The **Suspended Destinations** page refreshes and the suspended destination is included in the list of suspended destinations.
 - An alternative is to suspend the active destination from the **Destination Details** page – go to Step 8.
- 8 To view ftp push requests associated with either an active destination or a suspended destination (after making the appropriate entry in either the **Destination Name** text field or the **FTP Node** text field), **single-click** on the **View Requests** button in the **Active Destination** area.
- The **Destination Details** page is displayed.
 - The following types of data are displayed in the **FTP Push Operations that Caused the Suspension** area (if applicable): Request Id, ECS Granule Id, DPL Granule Id, Last Update, Size (MB), Explanation.
 - The following types of data are displayed in the **FTP Push Requests That Are Not In A Terminal State** area: Ord Typ/Prc Mod, OrderID/RequestID, Request Size (MB), Gran Cnt/FtpPush Complete, Priority, Request Status, Resource Class, ESDT, UserID, Resub Cnt, Created, Last Update, Actions.
 - To respond to conditions indicated on the **Destination Details** page refer to the **View and Respond to Destination Details on the OM GUI** procedure (Section 18.5.9.1).
- 9 Repeat Steps 4 through 8 as necessary to view and respond to information concerning suspended FtpPush distribution destinations on the **OM GUI**.
- 10 To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
- A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.

- 11** To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-19. View and Respond to Suspended FTP Push Distribution Destinations - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	FtpPush Monitor link (if necessary)	single-click
3	Suspended Destinations link (if necessary)	single-click
4	Observe information displayed on the Suspended Destinations page	read text
5	Resume button (if resuming a suspended destination)	single-click
6	<Destination Name> or <FTP Node> (if suspending an active destination or viewing destination details for an active or suspended destination)	enter text
7	Suspend button (in the Active Destination area) (if suspending an active destination)	single-click
8	View Requests button (in the Active Destination area) (if applicable)	single-click
9	Repeat Steps 4 through 8 (as necessary)	
10	Log Out link (when applicable)	single-click
11	OK button (to complete logging out) (when applicable)	single-click

18.5.9.1 View and Respond to Destination Details on the OM GUI

The **Destination Details** page provides the full-capability operator with a means of viewing detailed data concerning a particular destination and a means of taking the following kinds of actions:

- Suspend an active destination.
- Resume a suspended destination.
- Change the priority of a distribution request associated with the FtpPush destination while granules for the request still need to be staged or while granules for the request still need to be pushed.

- Suspend a request that still needs to be staged or while granules for the request still need to be pushed.
- Resume a request that was suspended by the **OM GUI** operator or while the processing of new requests by the OMS is suspended.
- Cancel a request that is not in a terminal state and while granules for the request still need to be staged or while granules for the request still need to be pushed.

The limited-capability operator can use the **Destinations Detail** page to view detailed data concerning a particular destination but is not allowed to take action on ftp push requests for any destination.

Table 18.5-20 presents (in a condensed format) the steps required to view and respond to destination details on the **OM GUI**. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If the **Destination Details** page is not already being displayed, perform the **View and Respond to Suspended FTP Push Distribution Destinations** procedure (Section 18.5.9) to display the page.
 - The **Destination Details** page is displayed.
- 3 Observe information displayed on the **Active Destinations Detail** page.
 - The following types of data are displayed in the **FTP Push Operations that Caused the Suspension** area (if applicable):
 - **Request Id.**
 - **ECS Granule Id.**
 - **DPL Granule Id.**
 - **Last Update.**
 - **Size (MB).**
 - **Explanation.**
 - The following types of data are displayed in the **FTP Push Requests That Are Not In A Terminal State** area:
 - **Ord Typ/Prc Mod.**
 - **OrderID/RequestID.**
 - **Request Size (MB).**
 - **Gran Cnt/FtpPush Complete.**
 - **Priority.**
 - **Request Status.**
 - **Resource Class.**
 - **ESDT.**

- **UserID.**
 - **Resub Cnt.**
 - **Created.**
 - **Last Update.**
 - **Actions.**
 - **Single-clicking** on a link in the column header row of the table causes table contents to be sorted on that column.
 - For example, clicking on the **RequestID** link causes the table to be organized in numerical order by Request ID.
 - **Single-clicking** on a specific Order ID or Request ID brings up a screen containing more detailed data concerning that particular order or request.
 - **Single-clicking** on a specific User ID brings up a screen that shows user profile information for that user.
 - The **Show _____ rows at a time** window provides a means of selecting the maximum number of rows of data to be displayed at a time.
 - For example, if **Show _____ rows at a time** is being displayed, selecting **50** from the option button would result in the display of a page of data containing up to 50 rows of data.
 - Horizontal and vertical scroll bars appear when necessary to allow viewing data that are not readily visible in the window.
 - If **AutoRefresh** is **ON**, the **Active Destinations Detail** page refreshes automatically as often as specified in the **Refresh screen every x minutes** window.
 - If a different refresh option is preferred, perform the **Set Refresh Options on OM GUI Pages** procedure (Section 18.5.2.1).
 - To manually update (refresh) the data on the screen, **single-click** on the **Reload Page** link.
 - The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.
 - The **first**, **previous**, **next**, and **last** links provide means of displaying additional pages of data.
 - The **Go directly to row...** window provides a means of displaying a page of data starting with a particular row of the table.
 - For example, if **Go directly to row _____ of 415 rows** is being displayed, typing **315** in the window and clicking on the **ok** button would result in the display of a page of data containing rows 315 through 364.
- 4** To suspend an active destination (if applicable) **single-click** on the **Suspend Destination** button.
- The destination is suspended.
 - The **Suspend Destination** button becomes a **Resume Destination** button.

- 5 To resume a suspended destination, **single-click** on the **Resume Destination** button.
 - The destination is resumed.
 - The **Resume Destination** button becomes a **Suspend Destination** button.
- 6 To change the priority of a particular distribution request (when applicable), perform the **Change the Priority of a Distribution Request Using the OM GUI** procedure (Section 18.5.3.2).
- 7 To either suspend a particular distribution request or resume processing of a suspended request (when applicable), perform the **Suspend, Resume, Cancel, Resubmit, or Stop a Distribution Request Using the OM GUI** procedure (Section 18.5.3.3).
- 8 To cancel a particular distribution request (when applicable), perform the **Suspend, Resume, Cancel, Resubmit, or Stop a Distribution Request Using the OM GUI** procedure (Section 18.5.3.3).
- 9 To review and/or respond to an open intervention for a particular distribution request first **single-click** on the **Open Intervention** link in the **Request Status** column for the request in the **Listing** table.
- 10 To review and/or respond to an open intervention go to the procedure **View Open Intervention Information on the OM GUI** procedure (Section 18.5.2).
- 11 Repeat Steps 3 through 10 as necessary to view and respond to destination details.
- 12 To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
 - A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
- 13 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
 - **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-20. View and Respond to Destination Details on the OM GUI - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	Perform the View and Respond to Suspended FTP Push Distribution Destinations procedure (if necessary)	Use procedure in Section 18.5.9
3	Observe information displayed on the Active Destinations Detail page	read text
4	Suspend Destination button (if suspending an active destination)	single-click
5	Resume Destination button (if resuming a suspended destination)	single-click
6	Change the priority of a distribution request (when applicable)	Use procedure in Section 18.5.3.2
7	Suspend a distribution request or resume processing of a suspended request (when applicable)	Use procedure in Section 18.5.3.3
8	Cancel a distribution request (when applicable)	Use procedure in Section 18.5.3.3
9	Open Intervention link (when applicable)	single-click
10	Review and/or respond to an open intervention (when applicable)	Use procedure in Section 18.5.2
11	Repeat Steps 3 through 10 (as necessary)	enter text
12	Log Out link (when applicable)	single-click
13	OK button (to complete logging out) (when applicable)	single-click

18.5.10 Check/Modify OM Queue Status

The **OM Queue Status** page provides the full-capability operator with a means of checking and modifying OM queue status. The **OM Queue Status** page allows the full-capability operator to monitor and change the current status of request queues for all media as well as the request queues for PDS, OMS, SDSRV, e-mail, staging, and HEG. (The limited-capability operator can monitor but cannot change the status of queues.) In addition, the **OM Queue Status** page allows both full-capability and limited-capability operators to determine the status (“up” or “down”) of the Order Manager Server.

Table 18.5-21 presents (in a condensed format) the steps required to check and modify OM Queue status. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **OM Status Pages** link in the navigation frame of the **OM GUI**.
 - The **OM Status Pages** menu is expanded.
- 3 If the **OM Queue Status** page is not already being displayed, **single-click** on the **OM Queue Status** link in the navigation frame of the **OM GUI**.
 - The **OM Queue Status** page is displayed.
 - If the **OM Queue Status** page is not displayed within a minute, it is likely that the OM Server is not operating properly.
 - For example, it may have stalled while trying to process requests that it could not process.
 - The **OM Queue Status** page has the following columns:
 - **ALL [QUEUES]**.
 - **PDS**.
 - **OMS**.
 - **SDSRV**.
 - **EMAIL**.
 - **STAGING**.
 - **Processing (HEG)**.
- 4 Observe information displayed in the **Current Request Processing States** table.
 - Directly under the **Current Request Processing States** header, one of the following statements is displayed:
 - **The OM Server is: UP** [indicates that the OM Server is currently operating].
 - **The OM Server is: DOWN** [indicates that the OM Server is not currently operating].

NOTE: The status of the OM Server is determined by a program called “Sweeper,” which makes an attempt to connect with the OM Server. If a connection cannot be made, it is assumed that the OM Server is down. If Sweeper was not installed correctly, either the error screen is displayed with a Sweeper error message or the Sweeper error message is displayed right on the **OM Queue Status** page itself. This does not necessarily mean that the OM Server is down.

- The status indicators (“lights”) in the Current Request Processing States table are color-coded to indicate the status of the request queues.
 - Green “light” indicates that the queue is active/un-suspended.
 - Red “light” with an “S” indicates that the server suspended the queue.

- Red “light” with no “S” indicates that the queue has been suspended by the operator.
 - On the **OM Queue Status** page there is a legend that describes the coding.
 - Clicking on the **Text-only version** link brings up a text-only version of the page intended for visually impaired operators.
 - The status indicators are buttons that the operator clicks to toggle their state (from “activate” to “suspend” or vice versa).
 - If **AutoRefresh** is **ON**, the **OM Queue Status** page refreshes automatically as often as specified in the **Refresh screen every x minutes** window.
 - If a different refresh option is preferred, perform the **Set Refresh Options on OM GUI Pages** procedure (Section 18.5.2.1).
 - To manually update (refresh) the data on the screen, **single-click** on the  icon in the **OM GUI** navigation frame.
 - The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.
- 5** If it is necessary to either activate or suspend a request queue (and there is authorization to do so), **single-click** on the queue status indicator/button to initiate toggling of its state (from “activate” to “suspend” or vice versa).
- A confirmation dialogue box is displayed to determine whether the state of the queue should really be changed.
- 6** To complete the process of toggling the state of a queue (if applicable) **single-click** on the appropriate button from the following selections:
- **OK** - to change the state of the queue and dismiss the dialogue box.
 - The dialogue box is dismissed.
 - The queue status indicator/button changes color (or letter in the case of the text-only version of the page) to indicate the new state.
 - **Cancel** - to dismiss the dialogue box without changing the state of the queue.
 - The dialogue box is dismissed.
 - The queue status indicator/button remains unchanged.
- 7** Repeat Steps 5 and 6 as necessary to change the state of additional request queues.
- 8** To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
- A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
- 9** To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.

- **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-21. Check OM Queue Status - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	OM Status Pages link	single-click
3	OM Queue Status link	single-click
4	Observe information displayed in the Current Request Processing States table	read text
5	<state> (queue status indicator/button) (if applicable)	single-click
6	OK button (if applicable)	single-click
7	Repeat Steps 5 and 6 (if applicable)	
8	Log Out link (when applicable)	single-click
9	OK button (to complete logging out) (when applicable)	single-click

18.5.10.1 Check/Modify HEG Order Status

The **HEG Order Status** page provides the Distribution Technician (whether full-capability or limited capability operator) with means of checking HEG status.

The **HEG Order Status** page allows the Distribution Technician to monitor the number of HEG requests and data volume currently in HEG processing. The information is arranged in the following three categories:

- Total HEG requests queued.
- Total HEG granules queued.
- Total input data (MB).

Table 18.5-22 presents (in a condensed format) the steps required to check/modify HEG order status. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **OM Status Pages** link in the navigation frame of the **OM GUI**.
 - The **OM Status Pages** menu is expanded.

- 3 If the **HEG Order Status** page is not already being displayed, **single-click** on the **HEG Order Status** link in the navigation frame of the **OM GUI**.
 - The **HEG Order Status** page is displayed.

- 4 Observe information displayed in the table on the **HEG Order Status** page.
 - The **HEG Order Status** page has the following columns:
 - **Total HEG Requests Queued.**
 - **Total HEG Granules Queued.**
 - **Total Input Data (MB).**
 - If **AutoRefresh** is **ON**, the **HEG Order Status** page refreshes automatically as often as specified in the **Refresh screen every x minutes** window.
 - If a different refresh option is preferred, perform the **Set Refresh Options on OM GUI Pages** procedure (Section 18.5.2.1).
 - To manually update (refresh) the data on the screen, **single-click** on the  icon in the **OM GUI** navigation frame.
 - The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.

- 5 To check or modify HEG queue status go to the **Check/Modify OM Queue Status** procedure (Section 18.5.10).

- 6 To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
 - A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.

- 7 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
 - **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-22. Check/Modify HEG Order Status - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	OM Status Pages link	single-click
3	HEG Order Status link	single-click
4	Observe information displayed in the table on the HEG Order Status page	read text

Table 18.5-22. Check/Modify HEG Order Status - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
5	Check/modify OM queue status (if necessary)	Use procedure in Section 18.5.10
6	Log Out link (when applicable)	single-click
7	OK button (to complete logging out) (when applicable)	single-click

18.5.10.2 Check Staging Status

The two **Staging Status** pages provide the Distribution Technician (whether full-capability or limited capability operator) with means of checking staging status in either of two ways; i.e., by....

- **Media Type.**
- **FTP Push Destination.**

The **Staging Status** pages allow the Distribution Technician to monitor the number of granules and data volume currently in staging. The staging information is arranged in the following four categories:

- Granules waiting for staging.
- Granules in staging.
- Granules that have been staged but not yet shipped.
- Granules that have been staged and shipped.

In addition to the preceding granule information, the data low and high water marks are shown on the **Staging Status** pages:

- **DHWM** – The Data High Water Mark is the maximum volume of data in staging or already staged but not yet shipped. If the data volume and number of requests is above the DHWM, it is assumed the media devices have plenty of work to keep them busy.
- **DLWM** – The Data Low Water Mark is the minimum volume of data that should be in staging or already staged but not yet shipped. If the data volume is below the DLWM, the media devices may soon become idle.

In general it is a good idea to keep the amount of work that is in staging or staged just below the high water mark of each output queue. This achieves a good balance among ftp output connections (or in the case of physical media, their various output devices).

The data high water marks can be exceeded in the interest of optimizing the use of the archive drives or to get high priority work through distribution quickly. For example, an idle archive would be dispatched even if it means exceeding the DHWM.

The DLWM is used mainly for dispatching high-priority work. Since it is a good idea to keep the queues at their high water marks, generally the output queues should be fairly full. As a result, a high-priority request might have to wait until some of the data gets worked off and the

queue falls below that high water mark. But high-priority requests should go through at a fast pace.

Table 18.5-23 presents (in a condensed format) the steps required to check staging status. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **OM Status Pages** link in the navigation frame of the **OM GUI**.
 - The **OM Status Pages** menu is expanded.
- 3 If the **OM Queue Status** page is not already being displayed, **single-click** on the **OM Queue Status** link in the navigation frame of the **OM GUI**.
 - The **OM Queue Status** page is displayed.
- 4 To display staging status by media type, **single-click** on the **Media Type** link in the navigation frame of the **OM GUI**.
 - The **Staging Status by Media Type** page is displayed.
- 5 To display staging status by FtpPush destination, **single-click** on the **FTP Push Destination** link in the navigation frame of the **OM GUI**.
 - The **Staging Status by FTP Push Destination** page is displayed.
- 6 Observe information displayed in the table on the **Staging Status** page.
 - Each **Staging Status** page (i.e., **by Media Type** or **by FTP Push Destination**) has the following columns:
 - [Media or FtpPush destinations (as applicable)].
 - **DHWM**.
 - **DLWM**.
 - **Waiting for Staging** [granule count and volume in MB].
 - **In Staging** [granule count and volume in MB].
 - **Staged and NOT Shipped** [granule count and volume in MB].
 - **Staged, Shipped & In DPL** [granule count and volume in MB].
 - Whenever there is little question mark next to a button or text field (e.g., **System Totals**), clicking on the question mark opens a dialogue box that describes the item.
 - The “HelpOnDemand” feature provides context-sensitive help for each page, particularly for controls or parameters that may not be entirely self-descriptive.
 - Horizontal and vertical scroll bars appear when necessary to allow viewing data that are not readily visible in the window.

- If **AutoRefresh** is **ON**, the **Staging Status by Media Type** or **Staging Status by FTP Push Destination** page refreshes automatically as often as specified in the **Refresh screen every x minutes** window.
 - If a different refresh option is preferred, perform the **Set Refresh Options on OM GUI Pages** procedure (Section 18.5.2.1).
 - To manually update (refresh) the data on the screen, **single-click** on the **Reload** link.
 - The Netscape browser **Edit → Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.
- 7 Repeat Steps 4 through 6 as necessary to view staging status.
- 8 To check or modify OM queue status return to the **Check/Modify OM Queue Status** procedure (Section 18.5.10).
- 9 To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
- A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
- 10 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-23. Check Staging Status - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	OM Status Pages link	single-click
3	OM Queue Status link	single-click
4	Media Type link (if applicable)	single-click
5	FTP Push Destination link (if applicable)	single-click
6	Observe information displayed in the table on the Staging Status page	read text
7	Repeat Steps 4 through 6 as necessary	
8	Check/modify OM queue status (if necessary)	Use procedure in Section 18.5.10
9	Log Out link (when applicable)	single-click
10	OK button (to complete logging out) (when applicable)	single-click

18.5.11 Check/Modify Values Assigned to OM Parameters

The **OM Configuration** pages provide the full-capability operator with a means of checking and modifying (if necessary) the values assigned to the following types of OM configuration parameters:

- **Aging Parameters.**
- **OM Server/Database Parameters.**
- **Media Parameters.**
- **Media Creation Parameters.**
- **FTP Push Policy.**

The limited-capability operator can use the **OM Configuration** page to view the values assigned to OM configuration parameters but is not allowed to change any parameters.

Procedures for checking/modifying values assigned to OM parameters are provided in Sections 18.5.11.1 through 18.5.11.4. The procedure to **Check/Modify FTP Push Policy Configuration** is in Section 18.5.12.

18.5.11.1 Check/Modify Values Assigned to Aging Parameters

The **Aging Parameters** page provides the full-capability operator with a means of checking and modifying aging parameter values.

Aging parameters affect how Distribution Requests are aged over time. The following two aging parameters are configurable for each ECS Priority Level (i.e., XPRESS, VHIGH, HIGH, NORMAL, or LOW):

- **Age Step.**
- **Maximum Priority.**

Age Step is the aging rate by which the effective priority of a request increases for every hour it has been waiting. The range is 0-100, including decimal fractions. If the parameter is set to zero (0), waiting requests never increase in priority. For example, if the Age Step is set to 5.5 and a request with an initial priority of 100 waits 10 hours to be pushed, the request increases in priority by a factor of 5.5 every hour until it has been delivered:

Hour 0:	priority = 100
Hour 1:	priority = 105.5
Hour 2:	priority = 111
.	
.	
.	
Hour 10:	priority = 155

Maximum Priority is the maximum priority a request can attain through the aging process. For example, if Maximum Priority were set to 130, once the request had reached a priority of 130, it would not go any higher [e.g., if a Maximum Priority of 130 were applied to the previous example, at Hour 6 the priority would become 130 and at every hour thereafter (if not delivered) it would still be 130].

Table 18.5-24 presents (in a condensed format) the steps required to check/modify values assigned to aging parameters. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **OM Configuration** link in the navigation frame of the **OM GUI**.
 - The **OM Configuration** menu is expanded.
- 3 If the **Aging Parameters** page is not already being displayed, **single-click** on the **Aging Parameters** link in the navigation frame of the **OM GUI**.
 - The **Aging Parameters** page is displayed.
- 4 Observe information displayed in the table on the **Aging Parameters** page.
 - The table is divided into sections for the various distribution request priorities (e.g., XPRESS) and within each section there are rows that indicate the identity and value of each of the following parameters associated with the priority:
 - **Age Step.**
 - **Maximum Priority.**
 - **Starting Priority (cannot be changed).**
 - Whenever there is little question mark next to a button or text field (e.g., **Age Step**), **single-clicking** on the question mark opens a dialogue box that describes the item.
 - The “HelpOnDemand” feature provides context-sensitive help for each page, particularly for controls or parameters that may not be entirely self-descriptive.
 - The ↻ icon in the **OM GUI** navigation frame can be used to update the data on (refresh) the screen.
 - The Netscape browser **Edit → Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.
- 5 If aging parameter value(s) is (are) to be modified (and there is authorization to do so), in the text entry box(es) for the relevant parameter(s) enter.
<value>
- 6 If aging parameter value(s) is (are) to be modified, **single-click** on the appropriate button from the following selections:
 - **Apply** - to apply the new value(s) to the parameter(s).
 - The new value(s) is (are) applied to the parameter(s).

- **Reset** - to clear the new value(s) from the text entry box(es) without changing the current value(s).
 - The original value(s) is (are) retained.
- 7 To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
- A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
- 8 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-24. Check/Modify Values Assigned to Aging Parameters - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	OM Configuration link	single-click
3	Aging Parameters link	single-click
4	Observe information displayed in the table on the Aging Parameters page	read text
5	<value> [in the text entry box(es) for the relevant parameter(s)] (if applicable)	enter text
6	Apply button (to implement changes) (if applicable)	read text
7	Log Out link (when applicable)	single-click
8	OK button (to complete logging out) (when applicable)	single-click

18.5.11.2 Check/Modify Values Assigned to OMS Server or Database Parameters

The **OMS Server and Database Configuration** page provides the full-capability operator with a means of checking and modifying OMS server or database parameter values.

OMS server and database parameters affect how the OM server and database run. The parameters are dynamically loaded from the OMS database into the configuration pages on the **OM GUI**. If a configuration parameter is added to the database, it is subsequently displayed on

the **OM GUI** when the applicable configuration page is requested. If a configuration parameter is deleted from the database, it is no longer displayed on the **OM GUI**. Consequently, the configuration parameters displayed on the **OM GUI** are variable.

Table 18.5-25 presents (in a condensed format) the steps required to check/modify values assigned to OMS server or database parameters. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.

- 2 If it has not been expanded already, **single-click** on the **OM Configuration** link in the navigation frame of the **OM GUI**.
 - The **OM Configuration** menu is expanded.

- 3 If the **OMS Server and Database Configuration** page is not already being displayed, **single-click** on one of the links under the **Server/Database** header in the navigation frame of the **OM GUI**.
 - Links under the **Server/Database** header in the navigation frame of the **OM GUI** include the following categories of parameters:
 - **All**.
 - **queue parms [queue parameters]**.
 - **cleanup parms**.
 - **email parms**.
 - **staging parms**.
 - **partition parms**.
 - **misc. parms**.
 - **HEG parms**.
 - For example, if the **All** link is selected, the **OMS Server and Database Configuration** page is displayed.

NOTE: OMS configuration parameters are dynamically loaded from the OMS database into the configuration pages on the **OM GUI**. If a configuration parameter is added to the database, it is subsequently displayed on the **OM GUI** when the applicable configuration page is requested. If a configuration parameter is deleted from the database, it is no longer displayed on the **OM GUI**. Consequently, the configuration parameters displayed on the **OM GUI** are variable.

- 4 Observe information displayed in the table on the **OMS Server and Database Configuration** page.
- The table on the **OMS Server and Database Configuration** page has the following columns:
 - **Parameter.**
 - **Description.**
 - **Value.**
 - The rows in the table indicate the current values and descriptions of the following types of parameters:
 - **Num of Allowed PDS Submissions.**
 - **Num of Allowed SDSRV Submissions.**
 - **Num of Allowed Email Submissions.**
 - **Child Process Time Limit.**
 - **Delete Complete Interventions After.**
 - **Delete Complete Actions After.**
 - **Max Request Granules.**
 - **Max Subset Granules.**
 - **Delay Partition.**
 - **Max Action Retries.**
 - **Idle Sleep Time.**
 - **Action Retry Wait (Seconds).**
 - **Num of Allowed Validations.**
 - **Action Check Interval.**
 - **Cleanup Check Interval.**
 - **Suspend Check Interval.**
 - **Billing Agency Email Address.**
 - **Billing Agency Name.**
 - **Max Concurrent Requests Processed.**
 - **Notify User for Partition Request.**
 - **Global Staging Status.**
 - **Min Moderate Request.**
 - **Min Expensive Request.**
 - **Max Cheap Requests.**
 - **Max Moderate Requests.**
 - **Max Expensive Requests.**
 - **Max Failure Archive.**
 - **Global Configured Email.**
 - **Max Orphan Req Age.**
 - **Cleanup Orphan Req Period.**
 - **Forward DN [Distribution Notice] Email.**
 - **Unsuccess Req Ret Time.**
 - **Cleanup Delay Interval.**
 - **Billable Proc Mode.**

- **Restrict Proc Mode.**
- **Max Num of Concurrent HEG Process.**
- **Max Num of Concur HEG Proc Per Req.**
- **HEG Process Retry Interval.**
- **Due Date for Media Request.**
- **Suspend HEG Dispatching.**
- **Stop HEG Acceptance.**
- **Generate Intervention for S3 Media Order.**
- **Qc Timeout.**
- **Production Timeout.**
- **Media Prep Timeout.**
- **Rimage Order Pull Time.**
- The  icon in the **OM GUI** navigation frame can be used to update the data on (refresh) the screen.
- The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.

5 If server or database parameter value(s) is (are) to be modified (and there is authorization to do so), in the text entry box(es) for the relevant parameter(s) enter.

<value>

NOTE: Server parameters cannot be set to 0 (zero).

6 If server or database parameter value(s) is (are) to be modified, **single-click** on the appropriate button from the following selections:

- **Apply** - to apply the new value(s) to the parameter(s).
 - The new value(s) is (are) applied to the parameter(s).
 - The **OMS Server and Database Configuration** page refreshes and displays the modified value(s).
- **Reset** - to clear the new value(s) from the text entry box(es) without changing the current value(s).
 - The original value(s) is (are) retained.

7 To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.

- A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.

8 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:

- **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.

- **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-25. Check/Modify Values Assigned to OMS Server or Database Parameters - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	OM Configuration link	single-click
3	Server/Database link	single-click
4	Observe information displayed in the table on the OMS Server and Database Configuration page.	read text
5	<value> [in the text entry box(es) for the relevant parameter(s)] (if applicable)	enter text
6	Apply button (to implement changes) (if applicable)	read text
7	Log Out link (when applicable)	single-click
8	OK button (to complete logging out) (when applicable)	single-click

18.5.11.3 Check/Modify Values Assigned to Media Parameters

The **Media Configuration** page provides the full-capability operator with a means of checking and modifying media parameter values.

Media parameters are specific to each kind of distribution medium and affect such things as limit checking against standard media capacity limits (e.g., minimum request size and maximum request size) and the partitioning of requests (e.g., partition size). The parameters are dynamically loaded from the OMS database into the configuration pages on the OM GUI. If a configuration parameter is added to the database, it is subsequently displayed on the OM GUI when the applicable configuration page is requested. If a configuration parameter is deleted from the database, it is no longer displayed on the OM GUI. Consequently, the configuration parameters displayed on the OM GUI are variable.

Table 18.5-26 presents (in a condensed format) the steps required to check/modify values assigned to media parameters. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.

- 2 If it has not been expanded already, **single-click** on the **OM Configuration** link in the navigation frame of the **OM GUI**.
 - The **OM Configuration** menu is expanded.
- 3 If the **Media Configuration** page is not already being displayed, **single-click** on the **Media** link in the navigation frame of the **OM GUI**.
 - The **Media Configuration** page is displayed.

NOTE: OMS configuration parameters are dynamically loaded from the OMS database into the configuration pages on the **OM GUI**. If a configuration parameter is added to the database, it is subsequently displayed on the **OM GUI** when the applicable configuration page is requested. If a configuration parameter is deleted from the database, it is no longer displayed on the **OM GUI**. Consequently, the configuration parameters displayed on the **OM GUI** are variable.

- 4 Observe information displayed in the table on the **Media Configuration** page.
 - The **Media Configuration** table has the following columns:
 - **Parameter.**
 - **Value.**
 - The rows in the table indicate the current values assigned to the following types of parameters (as applicable) for each type of distribution medium:
 - **MinRequestSize (GB).**
 - **MaxRequestSize (GB).**
 - **MinBundleSize (GB).**
 - **PartitionGranuleLimit.**
 - **MediaCapacity (GB).**
 - **PartitionSizeLimit (GB).**
 - **Request High Water Mark [RHWM].**
 - **Data High Water Mark [DHWM] (MB).**
 - **Pull Gran Dpl Time (days) [...].**
 - **Pull Gran Dpl Ret Pri (number) [...].**
 - **Min Pri to Preempt (number) [...].**
 - **Request Low Water Mark [RLWM].**
 - **Data Low Water Mark [DLWM] (MB).**
 - Each of the preceding parameters applies to each of the following distribution media:
 - **FtpPull.**
 - **FtpPush.**
 - **CDROM.**
 - **DLT.**
 - **DVD.**
 - **8MM.**
 - **scp.**

- The ↻ icon in the **OM GUI** navigation frame can be used to update the data on (refresh) the screen.
- The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.

5 If media parameter value(s) is (are) to be modified (and there is authorization to do so), in the text entry box(es) for the relevant parameter(s) enter.

<value>

- **MediaCapacity (GB)** should initially be set to the maximum capacity (in gigabytes) for the type of medium, but later should be adjusted to a lower or higher value depending on whether or not data compression is used.
- **MinRequestSize (GB)** is the minimum number of gigabytes that can be requested for the type of medium.
- **MaxRequestSize (GB)** should be the maximum total number of gigabytes that can be requested for that type of medium, regardless of whether or not it can be partitioned.
- **PartitionSizeLimit (GB)** should be the size (in GB) at which point partitioning of a request can occur.
- **MinBundleSize (GB)** is the minimum number of gigabytes in a bundle for the type of medium.
- **PartitionGranuleLimit** is the maximum number of granules that may be partitioned for the type of medium.
- **RHWM** - The Request High Water Mark is the desired maximum number of requests that may be in the Staging state, or that have completed Staging but are not yet in a terminal state (e.g., Shipped).
- **DHWM** – The Data High Water Mark is the maximum volume (in MB) of data in staging or already staged but not yet shipped. If the data volume and number of requests is above the DHWM, it is assumed the media devices have plenty of work to keep them busy.
- **RLWM** - The Request Low Water Mark.
- **DLWM** – The Data Low Water Mark is the minimum volume (in MB) of data that should be in staging or already staged but not yet shipped. If the data volume is below the DLWM, the media devices may soon become idle.

6 If media parameter value(s) is (are) to be modified, **single-click** on the appropriate button from the following selections:

- **Apply** - to apply the new value(s) to the parameter(s).
 - A **“Remember Values” Confirmation** dialogue box is displayed.
- **Reset** - to clear the new value(s) from the text entry box(es) and reinsert the current value(s).
 - The values displayed in the text entry boxes return to the current values.

- 7 If a “**Remember Values**” **Confirmation** dialogue box is displayed, **single-click** on the appropriate button from the following selections:
 - **Yes.**
 - **Never for this site.**
 - **No.**

- 8 To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
 - A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.

- 9 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
 - **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-26. Check/Modify Values Assigned to Media Parameters - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	OM Configuration link	single-click
3	Media link	single-click
4	Observe information displayed in the table on the Media Configuration page	read text
5	<value> [in the text entry box(es) for the relevant parameter(s)] (if applicable)	enter text
6	Apply button (to implement changes) (if applicable)	read text
7	Yes button, Never for this site button, or No button (as applicable)	single-click
8	Log Out link (when applicable)	single-click
9	OK button (to complete logging out) (when applicable)	single-click

18.5.11.4 Check/Modify Values Assigned to Media Creation Parameters

The **Media Creation Configuration** page provides the full-capability operator with a means of checking and modifying media creation parameter values.

Media creation parameters are specific to each kind of distribution medium and affect whether or not media orders are dispatched automatically and how media creation is controlled (i.e., by OMS or PDS). The parameters are dynamically loaded from the OMS database into the configuration pages on the OM GUI. If a configuration parameter is added to the database, it is subsequently displayed on the OM GUI when the applicable configuration page is requested. If a configuration parameter is deleted from the database, it is no longer displayed on the OM GUI. Consequently, the configuration parameters displayed on the OM GUI are variable.

Table 18.5-27 presents (in a condensed format) the steps required to check/modify values assigned to media creation parameters. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **OM Configuration** link in the navigation frame of the **OM GUI**.
 - The **OM Configuration** menu is expanded.
- 3 If the **Media Creation Configuration** page is not already being displayed, **single-click** on the **Media Creation** link in the navigation frame of the **OM GUI**.
 - The **Media Creation Configuration** page is displayed.

NOTE: OMS configuration parameters are dynamically loaded from the OMS database into the configuration pages on the **OM GUI**. If a configuration parameter is added to the database, it is subsequently displayed on the **OM GUI** when the applicable configuration page is requested. If a configuration parameter is deleted from the database, it is no longer displayed on the **OM GUI**. Consequently, the configuration parameters displayed on the **OM GUI** are variable.

- 4 Observe information displayed in the table on the **Media Creation Configuration** page.
 - The **Media Creation Configuration** table has two columns to show the following types of information:
 - Parameter.
 - Current Value.

- The rows in the table indicate the current values assigned to the following types of parameters for each type of distribution medium:
 - **DispatchMode.**
 - **MediaCreationType.**
- Each of the preceding parameters applies to each of the following distribution media:
 - **CDROM.**
 - **DLT.**
 - **DVD.**
 - **8MM.**
- The ↻ icon in the **OM GUI** navigation frame can be used to update the data on (refresh) the screen.
- The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.

5 If media parameter value(s) is (are) to be modified (and there is authorization to do so), first click and hold the option button in the row associated with the applicable distribution medium parameter to display a menu of options, move the mouse cursor to the appropriate value (highlighting it), then release the mouse button.

- **DispatchMode** can be set to either **Automatic** or **Manual**.
- **MediaCreationType** can be set to either **OMS** or **PDS**.

6 If media parameter value(s) is (are) to be modified, **single-click** on the appropriate button from the following selections:

- **Apply** - to apply the new value(s) to the parameter(s).
 - A **“Remember Values” Confirmation** dialogue box is displayed.
- **Reset** - to clear the new value(s) from the text entry box(es) and reinsert the current value(s).
 - The values displayed in the text entry boxes return to the current values.

7 If a **“Remember Values” Confirmation** dialogue box is displayed, **single-click** on the appropriate button from the following selections:

- **Yes.**
- **Never for this site.**
- **No.**

8 To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.

- A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.

- 9 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-27. Check/Modify Values Assigned to Media Creation Parameters - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	OM Configuration link	single-click
3	Media Creation link	single-click
4	Observe information displayed in the table on the Media Creation Configuration page	read text
5	<value> (DispatchMode option list and/or MediaCreationType option list) (if applicable)	single-click
6	Apply button (to implement changes) (if applicable)	read text
7	Yes button, Never for this site button, or No button (as applicable)	single-click
8	Log Out link (when applicable)	single-click
9	OK button (to complete logging out) (when applicable)	single-click

18.5.12 Check/Modify FTP Push Policy Configuration

The **FTP Push Policy Configuration** page provides the full-capability operator with a means of defining and configuring the fine-tuning parameter values of FtpPush destinations.

Configuration parameters on the **FTP Push Policy Configuration** page are grouped in the following three areas:

- **Global Settings for All Destinations.**
- **Settings for Non-Configured Destinations.**
- **Frequently Used Destinations.**

All FtpPush destinations belong to either the Frequently Used group, or the Non-Configured (general) group. All FtpPush destinations not specifically defined as **Frequently Used Destinations** are considered non-configured and use the parameter values in the **Settings for Non-Configured Destinations** area. All new destinations use the **Settings for Non-Configured Destinations** as their default values until other values are specifically assigned.

Global Settings for All Destinations are parameters that apply to all destinations regardless of their individual settings. Global settings apply to both frequently used and non-configured destinations.

Table 18.5-28 presents (in a condensed format) the steps required to check/modify ftp push policy configuration. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **OM Configuration** link in the navigation frame of the **OM GUI**.
 - The **OM Configuration** menu is expanded.
- 3 If the **FTP Push Policy Configuration** page is not already being displayed, **single-click** on the **FTP Push Policy** link in the navigation frame of the **OM GUI**.
 - The **FTP Push Policy Configuration** page is displayed.
- 4 Observe information displayed in the table on the **FTP Push Policy Configuration** page.
 - Configuration parameters on the **FTP Push Policy Configuration** page are grouped in the following three areas:
 - **Global Settings for All Destinations.**
 - **Settings for Non-Configured Destinations.**
 - **Frequently Used Destinations.**
 - The **Global Settings for All Destinations** area has the following types of parameters:
 - **Max Operations.**
 - **Max. FTP Failures.**
 - The **Settings for Non-Configured Destinations** area has the following types of parameters:
 - **RHWM** [Request High Water Mark].
 - **DHWM** [Data High Water Mark].
 - **DLWM** [Data Low Water Mark].
 - **Retry Mode.**
 - **Time Out.**
 - **Min. Throughput.**
 - **Max. Operations.**
 - **Retry Interval.**
 - The **Frequently Used Destinations** area has information in the following columns:
 - **Destination Name (Alias).**
 - **Del** [“delete” boxes – select box to mark corresponding destination for deletion].
 - **Host Address.**

- **Mode** [S3 or S4].
- **Destination Directory**.
- **Retry Mode**.
- **Single-clicking** on a specific Destination Name in the **Frequently Used Destinations** area brings up a screen containing more detailed data concerning that particular destination.
 - The **FTP Push Destination Details** page displays the following types of data concerning the destination in the **Destination Details** area: Name (Alias), Target Directory, Host/IP Address, and Processing Mode.
 - The **FTP Push Destination Details** page displays the following types of data concerning the destination in the **Settings for this Destination** area: Max. Operations, RHW, DHWM, DLWM, Time Out. Min Throughput, Retry Interval, Retry Mode, Notes.
 - **Single-clicking** on the  icon in the **OM GUI** navigation frame causes the **FTP Push Policy Configuration** page to be redisplayed.
- Whenever there is little question mark next to a button or text field (e.g., **Max Operations**), **single-clicking** on the question mark opens a dialogue box that describes the item.
 - The “HelpOnDemand” feature provides context-sensitive help for each page, particularly for controls or parameters that may not be entirely self-descriptive.
- Horizontal and vertical scroll bars appear when necessary to allow viewing data that are not readily visible in the window.
- The  icon in the **OM GUI** navigation frame can be used to update the data on (refresh) the screen.
- The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.

5 If parameter value(s) in either the **Global Settings for All Destinations** area or **Settings for Non-Configured Destinations** area is (are) to be modified (and there is authorization to do so), in the text entry box(es) for the relevant parameter(s) enter.

<value>

6 If parameter value(s) in either the **Global Settings for All Destinations** area or **Settings for Non-Configured Destinations** area is (are) to be modified, **single-click** on the appropriate button from the following selections:

- **Apply** - to apply the new value(s) to the parameter(s).
 - The new value(s) is (are) applied to the parameter(s).
- **Reset** - to clear the new value(s) from the text entry box(es) without changing the current value(s).
 - The new value(s) is (are) not applied to the parameter(s).

- 7 If the retry mode for a destination in the **Frequently Used Destinations** area should be changed (and there is authorization to do so), **single-click** on the option button (in the **Retry Mode** column) associated with the destination to display a menu of retry modes then **single-click** on the desired selection.
 - The following choices are available:
 - **Automatic.**
 - **Manual.**
 - Selected mode is displayed in the **Retry Mode** column.
 - The retry mode for the destination is changed to the selected value.

- 8 To remove (delete) destination(s) from the **Frequently Used Destinations** area, first either **single-click** in the corresponding box(es) in the **Del** column or (if all destinations are to be removed) **single-click** in the **Select all** box near the bottom of the **Frequently Used Destinations** area.
 - Selected destination(s) is (are) marked for deletion.
 - Removing a destination from the **Frequently Used Destinations** area does not actually delete the destination; it moves the destination to the non-configured group and erases its individual configuration parameters.

- 9 To continue the process of removing (deleting) destination(s) from the **Frequently Used Destinations** area, **single-click** on the **Remove Selected Destinations** link near the bottom of the **FTP Push Policy Configuration** page.
 - A destination deletion confirmation dialogue box is displayed with the message “Are you sure you want to delete the selected destinations?”

- 10 To complete the process of removing (deleting) destination(s) from the **Frequently Used Destinations** area, **single-click** on the appropriate button from the following selections:
 - **OK** - to delete the selected destination(s) and dismiss the confirmation dialogue box.
 - The confirmation dialogue box is dismissed.
 - The **FTP Push Policy Configuration** page is refreshed to display the **Frequently Used Destinations** list without the deleted destination(s).
 - **Cancel** – to dismiss the confirmation dialogue box without deleting the selected destination(s).
 - The confirmation dialogue box is dismissed.

- 11 To add a new destination to the **Frequently Used Destinations** area perform the **Add Destinations to the Frequently Used Destinations Area** procedure (Section 18.5.12.1).
 - In order for a destination to be added to the list of Frequently-Used Destinations, the destination must already exist (i.e., must be referenced in at least one current order).

- 12 If parameter value(s) for destination(s) in the **Frequently Used Destinations** area is (are) to be modified (and there is authorization to do so), perform the **Modify Values Assigned to Parameters of Frequently Used Destinations** procedure (Section 18.5.12.2).

- 13** To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
- A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
- 14** To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-28. Check/Modify FTP Push Policy Configuration - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	OM Configuration link	single-click
3	FTP Push Policy link	single-click
4	Observe information displayed in the table on the FTP Push Policy Configuration page	read text
5	<value> [in the text entry box(es) for the relevant parameter(s)] (if applicable)	enter text
6	Apply button (to implement changes) (if applicable)	read text
7	<mode> (Retry Mode option list) (if applicable)	single-click
8	<destination(s)> (in the Del column) or Select all box (if selecting destinations for deletion)	single-click
9	Remove Selected Destinations link (if selecting destinations for deletion)	single-click
10	OK [to delete the selected destination(s)] (if applicable)	single-click
11	Add destinations to the Frequently Used Destinations area (if applicable)	Use procedure in Section 18.5.12.1
12	Modify values assigned to parameters of frequently used destinations (if applicable)	Use procedure in Section 18.5.12.2
13	Log Out link (when applicable)	single-click
14	OK button (to complete logging out) (when applicable)	single-click

18.5.12.1 Add Destinations to the Frequently Used Destinations List

The **Add New Destination** page provides the full-capability operator with a means of adding destinations to the **Frequently Used Destinations** list on the **FTP Push Policy Configuration** page.

A destination on the **Frequently Used Destinations** list is defined by the following three attributes:

- **Alias** – a descriptive name or handle by which the destination can be easily identified. Each alias must be unique.
- **Target Directory** - the directory on the remote host to which files will be pushed.
- **Host Address** - the remote host machine name or IP address.

Each destination on the **Frequently Used Destinations** list must have exclusive attributes and an exclusive alias. Each new destination is initially assigned the same parameter values as are used by the non-configured destinations.

Table 18.5-29 presents (in a condensed format) the steps required to add destinations to the **Frequently Used Destinations** list. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1** If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2** If it has not been expanded already, **single-click** on the **OM Configuration** link in the navigation frame of the **OM GUI**.
 - The **OM Configuration** menu is expanded.
- 3** If the **FTP Push Policy Configuration** page is not already being displayed, **single-click** on the **FTP Push Policy** link in the navigation frame of the **OM GUI**.
 - The **FTP Push Policy Configuration** page is displayed.
- 4** **Single-click** on the **Add a Destination** button in the **Frequently Used Destinations** area of the **FTP Push Policy Configuration** page.
 - The **Add New Destination** page is displayed.
 - In the **Destination Details** area of the **Add New Destination** page text boxes for entering the following types of destination attributes are displayed: **Name (Alias)**, **Target Directory**, **Host/IP Address**.
 - In the Settings for this Destination area of the Add New Destination page current values for the following types of parameters are displayed: **Max. Operations**, **RHWM**, **DHWM**, **DLWM**, **Time Out**, **Min Throughput**, **Retry Interval**, **Retry Mode**, **Notes**.

- Each destination on the **Frequently Used Destinations** list must have exclusive attributes and an exclusive alias.
 - The attributes are entered in the **Destination Details** area of the **Add New Destination** page.
- Each new destination is initially assigned the same parameter values as are used by the non-configured destinations.
 - The parameter values are displayed in the **Settings for this Destination** area of the **Add New Destination** page.
- Whenever there is little question mark next to a button or text field (e.g., **Target Directory**), **single-clicking** on the question mark opens a dialogue box that describes the item.
 - The “HelpOnDemand” feature provides context-sensitive help for each page, particularly for controls or parameters that may not be entirely self-descriptive.

5 In the **Name (Alias)** text box enter:

<alias>

- **<alias>** is a unique descriptive name or handle by which the destination can be easily identified and by which the destination will be commonly known. For example:
Norford University

6 In the **Target Directory** text box enter:

<path>

- **<path>** is the path to the directory on the remote host to which data are to be pushed by ftp. For example:
/sci/data/push

7 In the **Host/IP Address** text box enter:

<address>

- **<address>** is the remote host machine name or IP address where data are to be pushed by ftp. For example:
dsc@nu.edu

8 In the **Max. Operations** text box enter:

<#operations>

- **<#operations>** is the maximum number of concurrent FtpPush operations for a particular destination (exclusive of but subject to the global Max Operations). For example:
2

- 9 In the **RHWM** text box enter:
<rhwm>
- <rhwm> is the Request High Water Mark, the desired maximum number of requests that may be in the Staging state, or that completed Staging but are not in a terminal state (e.g., Shipped). For example:
10
- 10 In the **DHWM** text box enter:
<dhwm>
- <dhwm> is the Data High Water Mark, the maximum volume of data (in GB) in Staging or already staged but not yet pushed. For example:
10
- 11 In the **DLWM** text box.
<dlwm>
- <dlwm> is the Data Low Water Mark, the minimum volume of data (in GB) in Staging or already staged but not yet pushed. For example:
2
- 12 In the **Time Out** text box enter:
<minutes>
- <minutes> is an extra time allotment (in minutes) that is applied to the expected throughput, such that expected throughput equals minimum throughput plus timeout. For example:
60
- 13 In the **Min. Throughput** text box enter:
<throughput>
- <throughput> is minimum data throughput (in MB/sec) for a particular destination. For example:
100
- 14 In the **Retry Interval** text box enter:
<minutes>
- <minutes> is the waiting period (in minutes) before FtpPush operations for a suspended destination are automatically retried. For example:
60

- 15 **Single-click** on the **Retry Mode** option button to display a menu of retry modes then **single-click** on the desired selection.
- The following choices are available:
 - **Automatic.**
 - **Manual.**
 - Selected mode is displayed in the **Retry Mode** column.
- 16 If a note should be entered concerning the destination (e.g., the reason for adding the destination to the **Frequently Used Destinations** list), in the **Notes** text box enter:
<text>
- 17 **Single-click** on the appropriate button from the following selections:
- **Save** - to save the new frequently used destination and the values specified for its parameters.
 - A **“Remember Values” Confirmation** dialogue box is displayed.
 - **Done** - to dismiss the **Add New Destination** page and display the **FTP Push Policy Configuration** page.
 - A **“Done” Confirmation** dialogue box is displayed.
 - **Reset** - to clear the new value(s) from the text entry box(es) without changing the current value(s).
 - The new value(s) is (are) cleared from the text entry box(es) without changing the current value(s).
- 18 If a **“Remember Values” Confirmation** dialogue box is displayed, **single-click** on the appropriate button from the following selections:
- **Yes.**
 - The **“Remember Values” Confirmation** dialogue box is dismissed.
 - The **Add New Destination** page is displayed.
 - **Never for this site.**
 - The **“Remember Values” Confirmation** dialogue box is dismissed.
 - The **Add New Destination** page is displayed.
 - **No.**
 - The **“Remember Values” Confirmation** dialogue box is dismissed.
 - The **Add New Destination** page is displayed.
- 19 If a **“Done” Confirmation** dialogue box is displayed, **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the **“Done” Confirmation** dialogue box and the **Add New Destination** page and display the **FTP Push Policy Configuration** page.
 - The **“Done” Confirmation** dialogue box is dismissed.
 - The **Add New Destination** page is dismissed.
 - The **FTP Push Policy Configuration** page is displayed.

- **Cancel** - to dismiss the **“Done” Confirmation** dialogue box and return to the **Add New Destination** page.
 - The **“Done” Confirmation** dialogue box is dismissed.
- 20** If the **Add New Destination** page is still being displayed and no changes to the new destination are needed, **single-click** on the **Done** button.
- A **“Done” Confirmation** dialogue box is displayed.
- 21** If a **“Done” Confirmation** dialogue box is displayed, **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the **“Done” Confirmation** dialogue box and the **Add New Destination** page and display the **FTP Push Policy Configuration** page.
 - The **“Done” Confirmation** dialogue box is dismissed.
 - The **Add New Destination** page is dismissed.
 - The **FTP Push Policy Configuration** page is displayed.
 - **Cancel** - to dismiss the **“Done” Confirmation** dialogue box and return to the **Add New Destination** page.
 - The **“Done” Confirmation** dialogue box is dismissed.
- 22** If changes to the new frequently used destination are needed, repeat Steps 5 through 21 as necessary.
- 23** Return to the **Check/Modify FTP Push Policy Configuration** procedure (Section 18.5.12).

Table 18.5-29. Add Destinations to the Frequently Used Destinations List - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	OM Configuration link	single-click
3	FTP Push Policy link	single-click
4	Add a Destination button	single-click
5	<alias> (in the Name (Alias) text box) (if applicable)	enter text
6	<path> (in the Target Directory text box) (if applicable)	enter text
7	<address> (in the Host/IP Address text box) (if applicable)	enter text
8	<#operations> (in the Max. Operations text box) (if applicable)	enter text
9	<rhwm> (in the RHWM text box) (if applicable)	enter text
10	<dhwmm> (in the DHWM text box) (if applicable)	enter text
11	<dlwm> (in the DLWM text box) (if applicable)	enter text

Table 18.5-29. Add Destinations to the Frequently Used Destinations List - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
12	<minutes> (in the Time Out text box) (if applicable)	enter text
13	<throughput> (in the Min. Throughput text box) (if applicable)	enter text
14	<minutes> (in the Retry Interval text box) (if applicable)	enter text
15	<mode> (Retry Mode option list) (if applicable)	single-click
16	<text> (in the Notes text box) (if applicable)	enter text
17	Save button	single-click
18	Yes button, Never for this site button, or No button (as applicable)	single-click
19	OK button (if applicable)	single-click
20	Done button (if applicable)	single-click
21	OK button (if applicable)	single-click
22	Repeat Steps 5 through 21 (as necessary)	
23	Return to the Check/Modify FTP Push Policy Configuration procedure	Use procedure in Section 18.5.12

18.5.12.2 Modify Values Assigned to Parameters of Frequently Used Destinations

The **FTP Push Destination Details** page provides the full-capability operator with a means of modifying the values assigned to parameters of frequently used FtpPush destinations (as listed in the **Frequently Used Destinations** area of the **FTP Push Policy Configuration** page).

Table 18.5-30 presents (in a condensed format) the steps required to modify values assigned to parameters of **Frequently Used Destinations**. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1** If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2** If it has not been expanded already, **single-click** on the **OM Configuration** link in the navigation frame of the **OM GUI**.
 - The **OM Configuration** menu is expanded.

- 3 If the **FTP Push Policy Configuration** page is not already being displayed, **single-click** on the **FTP Push Policy** link in the navigation frame of the **OM GUI**.
 - The **FTP Push Policy Configuration** page is displayed.
- 4 If the **FTP Push Destination Details** page for the relevant destination is not already being displayed, **single-click** on the specific Destination Name in the **Frequently Used Destinations** area.
 - The **FTP Push Destination Details** page is displayed.
- 5 Observe information displayed on the **FTP Push Destination Details** page.
 - In the **Destination Details** area of the **FTP Push Destination Details** page the following types of destination attributes are displayed:
 - **Name (Alias).**
 - **Target Directory.**
 - **Host/IP Address.**
 - In the **Settings for this Destination** area of the **FTP Push Destination Details** page current values for the following types of parameters are displayed:
 - **Max. Operations.**
 - **RHWM.**
 - **DHWM.**
 - **DLWM.**
 - **Time Out.**
 - **Min Throughput.**
 - **Retry Interval.**
 - **Retry Mode.**
 - **Notes.**
- 6 Perform Steps 7 through 20 as necessary to modify values that need to be changed.
- 7 In the **Name (Alias)** text box enter:
<alias>
 - <alias> is a unique descriptive name or handle by which the destination can be easily identified and by which the destination will be commonly known. For example:
Norford University
- 8 In the **Target Directory** text box enter:
<path>
 - <path> is the path to the directory on the remote host to which data are to be pushed by ftp. For example:
/sci/data/push

- 9 In the **Host/IP Address** text box enter:
<address>
- **<address>** is the remote host machine name or IP address where data are to be pushed by ftp. For example:
dsc@nu.edu
- 10 In the **Max. Operations** text box enter:
<#operations>
- **<#operations>** is the maximum number of concurrent FtpPush operations for a particular destination (exclusive of but subject to the global Max Operations). For example:
2
- 11 In the **RHWM** text box enter:
<rhwm>
- **<rhwm>** is the Request High Water Mark, the desired maximum number of requests that may be in the Staging state, or that completed Staging but are not in a terminal state (e.g., Shipped). For example:
10
- 12 In the **DHWM** text box enter:
<dhwm>
- **<dhwm>** is the Data High Water Mark, the maximum volume of data (in GB) in Staging or already staged but not yet pushed. For example:
10
- 13 In the **DLWM** text box.
<dlwm>
- **<dlwm>** is the Data Low Water Mark, the minimum volume of data (in GB) in Staging or already staged but not yet pushed. For example:
2
- 14 In the **Time Out** text box enter:
<minutes>
- **<minutes>** is an extra time allotment (in minutes) that is applied to the expected throughput, such that expected throughput equals minimum throughput plus timeout. For example:
60

- 15 In the **Min. Throughput** text box enter:
<throughput>
- <throughput> is minimum data throughput (in MB/sec) for a particular destination.
For example:
100
- 16 In the **Retry Interval** text box enter:
<minutes>
- <minutes> is the waiting period (in minutes) before FtpPush operations for a suspended destination are automatically retried. For example:
60
- 17 **Single-click** on the **Retry Mode** option button to display a menu of retry modes then **single-click** on the desired selection.
- The following choices are available:
 - **Automatic.**
 - **Manual.**
 - Selected mode is displayed in the **Retry Mode** column.
- 18 If a note should be entered concerning the destination (e.g., the reason for adding the destination to the **Frequently Used Destinations** list), in the **Notes** text box enter:
<text>
- 19 **Single-click** on the appropriate button from the following selections:
- **Save** - to save the new frequently used destination and the values specified for its parameters.
 - A **“Remember Values” Confirmation** dialogue box is displayed.
 - **Done** - to dismiss the **Add New Destination** page and display the **FTP Push Policy Configuration** page.
 - A **“Done” Confirmation** dialogue box is displayed.
 - **Reset** - to clear the new value(s) from the text entry box(es) without changing the current value(s).
 - The new value(s) is (are) cleared from the text entry box(es) without changing the current value(s).
- 20 If a **“Remember Values” Confirmation** dialogue box is displayed, **single-click** on the appropriate button from the following selections:
- **Yes.**
 - The **“Remember Values” Confirmation** dialogue box is dismissed.
 - The **Add New Destination** page is displayed.

- **Never for this site.**
 - The **“Remember Values” Confirmation** dialogue box is dismissed.
 - The **Add New Destination** page is displayed.
 - **No.**
 - The **“Remember Values” Confirmation** dialogue box is dismissed.
 - The **Add New Destination** page is displayed.
- 21** If a **“Done” Confirmation** dialogue box is displayed, **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the **“Done” Confirmation** dialogue box and the **Add New Destination** page and display the **FTP Push Policy Configuration** page.
 - The **“Done” Confirmation** dialogue box is dismissed.
 - The **Add New Destination** page is dismissed.
 - The **FTP Push Policy Configuration** page is displayed.
 - **Cancel** - to dismiss the **“Done” Confirmation** dialogue box and return to the **Add New Destination** page.
 - The **“Done” Confirmation** dialogue box is dismissed.
- 22** If the **FTP Push Destination Details** page is still being displayed and no changes to the new destination are needed, **single-click** on the **Done** button.
- A **“Done” Confirmation** dialogue box is displayed.
- 23** If a **“Done” Confirmation** dialogue box is displayed, **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the **“Done” Confirmation** dialogue box and the **Add New Destination** page and display the **FTP Push Policy Configuration** page.
 - The **“Done” Confirmation** dialogue box is dismissed.
 - The **Add New Destination** page is dismissed.
 - The **FTP Push Policy Configuration** page is displayed.
 - **Cancel** - to dismiss the **“Done” Confirmation** dialogue box and return to the **Add New Destination** page.
 - The **“Done” Confirmation** dialogue box is dismissed.
- 24** If changes to the frequently used destination are needed, repeat Steps 7 through 23 as necessary.
- 25** Return to the **Check/Modify FTP Push Policy Configuration** procedure (Section 18.5.12).

Table 18.5-30. Modify Values Assigned to Parameters of Frequently Used Destinations - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	OM Configuration link	single-click
3	FTP Push Policy link	single-click
4	< Destination Name > (in the Frequently Used Destinations area)	single-click
5	Observe information displayed on the FTP Push Destination Details page	read text
6	< alias > (in the Name (Alias) text box) (if applicable)	enter text
7	< path > (in the Target Directory text box) (if applicable)	enter text
8	< address > (in the Host/IP Address text box) (if applicable)	enter text
9	< #operations > (in the Max. Operations text box) (if applicable)	enter text
10	< rhwm > (in the RHWM text box) (if applicable)	enter text
11	< dhwm > (in the DHWM text box) (if applicable)	enter text
12	< dlwm > (in the DLWM text box) (if applicable)	enter text
13	< minutes > (in the Time Out text box) (if applicable)	enter text
14	< throughput > (in the Min. Throughput text box) (if applicable)	enter text
15	< minutes > (in the Retry Interval text box) (if applicable)	enter text
16	< mode > (Retry Mode option list) (if applicable)	single-click
17	< text > (in the Notes text box) (if applicable)	enter text
18	Save button	single-click
19	Yes button, Never for this site button, or No button (as applicable)	single-click
20	OK button (if applicable)	single-click
21	Done button (if applicable)	single-click
22	OK button (if applicable)	single-click
23	Repeat Steps 6 through 22 (as necessary)	
24	Return to the Check/Modify FTP Push Policy Configuration procedure	Use procedure in Section 18.5.12

18.5.13 View the OM GUI Log

The **OM GUI Log Viewer** page provides the Distribution Technician with a means of checking entries in the OM GUI log. The log file that the log viewer displays is located under the cgi-bin/logs directory where the **OM GUI** is installed. It is not the web server log or the SYSLOG. It is a log that is specifically generated by and for the **OM GUI**.

Table 18.5-31 presents (in a condensed format) the steps required to view the **OM GUI** log. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **Logs** link in the navigation frame of the **OM GUI**.
 - The **Logs** menu is expanded.
- 3 If the **OM GUI Log Viewer** page is not already being displayed, **single-click** on the **OM GUI Log Viewer** link in the navigation frame of the **OM GUI**.
 - The **OM GUI Log Viewer** page is displayed.
- 4 Observe information displayed in the **Log Summary**.
 - The **Log Summary** provides the following kinds of information:
 - **Size** (size of the log file).
 - **Lines** (number of lines in the log file).
 - **Last Modified** (when the log file was last modified).
- 5 In the **View the last ___ line(s) of the log file** text box enter:
<number>
 - **<number>** represents the number of lines to be displayed.
 - The log viewer's functioning is similar to that of the UNIX "tail" command: to see a particular number of lines at the end of the log, specify the number of lines in the **View the last ___ line(s) of the log file** text box.
 - Entering 0 (zero) or leaving the text box blank indicates that the entire log file should be displayed.
 - It is possible to specify a number that is equal to or greater than the total number of lines in the log file.
 - The total number of lines in the log file is shown in the **Log Summary** on the **OM GUI Log Viewer** page.

- After long periods of usage, the log file may grow to considerable size and it may take some time to load the entire log into the **OM GUI Log Viewer** page.
 - In most cases viewing the last 100 - 500 lines would be adequate to assess recent activity and it would greatly decrease the amount of time it would take to load the log file onto the page.
- 6 **Single-click** on the **OK** button.
 - The specified lines from the log file are displayed.
 - 7 Observe information displayed in the log file.
 - The GUI log is a record of every page that runs and every stored procedure that is called within those pages.
 - The actual log file (EcOmGui.log) is typically located in the /usr/ecs/<MODE>/CUSTOM/WWW/OMS/cgi-bin/logs directory on the Data Pool Server host (x0dps01).
 - If preferred, the log file can be viewed with any UNIX editor or visualizing command (e.g., **pg, vi, view, more**).
 - 8 To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
 - A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
 - 9 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
 - **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-31. View the OM GUI Log - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	Logs link	single-click
3	OM GUI Log Viewer link	single-click
4	Observe information displayed in the Log Summary	read text
5	<number> (in View the last ___ line(s) of the log file text box)	enter text
6	OK button	single-click
7	Observe information displayed in the log file	

Table 18.5-31. View the OM GUI Log - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
8	Log Out link (when applicable)	single-click
9	OK button (to complete logging out) (when applicable)	single-click

18.5.14 View PMD Open Intervention Information on the OM GUI

Errors with Physical Media Distribution (PMD) are handled in much the same way as interventions for distribution requests are handled. An operator intervention is generated by the OMS Server and is displayed on the OMS GUI.

The **Open Physical Media Interventions** page provides the full-capability operator with a means of viewing and responding to PMD open interventions.

Table 18.5-32 presents (in a condensed format) the steps required to view PMD open intervention information on the **OM GUI**. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.
- 3 **Single-click** on the **Open Interventions** link in the navigation frame of the **OM GUI**.
 - The **Open Physical Media Interventions** page is displayed.
 - The **Current Filters** area of the **Open Physical Media Interventions** page describes how the current listing of distribution requests has been filtered.
 - It is important to check the filter settings when opening the **Open Physical Media Interventions** page because changes to the filter settings tend to persist, even from one session to another.
 - To filter the **PMD Open Interventions Listing** in a different way, perform the **Filter Data Displayed on the Distribution Requests Pages** procedure (Section 18.5.3.1).
 - The **Options** area of the **Open Physical Media Interventions** page has the following buttons and selection boxes:
 - **Change Filter** button [refer to the **Filter Data Displayed on the Distribution Requests Pages** procedure (Section 18.5.3.1).
 - **Bulk Submit** button [for submitting selected intervention(s)].
 - **Bulk Fail** button [for failing selected intervention(s)].

- **Select All** box [for selecting all eligible requests for either **Bulk Submit** or **Bulk Fail**].
- **Select None** box [for selecting none of the eligible requests for either **Bulk Submit** or **Bulk Fail**].
- The **Listing** table has the following columns:
 - **Sel** [check boxes for marking items to be submitted or failed].
 - **Order Id.**
 - **Request Id.**
 - **Media Type.**
 - **Request Size(MB).**
 - **Status.**
 - **Worked by.**
 - **Created.**
 - **Acknowledged.**
 - **Explanation(s).**

4 Observe information displayed in the **Listing** table of the **Open Physical Media Interventions** page.

- The **Show _____ rows at a time** window provides a means of selecting the maximum number of rows of data to be displayed at a time.
 - For example, if **Show _____ rows at a time** is being displayed, selecting **50** from the option button would result in the display of a page of data containing up to 50 rows of data.
- **Single-clicking** on a link (underlined word) in the column header row of the table causes table contents to be sorted on that column.
 - For example, clicking on the **Created** link causes the table to be organized by “Creation Time,” with the most recent request requiring intervention in the top row of the table.
- **Single-clicking** on a specific Order ID brings up a screen containing more detailed data concerning that particular order.
 - The ECS Order page displays the following types of data concerning the order: Request ID(s), Order Type, Order Source, Ext. RequestId, Receive Date, Last Update, Description, Start Date, User ID, Status, Ship Date, Order Home DAAC.
 - **Single-clicking** on the  icon in the **OM GUI** navigation frame causes the **Open Interventions** page to be redisplayed.
- **Single-clicking** on a specific Request ID in the **Listing** table of the **Open Interventions** page brings up a screen containing detailed data concerning the intervention for that particular request (refer to Steps 9 and 10).
- Horizontal and vertical scroll bars appear when necessary to allow viewing data that are not readily visible in the window.

- If **AutoRefresh** is **ON**, the **Open Physical Media Interventions** page refreshes automatically as often as specified in the **Refresh screen every x minutes** window.
 - If a different refresh option is preferred, perform the **Set Refresh Options on OM GUI Pages** procedure (Section 18.5.2.1).
 - To manually update (refresh) the data on the screen, **single-click** on the  icon in the **OM GUI** navigation frame.
 - The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.
 - The **first**, **previous**, **next**, and **last** links provide means of displaying additional pages of data.
- 5 To fail intervention(s) first **single-click** in either the **Select All** check box (if all interventions are to be failed) in the **Options** area of the **Open Physical Media Interventions** page or the individual check box(es) in the **Sel** column associated with specific intervention(s).
 - A checkmark is displayed in each selected check box.
 - 6 To complete the process of failing intervention(s) **single-click** on the **Bulk Fail** button in the **Options** area of the **Open Physical Media Interventions** page.
 - The selected intervention(s) is/are failed.
 - 7 To submit intervention(s) first **single-click** in either the **Select All** check box (if all interventions are to be submitted) in the **Options** area of the **Open Physical Media Interventions** page or the individual check box(es) in the **Sel** column associated with specific intervention(s).
 - A checkmark is displayed in each selected check box.
 - 8 To complete the process of submitting intervention(s) **single-click** on the **Bulk Submit** button in the **Options** area of the **Open Physical Media Interventions** page.
 - The selected intervention(s) is/are submitted.
 - 9 **Single-click** on a specific Request ID in the **Listing** table of the **Open Physical Media Interventions** page to bring up a screen containing detailed data concerning the intervention for that particular request.
 - For example, clicking on Request ID **0800013197** brings up a **PMD Open Intervention Detail** page (i.e., **Intervention for Request 0800013197**).
 - 10 Observe information displayed on the **PMD Open Intervention Detail** page.
 - The following items are displayed on the **PMD Open Intervention Detail** page.
 - **Order ID.**
 - **Request ID.**
 - **Input Size.**
 - **Media Type.**
 - **Priority.**

- **Current Device.**
 - **Error Report** (if applicable).
 - **Print QC Report** button (if applicable).
 - **Explanation(s).**
 - **Worked by** [with **assign** link to assign new worker].
 - **User ID.**
 - **Created.**
 - **Acknowledged.**
 - **Request Status.**
 - **Volume List: Volume Name** [with granules... link]; **Status; Change to...** [including check box(es) for marking to what status the volume should be changed]; **Explanation; Production Module; Apply Volume Changes** button.
 - **Request Level Disposition: Keep on hold; Fail this Distribution Request; Retry media creation for entire Distribution Request; Retry media creation for volumes marked ...** [e.g., **Retry media creation for volumes marked Failed**]; **Retry QC for volumes marked ...** [e.g., **Retry QC for volumes marked Failed**].
 - **OPERATOR NOTES:** text box (for entering comments).
 - **Apply** button.
 - **reset** button.
 - **Single-clicking** on the  icon in the **OM GUI** navigation frame causes the **Open Interventions** page to be redisplayed.
- 11** To work on the intervention being displayed on the **PMD Open Intervention Detail** page, perform the **Respond to a PMD Open Intervention** procedure (Section 18.5.14.1).
- 12** To view the details of another open intervention first **single-click** on the  icon in the **OM GUI** navigation frame then return to Step 4.
- The **PMD Open Intervention Detail** page is dismissed.
 - The **Open Physical Media Interventions** page is displayed.
- 13** To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
- A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
- 14** To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.

- **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-32. View PMD Open Intervention Information on the OM GUI - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	Physical Media Distribution link)	single-click
3	Open Interventions link	single-click
4	Observe information displayed in the Listing table of the Open Physical Media Interventions page	read text
5	Either the Select All check box or individual check box(es) in the Sel column [to fail intervention(s) – if applicable]	single-click
6	Bulk Fail button (in the Options area of the Open Physical Media Interventions page) (to fail interventions - if applicable)	single-click
7	Either the Select All check box or individual check box(es) in the Sel column [to submit intervention(s) - if applicable]	single-click
8	Bulk Submit button (in the Options area of the Open Physical Media Interventions page) (to submit interventions - if applicable)	single-click
9	< Request ID > (in the Listing table of the Open Physical Media Interventions page)	single-click
10	Observe information displayed on the PMD Open Intervention Detail page	read text
11	Work on the intervention (if appropriate)	Use procedure in Section 18.5.2.2
12	◀ icon in the OM GUI navigation frame (if applicable)	single-click
13	Return to Step 4 (if applicable)	
14	Log Out link (when applicable)	single-click
15	OK (when applicable)	single-click

18.5.14.1 Respond to a PMD Open Intervention

The **PMD Open Intervention Detail** page provides the full-capability operator with a means of performing the following kinds of interventions:

- Change the status of any/all volumes (pass or fail them).
- Fail or change any/all granules in a volume.

- Restart media creation.
- Continue media creation with selected volumes.

Table 18.5-33 presents (in a condensed format) the steps required to respond to a PMD open intervention. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

NOTE: The response to an intervention may require coordination between the Distribution Technician and a User Services representative, especially when determining a more suitable type of distribution medium, selecting a replacement granule, or taking any other action that would require contacting the person who submitted the order.

- 1 Observe the information displayed in the **Worked by** column of the **PMD Open Intervention Detail** page.
 - If the **PMD Open Intervention Detail** page is not being displayed on the **OM GUI**, go to the **View PMD Open Intervention Information on the OM GUI** procedure (Section 18.5.14).
 - If someone is already working on the intervention, that person is identified in the **Worked by:** field of the **PMD Open Intervention Detail** page.
 - In general working on an intervention is left to the person who has already been signed up to work on it unless the change is coordinated with that person or they are going to be unavailable (e.g., due to illness or vacation).
 - If necessary (e.g., due to illness, vacation, or prior coordination), it is possible to override the assignment of a person to work on an intervention.
- 2 To assign oneself to work on the intervention, first **single-click** on the **assign** or **change** link in the **Worked by:** field on the **PMD Open Intervention Detail** page.
 - If someone has been assigned to work on the intervention a **change** link is displayed; if no one has been assigned to work on the intervention an **assign** link is displayed.
 - **Single-clicking** on the **assign** or **change** link causes a text box to be displayed.
- 3 To continue the process of assigning oneself to work on the intervention, in the text box displayed beside the **assign** or **change** link in the **Worked by:** field enter:
<user ID>
 - If necessary, overwrite the ID of the previously assigned person.
- 4 To continue the process of assigning oneself to work on the intervention, **single-click** on the green button with the checkmark next to the text box in the **Worked by:** field.

NOTE: When a PMD request goes into Intervention, the device allocated for the request is **not** automatically freed up; it is still allocated to the request.

- 5 If there is a device listed in the **Current Device** field of the **PMD Open Intervention Detail** page and the device should be made available for processing other requests while the current request is in Intervention, first **single-click** on the **deallocate this device...** link adjacent to the **Current Device** entry.
 - A confirmation dialogue box is displayed with the message “WARNING: This will deallocate device ... from Media Distribution request Do you want to continue?”
- 6 To continue the process of making the allocated device available for processing other requests while the current request is in Intervention, **single-click** on the appropriate button from the following selections:
 - **OK** - to confirm freeing up the device and dismiss the dialogue box.
 - The dialogue box is dismissed.
 - The **PMD Open Intervention Detail** page reloads and “none” is displayed for **Current Device**.
 - **Cancel** - to dismiss the dialogue box without freeing up the device.
 - The dialogue box is dismissed.
 - The **PMD Open Intervention Detail** page is displayed and the allocated device is still displayed for **Current Device**.
- 7 To view/check the granules in a volume, first **single-click** on the **granule...** link associated with the volume name in the **Volume List**.
 - The **Granule List for Volume Y of Request X** is displayed in a pop-up window.
 - The **Granule List for Volume Y of Request X** has the following columns:
 - **DBID.**
 - **ESDT/Type.**
 - **In Size (MB).**
 - **Out Size (MB).**
 - **Status.**
 - **Explanation.**
 - **Action [Fail check boxes].**
- 8 If no granule in the volume is to be replaced or “failed” or if all granules in the volume are to be “failed,” skip Steps 9 through 18 and go to Step 19.
- 9 If a granule is to be replaced (e.g., because of an “Invalid UR/Granule Not Found” entry in the **Explanation** column of the **Granule List**), in the **DBID** text box enter:
<Database ID>
 - The DBID for a replacement granule can be determined by doing a search using the EDG.
- 10 To continue the process of specifying a replacement granule, **single-click** on the **Apply** button associated with the DBID.
 - A dialogue box is displayed to confirm the change to the granule.

- 11** To continue the process of specifying a replacement granule, **single-click** on the appropriate button from the following selections:
- **OK** - to confirm the specification of a replacement granule and dismiss the dialogue box.
 - The dialogue box is dismissed.
 - The **Granule List for Volume Y of Request X** is displayed.
 - **Cancel** - to dismiss the dialogue box without specifying a replacement granule.
 - The dialogue box is dismissed.
 - The **Granule List for Volume Y of Request X** is displayed.
- 12** If a granule is to be “failed” (e.g., because of an “Invalid UR/Granule Not Found” entry in the **Explanation** column of the **Granule List**), **single-click** on the **Fail** check box in the **Action** column of the row for the granule in the **Granule List**.
- 13** Repeat Step 12 as necessary to mark additional granules to be “failed.”
- 14** If a granule is to be “failed,” click on the **Apply** button in the **Granule List**.
- A dialogue box is displayed to confirm the change to the granule.

NOTE: “Failing” a granule is a permanent action and cannot be canceled after having been confirmed.

- 15** To continue the process of failing a granule, **single-click** on the appropriate button from the following selections:
- **OK** - to confirm the failure of the granule and dismiss the dialogue box.
 - The dialogue box is dismissed.
 - The **Granule List for Volume Y of Request X** is displayed.
 - **Cancel** - to dismiss the dialogue box without failing the granule.
 - The dialogue box is dismissed.
 - The **Granule List for Volume Y of Request X** is displayed.
- 16** Repeat Steps 9 through 15 (as necessary) to replace or fail any additional granules.
- 17** **Single-click** on the **Close Window** button to close the **Granule List for Volume Y of Request X** pop-up window.
- The **Granule List for Volume Y of Request X** is dismissed.
 - The **PMD Open Intervention Detail** page is displayed.
- 18** Repeat Steps 7 through 17 (as necessary) to replace or fail any granules in additional volumes.

- 19 If an individual volume in the **Volume List** is to be marked for change to another status (e.g., **Created** or **Failed**) as listed in the **Change to...** column, **single-click** in the corresponding check box.
- 20 Repeat Step 19 (as necessary) to mark any additional volumes for change to another status.
- 21 To apply status changes to marked volume(s) **single-click** on the **Apply** button at the bottom of the **Volume List**.
- 22 If a note should be entered concerning the request, in the **OPERATOR NOTES** text box enter:
<text>
 - For example, the note may explain the reason for resubmitting the request.
- 23 To select the disposition for the request **single-click** on the appropriate button from the following selections:
 - **Keep on hold** - to delay applying any intervention action (keep the intervention open) and dismiss the **PMD Open Intervention Detail** page.
 - Placing an intervention on hold does not allow changing the request's attributes, but saves the operator notes and allows opening the intervention at a later time (essentially, the intervention is being “saved”).
 - **Fail this Distribution Request** - to cancel/fail the entire request (including all volumes) and dismiss the **PMD Open Intervention Detail** page.
 - **Retry media creation for entire Distribution Request** - to restart media creation. This option “resets” the request to create the physical media. All volumes are subsequently retried (and QC’ed).
 - **Retry media creation for volumes marked ... [e.g., Retry media creation for volumes marked Failed]** - to continue media creation with the volumes that are marked as indicated (e.g., **Failed**) in the **Volume List**. The request is not reset; the OMS tries to recreate the selected volumes.
 - **Retry QC for volumes marked ... [e.g., Retry QC for volumes marked Failed]** - to retry QC for the volumes that are marked as indicated in the **Volume List**. This is useful in cases where a QC error was recorded in the database but it is suspected that the volume creation was actually successful or where it is desirable to verify that a volume is truly corrupt.

NOTE: There are **Apply** and **reset** buttons at the bottom of the **PMD Open Intervention Detail** page. The **reset** button does not cancel any changes made to the request. It simply resets the form buttons for the **Request Level Disposition** section to their original states.

- 24 **Single-click** on the **Apply** button.
- A **Close Confirmation** page is displayed.
 - The **Close Confirmation** page displays the actions to be taken; for example, the following types of actions may be listed: **Disposition** [e.g., Keep on hold, Fail this Distribution Request].
 - If it was necessary to fail a request or granule(s) within a request, the **Close Confirmation** page includes options for either appending additional text to the default e-mail message to be sent to the requester or choosing not to send an e-mail message to the requester. An **Additional e-mail text** text box for appending text (if desired) to the standard e-mail text is displayed on the **Close Confirmation** page; a **Don't send e-mail** box to suppress the sending of an e-mail message is displayed on the **Close Confirmation** page.
- 25 If the intervention involved failing a request or granule(s) within a request, or modifying the granules in a request, and additional text is to be appended to the corresponding standard e-mail text, in the **Additional e-mail text** text box on the **Close Confirmation** page enter:
- <text>
- 26 If the intervention involved failing a request or granule(s) within a request, or modifying the granules in a request, and no e-mail message is to be sent, **single-click** on the **Don't send e-mail** box on the **Close Confirmation** page to suppress the sending of an e-mail message indicating request/granule failure.
- Unless the **Don't send e-mail** box is checked, an e-mail message indicating request/granule failure will be sent to the requester.
- 27 **Single-click** on the appropriate button from the following selections:
- **OK** - to apply the specified intervention actions (if any) and dismiss the **Close Confirmation** page.
 - The **Close Confirmation** page is dismissed.
 - An **Intervention Closed** page is displayed
 - **Cancel** - to dismiss the **Close Confirmation** page without applying the specified intervention actions.
 - The **Close Confirmation** page is dismissed.
 - A warning dialogue box is displayed with the message “WARNING: The disposition and actions you have taken for this intervention will be lost. Continue?”
- 28 If a warning dialogue box is displayed with the message “WARNING: The disposition and actions you have taken for this intervention will be lost. Continue?” **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the warning dialogue box and the **Close Confirmation** page and return to the **PMD Open Intervention Detail** page.

- **Cancel** - to dismiss the warning dialogue box and return to the **Close Confirmation** page.
- 29** To exit from the **Intervention Closed** page, click on the **OK** button.
- The **Intervention Closed** page is dismissed.
 - The **Open Physical Media Interventions** page is displayed.
- 30** To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
- A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
- 31** To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-33. Respond to a PMD Open Intervention - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	Observe the information displayed in the Worked by column	read text
2	assign or change link (if applicable)	single-click
3	< user ID > (if applicable)	enter text
4	green button with the checkmark (next to the text box in the Worked by: field) (if applicable)	single-click
5	free up [deallocate] this device... link (adjacent to the Current Device entry) (if applicable)	single-click
6	OK button (to deallocate device) (if applicable)	single-click
7	granule... link (in the Volume List) (to view/check the granules in a volume)	single-click
8	< Database ID > (DBID text box) (if applicable)	enter text
9	Apply button (if applicable)	single-click
10	OK button (if applicable)	single-click
11	Fail check box (in Action column of the row for the granule) (if applicable)	single-click
12	Repeat Step 11 (as necessary)	
13	OK button [to “fail” granule(s)] (if applicable)	single-click
14	Repeat Steps 8 through 13 (as necessary)	

**Table 18.5-33. Respond to a PMD Open Intervention - Quick-Step Procedures
(2 of 2)**

Step	What to Enter or Select	Action to Take
15	Close Window button (if applicable)	single-click
16	individual check box(es) in the Change to... column [to mark volume(s) for change to another status - if applicable]	single-click
17	Repeat Step 17 (as necessary)	single-click
18	Apply button [to apply status changes to marked volume(s)] (if applicable)	single-click
19	<text> (OPERATOR NOTES text box) (if applicable)	enter text
20	Keep on hold button (if applicable)	single-click
21	Fail this Distribution Request button (if applicable)	single-click
22	Retry media creation for entire Distribution Request button (if applicable)	single-click
23	Retry media creation for volumes marked ... [e.g., Retry media creation for volumes marked Failed] button (if applicable)	single-click
24	Retry QC for volumes marked ... [e.g., Retry QC for volumes marked Failed] button (if applicable)	single-click
25	Apply button	single-click
26	<text> (Additional e-mail text text box) (if applicable)	enter text
27	Don't send e-mail button (if applicable)	single-click
28	OK button (to dismiss the Close Confirmation page)	single-click
29	OK button (to dismiss the warning dialogue box) (if applicable)	single-click
30	OK button (to exit from the Intervention Closed page) (when applicable)	single-click
31	Log Out link (when applicable)	single-click
32	OK (to complete logging out) (when applicable)	single-click

18.5.15 Check/Modify PMD Configuration

The following procedures are involved in checking/modifying PMD configuration:

- **Check/Modify PMD Device Configuration** (Section 18.5.15.1)
 - View the configuration of devices (i.e., disk and tape drives) used in physical media production and QC.
 - Change device configuration (full-capability operators only).
- **Filter Data Displayed on the PMD Device Configuration Page** (Section 18.5.15.2)

- **Check/Modify PMD Printer Configuration** (Section 18.5.15.3)
 - View information on all the currently configured printers.
 - Change printer configuration and/or add printer configurations (full-capability operators only).
- **Check/Modify PMD Production Module Configuration** (Section 18.5.15.4)
 - View information on all the currently configured production modules.
 - Add production modules and/or edit production module parameter values (full-capability operators only).

18.5.15.1 Check/Modify PMD Device Configuration

For Synergy V, the **OM GUI** displays the configuration of devices used in physical media creation. Additional devices can be “added.” The **PMD Device Configuration** page displays the following types of information on all the currently configured devices:

- The given device label.
- The media type associated with the device.
- The “Free” or “Busy” status of the device.
 - A tape device (8MM or DLT) is considered “Busy” if it is occupied by a PMD request.
 - A tape device is considered “Free” if there is no Request allocated to it.
 - A Rimage device is only considered “Busy” if it has reached 100% of its Job Allocation; otherwise, a Rimage device is always “Free.”
- The device’s On-Line status (“off-line” or “on-line”).
 - If the device is off-line, the reason is displayed in the “Off-Line” reason column.

In addition, the **PMD Device Configuration** page gives the operator a quick visual indicator of the load for each Rimage device (i.e., each drive for creating CD or DVD media). It calculates the device’s current load and shows the percentage based on the maximum number of jobs that device has been configured to handle. This is based on the **Job Limit** parameter.

Table 18.5-34 presents (in a condensed format) the steps required to check/modify PMD device configuration. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.

- 3 If the **PMD Device Configuration** page is not already being displayed, **single-click** on the **Device Configuration** link in the navigation frame of the **OM GUI**.
 - The **PMD Device Configuration** page is displayed.
 - The **Filter** area of the **PMD Device Configuration** page provides a means of filtering the device configurations shown on the page by media type, online status and/or device status.
 - If the desired configuration information is not listed in the device configuration table of the **PMD Device Configuration** page, perform the **Filter Data Displayed on the PMD Device Configuration Page** procedure (Section 18.5.15.2).
 - The device configuration table has the following columns:
 - **Device Label.**
 - **Current Request.**
 - **Media Type.**
 - **Reserved for Mode.**
 - **Used by Mode.**
 - **Device Status.**
 - **Online Status.**
 - **Offline Reason.**
 - The **Rimage Device Loads** area of the **PMD Device Configuration** page shows the following types of information for each Rimage device:
 - **Allocated Work Load** (displays percentage based on the maximum number of jobs that device has been configured to handle and provides a corresponding bar graph).
 - **Actual Work Load** (displays percentage based on the maximum number of jobs that device has been configured to handle and provides a corresponding bar graph).
- 4 Observe information displayed in the device configuration table of the **PMD Device Configuration** page.
 - If **AutoRefresh** is **ON**, the **PMD Device Configuration** page refreshes automatically as often as specified in the **Refresh screen every x minutes** window.
 - If a different refresh option is preferred, perform the **Set Refresh Options on OM GUI Pages** procedure (Section 18.5.2.1).
 - The  icon in the **OM GUI** navigation frame can be used to update the data on (refresh) the screen.
 - The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.
- 5 If the desired configuration information is not listed in the device configuration table of the **PMD Device Configuration** page, perform the **Filter Data Displayed on the PMD Device Configuration Page** procedure (Section 18.5.15.2).
- 6 If request filtering was necessary, return to Step 4.

- 7 To change the on-line or off-line status of a device, first **single-click** on the corresponding “light” in the **Online Status** column of the device configuration table to bring up a pop-up dialogue box.
- A pop-up dialogue box for changing the on-line/off-line status of a device is displayed.
 - If the device is not busy and is to be taken off line, the dialogue box requests an explanation for taking the device off line.
 - If the device is busy and is to be taken off line, a warning is provided. The current allocated request will be completed, after that the device will be taken off line.
- 8 If necessary for continuing the process of changing the on-line or off-line status of a device, in the text box in the dialogue box enter:
<explanation>
- <explanation> explains why the device is being taken off line.
- 9 To continue the process of changing the on-line or off-line status of a device, **single-click** on the appropriate button from the following selections:
- **Apply** - to change the on-line or off-line status of the device and dismiss the dialogue box.
 - The dialogue box is dismissed.
 - The **PMD Device Configuration** page is displayed.
 - A status of either “Off-Line PENDING” or “On-Line PENDING” is shown on the **PMD Device Configuration** page.
 - Because on-line/off-line status of the device is done logically and not physically (i.e., it is only marked as virtually on line or off line in the OMS database), there is some latency involved in changing the device’s real status.
 - When the OMS Server picks up the status from the database, it is updated to “Off-Line” or “On-Line” (as the case may be).
 - **Cancel** - to dismiss the dialogue box without changing the on-line or off-line status of the device.
 - The dialogue box is dismissed.
 - The **PMD Device Configuration** page is displayed.
- 10 To start the process of adding a new device to the configuration **single-click** on the **Add New Device** button near the top of the **PMD Device Configuration** page.
- An **Add New Device** page is displayed.

- 11** To continue the process of adding a new device to the configuration **single-click** on the option button associated with the **Device Purpose** box to display a menu of purposes (i.e., **Production**, **QC**, or **Production and QC**) then **single-click** on the desired selection.
- If **Production** was selected, the **Add New Device** page displays **Device Type** radio buttons.
 - If **QC** or **Production and QC** was selected, the corresponding **Device Details** page is displayed.
- 12** To continue the process of adding a new device to the configuration if the device is going to be used for production (only), **single-click** on the appropriate radio button (i.e., **Rimage** or **Tape**).
- The corresponding **Device Details** page is displayed.
- 13** To continue the process of adding a new device to the configuration **single-click** on the appropriate **Media Type** radio button from the choices listed.
- 14** To continue the process of adding a new device to the configuration if the device is going to be used for QC (only), **single-click** on the appropriate **PC Attached** radio button (i.e., **yes** or **no**).
- 15** To continue the process of adding a new device to the configuration, in the corresponding text boxes enter:
- <text>
- <text> is entered in the following text boxes, as applicable:
 - **Allocated Workload Limit** (applicable to Rimage production only).
 - **Actual Workload Limit** (applicable to Rimage production only).
 - **Device Label.**
 - **Device Path.**
 - **Device Description.**
- 16** To continue the process of adding a new device to the configuration if the device is to be reserved for use by a particular ECS mode only, **single-click** on the option button associated with the **Reserve for Mode (optional)** box to display a menu of modes then **single-click** on the desired selection.
- **ALL MODES** is the default.
- 17** To conclude the process of adding a device to the configuration **single-click** on the appropriate button from the following selections:
- **OK** - to add the specified device.
 - The **Add New Device** page is dismissed.
 - The **PMD Device Configuration** page is displayed; the newly added device is shown on the **PMD Device Configuration** page.

- **Cancel** - to cancel the process of adding the specified device.
 - The **Add New Device** page is dismissed.
 - An “Are you sure want [sic] to cancel?” dialogue box is displayed; **single-click** on **OK** to cancel the new device and go to the **PMD Device Configuration** page; **single-click** on **Cancel** to return to the **Add New Device** page.
- 18** To add additional devices to the configuration repeat Steps 10 through 17 as necessary.
- 19** To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
- A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
- 20** To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-34. Check/Modify PMD Configuration - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	Physical Media Distribution link	single-click
3	Device Configuration link	single-click
4	Observe information displayed in the table on the PMD Device Configuration page	read text
5	Filter data displayed on the PMD Device Configuration page (if necessary)	Use procedure in Section 18.5.15.2
6	<indicator light> (to change the on-line or off-line status in the Online Status column) (as necessary)	single-click
7	<explanation> (for taking a device off line) (if applicable)	enter text
8	Apply button (to change the on-line or off-line status of a device) (if applicable)	single-click
9	Add New Device button (if applicable)	
10	<purpose> (Device Purpose option button) (if applicable)	single-click
11	<category> button (i.e., Rimage or Tape) (if applicable)	single-click

Table 18.5-34. Check/Modify PMD Configuration - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
12	<media type> radio button (if applicable)	single-click
13	yes button or no button (as applicable)	single-click
14	Allocated Workload Limit text box (as applicable)	enter text
15	Actual Workload Limit text box (as applicable)	enter text
16	Device Label text box (as applicable)	enter text
17	Device Path text box (as applicable)	enter text
18	Device Description text box (as applicable)	enter text
19	<mode> (Reserve for Mode option button) (if applicable)	single-click
20	OK button (to add the device) (if applicable)	single-click
21	Repeat Steps 9 through 20 (as necessary)	
22	Log Out link (when applicable)	single-click
23	OK button (to complete logging out) (when applicable)	single-click

18.5.15.2 Filter Data Displayed on the PMD Device Configuration Page

Features at the top of the **PMD Device Configuration** page provide the Distribution Technician (whether full-capability or limited capability operator) with a means of filtering data displayed on the **PMD Device Configuration** page.

Table 18.5-35 presents (in a condensed format) the steps required to filter data displayed on the **PMD Device Configuration** page. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If the device configuration table needs to be filtered to show devices of one particular type of physical distribution medium only (e.g., CDROM, DVD, DLT or 8MM), **single-click** on the **media type** option button to display a menu of media types then **single-click** on the desired selection.
 - Selected type of physical distribution medium is displayed in the media type box.
 - Filtering by media type may be combined with filtering by online status (refer to Step 2) and/or device status (refer to Step 3).
 - If no “online status” filtering criterion is going to be selected, go to Step 3.
 - If neither an “online status” nor a “device status” filtering criterion is going to be selected, go to Step 4.

- 2 If the device configuration table needs to be filtered to show devices with a particular online status only (i.e., on-line or off-line), **single-click** on the **online status** option button to display a menu of online statuses then **single-click** on the desired selection.
 - Selected online status is displayed in the online status box.
 - If no “device status” filtering criterion is going to be selected, go to Step 4.

- 3 If the device configuration table needs to be filtered to show devices with a particular device status only (i.e., FREE or BUSY), **single-click** on the **device status** option button to display a menu of device statuses then **single-click** on the desired selection.
 - Selected device status is displayed in the device status box.

- 4 When the relevant filtering criteria have been selected (as described in Steps 1 through 3), **single-click** on the appropriate button from the following selections:
 - **Apply** - to apply the specified filtering criteria.
 - The **PMD Device Configuration** page refreshes.
 - Only requests that meet the specified filter criteria appear in the device configuration table on the **PMD Device Configuration** page.
 - **Clear**- to clear the selected filter criteria.

- 5 Return to the **Check/Modify PMD Device Configuration** procedure (Section 18.5.15.1).

Table 18.5-35. Filter Data Displayed on the PMD Device Configuration Page - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	<medium> (media type option button) (if applicable)	single-click
2	<status> (online status option button) (as applicable)	single-click
3	<status> (device status option buttons) (as applicable)	single-click
4	Apply button	single-click
5	Return to the View Completed Operator Actions and Interventions on the OM GUI procedure	Use procedure in Section 18.5.7

18.5.15.3 Check/Modify PMD Printer Configuration

For Synergy V, the **OM GUI** handles the configuration of printers used in physical media creation. The printer configurations can be “edited.” The **PMD Printer Configuration** page displays the following types of information on all the currently configured printers:

- Printer name.
- Type of printer [function(s) the printer supports in physical media distribution].

- Network info (as applicable).
- Status of the printer.
- Printer options.

Table 18.5-36 presents (in a condensed format) the steps required to check/modify PMD printer configuration. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.
- 3 If the **PMD Printer Configuration** page is not already being displayed, **single-click** on the **Printer Configuration** link in the navigation frame of the **OM GUI**.
 - The **PMD Printer Configuration** page is displayed.
 - The **Printer Configuration** table has the following columns:
 - **Name.**
 - **Type** [function(s) the printer supports in physical media distribution].
 - **Network info** (as applicable).
 - **Status.**
 - **Options.**
- 4 Observe information displayed in the **Printer Configuration** table.
- 5 To change a printer's configuration first click on the **edit...** button next to the printer name to bring up a **PMD Printer Configuration** page with an **Edit parameters** area for the specified printer.
 - A **PMD Printer Configuration** page with an **Edit parameters** area for the specified printer is displayed.
- 6 Observe information displayed on the **PMD Printer Configuration** page with **Edit parameters** area for the selected printer.
 - The following items are displayed in the **Edit parameters** area for the selected printer:
 - **Type.**
 - **Name.**
 - **Network Info.**
 - **Options.**

- **Single-clicking** on the  icon in the **OM GUI** navigation frame causes the **PMD Printer Configuration** page to be redisplayed.
- 7 To change the name assigned to the printer in the corresponding text box enter:
<name>
- Changes to parameter values are not effective until they have been implemented using the **Apply** button (Step 10).
- 8 To change the network info value assigned to the printer in the corresponding text box enter:
<network info>
- Changes to any of the preceding parameter values are not effective until they have been implemented using the **Apply** button (Step 10).
- 9 To change the “**Options**” first click on the appropriate radio button from the following selections:
- **Always** (print).
 - **Never** (print).
- 10 To implement printer configuration parameter changes click on the appropriate button from the following selections:
- **Apply** - to implement printer configuration parameter changes related to name, network info, and/or options.
 - The **PMD Printer Configuration** page with **Edit parameters** area is dismissed.
 - The **PMD Printer Configuration** page is displayed.
 - **Cancel Edit** - to cancel implementation of configuration parameter changes related to name, network info, and/or options.
 - The **PMD Printer Configuration** page with **Edit parameters** area is dismissed.
 - The **PMD Printer Configuration** page is displayed.
- 11 To edit the configuration parameters of another printer (if applicable) return to Step 5.
- 12 To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
- A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
- 13 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.

- **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-36. Check/Modify PMD Printer Configuration - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	Physical Media Distribution link	single-click
3	Printer Configuration link	single-click
4	Observe information displayed in the Configuration table	read text
5	edit... button (next to the printer name) (if applicable)	single-click
6	Observe information displayed on the PMD Printer Configuration page with Edit parameters area (if applicable)	single-click
7	<name> (for printer) (if applicable)	enter text
8	<network info> (related to printer) (if applicable)	enter text
9	Always button or Never button (as applicable)	single-click
10	Apply button (to implement changes to configuration parameter values) (if applicable)	single-click
11	Return to Step 5 (as necessary)	
12	Log Out link (when applicable)	single-click
13	OK button (to complete logging out) (when applicable)	single-click

18.5.15.4 Check/Modify PMD Production Module Configuration

For Synergy V, the **OM GUI** handles the configuration of production modules used in physical media creation. Production modules can be “added” and production module parameter values can be “edited.” The **PMD Production Module Configuration** page displays the following types of information on all the currently configured production modules:

- Name.
- Date/time created.
- Date/time last updated.
- Path to image files.
- Path to text files.
- Name of the executable.
- Whether or not the production module is the default module.

Table 18.5-37 presents (in a condensed format) the steps required to check/modify PMD production module configuration. If you are already familiar with the procedures, you may

prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.
- 3 If the **PMD Production Module Configuration** page is not already being displayed, **single-click** on the **PM Configuration** link in the navigation frame of the **OM GUI**.
 - The **PMD Production Module Configuration** page is displayed.
 - Each production module is listed in a separate table that has the following columns:
 - **Name.**
 - **Created** (date/time).
 - **Last Updated** (date/time).
 - **Image File Path.**
 - **Text File Path.**
 - **Executable.**
 - **Default Module** (yes/no).
- 4 Observe information displayed in the production module tables of the **PMD Production Module Configuration** page.
 - To manually update (refresh) the data on the screen, click on the  icon in the **OM GUI** navigation frame.
 - The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.
- 5 To modify the value assigned to the image file path parameter for a particular production module in the corresponding text box enter:
<image path>
 - Modifications to production module parameter values are not implemented until the **Apply Changes** button for the production module has been activated.
- 6 To modify the value assigned to the text file path parameter for a particular production module in the corresponding text box enter:
<text path>
 - Modifications to production module parameter values are not implemented until the **Apply Changes** button for the production module has been activated.

- 7 To designate whether or not a production module is the default module **single-click** on the appropriate button from the following selections:
 - **yes** - to designate a production module as the default module.
 - **no** - to designate a production module as not being the default module.
- 8 Repeat Steps 5 through 7 as necessary to identify parameter values to be modified for other production modules.
- 9 If modified parameter values for a particular production module have been entered in the table for the production module on the **PMD Production Module Configuration** page, **single-click** on the appropriate button from the following selections:
 - **Apply Changes** - to implement the specified modifications to production module parameter values.
 - The modified value(s) for the particular production module is/are implemented.
 - **Reset** - to reset the parameter values for the production module to the original values.
 - The modified value(s) for the particular production module is/are not implemented.

NOTE: The process of adding a new production module to the PMD configuration assumes that the production module has been properly installed already.

- 10 To add a new production module first **single-click** on the **Add New Production Module** button on the **PMD Production Module Configuration** page.
 - An **Add New Production Module** table is displayed on the **PMD Production Module Configuration** page.
- 11 To continue the process of adding a new production module, in the corresponding text box of the **Add New Production Module** table enter:
<name>
 - <name> is the name of the production module to be added to the configuration.
- 12 To continue the process of adding a new production module, in the corresponding text box of the **Add New Production Module** table enter:
<image path>
- 13 To continue the process of adding a new production module, in the corresponding text box of the **Add New Production Module** table enter:
<text path>

- 14** To designate whether or not a production module being added to the configuration is the default module **single-click** on the appropriate button from the following selections in the **Add New Production Module** table:
- **yes** - to designate a production module as the default module.
 - **no** - to designate a production module as not being the default module.
- 15** To conclude the process of adding a new production module click on the appropriate button or link from the following selections:
- **Add This Production Module** button - to add the new production module to the PMD configuration.
 - The **Add New Production Module** table on the **PMD Production Module Configuration** page is dismissed.
 - The **PMD Production Module Configuration** page is displayed.
 - **Cancel** link - to abort the process of adding a new production module to the PMD configuration.
 - The **Add New Production Module** table on the **PMD Production Module Configuration** page is dismissed.
 - The **PMD Production Module Configuration** page is displayed.
- 16** Repeat Steps 10 through 15 as necessary to add new production modules to the PMD configuration.
- 17** To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
- A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
- 18** To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-37. Check/Modify PMD Production Module Configuration - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	Physical Media Distribution link	single-click
3	PM Configuration link	single-click
4	Observe information displayed in the production module tables of the PMD Production Module Configuration page	read text
5	<image path> (in Image File Path text box) (if applicable)	enter text
6	<text path> (in Text File Path text box) (if applicable)	enter text
7	yes button or no button (in Default Module column) (if applicable)	single-click
8	Repeat Steps 5 through 7 (as necessary)	
9	Apply Changes button (to implement changes to configuration parameter values) (if applicable)	single-click
10	Add New Production Module button (if applicable)	single-click
11	<name> (in Name text box) (if applicable)	single-click
12	<image path> (in Image File Path text box) (if applicable)	single-click
13	<text path> (in Text File Path text box) (if applicable)	single-click
14	yes button or no button (in Default Module column) (if applicable)	single-click
15	Add This Production Module button (if applicable)	single-click
16	Repeat Steps 10 through 15 (as necessary).	
17	Log Out link (when applicable)	single-click
18	OK button (to complete logging out) (when applicable)	single-click

18.5.16 Check PMD Reports

The **PMD Report Summary** page located under the **Physical Media Distribution** menu is meant to emulate the legacy PDS functionality. The only difference is that the reports are displayed in HTML through the browser. By using the browser's built-in and convenient print function, the reports can be printed with the formatting intact.

The following types of reports are available:

- **Tape Device Report** - This shows, by media type, the summary of off-line, on-line and free/busy tape devices
- **RIMAGE Device Report** - Unlike the tape device report, this shows the number and volume (in MB) of jobs queued, since RIMAGE devices don't really become "Busy" unless their Job Limit has been reached.
- **Job Request Summary** - A quick summary of the PMD requests in their various states from waiting for a device to waiting for shipment.

Table 18.5-38 presents (in a condensed format) the steps required to check PMD reports. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.
- 3 If the **PMD Report Summary** page is not already being displayed, **single-click** on the **Reports** link in the navigation frame of the **OM GUI**.
 - The **PMD Report Summary** page is displayed.
- 4 Observe information displayed in the table on the **PMD Report Summary** page.
 - **Tape Device Report** has a row for each type of tape device and columns describing the following characteristics of the tape devices:
 - **Media Type.**
 - **off-line devices.**
 - **on-line devices.**
 - **free devices.**
 - **busy devices.**
 - **RIMAGE Device Report** has a row for each type of disk medium and columns describing the following characteristics of the disk media:
 - **Media Type.**
 - **Creation Jobs Queued.**
 - **Volume of Jobs Queued.**
 - **Job Request Summary** has a row for each type of physical distribution medium and columns describing the following characteristics of the physical distribution media:
 - **Media Type.**
 - **Jobs waiting for devices.**
 - **Jobs Transferring.**

- **Jobs in QC.**
- **Jobs Waiting for Shipment.**
- To manually update (refresh) the data on the screen, click on the ↻ icon in the **OM GUI** navigation frame.
- The Netscape browser **Edit** → **F****ind in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.

NOTE: To get the most up-to-date statistics, reload the page just before printing. Because the **OM GUI** has a time stamp on every page, it shows when the report was generated, giving an idea of the report's accuracy.

5 To print the PMD reports execute the following menu path from the pull-down menu (on the Netscape browser):

File → **P****rint**

- A **Print** dialogue box is displayed.
- 6** To continue the process of printing the PMD reports **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the dialogue box and print the reports.
 - The dialogue box is dismissed.
 - The reports are printed.
 - **Cancel** - to dismiss the dialogue box without printing the reports.
 - The dialogue box is dismissed.
- 7** To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
- A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
- 8** To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-38. Check PMD Reports - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	Physical Media Distribution link	single-click
3	Reports link	single-click
4	Observe information displayed in the table on the PMD Report Summary page	read text
5	File → P rint (on Netscape browser)	single-click
6	OK button (to initiate printing)	single-click
7	Log Out link (when applicable)	single-click
8	OK button (to complete logging out) (when applicable)	single-click

18.5.17 Monitor/Control PMD Media Creation Using the OM GUI

The **Media Creation Actions** page provides the full-capability operator with a means of performing various types of media creation actions.

If physical media creation for a type of physical distribution medium is dispatched manually, the operator must take action to activate each request on that type of physical distribution medium using the **Media Creation Actions** page.

The OMS production software (EcOmPdModule) runs twice during media production; i.e., once for media preparation and again for media creation. Somewhat different activities occur for disk and tape preparation and creation. The following activities occur during disk and tape preparation:

- Disk (CD/DVD) preparation.
 - HDF and metadata file are read.
 - Data is staged.
 - Summary file is created.
 - Summary file is copied.
 - Jewel case insert is created.
 - ISO image file is created.
- Tape preparation.
 - HDF and metadata file are read.
 - Data is staged.
 - Summary file is created.
 - Summary file is copied.
 - Tape label is created.

The following activities occur during disk and tape creation:

- Disk (CD/DVD) creation.
 - Merge (label data) file is created.
 - Rimage interface file is created.
 - Rimage writes data to media.
 - Jewel case insert is printed.
 - ISO image and interface file are cleaned up.
 - Staging directory is cleaned up.
- Tape creation.
 - Data is written to tape.
 - Tape label is printed.
 - Staging directory is cleaned up.

The following activities occur during disk and tape QC/verification:

- The medium is inserted in a different drive than that used to create the disk or tape.
- QC of disks is typically done on a QC PC.
- The operator starts QC from the **OM GUI**.
- QC compares the summary file and a “tar -tvf” of the medium.

On the **OM GUI** media creation is divided into the following “actions:”

- Activate Request.
- Mount Media for Production.
- Collect Media for QC.
- Activate Media for QC.
- Mount Media for QC.
- Assemble Package.

Entries in the **Action Type** column of the **Media Creation Actions** page indicate to the operator what general kind of action needs to be taken next. The operator can select the appropriate choice from the alternatives listed in the **Options** column.

Table 18.5-39 presents (in a condensed format) the steps required to monitor/control PMD media creation using the **OM GUI**. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.

- 3** **Single-click** on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.
- The **Media Creation Actions** page is displayed.
 - The **Filter** area of the **Media Creation Actions** page allows the operator to select the type(s) of actions to be displayed on the page. The following types of actions can be selected:
 - **Activate Media for QC.**
 - **Activate Request.**
 - **Assemble Package.**
 - **Collect Media for QC.**
 - **Mount Media for Production.**
 - **Mount Media for QC.**
 - The **Listing** table has the following columns:
 - **OrderID.**
 - **RequestID.**
 - **Media Type.**
 - **Device Name.**
 - **Request Status** [status of the request. If the status is “Operator Intervention” and an OMS intervention exists, the status is a link to the Intervention Detail page for the intervention.].
 - **Due Date** [date/time the request is due to be shipped.].
 - **Media Action Note** ["Y" indicates that there is a note associated with the request. To see the note **single-click** the "Y."].
 - **Action Type** [type of action in the media creation process that OMS has queued and the operator can take.].
 - **Options** [options available to the operator in response to the queued action (in the **Action Type** column.].
- 4** Observe information displayed in the **Listing** table of the **Media Creation Actions** page.
- The **Show _____ rows at a time** window provides a means of selecting the maximum number of rows of data to be displayed at a time.
 - For example, if **Show _____ rows at a time** is being displayed, selecting **50** from the option button would result in the display of a page of data containing up to 50 rows of data.
 - **Single-clicking** on a link in the column header row of the table causes table contents to be sorted on that column.
 - For example, **single-clicking** on the **Request Status** link causes the table to be organized by “Request Status,” with the most recent request requiring intervention in the top row of the table.

- **Single-clicking** on a specific Order ID brings up a screen containing more detailed data concerning that particular order.
 - The ECS Order page displays the following types of data concerning the order: Request ID(s); Order Type; Order Source; Ext. RequestId, Receive Date; Last Update; Description; Start Date; User ID; Status; Ship Date; Order Home DAAC.
- **Single-clicking** on the  icon in the **OM GUI** navigation frame causes the **Media Creation Actions** page to be redisplayed.
- **Single-clicking** on a specific Request ID in the **Listing** table of the **Media Creation Actions** page brings up a **Distribution Request Detail** page.
 - For example, **single-clicking** on Request ID **0800013350** brings up a **Distribution Request Detail** page (i.e., **DISTRIBUTION REQUEST 0800013350**) that displays the following types of data (as applicable) concerning the request (varies with the type of distribution medium selected): UserID; E-mail; Request Size (MB); # Granules; # Granules Staged; # Granules FTP Pushed; Receive Date/Time; Start Date/Time; Last Update; End Date/Time; Due Date; Allocated Device; OrderId; Order Type; Ext. RequestId; Priority; Request Status; Destination; Edit FtpPush Parameters [button]; Resubmit Count; Media Type; Resource Class; Actions [Action button(s) (e.g., Resubmit, Stop, Cancel, Suspend, and/or Resume)]; User String; Device Allocated Date/Time; Request Notes; Volume List: Volume Name; Status; Action; Explanation; Production Module; Last Update; Request Notes [text box and Apply button]; Mailing Address: Title; First Name; Middle Initial; Last Name; Email; Organization; Address; City; State/Province; Country; Zip/Postal code; Telephone; Fax; Shipping Address: Title; First Name; Middle Initial; Last Name; Email; Address; City; State/Province; Country; Zip/Postal code; Telephone; Fax; Billing Address: Title; First Name; Middle Initial; Last Name; Email; Organization; Address; City; State/Province; Country; Zip/Postal code; Telephone; Fax; Granule List/Failed Granules (e.g., DB ID; DPL ID; ESDT; Size (MB); Proc Mode; HEG Line Item; Volume Name; Granule Status; Completion Time; Explanation).
- Horizontal and vertical scroll bars appear when necessary to allow viewing data that are not readily visible in the window.
- If **AutoRefresh** is **ON**, the **Media Creation Actions** page refreshes automatically as often as specified in the **Refresh screen every x minutes** window.
 - If a different refresh option is preferred, perform the **Set Refresh Options on OM GUI Pages** procedure (Section 18.5.2.1).
- To manually update (refresh) the data on the screen, **single-click** on the  icon in the **OM GUI** navigation frame.
- The Netscape browser **Edit** → **Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.
- The **first**, **previous**, **next**, and **last** links provide means of displaying additional pages of data.

- 5 To change the priority of a distribution request first **single-click** on the option button in the **Priority** column of the row associated with the request to display a menu of priorities then **single-click** on the desired selection.
 - Selected priority is displayed in the **Priority** column.
 - An alternative is to bring up the relevant **Distribution Request Detail** page (by **single-clicking** on the Request ID in the **Distribution Requests** table), **single-click** on the option button on the **Priority** line to display a menu of priorities, then **single-click** on the desired selection.
- 6 To implement a priority change **single-click** on the **Apply** button adjacent to the text box displaying the desired priority.
 - “Priority changed” is displayed in the **Priority** column for the row associated with the request.
- 7 Repeat Steps 5 and 6 as necessary to change the priority of additional distribution requests.
- 8 If **Activate Request** is displayed in the **Action Type** column for a request on the **Media Creation Actions** page, go to the appropriate procedure (from the list that follows) for responding to the action type associated with the request.
 - **Activate PMD Requests** (Section 18.5.17.1) [to start the media creation process for PMD requests].
 - **Fail a PMD Request** (Section 18.5.17.2) [to manually fail a PMD request and (optionally) either enter additional text for the distribution notice (DN) or specify that no DN is to be sent].
 - **Annotate a PMD Action** (Section 18.5.17.3) [to add notes to any PMD action].
- 9 If **Mount Media for Production** is displayed in the **Action Type** column for a request on the **Media Creation Actions** page, go to the appropriate procedure (from the list that follows) for responding to the action type associated with the request.
 - **Confirm Mount Media for PMD** (Section 18.5.17.4) [to confirm media mounting for the next volume of the request].
 - **Fail Mount Media for PMD** (Section 18.5.17.5) [to notify OMS that the assigned drive currently cannot be used for media creation for a particular request and (optionally) to take the device off line].
 - **Annotate a PMD Action** (Section 18.5.17.3) [to add notes to any PMD action].
- 10 If **Collect Media for QC** is displayed in the **Action Type** column for a request on the **Media Creation Actions** page, go to the appropriate procedure (from the list that follows) for responding to the action type associated with the request.
 - **Confirm Media Collection Complete for PMD** (Section 18.5.17.6) [to confirm media collection complete for PMD (i.e., the recently created volume(s) that was/were waiting for dismount has/have been dismounted)].

- **Fail PMD Media Collection** (Section 18.5.17.7) [to indicate that the media collection or dismount failed].
 - **Annotate a PMD Action** (Section 18.5.17.3) [to add notes to any PMD action].
- 11** If **Activate Media for QC** is displayed in the **Action Type** column for a request on the **Media Creation Actions** page, go to the following procedure:
- **Activate QC for PMD Requests** (Section 18.5.17.8) [to start the media QC process for PMD requests].
 - **Fail a PMD Request** (Section 18.5.17.2) [to manually fail a PMD request and (optionally) either enter additional text for the distribution notice (DN) or specify that no DN is to be sent].
 - **Annotate a PMD Action** (Section 18.5.17.3) [to add notes to any PMD action].
- 12** If **Mount Media for QC** is displayed in the **Action Type** column for a request on the **Media Creation Actions** page, go to the appropriate procedure (from the list that follows) for responding to the action type associated with the request.
- **Confirm Mount Media for PMD** (Section 18.5.17.4) [to confirm media mounting for the next volume of the request].
 - **Fail Mount Media for PMD** (Section 18.5.17.5) [to notify OMS that the assigned drive currently cannot be used for media creation for a particular request and (optionally) to take the device off line].
 - **Annotate a PMD Action** (Section 18.5.17.3) [to add notes to any PMD action].
- 13** If **Assemble Package** is displayed in the **Action Type** column for a request on the **Media Creation Actions** page, go to the appropriate procedure (from the list that follows) for responding to the action type associated with the request.
- **Mark PMD Request Shipped** (Section 18.5.17.9) [to confirm media dismount for a particular request that has passed QC and is ready to be marked “shipped”].
 - **Confirm PMD Media Dismounted** (Section 18.5.17.10) [to confirm media dismount for a particular request].
 - **Confirm PMD Package Assembled** (Section 18.5.17.11) [to confirm that the package was assembled for shipment].
 - **Mark PMD Package Not Assembled** (Section 18.5.17.12) [to indicate that the package was **not** assembled for shipment].
 - **Fail a PMD Request** (Section 18.5.17.2) [to manually fail a PMD request and (optionally) either enter additional text for the distribution notice (DN) or specify that no DN is to be sent].
 - **Print PMD Outputs** (Section 18.5.17.13) [to reprint certain documents associated with PMD production, including shipping label, DN, and/or (in the case of CD-R/DVD-R) the jewel case insert].
 - **Annotate a PMD Action** (Section 18.5.17.3) [to add notes to any PMD action].
- 14** Repeat Steps 2 through 13 as necessary to monitor/control PMD media creation.

- 15 If an open intervention is created (either automatically or manually) with respect to a request (e.g., due to the failure of a request), go to the **View PMD Open Intervention Information on the OM GUI** procedure (Section 18.5.14).
- 16 To start the process of logging out (if applicable) **single-click** on the **Log Out** link in the navigation frame of the **OM GUI**.
- A log-out dialogue box containing the message “Are you sure you want to log out? This will close your browser.” is displayed.
- 17 To complete the process of logging out (when applicable) **single-click** on the appropriate button from the following selections:
- **OK** - to dismiss the dialogue box and complete the log-out.
 - The dialogue box is dismissed.
 - The Netscape browser is dismissed.
 - **Cancel** - to dismiss the dialogue box without logging out.
 - The dialogue box is dismissed.
 - The **OM GUI** is displayed.

Table 18.5-39. Monitor/Control PMD Media Creation Using the OM GUI - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	Physical Media Distribution link (if necessary)	single-click
3	Media Creation Actions link	single-click
4	Observe information displayed in the Listing table of the Media Creation Actions page	read text
5	<priority> (option button in the Priority column of the row associated with the request) (if applicable)	single-click
6	Apply button (to implement a priority change) (if applicable)	single-click
7	Repeat Steps 5 and 6 (as necessary)	
8	If Activate Request is displayed in the Action Type column for a request on the Media Creation Actions page, perform the appropriate operational procedure (as needed)	Use applicable procedure(s) in Sections 18.5.17.1 through 18.5.17.3
9	If Mount Media for Production is displayed in the Action Type column for a request on the Media Creation Actions page, perform the appropriate operational procedure (as needed)	Use applicable procedure(s) in Section 18.5.17.4, Section 18.5.17.5, and/or Section 18.5.17.3
10	If Collect Media for QC is displayed in the Action Type column for a request on the Media Creation Actions page, perform the appropriate operational procedure (as needed)	Use applicable procedure(s) in Sections 18.5.17.6 through 18.5.17.10, and/or Section 18.5.17.3

Table 18.5-39. Monitor/Control PMD Media Creation Using the OM GUI - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
11	If Activate Media for QC is displayed in the Action Type column for a request on the Media Creation Actions page, perform the appropriate operational procedure (as needed)	Use applicable procedure(s) in Section 18.5.17.8, Section 18.5.17.5, and/or Section 18.5.17.3
12	If Mount Media for QC is displayed in the Action Type column for a request on the Media Creation Actions page, perform the appropriate operational procedure (as needed)	Use applicable procedure(s) in Section 18.5.17.4, Section 18.5.17.5, and/or Section 18.5.17.3
13	If Assemble Package is displayed in the Action Type column for a request on the Media Creation Actions page, perform the appropriate operational procedure (as needed)	Use applicable procedure(s) in Sections 18.5.17.9 through 18.5.17.13, Section 18.5.17.5, Section 18.5.17.2, Section 18.5.17.10, and/or Section 18.5.17.3
14	Repeat Steps 3 through 13 (as necessary)	
15	View open intervention (if applicable)	Use procedure in Section 18.5.14
16	Log Out link (when applicable)	single-click
17	OK button (to complete logging out) (when applicable)	single-click

18.5.17.1 Activate PMD Requests

The **Activate PMD Requests** procedure is used for activating distribution requests by allocating them to devices (tape or disk drives). For tape media, the operator must confirm the presence of a blank tape in the device. The procedure is performed in response to an **Activate Request** action displayed in the **Action Type** column of the **Media Creation Actions** page. The **Activate PMD Requests** procedure is typically performed in association with other procedures (e.g., **Monitor/Control PMD Media Creation Using the OM GUI**).

The **Activate Request** pages provide the full-capability operator with means of manually activating PMD requests. The full-capability operator has options for assigning a different device for creating the volume, confirming tape mounting (if applicable), and/or annotating the action.

If physical media creation for a type of physical distribution medium is dispatched manually, the operator must take action to activate each request on that type of physical distribution medium using the **Media Creation Actions** page and the appropriate **Activate Request** page.

Table 18.5-40 presents (in a condensed format) the steps required to activate PMD requests. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it is not already being displayed, launch the **Order Manager GUI** (refer to Section 18.5.1).
 - The **Order Manager GUI** is displayed.
- 2 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.
- 3 **Single-click** on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.
 - The **Media Creation Actions** page is displayed.
 - The **Filter** area of the **Media Creation Actions** page allows the operator to select the type(s) of actions to be displayed on the page. The following types of actions can be selected:
 - **Activate Media for QC.**
 - **Activate Request.**
 - **Assemble Package.**
 - **Collect Media for QC.**
 - **Mount Media for Production.**
 - **Mount Media for QC.**
 - The **Listing** table has the following columns:
 - **OrderID.**
 - **RequestID.**
 - **Media Type.**
 - **Device Name.**
 - **Request Status.**
 - **Due Date.**
 - **Media Action Note.**
 - **Action Type.**
 - **Options.**
- 4 Observe information displayed in the **Listing** table of the **Media Creation Actions** page.

NOTE: In order to activate a PMD request for production the entry in the **Action Type** column for that request must be **Activate Request**.

- 5 To start the process of activating a PMD request, **single-click** and hold the option button in the **Options** column for the row associated with the request to display a menu of options, **move** the mouse cursor to **Activate Request** (highlighting it), then **release** the mouse button.
 - An **Activate Request** dialogue box for tape media or for disk media (as applicable) is displayed.
 - The **Activate Request** dialogue box displays the list of available devices of the required type, and either proposes one of them as a default choice or indicates that none are available.
 - If the device is a Rimage (disk) unit, the dialogue box displays the following current workload information for each available unit: Device Name; Workload (MB); Workload Limit.
- 6 If a device other than the one displayed in the **Activate Request** dialogue box is preferred, **single-click** and **hold** the option button in the dialogue box to display a menu of available devices, **move** the mouse cursor to the desired selection (highlighting it), then **release** the mouse button.
 - The desired device is displayed in the **Activate Request** dialogue box.
- 7 **Single-click** in the **Select ... Device to Allocate** check box.
 - A checkmark is displayed in the **Select ... Device to Allocate** check box.
- 8 If the device is a Rimage (disk) unit, ensure that the input bins of the Rimage unit contain blank disks.
 - Load the input bin(s) if necessary, ensuring that the disks are inserted right-side up (shiny side down).
 - For detailed instructions refer to the Rimage unit operating manual.
- 9 If the data are to be recorded on a tape, ensure that there is a blank tape in the drive to be used for recording the data.
- 10 If the data are to be recorded on a tape, wait for the drive to come on line before activating the request using the **Activate Request** dialogue box.
 - Wait for light to stop flashing.
- 11 If the data are to be recorded on a tape and there is a problem with the tape drive (e.g., it is malfunctioning and needs to be taken off line), go to the **Fail Mount Media for PMD** procedure (Section 18.5.17.5).
- 12 If the data are to be recorded on a tape, after ensuring that there is a blank tape in the drive to be used for recording the data, **single-click** in the check box labeled **Confirm Mount of ... Volume ... on Device ...**
 - A checkmark is displayed in the **Confirm Mount of ... Volume ... on Device ...** check box.

- 13 If notes are to be entered for the “activate” action, in the **Operator Notes for Action** text box of the **Activate Request** dialogue box enter:
- <text>
- Text is displayed in the **Operator Notes for Action** text box of the **Activate Request** dialogue box.
- 14 To complete the process of activating the request **single-click** on the appropriate button from the following selections:
- **Activate Request** - to dismiss the dialogue box and activate the request.
 - The dialogue box is dismissed.
 - The **Media Creation Actions** page is displayed.
 - **Cancel** - to dismiss the dialogue box without activating the request.
 - The dialogue box is dismissed unless the Operator Notes have changed, in which case the **Cancel** button provides an opportunity to save the updated notes before dismissing the dialogue box.
 - The **Media Creation Actions** page is displayed.
- 15 Repeat Steps 4 through 14 as necessary to activate additional requests.
- 16 Return to the procedure that specified activating PMD requests [e.g., **Monitor/Control PMD Media Creation Using the OM GUI** (Section 18.5.17)].

Table 18.5-40. Activate PMD Requests - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	Launch the Order Manager GUI (if necessary)	Use procedure in Section 18.5.1
2	Physical Media Distribution link (if necessary)	single-click
3	Media Creation Actions link	single-click
4	Observe information displayed in the Listing table of the Media Creation Actions page	read text
5	Activate Request (on the option button in the Options column of the row associated with the request)	single-click
6	<device> (option button in the Activate Request dialogue box) (if applicable)	single-click
7	Select ... Device to Allocate check box (if applicable)	single-click
8	Insert blank disks in the input bins of the Rimage unit (if applicable)	Stack
9	Insert a blank tape in the appropriate tape drive (if applicable)	push in or push in and close door (as applicable)
10	Wait for the drive to come on line (if applicable)	wait
11	Perform the Fail Mount Media for PMD procedure (if applicable)	Use procedure in Section 18.5.17.5

Table 18.5-40. Activate PMD Requests - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
12	Confirm Mount of ... Volume ... on Device check box	single-click
13	<text> (in the Operator Notes for Action text box) (if applicable)	enter text
14	Activate Request button	single-click
15	Repeat Steps 4 through 14 (as necessary)	
16	Return to the procedure that specified activating PMD requests	

18.5.17.2 Fail a PMD Request

The **Fail a PMD Request** procedure is used for notifying OMS that a request should be failed and (optionally) either adding text to the DN or suppressing the DN. The procedure is performed in response to an **Activate Request** or **Assemble Package** action displayed in the **Action Type** column of the **Media Creation Actions** page. The **Fail a PMD Request** procedure is typically performed in association with other procedures (e.g., **Monitor/Control PMD Media Creation Using the OM GUI**).

The **Fail Request** page provides the full-capability operator with a means of manually failing PMD requests. In addition, the full-capability operator has the options of either entering additional text to be included in the distribution notice (DN) or specifying that no DN be sent. Furthermore, the full-capability operator has the option of annotating the action.

Table 18.5-41 presents (in a condensed format) the steps required to fail a PMD request. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.
- 2 If the **Media Creation Actions** page is not being displayed already, **single-click** on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.
 - The **Media Creation Actions** page is displayed.
 - The **Filter** area of the **Media Creation Actions** page allows the operator to select the type(s) of actions to be displayed on the page. The following types of actions can be selected:
 - **Activate Media for QC.**
 - **Activate Request.**
 - **Assemble Package.**
 - **Collect Media for QC.**

- **Mount Media for Production.**
- **Mount Media for QC.**
- The **Listing** table has the following columns:
 - **OrderID.**
 - **RequestID.**
 - **Media Type.**
 - **Device Name.**
 - **Request Status.**
 - **Due Date.**
 - **Media Action Note.**
 - **Action Type.**
 - **Options.**

3 Observe information displayed in the **Listing** table of the **Media Creation Actions** page.

NOTE: In order to fail a PMD request the entry in the **Action Type** column for that request must be either **Activate Request**, **Activate Media for QC** or **Assemble Package**.

4 To start the process of failing a PMD request, **single-click** and **hold** the option button in the **Options** column for the row associated with the relevant request to display a menu of options, **move** the mouse cursor to **Fail Request** (highlighting it), then **release** the mouse button.

- A **Fail Request** dialogue box is displayed.
 - The **Fail Request** dialogue box displays options for entering additional text to be included in the DN, specifying that no DN should be sent, and/or annotating the “fail request” action.

5 If additional text is to be entered for the DN, in the **Additional text for DN** text box of the **Fail Request** dialogue box enter:

<text>

- Text is displayed in the **Additional text for DN** text box of the **Fail Request** dialogue box.

6 If no DN is to be sent, **single-click** in the check box labeled **Don’t send DN**.

- A checkmark is displayed in the **Don’t send DN** check box.

7 If notes are to be entered for the “fail request” action, in the **Operator Notes for Action** text box of the **Fail Request** dialogue box enter:

<text>

- Text is displayed in the **Operator Notes for Action** text box of the **Fail Request** dialogue box.

- 8 To complete the process of failing the request **single-click** on the appropriate button from the following selections:
 - **Fail Request** - to dismiss the dialogue box and fail the request.
 - The dialogue box is dismissed.
 - The **Media Creation Actions** page is displayed.
 - **Cancel** - to dismiss the dialogue box without failing the request.
 - The dialogue box is dismissed unless the Operator Notes have changed, in which case the **Cancel** button provides an opportunity to save the updated notes before dismissing the dialogue box.
 - The **Media Creation Actions** page is displayed.
- 9 Repeat Steps 3 through 8 as necessary to fail additional requests.
- 10 Return to the procedure that specified failing a PMD request [e.g., **Monitor/Control PMD Media Creation Using the OM GUI** (Section 18.5.17)].

Table 18.5-41. Fail a PMD Request - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Physical Media Distribution link (if necessary)	single-click
2	Media Creation Actions link	single-click
3	Observe information displayed in the Listing table of the Media Creation Actions page	read text
4	Fail Request (on the option button in the Options column of the row associated with the request)	single-click
5	<text> (in the Additional text for DN text box) (if applicable)	single-click
6	Don't send DN check box (if applicable)	single-click
7	<text> (in the Operator Notes for Action text box) (if applicable)	enter text
8	Fail Request button	single-click
9	Repeat Steps 3 through 8 (as necessary)	single-click
10	Return to the procedure that specified failing a PMD request	

18.5.17.3 Annotate a PMD Action

The **Annotate a PMD Action** procedure is used for adding notes to PMD actions. The procedure is performed in response to any action (i.e., **Activate Request**, **Mount Media for Production**, **Collect Media for QC**, **Mount Media for QC**, or **Assemble Package**) displayed in the **Action Type** column of the **Media Creation Actions** page. The **Annotate a PMD**

Action procedure is typically performed in association with other procedures (e.g., **Monitor/Control PMD Media Creation Using the OM GUI**).

The **Annotate Action** page provides the full-capability operator with a means of adding notes to PMD actions.

Table 18.5-42 presents (in a condensed format) the steps required to annotate a PMD action. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.

- 2 If the **Media Creation Actions** page is not being displayed already, **single-click** on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.
 - The **Media Creation Actions** page is displayed.
 - The **Filter** area of the **Media Creation Actions** page allows the operator to select the type(s) of actions to be displayed on the page. The following types of actions can be selected:
 - **Activate Media for QC.**
 - **Activate Request.**
 - **Assemble Package.**
 - **Collect Media for QC.**
 - **Mount Media for Production.**
 - **Mount Media for QC.**
 - The **Listing** table has the following columns:
 - **OrderID.**
 - **RequestID.**
 - **Media Type.**
 - **Device Name.**
 - **Request Status.**
 - **Due Date.**
 - **Media Action Note.**
 - **Action Type.**
 - **Options.**

- 3 Observe information displayed in the **Listing** table of the **Media Creation Actions** page.

NOTE: In order to annotate a PMD action for a request any of the possible entries in the **Action Type** column for the request is acceptable (i.e., **Activate Request**, **Mount Media for Production**, **Collect Media for QC**, **Activate Media for QC**, **Mount Media for QC**, or **Assemble Package**).

- 4 To start the process of annotating a PMD action, **single-click** and **hold** the option button in the **Options** column for the row associated with the relevant request to display a menu of options, **move** the mouse cursor to **Annotate Action** (highlighting it), then **release** the mouse button.
 - An **Annotate Action** dialogue box is displayed.
- 5 In the **Operator Notes for Action** text box of the **Annotate Action** dialogue box enter: **<text>**
 - Text is displayed in the **Operator Notes for Action** text box of the **Annotate Action** dialogue box.
- 6 To complete the process of annotating the action **single-click** on the appropriate button from the following selections:
 - **Annotate Action** - to dismiss the dialogue box and apply the annotation to the action.
 - The dialogue box is dismissed.
 - The **Media Creation Actions** page is displayed.
 - **Cancel** - to dismiss the dialogue box without annotating the action.
 - The dialogue box is dismissed unless the Operator Notes have changed, in which case the **Cancel** button provides an opportunity to save the updated notes before dismissing the dialogue box.
 - The **Media Creation Actions** page is displayed.
- 7 Repeat Steps 3 through 6 as necessary to annotate additional actions.
- 8 Return to the procedure that specified annotating a PMD request [e.g., **Monitor/Control PMD Media Creation Using the OM GUI** (Section 18.5.17)].

Table 18.5-42. Annotate a PMD Action - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Physical Media Distribution link (if necessary)	single-click
2	Media Creation Actions link	single-click
3	Observe information displayed in the Listing table of the Media Creation Actions page	read text
4	Annotate Action (on the option button in the Options column of the row associated with the request)	single-click
5	<text> (in the Operator Notes for Action text box) (if applicable)	enter text
6	Annotate Action button	single-click
7	Repeat Steps 3 through 7 (as necessary)	single-click
8	Return to the procedure that specified annotating a PMD request	

18.5.17.4 Confirm Mount Media for PMD

The **Confirm Mount Media for PMD** procedure is used for notifying OMS that the medium has been mounted for the next volume of a multi-volume request. The procedure is performed in response to a **Mount Media for Production** or **Mount Media for QC** action displayed in the **Action Type** column of the **Media Creation Actions** page. The **Confirm Mount Media for PMD** procedure is typically performed in association with other procedures (e.g., **Monitor/Control PMD Media Creation Using the OM GUI**).

The **Confirm Mount Media** page provides the full-capability operator with a means of confirming media mounting for the next volume of the request. The full-capability operator has the option of annotating the action.

Table 18.5-43 presents (in a condensed format) the steps required to confirm media mounting for PMD. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.
- 2 If the **Media Creation Actions** page is not being displayed already, **single-click** on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.
 - The **Media Creation Actions** page is displayed.
 - The **Filter** area of the **Media Creation Actions** page allows the operator to select the type(s) of actions to be displayed on the page. The following types of actions can be selected:
 - **Activate Media for QC.**
 - **Activate Request.**
 - **Assemble Package.**
 - **Collect Media for QC.**
 - **Mount Media for Production.**
 - **Mount Media for QC.**
 - The **Listing** table has the following columns:
 - **OrderID.**
 - **RequestID.**
 - **Media Type.**
 - **Device Name.**
 - **Request Status.**
 - **Due Date.**
 - **Media Action Note.**
 - **Action Type.**
 - **Options.**

3 Observe information displayed in the **Listing** table of the **Media Creation Actions** page.

NOTE: In order to confirm media mounting the entry in the **Action Type** column for the relevant request must be either **Mount Media for Production** or **Mount Media for QC**.

4 To start the process of confirming media mounting, **single-click** and **hold** the option button in the **Options** column for the row associated with the relevant request to display a menu of options, **move** the mouse cursor to **Confirm Mount Media** (highlighting it), then **release** the mouse button.

- A **Confirm Mount Media** dialogue box is displayed.

5 If media mounting is for production purposes (rather than QC), ensure that there is a blank tape in the drive to be used for recording the data.

6 If media mounting is for QC purposes (rather than production) put the tape or disk of the first volume of the request into the drive to be used for QC.

7 Wait for the drive to come on line before confirming media mounting using the **Confirm Mount Media** dialogue box.

- Wait for light to stop flashing.

8 If there is a problem with the drive (e.g., it is malfunctioning and needs to be taken off line), go to the **Fail Mount Media for PMD** procedure (Section 18.5.17.5).

9 If notes are to be entered for the “confirm mount media” action, type the appropriate text in the **Operator Notes for Action** text box of the **Confirm Mount Media** dialogue box.

- Text is displayed in the **Operator Notes for Action** text box of the **Confirm Mount Media** dialogue box.

10 To complete the process of confirming media mounting **single-click** on the appropriate button from the following selections:

- **Confirm Mount Media** - to dismiss the dialogue box and confirm media mounting.
 - The dialogue box is dismissed.
 - The **Media Creation Actions** page is displayed.
- **Cancel** - to dismiss the dialogue box without confirming media mounting.
 - The dialogue box is dismissed unless the Operator Notes have changed, in which case the **Cancel** button provides an opportunity to save the updated notes before dismissing the dialogue box.
 - The **Media Creation Actions** page is displayed.

11 Repeat Steps 3 through 10 as necessary to confirm additional media mounting.

- 12 Return to the procedure that specified confirming media mounting [e.g., **Monitor/Control PMD Media Creation Using the OM GUI** (Section 18.5.17)].

Table 18.5-43. Confirm Mount Media for PMD - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Physical Media Distribution link (if necessary)	single-click
2	Media Creation Actions link	single-click
3	Observe information displayed in the Listing table of the Media Creation Actions page	read text
4	Confirm Mount Media (on the option button in the Options column of the row associated with the request)	single-click
5	Insert a blank tape in the appropriate tape drive (if applicable)	push in or push in and close door (as applicable)
6	Insert disk or tape in the appropriate tape drive (if applicable)	push in or push in and close door (as applicable)
7	Wait for the drive to come on line (if applicable)	wait
8	Perform the Fail Mount Media for PMD procedure (if applicable)	Use procedure in Section 18.5.17.5
9	<text> (in the Operator Notes for Action text box) (if applicable)	enter text
10	Confirm Mount Media button	single-click
11	Repeat Steps 3 through 10 (as necessary)	single-click
12	Return to the procedure that specified confirming media mounting	

18.5.17.5 Fail Mount Media for PMD

The **Fail Mount Media for PMD** procedure is used for notifying OMS that the assigned drive currently cannot be used for media creation for a particular request and (optionally) to take the device off line. The procedure is performed in response to a **Mount Media for Production** or **Mount Media for QC** action displayed in the **Action Type** column of the **Media Creation Actions** page. The **Fail Mount Media for PMD** procedure is typically performed in association with other procedures (e.g., **Monitor/Control PMD Media Creation Using the OM GUI**).

The **Fail Mount Media** page provides the full-capability operator with a means of failing mount media and (optionally) to take the device off line. In addition, the full-capability operator has the option of annotating the action.

Table 18.5-44 presents (in a condensed format) the steps required to fail mount media for PMD. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If the failure to mount media occurs during the **Activate PMD Requests** procedure or the **Activate QC for PMD Requests** procedure, first **single-click** on the **Cancel** button in the **Activate Request** or **Activate QC for RequestID ...** dialogue box.
 - The **Activate Request** or **Activate QC for RequestID ...** dialogue box is dismissed.

- 2 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.

- 3 If the **Media Creation Actions** page is not being displayed already, **single-click** on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.
 - The **Media Creation Actions** page is displayed.
 - The **Filter** area of the **Media Creation Actions** page allows the operator to select the type(s) of actions to be displayed on the page. The following types of actions can be selected:
 - **Activate Media for QC.**
 - **Activate Request.**
 - **Assemble Package.**
 - **Collect Media for QC.**
 - **Mount Media for Production.**
 - **Mount Media for QC.**
 - The **Listing** table has the following columns:
 - **OrderID.**
 - **RequestID.**
 - **Media Type.**
 - **Device Name.**
 - **Request Status.**
 - **Due Date.**
 - **Media Action Note.**
 - **Action Type.**
 - **Options.**

- 4 Observe information displayed in the **Listing** table of the **Media Creation Actions** page.

NOTE: In order to fail media mounting the entry in the **Action Type** column for the relevant request must be **Mount Media for Production** or **Mount Media for QC**.

- 5 To start the process of failing media mounting, **single-click** and **hold** the option button in the **Options** column for the row associated with the relevant request to display a menu of options, **move** the mouse cursor to **Fail Mount Media** (highlighting it), then **release** the mouse button.
- A **Fail Mount Media** dialogue box is displayed.
 - The **Fail Mount Media** dialogue box displays options for taking the currently assigned device off line, explaining why the currently assigned device is being taken off line, and/or annotating the “fail mount media” action.
- 6 If the currently assigned device is to be taken off line, first **single-click** in the **Set currently assigned ... device ... off-line** check box.
- A checkmark is displayed in the **Set currently assigned ... device ... off-line** check box.
 - The mount can be failed without taking the currently assigned device off line.
- 7 If the currently assigned device is to be taken off line, in the **Explanation for Set Device Off-line** text box of the **Fail Mount Media** dialogue box enter:
- <text>
- Text is displayed in the **Explanation for Set Device Off-line** text box of the **Fail Mount Media** dialogue box.
- 8 If notes are to be entered for the “fail mount media” action, in the **Operator Notes for Action** text box of the **Fail Mount Media** dialogue box enter:
- <text>
- Text is displayed in the **Operator Notes for Action** text box of the **Fail Mount Media** dialogue box.
- 9 To complete the process of failing the mount click on the appropriate button from the following selections:
- **Fail Mount Media** - to dismiss the dialogue box and fail the mount (and, if specified, take the device off line).
 - The dialogue box is dismissed.
 - If the mount request that was failed was for production of the first volume of a request to be written, the request is requeued for allocation to a device.
 - If the mount request that was failed was for production of a volume other than the first volume of a request, OMS generates a **Media Creation Error** intervention (due to mount problems) and the operator has to respond to the intervention to specify what to do next (e.g., rewrite the previous volume or change the type of distribution medium). [Refer to the **View PMD Open Intervention Information on the OM GUI** procedure (Section 18.5.14) and the **Respond to a PMD Open Intervention** procedure (Section 18.5.14.1).]
 - If the mount request that was failed was for QC of a volume, the OMS generates a **QC error** (media mount failed); however, it does not flag the volume as having

failed QC. This gives the operator an opportunity to react to device problems that cause media damage or make dismounting the media impossible.

- The **Media Creation Actions** page is displayed.
- **Cancel** - to dismiss the dialogue box without failing the mount.
 - The dialogue box is dismissed unless the Operator Notes have changed, in which case the **Cancel** button provides an opportunity to save the updated notes before dismissing the dialogue box.
 - The **Media Creation Actions** page is displayed.

10 Repeat Steps 1 through 9 as necessary to fail additional mounts.

11 Return to the procedure that specified failing mount media [e.g., **Monitor/Control PMD Media Creation Using the OM GUI** (Section 18.5.17), **Activate PMD Requests** (Section 18.5.17.1), or **Activate QC for PMD Requests** (Section 18.5.17.8)].

Table 18.5-44. Fail Mount Media for PMD - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Cancel button (in the Activate Request or Activate QC for RequestID ... dialogue box) (if necessary)	single-click
2	Physical Media Distribution link (if necessary)	single-click
3	Media Creation Actions link	single-click
4	Observe information displayed in the Listing table of the Media Creation Actions page	read text
5	Fail Mount Media (on the option button in the Options column of the row associated with the request)	single-click
6	Set currently assigned ... device ... off-line check box (if applicable)	single-click
7	<text> (in the Explanation for Set Device Off-line text box) (if applicable)	enter text
8	<text> (in the Operator Notes for Action text box) (if applicable)	enter text
9	Fail Mount Media button	single-click
10	Repeat Steps 1 through 9 (as necessary)	single-click
11	Return to the procedure that specified failing mount media	

18.5.17.6 Confirm Media Collection Complete for PMD

The **Confirm Media Collection Complete for PMD** procedure is used for notifying OMS that the recently created volume(s) that was/were waiting for dismount has/have been dismounted. The procedure is performed in response to a **Collect Media for QC** action displayed in the **Action Type** column of the **Media Creation Actions** page. The **Confirm Media Collection Complete for PMD** procedure is typically performed in association with other procedures (e.g., **Monitor/Control PMD Media Creation Using the OM GUI**).

The **Media Collection Complete** page provides the full-capability operator with a means of confirming media collection complete for PMD (i.e., the recently created volume(s) that was/were waiting for dismount has/have been dismounted). The full-capability operator has the option of annotating the action.

Table 18.5-45 presents (in a condensed format) the steps required to confirm media collection complete for PMD. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.

- 2 If the **Media Creation Actions** page is not being displayed already, **single-click** on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.
 - The **Media Creation Actions** page is displayed.
 - The **Filter** area of the **Media Creation Actions** page allows the operator to select the type(s) of actions to be displayed on the page. The following types of actions can be selected:
 - **Activate Media for QC.**
 - **Activate Request.**
 - **Assemble Package.**
 - **Collect Media for QC.**
 - **Mount Media for Production.**
 - **Mount Media for QC.**
 - The **Listing** table has the following columns:
 - **OrderID.**
 - **RequestID.**
 - **Media Type.**
 - **Device Name.**
 - **Request Status.**
 - **Due Date.**
 - **Media Action Note.**
 - **Action Type.**
 - **Options.**

3 Observe information displayed in the **Listing** table of the **Media Creation Actions** page.

NOTE: In order to confirm media collection complete the entry in the **Action Type** column for that request must be **Collect Media for QC**.

4 To start the process of confirming media collection complete, **single-click** and **hold** the option button in the **Options** column for the row associated with the request to display a menu of options, **move** the mouse cursor to **Media Collection Complete** (highlighting it), then **release** the mouse button.

- A **Media Collection Complete** dialogue box is displayed.
 - The **Media Collection Complete** dialogue box displays the following information concerning each volume created for the request: Volume Name; Volume Status.

5 Dismount the volume(s) identified as “waiting for dismount” in the **Volumes Created** table of the **Media Collection Complete** dialogue box.

6 **Single-click** in the **Confirm dismount of ... volume ... from device ...** check box.

- A checkmark is displayed in the **Confirm dismount of ... volume ... from device ...** check box.

7 If notes are to be entered for the “collection” action, in the **Operator Notes for Action** text box of the **Media Collection Complete** dialogue box enter:

<text>

- Text is displayed in the **Operator Notes for Action** text box of the **Media Collection Complete** dialogue box.

8 To complete the process of confirming media collection complete **single-click** on the appropriate button from the following selections:

- **Media Collection Complete** - to dismiss the dialogue box and confirm media collection complete.
 - The dialogue box is dismissed.
 - The **Media Creation Actions** page is displayed.
- **Cancel** - to dismiss the dialogue box without confirming media collection complete.
 - The dialogue box is dismissed unless the Operator Notes have changed, in which case the **Cancel** button provides an opportunity to save the updated notes before dismissing the dialogue box.
 - The **Media Creation Actions** page is displayed.

9 Repeat Steps 3 through 8 as necessary to confirm media collection complete for additional requests.

- 10 Return to the procedure that specified confirming media collection complete [e.g., **Monitor/Control PMD Media Creation Using the OM GUI** (Section 18.5.17)].

Table 18.5-45. Confirm Media Collection Complete for PMD - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Physical Media Distribution link (if necessary)	single-click
2	Media Creation Actions link	single-click
3	Observe information displayed in the Listing table of the Media Creation Actions page	read text
4	Media Collection Complete (on the option button in the Options column of the row associated with the request)	single-click
5	Dismount the volume(s) identified as “waiting for dismount” (in the Volumes Created table)	pull out or open door and pull out (as applicable)
6	Confirm dismount of ... volume ... from device ... check box	single-click
7	<text> (in the Operator Notes for Action text box) (if applicable)	enter text
8	Media Collection Complete button	single-click
9	Repeat Steps 3 through 8 (as necessary)	single-click
10	Return to the procedure that specified confirming media collection complete	

18.5.17.7 Fail PMD Media Collection

The **Fail PMD Media Collection** procedure is used for notifying OMS that the media collection or dismount failed. The procedure is performed in response to a **Collect Media for QC** action displayed in the **Action Type** column of the **Media Creation Actions** page. The **Fail PMD Media Collection** procedure is typically performed in association with other procedures (e.g., **Monitor/Control PMD Media Creation Using the OM GUI**).

The **Fail Media Collection** page provides the full-capability operator with a means of indicating that the media collection or dismount failed. The full-capability operator has the option of annotating the action.

Table 18.5-46 presents (in a condensed format) the steps required to fail PMD media collection. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.

- 2 If the **Media Creation Actions** page is not being displayed already, **single-click** on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.
 - The **Media Creation Actions** page is displayed.
 - The **Filter** area of the **Media Creation Actions** page allows the operator to select the type(s) of actions to be displayed on the page. The following types of actions can be selected:
 - **Activate Media for QC.**
 - **Activate Request.**
 - **Assemble Package.**
 - **Collect Media for QC.**
 - **Mount Media for Production.**
 - **Mount Media for QC.**
 - The **Listing** table has the following columns:
 - **OrderID.**
 - **RequestID.**
 - **Media Type.**
 - **Device Name.**
 - **Request Status.**
 - **Due Date.**
 - **Media Action Note.**
 - **Action Type.**
 - **Options.**

- 3 Observe information displayed in the **Listing** table of the **Media Creation Actions** page.

NOTE: In order to fail media collection the entry in the **Action Type** column for that request must be **Collect Media for QC**.

- 4 To start the process of failing media collection, **single-click** and **hold** the option button in the **Options** column for the row associated with the request to display a menu of options, **move** the mouse cursor to **Fail Media Collection** (highlighting it), then **release** the mouse button.
 - A **Fail Media Collection** dialogue box is displayed.

- 5 If the currently assigned device is to be taken off line, first **single-click** in the **Set currently assigned ... device off-line** check box.
 - A checkmark is displayed in the **Set currently assigned ... device off-line** check box.
 - The mount can be failed without taking the currently assigned device off line.

- 6 If the currently assigned device is to be taken off line, in the **Explanation for Set Device Off-line** text box of the **Fail Media Collection** dialogue box enter:
- <text>
- Text is displayed in the **Explanation for Set Device Off-line** text box of the **Fail Media Collection** dialogue box.
- 7 If notes are to be entered for the “fail media collection” action, in the **Operator Notes for Action** text box of the **Fail Media Collection** dialogue box enter:
- <text>
- Text is displayed in the **Operator Notes for Action** text box of the **Fail Media Collection** dialogue box.
- 8 To complete the process of failing media collection **single-click** on the appropriate button from the following selections:
- **Fail Media Collection** - to dismiss the dialogue box and fail media collection.
 - The dialogue box is dismissed.
 - The **Media Creation Actions** page is displayed.
 - If media collection is failed, OMS generates a **QC error** (due to media collection problems); however, it does not flag a volume as having passed or failed QC. The operator must identify which media are missing or appear to be damaged.
 - **Cancel** - to dismiss the dialogue box without failing media collection.
 - The dialogue box is dismissed unless the Operator Notes have changed, in which case the **Cancel** button provides an opportunity to save the updated notes before dismissing the dialogue box.
 - The **Media Creation Actions** page is displayed.
- 9 Repeat Steps 3 through 8 as necessary to fail media collection for additional requests.
- 10 Return to the procedure that specified failing media collection [e.g., **Monitor/Control PMD Media Creation Using the OM GUI** (Section 18.5.17)].

Table 18.5-46. Fail PMD Media Collection - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Physical Media Distribution link (if necessary)	single-click
2	Media Creation Actions link	single-click
3	Observe information displayed in the Listing table of the Media Creation Actions page	read text
4	Fail Media Collection (on the option button in the Options column of the row associated with the request)	single-click
5	Set currently assigned ... device off-line check box (if applicable)	single-click
6	<text> (in the Explanation for Set Device Off-line text box of the Fail Mount Media dialogue box) (if applicable)	enter text
7	<text> (in the Operator Notes for Action text box) (if applicable)	enter text
8	Fail Media Collection button	single-click
9	Repeat Steps 3 through 7 (as necessary)	single-click
10	Return to the procedure that specified failing media collection	

18.5.17.8 Activate QC for PMD Requests

The **Activate QC for PMD Requests** procedure is used for activating QC by allocating distribution requests to devices (tape or disk drives). The operator must confirm the presence of the tape or disk medium in the device. The procedure is performed in response to an **Activate Media for QC** action displayed in the **Action Type** column of the **Media Creation Actions** page. The **Activate QC for PMD Requests** procedure is typically performed in association with other procedures (e.g., **Monitor/Control PMD Media Creation Using the OM GUI**).

The following activities occur during disk/tape QC/verification:

- The medium is inserted in a different drive than that used to create the disk or tape.
- QC of disks is typically done on a QC PC.
- The operator starts QC from the **OM GUI**.
- QC compares the summary file (generated when the data were set up for copying to the physical media) and a “tar -tvf” of the medium.

The **Activate QC** dialogue box provides the full-capability operator with means of manually activating PMD QC. The full-capability operator has options for assigning a different device for performing QC of the volume, confirming tape mounting (if applicable), and/or annotating the action.

Table 18.5-47 presents (in a condensed format) the steps required to activate QC for PMD requests. If you are already familiar with the procedures, you may prefer to use the quick-step

table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.

- 2 If the **Media Creation Actions** page is not being displayed already, **single-click** on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.
 - The **Media Creation Actions** page is displayed.
 - The **Filter** area of the **Media Creation Actions** page allows the operator to select the type(s) of actions to be displayed on the page. The following types of actions can be selected:
 - **Activate Media for QC.**
 - **Activate Request.**
 - **Assemble Package.**
 - **Collect Media for QC.**
 - **Mount Media for Production.**
 - **Mount Media for QC.**
 - The **Listing** table has the following columns:
 - **OrderID.**
 - **RequestID.**
 - **Media Type.**
 - **Device Name.**
 - **Request Status.**
 - **Due Date.**
 - **Media Action Note.**
 - **Action Type.**
 - **Options.**

- 3 Observe information displayed in the **Listing** table of the **Media Creation Actions** page.

NOTE: In order to activate QC the entry in the **Action Type** column for that request must be **Mount Media for QC**.

- 4 To start the process of activating QC, **single-click** and **hold** the option button in the **Options** column for the row associated with the request to display a menu of options, **move** the mouse cursor to **Activate QC** (highlighting it), then **release** the mouse button.
 - An **Activate QC** dialogue box is displayed.
 - The **Activate QC** dialogue box displays the list of available devices of the required type, and either proposes one of them as a default choice or indicates that none are available.

- 5 If a device other than the one displayed in the **Activate QC** dialogue box is preferred, **single-click** and **hold** the option button in the dialogue box to display a menu of available devices, **move** the mouse cursor to the desired selection (highlighting it), then **release** the mouse button.
 - The desired device is displayed in the **Activate QC** dialogue box.
- 6 **Single-click** in the **Select ... Device to Allocate** check box.
 - A checkmark is displayed in the **Select ... Device to Allocate** check box.
- 7 Put the tape or disk of the first volume of the request into the drive to be used for QC.
- 8 Wait for the drive to come on line before confirming media mounting using the **Activate QC** dialogue box.
 - Wait for light to stop flashing.
- 9 If there is a problem with the tape drive (e.g., it is malfunctioning and needs to be taken off line), perform the **Fail Mount Media for PMD** procedure (Section 18.5.17.5).
- 10 After ensuring that the drive has come on line, **single-click** in the check box labeled **Confirm Mount of first ... volume ... on device ...** in the **Activate QC** dialogue box.
 - A checkmark is displayed in the **Confirm Mount of first ... volume ... on device ...** check box.
- 11 If notes are to be entered for the “activate” action, in the **Operator Notes for Action** text box of the **Activate QC** dialogue box enter:
<text>
 - Text is displayed in the **Operator Notes for Action** text box of the **Activate QC** dialogue box.
- 12 To complete the process of activating QC **single-click** on the appropriate button from the following selections:
 - **Activate QC** - to dismiss the dialogue box and activate QC of the request.
 - The dialogue box is dismissed.
 - The **Media Creation Actions** page is displayed.
 - **Cancel** - to dismiss the dialogue box without activating QC of the request.
 - The dialogue box is dismissed unless the Operator Notes have changed, in which case the **Cancel** button provides an opportunity to save the updated notes before dismissing the dialogue box.
 - The **Media Creation Actions** page is displayed.
- 13 Repeat Steps 3 through 12 as necessary to activate QC for additional requests.
- 14 Return to the procedure that specified activating QC for PMD requests [e.g., **Monitor/Control PMD Media Creation Using the OM GUI** (Section 18.5.17)].

Table 18.5-47. Activate QC for PMD Requests - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Physical Media Distribution link (if necessary)	single-click
2	Media Creation Actions link	single-click
3	Observe information displayed in the Listing table of the Media Creation Actions page	read text
4	Activate QC (on the option button in the Options column of the row associated with the request)	single-click
5	<device> (option button in the Activate QC dialogue box) (if applicable)	single-click
6	Select ... Device to Allocate check box (if applicable)	single-click
7	Insert disk or tape in the appropriate tape drive	push in or push in and close door (as applicable)
8	Wait for the drive to come on line	wait
9	Perform the Fail Mount Media for PMD procedure (if applicable)	Use procedure in Section 18.5.17.5
10	Confirm Mount of first ... volume ... on device ... check box	single-click
11	<text> (in the Operator Notes for Action text box) (if applicable)	enter text
12	Activate QC button	single-click
13	Repeat Steps 3 through 12 (as necessary)	single-click
14	Return to the procedure that specified activating QC for PMD requests	

18.5.17.9 Mark PMD Request Shipped

The **Mark PMD Request Shipped** procedure is used for notifying OMS that the volume(s) recently passed through QC and that was/were waiting for dismount has/have been dismounted and is/are ready to be marked “shipped.” The procedure is performed in response to an **Assemble Package** action displayed in the **Action Type** column of the **Media Creation Actions** page. The **Mark PMD Request Shipped** procedure is typically performed in association with other procedures (e.g., **Monitor/Control PMD Media Creation Using the OM GUI**).

The **Mark Request Shipped** page provides the full-capability operator with a means of confirming the assembly of the PMD package for shipment (i.e., the volume(s) that successfully passed QC and was/were waiting for dismount has/have been dismounted and is/are ready to be marked “shipped”). In addition, the full-capability operator has options for suppressing the DN and/or annotating the action.

Table 18.5-48 presents (in a condensed format) the steps required to mark a PMD request shipped. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.

- 2 If the **Media Creation Actions** page is not being displayed already, **single-click** on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.
 - The **Media Creation Actions** page is displayed.
 - The **Filter** area of the **Media Creation Actions** page allows the operator to select the type(s) of actions to be displayed on the page. The following types of actions can be selected:
 - **Activate Media for QC.**
 - **Activate Request.**
 - **Assemble Package.**
 - **Collect Media for QC.**
 - **Mount Media for Production.**
 - **Mount Media for QC.**
 - The **Listing** table has the following columns:
 - **OrderID.**
 - **RequestID.**
 - **Media Type.**
 - **Device Name.**
 - **Request Status.**
 - **Due Date.**
 - **Media Action Note.**
 - **Action Type.**
 - **Options.**

- 3 Observe information displayed in the **Listing** table of the **Media Creation Actions** page.

NOTE: In order to confirm PMD package assembled the entry in the **Action Type** column for that request must be **Assemble Package**.

- 4 To start the process of confirming PMD package assembly, **single-click** and **hold** the option button in the **Options** column for the row associated with the request to display a menu of options, **move** the mouse cursor to **Mark Request Shipped** (highlighting it), then **release** the mouse button.
 - A **Mark Request Shipped** dialogue box is displayed.
 - The **Mark Request Shipped** dialogue box displays the following information concerning each volume created for the request: Volume Name; Volume Status.
 - In addition, the **Mark Request Shipped** dialogue box displays the following information concerning the outputs printed for the request: Output Name; Printer.

- 5 Dismount the volume(s) identified as “waiting for dismount” in the **Volumes Created** table of the **Mark Request Shipped** dialogue box.
- 6 **Single-click** in the **Confirm dismount of ... volume ... from device ...** check box.
 - A checkmark is displayed in the **Confirm dismount of ... volume ... from device ...** check box.
- 7 **Single-click** in the **Mark Request “Shipped”** check box.
 - A checkmark is displayed in the **Mark Request “Shipped”** check box.
- 8 If no DN is to be sent, **single-click** in the check box labeled **Don’t send DN**.
 - A checkmark is displayed in the **Don’t send DN** check box.
- 9 If notes are to be entered for the “mark shipped” action, in the **Operator Notes for Action** text box of the **Mark Request Shipped** dialogue box enter:
<text>
 - Text is displayed in the **Operator Notes for Action** text box of the **Mark Request Shipped** dialogue box.
- 10 To complete the process of confirming PMD package assembly **single-click** on the appropriate button from the following selections:
 - **Mark Request Shipped** - to dismiss the dialogue box and confirm PMD package assembled.
 - The dialogue box is dismissed.
 - The **Media Creation Actions** page is displayed.
 - **Cancel** - to dismiss the dialogue box without confirming PMD package assembly.
 - The dialogue box is dismissed unless the Operator Notes have changed, in which case the **Cancel** button provides an opportunity to save the updated notes before dismissing the dialogue box.
 - The **Media Creation Actions** page is displayed.
- 11 Repeat Steps 3 through 10 as necessary to confirm PMD package assembled for additional requests.
- 12 Return to the procedure that specified confirming PMD package assembly [e.g., **Monitor/Control PMD Media Creation Using the OM GUI** (Section 18.5.17)].

Table 18.5-48. Mark PMD Request Shipped - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Physical Media Distribution link (if necessary)	single-click
2	Media Creation Actions link	single-click
3	Observe information displayed in the Listing table of the Media Creation Actions page	read text
4	Mark Request Shipped (on the option button in the Options column of the row associated with the request)	single-click
5	Dismount the volume(s) for the request	pull out or open door and pull out (as applicable)
6	Confirm dismount of ... volume ... from device ... check box	single-click
7	Mark Request “Shipped” check box	single-click
8	Don’t send DN check box (if applicable)	single-click
9	<text> (in the Operator Notes for Action text box) (if applicable)	enter text
10	Mark Request Shipped button	single-click
11	Repeat Steps 3 through 10 (as necessary)	single-click
12	Return to the procedure that specified confirming PMD package assembly	

18.5.17.10 Confirm PMD Media Dismounted

The **Confirm PMD Media Dismounted** procedure is used for notifying OMS that a volume has been dismounted from the applicable device. The procedure is performed in response to an **Assemble Package** action displayed in the **Action Type** column of the **Media Creation Actions** page. The **Confirm PMD Media Dismounted** procedure is typically performed in association with other procedures (e.g., **Monitor/Control PMD Media Creation Using the OM GUI**).

The **Confirm Media Dismounted** page provides the full-capability operator with a means of confirming that the last volume used for QC for a particular request has been dismounted. Optionally, the full-capability operator can annotate the action and/or confirm that the package has been assembled.

Table 18.5-49 presents (in a condensed format) the steps required to confirm PMD media dismounted. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.

- 2 If the **Media Creation Actions** page is not being displayed already, **single-click** on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.
 - The **Media Creation Actions** page is displayed.
 - The **Filter** area of the **Media Creation Actions** page allows the operator to select the type(s) of actions to be displayed on the page. The following types of actions can be selected:
 - **Activate Media for QC.**
 - **Activate Request.**
 - **Assemble Package.**
 - **Collect Media for QC.**
 - **Mount Media for Production.**
 - **Mount Media for QC.**
 - The **Listing** table has the following columns:
 - **OrderID.**
 - **RequestID.**
 - **Media Type.**
 - **Device Name.**
 - **Request Status.**
 - **Due Date.**
 - **Media Action Note.**
 - **Action Type.**
 - **Options.**
- 3 Observe information displayed in the **Listing** table of the **Media Creation Actions** page.

NOTE: In order to confirm media dismantled the entry in the **Action Type** column for that request must be **Assemble Package**.

- 4 To start the process of confirming media dismantled, **single-click** and **hold** the option button in the **Options** column for the row associated with the request to display a menu of options, **move** the mouse cursor to **Confirm Media Dismounted** (highlighting it), then **release** the mouse button.
 - A **Confirm Media Dismounted** dialogue box is displayed.
 - The **Confirm Media Dismounted** dialogue box displays the following information concerning each volume created for the request: **Volume Name**, **Volume Status**, and **Production Module**.
 - In addition, the **Confirm Media Dismounted** dialogue box displays the following information concerning the outputs printed for the request: **Output Name**, **Printer**.
- 5 Dismount the specified volume for the request.

- 6 To confirm that the package is assembled (if applicable) **single-click** in the **Confirm Package Assembled** check box.
 - A checkmark is displayed in the **Confirm Package Assembled** check box.
- 7 If notes are to be entered for the action, in the **Operator Notes for Action** text box of the **Media Collection Complete** dialogue box enter:

<text>

 - Text is displayed in the **Operator Notes for Action** text box of the **Media Collection Complete** dialogue box.
- 8 To complete the process of confirming media dismantled **single-click** on the appropriate button from the following selections:
 - **Confirm Media Dismounted** - to dismiss the dialogue box and confirm media dismantled.
 - The dialogue box is dismissed.
 - The **Media Creation Actions** page is displayed.
 - **Cancel** - to dismiss the dialogue box without confirming media dismantled.
 - The dialogue box is dismissed unless the Operator Notes have changed, in which case the **Cancel** button provides an opportunity to save the updated notes before dismissing the dialogue box.
 - The **Media Creation Actions** page is displayed.
- 9 Repeat Steps 3 through 8 as necessary to confirm media dismantled for additional requests.
- 10 Return to the procedure that specified confirming media dismantled [e.g., **Monitor/Control PMD Media Creation Using the OM GUI** (Section 18.5.17)].

Table 18.5-49. Confirm PMD Media Dismounted - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	Physical Media Distribution link (if necessary)	single-click
2	Media Creation Actions link	single-click
3	Observe information displayed in the Listing table of the Media Creation Actions page	read text
4	Confirm Media Dismounted (on the option button in the Options column of the row associated with the request)	single-click
5	Dismount the volume(s) for the request	pull out or open door and pull out (as applicable)
6	Confirm Package Assembled check box (if applicable)	single-click
7	<text> (in the Operator Notes for Action text box) (if applicable)	enter text

Table 18.5-49. Confirm PMD Media Dismounted - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
8	Confirm Media Dismounted button	single-click
9	Repeat Steps 3 through 8 (as necessary)	single-click
10	Return to the procedure that specified confirming media dismounted	

18.5.17.11 Confirm PMD Package Assembled

The **Confirm PMD Package Assembled** procedure is used for notifying OMS that the last volume of a request passed QC and has been dismounted. The procedure is performed in response to an **Assemble Package** action displayed in the **Action Type** column of the **Media Creation Actions** page. The **Confirm PMD Package Assembled** procedure is typically performed in association with other procedures (e.g., **Monitor/Control PMD Media Creation Using the OM GUI**).

The **Confirm Package Assembled** page provides the full-capability operator with a means of confirming the assembly of the PMD package for shipment (i.e., the last volume of a request passed QC and has been dismounted). The full-capability operator has the option of annotating the action.

Table 18.5-50 presents (in a condensed format) the steps required to confirm that the PMD package has been assembled. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.

- 2 If the **Media Creation Actions** page is not being displayed already, **single-click** on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.
 - The **Media Creation Actions** page is displayed.
 - The **Filter** area of the **Media Creation Actions** page allows the operator to select the type(s) of actions to be displayed on the page. The following types of actions can be selected:
 - **Activate Media for QC.**
 - **Activate Request.**
 - **Assemble Package.**
 - **Collect Media for QC.**
 - **Mount Media for Production.**
 - **Mount Media for QC.**

- The **Listing** table has the following columns:
 - **OrderID.**
 - **RequestID.**
 - **Media Type.**
 - **Device Name.**
 - **Request Status.**
 - **Due Date.**
 - **Media Action Note.**
 - **Action Type.**
 - **Options.**

3 Observe information displayed in the **Listing** table of the **Media Creation Actions** page.

NOTE: In order to confirm PMD package assembled the entry in the **Action Type** column for that request must be **Assemble Package**.

4 To start the process of confirming PMD package assembly, **single-click** and **hold** the option button in the **Options** column for the row associated with the request to display a menu of options, **move** the mouse cursor to **Confirm Package Assembled** (highlighting it), then **release** the mouse button.

- A **Confirm Package Assembled** dialogue box is displayed.
 - The **Confirm Package Assembled** dialogue box displays the following information concerning each volume created for the request: **Volume Name**, **Volume Status**, and **Production Module**.
 - In addition, the **Confirm Package Assembled** dialogue box displays the following information concerning the outputs printed for the request: **Output Name**, **Printer**.

5 Dismount the volume(s) identified as “waiting for dismount” in the **Volumes Created** table of the **Confirm Package Assembled** dialogue box.

6 Click in the **Confirm dismount of last ... volume ... from device** check box.

- A checkmark is displayed in the **Confirm dismount of last ... volume ... from device** check box.

7 If notes are to be entered for the “assemble” action, in the **Operator Notes for Action** text box of the **Confirm Package Assembled** dialogue box enter:

<text>

- Text is displayed in the **Operator Notes for Action** text box of the **Confirm Package Assembled** dialogue box.

- 8 To complete the process of confirming PMD package assembly **single-click** on the appropriate button from the following selections:
 - **Confirm Package Assembled** - to dismiss the dialogue box and confirm PMD package assembled.
 - The dialogue box is dismissed.
 - The **Media Creation Actions** page is displayed.
 - **Cancel** - to dismiss the dialogue box without confirming PMD package assembly.
 - The dialogue box is dismissed unless the Operator Notes have changed, in which case the **Cancel** button provides an opportunity to save the updated notes before dismissing the dialogue box.
 - The **Media Creation Actions** page is displayed.
- 9 Repeat Steps 3 through 8 as necessary to confirm PMD package assembled for additional requests.
- 10 Return to the procedure that specified confirming PMD package assembly [e.g., **Monitor/Control PMD Media Creation Using the OM GUI** (Section 18.5.17)].

Table 18.5-50. Confirm PMD Package Assembled - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Physical Media Distribution link (if necessary)	single-click
2	Media Creation Actions link	single-click
3	Observe information displayed in the Listing table of the Media Creation Actions page	read text
4	Confirm Package Assembled (on the option button in the Options column of the row associated with the request)	single-click
5	Dismount the volume(s) identified as “waiting for dismount”	pull out or open door and pull out (as applicable)
6	Confirm dismount of last ... volume ... from device check box	single-click
7	<text> (in the Operator Notes for Action text box) (if applicable)	enter text
8	Confirm Package Assembled button	single-click
9	Repeat Steps 3 through 8 (as necessary)	single-click
10	Return to the procedure that specified confirming PMD package assembly	

18.5.17.12 Mark PMD Package Not Assembled

The **Mark PMD Package Not Assembled** procedure is used for notifying OMS that the package was not assembled for shipment. The procedure is performed in response to an **Assemble Package** action displayed in the **Action Type** column of the **Media Creation Actions** page.

The **Mark PMD Package Not Assembled** procedure is typically performed in association with other procedures (e.g., **Monitor/Control PMD Media Creation Using the OM GUI**).

The **Package Not Assembled** page provides the full-capability operator with a means of indicating that the package was not assembled for shipment. The full-capability operator has the option of annotating the action.

Table 18.5-51 presents (in a condensed format) the steps required to mark a PMD package not assembled. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.

- 2 If the **Media Creation Actions** page is not being displayed already, **single-click** on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.
 - The **Media Creation Actions** page is displayed.
 - The **Filter** area of the **Media Creation Actions** page allows the operator to select the type(s) of actions to be displayed on the page. The following types of actions can be selected:
 - **Activate Media for QC.**
 - **Activate Request.**
 - **Assemble Package.**
 - **Collect Media for QC.**
 - **Mount Media for Production.**
 - **Mount Media for QC.**
 - The **Listing** table has the following columns:
 - **OrderID.**
 - **RequestID.**
 - **Media Type.**
 - **Device Name.**
 - **Request Status.**
 - **Due Date.**
 - **Media Action Note.**
 - **Action Type.**
 - **Options.**

- 3 Observe information displayed in the **Listing** table of the **Media Creation Actions** page.

NOTE: In order to mark a PMD package “not assembled” the entry in the **Action Type** column for that request must be **Assemble Package**.

- 4 To start the process of marking a PMD package “not assembled,” **single-click** and **hold** the option button in the **Options** column for the row associated with the request to display a menu of options, **move** the mouse cursor to **Package Not Assembled** (highlighting it), then **release** the mouse button.
 - A **Package Not Assembled** dialogue box is displayed.
- 5 If possible, dismount the volume identified in the **Confirm dismount of last ... volume ... from device** statement on the **Package Not Assembled** dialogue box.
- 6 If applicable, **single-click** in the **Confirm dismount of last ... volume ... from device ...** check box.
 - A checkmark is displayed in the **Confirm dismount of last ... volume ... from device ...** check box.
 - Confirmation of the dismount of the last volume is required if the device is to be taken off line.
- 7 If the currently assigned device is to be taken off line, **single-click** in the **Set currently assigned ... device off-line** check box.
 - A checkmark is displayed in the **Set currently assigned ... device off-line** check box.
- 8 If the currently assigned device is to be taken off line, in the **Explanation for Set Device Off-line** text box of the **Fail Mount Media** dialogue box enter:
<text>
 - Text is displayed in the **Explanation for Set Device Off-line** text box of the **Fail Mount Media** dialogue box.
- 9 If notes are to be entered for the “package not assembled” action, in the **Operator Notes for Action** text box of the **Package Not Assembled** dialogue box enter:
<text>
 - Text is displayed in the **Operator Notes for Action** text box of the **Package Not Assembled** dialogue box.
- 10 To complete the process of marking the PMD package “not assembled” **single-click** on the appropriate button from the following selections:
 - **Package Not Assembled** - to dismiss the dialogue box and mark the PMD package “not assembled.”
 - The dialogue box is dismissed.
 - The **Media Creation Actions** page is displayed.
 - If the PMD package is marked “not assembled,” OMS generates a QC error, which results in a QC intervention that offers the operator a range of options for responding to the problem.

- **Cancel** - to dismiss the dialogue box without marking the PMD package “not assembled.”
 - The dialogue box is dismissed unless the Operator Notes have changed, in which case the **Cancel** button provides an opportunity to save the updated notes before dismissing the dialogue box.
 - The **Media Creation Actions** page is displayed.
- 11 Repeat Steps 3 through 10 as necessary to mark PMD packages “not assembled” for additional requests.
 - 12 Return to the procedure that specified marking the PMD package “not assembled” [e.g., **Monitor/Control PMD Media Creation Using the OM GUI** (Section 18.5.17)].

Table 18.5-51. Mark PMD Package Not Assembled - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Physical Media Distribution link (if necessary)	single-click
2	Media Creation Actions link	single-click
3	Observe information displayed in the Listing table of the Media Creation Actions page	read text
4	Package Not Assembled (on the option button in the Options column of the row associated with the request)	single-click
5	Dismount the volume identified in the Confirm dismount of last ... volume ... from device statement (if possible)	single-click
6	Confirm dismount of last ... volume ... from device ... check box (if applicable)	single-click
7	Set currently assigned ... device off-line check box (if applicable)	single-click
8	<text> (in the Explanation for Set Device Off-line text box) (if applicable)	enter text
9	<text> (in the Operator Notes for Action text box) (if applicable)	enter text
10	Package Not Assembled button	single-click
11	Repeat Steps 3 through 10 (as necessary)	single-click
12	Return to the procedure that specified marking the PMD package “not assembled”	

18.5.17.13 Print PMD Outputs

The **Print PMD Outputs** procedure is used for reprinting certain documents associated with PMD production, including shipping label, DN, and/or (in the case of CD-R/DVD-R) the jewel case insert. The procedure is performed in response to an **Assemble Package** action displayed in

the **Action Type** column of the **Media Creation Actions** page. The **Print PMD Outputs** procedure is typically performed in association with other procedures (e.g., **Monitor/Control PMD Media Creation Using the OM GUI**).

The **Print Outputs** page provides the full-capability operator with a means of reprinting certain documents associated with PMD production.

Table 18.5-52 presents (in a condensed format) the steps required to print PMD outputs. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it has not been expanded already, **single-click** on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.
 - The **Physical Media Distribution** menu is expanded.

- 2 If the **Media Creation Actions** page is not being displayed already, **single-click** on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.
 - The **Media Creation Actions** page is displayed.
 - The **Filter** area of the **Media Creation Actions** page allows the operator to select the type(s) of actions to be displayed on the page. The following types of actions can be selected:
 - **Activate Media for QC.**
 - **Activate Request.**
 - **Assemble Package.**
 - **Collect Media for QC.**
 - **Mount Media for Production.**
 - **Mount Media for QC.**
 - The **Listing** table has the following columns:
 - **OrderID.**
 - **RequestID.**
 - **Media Type.**
 - **Device Name.**
 - **Request Status.**
 - **Due Date.**
 - **Media Action Note.**
 - **Action Type.**
 - **Options.**

- 3 Observe information displayed in the **Listing** table of the **Media Creation Actions** page.

NOTE: In order to reprint PMD outputs the entry in the **Action Type** column for that request must be **Assemble Package**.

- 4 To start the process of reprinting PMD outputs, **single-click** and **hold** the option button in the **Options** column for the row associated with the request to display a menu of options, **move** the mouse cursor to **Print Outputs** (highlighting it), then **release** the mouse button.
 - A **Print Outputs** dialogue box is displayed.
 - The **Print Outputs** dialogue box allows printing any/all of the following documents: jewel case inserts; shipping label; packing list (DN), QC report.
- 5 To have jewel case insert(s) printed, **single-click** in the check box labeled **Print Jewel Case Inserts** in the **Print Outputs** dialogue box.
 - A checkmark is displayed in the **Print Jewel Case Inserts** check box.
- 6 To have a shipping label printed, **single-click** in the check box labeled **Print Shipping Label** in the **Print Outputs** dialogue box.
 - A checkmark is displayed in the **Print Shipping Label** check box.
- 7 To have a packing list (DN) printed, **single-click** in the check box labeled **Print Packing List(DN)** in the **Print Outputs** dialogue box.
 - A checkmark is displayed in the **Print Packing List(DN)** check box.
- 8 To have a QC report printed, **single-click** in the check box labeled **Print QC Report** in the **Print Outputs** dialogue box.
 - A checkmark is displayed in the **Print QC Report** check box.
- 9 To complete the process of reprinting outputs **single-click** on the appropriate button from the following selections:
 - **Print Outputs** - to dismiss the dialogue box and reprint the selected document(s).
 - The dialogue box is dismissed.
 - The **Media Creation Actions** page is displayed.
 - The selected document(s) is/are reprinted on the applicable printer(s).
 - **Cancel** - to dismiss the dialogue box without reprinting any documents.
 - The dialogue box is dismissed unless the Operator Notes have changed, in which case the **Cancel** button provides an opportunity to save the updated notes before dismissing the dialogue box.
 - The **Media Creation Actions** page is displayed.
- 10 Repeat Steps 3 through 9 as necessary to reprint outputs for additional requests.
- 11 Return to the procedure that specified printing outputs [e.g., **Monitor/Control PMD Media Creation Using the OM GUI** (Section 18.5.17)].

Table 18.5-52. Print PMD Outputs - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Physical Media Distribution link (if necessary)	single-click
2	Media Creation Actions link	single-click
3	Observe information displayed in the Listing table of the Media Creation Actions page	read text
4	Print Outputs (on the option button in the Options column of the row associated with the request)	single-click
5	Print Jewel Case Inserts check box (if applicable)	single-click
6	Print Shipping Label check box (if applicable)	single-click
7	Print Packing List(DN) check box (if applicable)	single-click
8	Print QC Report check box (if applicable)	single-click
9	Print Outputs button	single-click
10	Repeat Steps 3 through 9 (as necessary)	single-click
11	Return to the procedure that specified printing outputs	

18.5.18 Use the OM PDS Cleanup Manager

The **OM PDS Cleanup Manager (OmPdCleanupGUI)** is a GUI that is used for specifying a file cleanup strategy for the following types of files:

- Debug Log files (DebugLog directory).
- Summary files (Summary directory).
- Template files (Label directory).
- QC Log files (QC directory).
- QC files (QC directory).

The **OM PDS Cleanup Manager** generates or modifies a Bourne shell script (i.e., cleanup.sh) that implements the file cleanup strategy. In addition, the **OM PDS Cleanup Manager** may modify the crontab file to adjust the time intervals for deletion or archiving of files.

The large number of files generated by physical media distribution activities would overwhelm the system if some of the files were not removed from the working directories on a fairly frequent basis. However, some files may be required for a limited period of time in order to troubleshoot a job if there is a problem with it or if it is returned from the customer.

The **OM PDS Cleanup Manager** is not used very often, especially if a manageable retention period has been established for the affected files.

Table 18.5-53 presents (in a condensed format) the steps required to use the **OM PDS Cleanup Manager**. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Access a terminal window logged in to the PDS host.
 - Examples of PDS host names include **e0dig06**, **g0dig06**, **l0dig06** and **n0dig06**.
 - For detailed instructions refer to the **Log in to System Hosts** procedure (Section 18.2.1).

- 2 In the terminal window, at the command line prompt, enter:
cd /usr/ecs/<MODE>/CUSTOM/utilities
 - Change directory to the directory containing the OM PDS Cleanup Manager start-up script (i.e., OmPdCleanupGUI).
 - The **<MODE>** will most likely be one of the following operating modes:
 - OPS (for normal operation).
 - TS1 (for SSI&T).
 - TS2 (new version checkout).
 - Note that the separate subdirectories under /usr/ecs apply to different operating modes.

- 3 In the terminal window, at the command line prompt, enter:
OmPdCleanupGUI <MODE>
 - The **OM PDS Cleanup Manager** is displayed.

- 4 For each of the following types of files, **single-click** on either the **Archive** or **Delete** radio button (as applicable) to the right of the type of file:
 - **DebugLog files.**
 - **Summary files.**
 - **Label files.**
 - **[QC] Log files.**
 - **QC files.**
 - When one of the radio buttons is selected, the button color changes from gray to red and the button gives the appearance of being depressed.

- 5 For each type of file, in the text box adjacent to the button selected in the previous step enter:
<number of days>
 - **<number of days>** is the number of days after which files of that type are to be either archived or deleted.

- 6 If files older than a particular number of days should be deleted, **single-click** on the **Delete any files older than** radio button.
 - When the **Delete any files older than** button is selected, the button color changes from gray to red.

7 If files older than a particular number of days should be deleted, in the text box adjacent to the **Delete any files older than** radio button enter:

<number of days>

- <number of days> is the appropriate number of days.

8 In the **Run cleanup daily at** fields enter:

<hh:mm>

- < **hh:mm** > is the time (in 24-hour format) when the cleanup should run.
 - For example, type **2:00** for two o'clock in the morning or type **14:00** for two o'clock in the afternoon.

9 **Single-click** on the appropriate button from the following selections:

- **Apply & Exit** - to set the cleanup parameters as specified on the **OM PDS Cleanup Manager GUI**.
 - A **This will modify the PDS cleanup script and/or crontab** dialogue box is displayed.
 - Go to Step 10.
- **Cancel** - to dismiss the **OM PDS Cleanup Manager GUI** without applying any new cleanup parameters.
 - The **OM PDS Cleanup Manager GUI** is dismissed.
 - End of procedure.

10 **Single-click** on the appropriate button from the following selections:

- **Proceed** - to set the cleanup parameters as specified on the **OM PDS Cleanup Manager GUI**.
 - The cleanup script is generated, incorporating the parameters specified on the **OM PDS Cleanup Manager GUI**.
 - The **OM PDS Cleanup Manager GUI** is dismissed.
- **Cancel** - to dismiss the **OM PDS Cleanup Manager GUI** without applying any new cleanup parameters.
 - The **OM PDS Cleanup Manager GUI** is dismissed.

Table 18.5-53. Use the OM PDS Cleanup Manager - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	UNIX window (PDS host)	single-click or use procedure in Section 18.2.1
2	cd /usr/ecs/<MODE>/CUSTOM/utilities	enter text, press Enter
3	OmPdCleanupGUI <MODE>	enter text, press Enter
4	Either the Archive or Delete radio button to the right of a type of file (if applicable)	single-click

**Table 18.5-53. Use the OM PDS Cleanup Manager - Quick-Step Procedures
(2 of 2)**

Step	What to Enter or Select	Action to Take
5	<number of days> (in text box corresponding to the type of file) (if applicable)	enter text
6	Repeat Steps 4 and 5 (as necessary)	
7	Delete any files older than radio button (if applicable)	single-click
8	<number of days> (in text box corresponding to Delete any files older than) (if applicable)	enter text
9	<hh:mm> (in the Run cleanup daily at fields)	enter text
10	Apply & Exit button	single-click
11	Proceed button	single-click

18.5.19 Use the Order Manager (OM) Command Line Utility and the OMS Configuration CI

The **Order Manager (OM) Command Line Utility** provides a mechanism by which the Operations staff can submit product requests to the Order Manager Subsystem (OMS) database directly regardless of whether the Order Manager Server is “up” or “down.” Product requests submitted using the **OM Command Line Utility** are in ODL format, consistent with the Product Request ODL protocol specified in 505-41-30, *Interface Control Document Between EOSDIS Core System (ECS) and the Version 0 System for Interoperability* (with a few extensions).

Before running the **OM Command Line Utility**, it may be necessary to prepare input files that are specified in optional arguments when starting the utility. Each input file represents a separate request for data.

The **Prepare Input Files for Use with the OM Command Line Utility** procedure is provided in Section 18.5.19.1. The **Run the OM Command Line Utility** procedure is provided in Section 18.5.19.2.

The **OMS Configuration Script** or **OMS Configuration Command-Line Interface (OMS Configuration CI)** allows full-capability operators to configure certain attributes of the OMS that are not configured using the **OM GUI**; for example, switching between Synergy IV and Synergy III operations. For the most part the attributes that are configured using the **OMS Configuration CI** do not require frequent modification.

Before starting the **OMS Configuration CI**, it may be necessary to prepare input files that are specified in optional arguments when starting the **OMS Configuration CI**. If such input files are used, the full-capability operator references the input file(s) in the command-line arguments when starting the **OMS Configuration CI**.

The **Prepare Input Files for Use with the OMS Configuration CI** procedure is provided in Section 18.5.19.3. Procedures for starting and using the **OM Command Line Utility** are provided in Sections 18.5.19.4 through 18.5.19.8.

The **OM Command Line Utility** and the **OMS Configuration CI** utility are intended for full-capability operators only. Because they are UNIX utilities, the **OM Command Line Utility** and the **OMS Configuration CI** depends on standard UNIX permissions to restrict execution of the script to authorized users.

18.5.19.1 Prepare Input Files for Use with the OM Command Line Utility

Input files for product requests to be submitted using the **OM Command Line Utility** must be created before the utility is started. The input files are normally created using templates. The templates may be either previously used input files or the model templates in the `/usr/ecs/<MODE>/CUSTOM/data/OMS/template` directory. The applicable template should be copied and modified as necessary.

The model templates in the `/usr/ecs/<MODE>/CUSTOM/data/OMS/template` directory provide templates for requests involving various types of distribution media (e.g., ftp pull, ftp push, 8mm tape, or DVD). In addition, it is possible to submit a request for data to be inserted into the Data Pool. [For an example of a Data Pool insert request refer to the Order Manager Command Line Utility section of the *Release 7.10 Operations Tools Manual for the EMD Project (609 EMD 001)*.]

All requests to be submitted concurrently must have the same root name (e.g., `/usr/ecs/OPS/CUSTOM/data/OMS/request`) but different numerical suffixes, starting with 0 (zero). For example, if three requests were to be submitted, input files with the following names would be prepared in advance:

- `/usr/ecs/OPS/CUSTOM/data/OMS/request.0`
- `/usr/ecs/OPS/CUSTOM/data/OMS/request.1`
- `/usr/ecs/OPS/CUSTOM/data/OMS/request.2`

In the example each file has the same root name (i.e., `/usr/ecs/OPS/CUSTOM/data/OMS/request`) and each has a different numerical suffix, starting with 0. When the **OM Command Line Utility** is started, the operator specifies the root name and the number of files to be processed. The **OM Command Line Utility** automatically determines the suffixes.

Table 18.5-54 presents (in a condensed format) the steps required to prepare input files for use with the **OM Command Line Utility**. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Access a terminal window logged in to the Sun Consolidation Internal Server host.
 - Examples of Sun Consolidation Internal Server host names include **e0acs11**, **g0acs11**, **l0acs03**, and **n0acs04**.
 - For detailed instructions refer to the **Log in to System Hosts** procedure (Section 18.2.1).

- 2 In the terminal window, at the command line prompt, enter:

```
cd /usr/ecs/<MODE>/CUSTOM/data/OMS/template
```

- Change directory to the directory containing the Product Request ODL templates (e.g., prod.0, prod.1, prod.2, and prod.3).
- The **<MODE>** will most likely be one of the following operating modes:
 - OPS (for normal operation).
 - TS1 (for SSI&T).
 - TS2 (new version checkout).
- Note that the separate subdirectories under /usr/ecs apply to different operating modes.

- 3 At the command line prompt, enter:

```
ls -al
```

- A list of directory contents is displayed.
- For example:

```
total 62  
drwxrwxr-x  2 cmops  cmops   512 Aug 19 09:39 ./  
drwxrwxr-x  4 cmops  cmops  3584 Aug 23 13:11 ../  
-r--r--r--  1 cmops  cmops  3924 Aug 19 09:39 prod.0  
-r--r--r--  1 cmops  cmops  3627 Aug 19 09:39 prod.1  
-r--r--r--  1 cmops  cmops  2273 Aug 19 09:39 prod.2  
-r--r--r--  1 cmops  cmops  2271 Aug 19 09:39 prod.3  
-r--r--r--  1 cmops  cmops  2271 Aug 19 09:39 prod.4  
-r--r--r--  1 cmops  cmops  2271 Aug 19 09:39 prod.5  
-r--r--r--  1 cmops  cmops  2594 Aug 19 09:39 prod.6  
-r--r--r--  1 cmops  cmops  2570 Aug 19 09:39 prod.7
```

- 4 At the command line prompt, enter:

```
cp <filename1> ../<filename2>
```

- Copy the template to be used to a working directory.
- For example:

```
cp prod.0 ../request.0
```

- In the example the file **prod.0** is copied to the next directory up in the directory hierarchy (in this case **/usr/ecs/OPS/CUSTOM/data/OMS**) and given the name **request.0**.

- Although it may not be absolutely necessary to change the file name when copying a template, doing so can avoid problems, especially when the same template is being used to create multiple input files or when the template's file name is the same as one of the input files in the destination directory.

5 At the command line prompt, enter:

cd ..

- Change directory to the directory containing the copy of the Product Request ODL template.

6 At the command line prompt, enter:

ls -al

- A list of directory contents is displayed.
- For example:

```
total 24
drwxrwxr-x 4 cmops cmops 3584 Aug 23 13:11 ./
drwxr-xr-x 16 cmops cmops 512 May 6 09:47 ../
lrwxrwxrwx 1 cmops cmops 28 May 6 09:42 preamble ->
/usr/ecs/OPS/CUSTOM/data/DSS/
-r--r--r-- 1 cmshared cmshared 3924 Aug 23 13:11 request.0
drwxrwxr-x 2 cmops cmops 512 May 18 2003 ResourceCatalogs/
drwxrwxr-x 2 cmops cmops 512 Aug 19 09:39 template/
```

- Note the file permissions of the template file that was copied to this directory. It is a read-only file.

7 To change the file permissions (if necessary) at the command line prompt, enter:

chmod 777 <filename>

- The file permissions are changed.
 - 777 is an example only; it provides general access to the file for reading, writing, and execution.

8 At the command line prompt, enter:

vi <filename>

- <filename> is the name of a file to be opened and modified.
- For example in response to the following command:

```
x0acs11{cmshared}[10]->vi request.0
```

the following response is displayed:

```
GROUP = PRODUCT_REQUEST
MESSAGE_ID = "B1027711830"
[REQUEST_ID = "37475:27364"]
DATA_CENTER_ID = "ECS-TEST"
[ECS_AUTHENTICATOR = "cmshared"]
GROUP = USER_AFFILIATION
CATEGORY = "USA"
TYPE = "GOVERNMENT"
END_GROUP = USER_AFFILIATION
{
GROUP = CONTACT_ADDRESS
TITLE = ""
FIRST_NAME = "Jane"
MIDDLE_INITIAL = ""
LAST_NAME = "Doe"
ORGANIZATION = ""
ADDRESS = ("abcd")
CITY = "Landover"
STATE = "MD"
ZIP = ""
COUNTRY = "UNITED STATES"
PHONE = "301-555-9999"
```

```
"request.0" 122 lines, 3924 characters
```

- Only the first few lines of the file are shown in the example.
- The edited file will specify the request information to be sent to the OMS.
- Although this procedure has been written for the **vi** editor, any UNIX editor can be used to edit the file.

9 Using vi editor commands create a file that specifies the relevant request information to be sent to the OMS.

- In the template files there are brackets ([]), and braces ({ }) around some of the lines and groups.
 - Brackets indicate optional entries containing content that is subject to change.
 - Braces indicate entries that are required but the content is subject to change.

- Lines or groups of lines with no brackets or braces around them should not be changed.
- Remove the brackets and braces around the lines and groups in the file being edited.
- The following vi editor commands are useful:
 - **h** (move cursor left).
 - **j** (move cursor down).
 - **k** (move cursor up).
 - **l** (move cursor right).
 - **a** (append text).
 - **i** (insert text).
 - **r** (replace single character).
 - **x** (delete a character).
 - **dw** (delete a word).
 - **dd** (delete a line).
 - **ndd** (delete *n* lines).
 - **u** (undo previous change).
 - **Esc** (switch to command mode).

10 Press the **Esc** key.

11 At the command line prompt, enter:

ZZ

- **vi** exits and the edited file is saved.
 - To exit **vi** without saving the new entries in the file type **:q!** then press **Return/Enter**.
- UNIX command line prompt is displayed.

12 Repeat Steps 2 through 11 as necessary to prepare additional files.

Table 18.5-54. Prepare Input Files for Use with the OM Command Line Utility - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	UNIX window (Sun Consolidation Internal Server host)	single-click or use procedure in Section 18.2.1
2	<code>cd /usr/ecs/<MODE>/CUSTOM/data/OMS/template</code>	enter text, press Enter
3	<code>ls -al</code>	enter text, press Enter
4	<code>cp <filename1> ../<filename2></code>	enter text, press Enter
5	<code>cd ..</code>	enter text, press Enter
6	<code>ls -al</code>	enter text, press Enter
7	<code>chmod 777 <filename></code> (if necessary)	enter text, press Enter
8	<code>vi <file name></code>	enter text, press Enter

Table 18.5-54. Prepare Input Files for Use with the OM Command Line Utility - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
9	Use vi editor commands create a file that specifies the relevant request information to be sent to the OMS	enter text
10	Esc key	press
11	ZZ (or :wq!)	enter text, press Enter
12	Repeat Steps 2 through 11 (as necessary)	

18.5.19.2 Run the OM Command Line Utility

Before running the **OM Command Line Utility**, any input files that are to be specified in optional arguments when starting the **OM Command Line Utility** must have been prepared. Each input file represents a separate request for data. If such input files are used, the operator references the input file(s) in the command-line arguments when starting the **OM Command Line Utility**.

Table 18.5-55 presents (in a condensed format) the steps required to run the **OM Command Line Utility**. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Access a terminal window logged in to the Sun Consolidation Internal Server host.
 - Examples of Sun Consolidation Internal Server host names include **e0acs11**, **g0acs11**, **l0acs03**, and **n0acs04**.
 - For detailed instructions refer to the **Log in to System Hosts** procedure (Section 18.2.1).

- 2 In the terminal window, at the command line prompt, enter:


```
cd /usr/ecs/<MODE>/CUSTOM/utilities
```

 - Change directory to the directory containing the Order Manager scripts (e.g., `EcOmSrCliDriverStart`).
 - The **<MODE>** will most likely be one of the following operating modes:
 - OPS (for normal operation).
 - TS1 (for SSI&T).
 - TS2 (new version checkout).
 - Note that the separate subdirectories under `/usr/ecs` apply to different operating modes.

3 In the terminal window, at the command line prompt, enter:

**EcOmSrCliDriverStart <MODE> <rootname> <#requests> [sub-interval]
[dBretries] [retry-interval]**

- The utility enters the request information (from the input files) in the OMS database.
- **<rootname>** is a required argument; it specifies the full path name of root name of the input (request) files.
 - For example:
/usr/ecs/<MODE>/CUSTOM/data/OMS/request
 - All input files to be submitted concurrently must have the same root name but different numerical suffixes, starting with 0 (zero). For example, if three requests were to be submitted, input files with the following names would have been prepared in advance: **/usr/ecs/OPS/CUSTOM/data/OMS/request.0;**
/usr/ecs/OPS/CUSTOM/data/OMS/request.1;
/usr/ecs/OPS/CUSTOM/data/OMS/request.2
 - Each file has the same root name (i.e., “/usr/ecs/OPS/CUSTOM/data/OMS/request”) and each has a different numerical suffix. When the **OM Command Line Utility** is started, it automatically determines the suffixes.
- **<#requests>** is a required argument; it specifies the number of requests the **OM Command Line Utility** submits concurrently. The utility uses the number to determine the suffixes of the file names to be read.
- **sub-interval** is an optional argument; it specifies how many seconds apart the requests are submitted. If no value is specified, the default value of zero is used. When the value is zero, all requests are submitted with no submission interval (i.e., all at the same time).
- **dBretries** is an optional argument; it specifies how many times the utility tries to connect to the OMS database. If no value is specified, the default value of two times is used.
- **retry-interval** is an optional argument; it specifies the number of seconds between retries when the utility is trying to connect to the OMS database. If no value is specified, the default value of 10 seconds is used.
- Examples:

EcOmSrCliDriverStart OPS /usr/ecs/OPS/CUSTOM/data/OMS/request 7

- The example indicates that EcOmSrCliDriver should process the ten files named request.0, request.1, request.2, request.3, request.4, request.5, and request.6 in directory /usr/ecs/OPS/CUSTOM/data/OMS. Default conditions apply to when the requests are to be submitted (all at the same time), the number of retries for connecting to the database (two retries), and the retry interval (10 seconds).

EcOmSrCliDriverStart OPS /usr/ecs/OPS/CUSTOM/data/OMS/item 3 5 4 15

- The example indicates that EcOmSrCliDriver should process the three files named item.0, item.1, and item.2 in directory /usr/ecs/OPS/CUSTOM/data/OMS.

The requests are to be submitted at five-second intervals. Four retries may be made to connect to the database. The retries would occur at 15-second intervals.

Table 18.5-55. Start the OMS Configuration CI - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	UNIX window (Sun Consolidation Internal Server host)	single-click or use procedure in Section 18.2.1
2	<code>cd /usr/ecs/<MODE>/CUSTOM/utilities</code>	enter text, press Enter
3	<code>EcOmSrCliDriverStart <MODE> <rootname> <#requests> [sub-interval] [dBretries] [retry-interval]</code>	enter text, press Enter

18.5.19.3 Prepare Input Files for Use with the OMS Configuration CI

There are two general types of input files used with the **OMS Configuration CI**:

- Synergy III mode exception files.
- Order-tracking retention time data.

If any Synergy III mode exceptions are to be applied using the **OMS Configuration CI**, the appropriate input file(s) must be prepared first so the file(s) can be included in arguments that are specified when the **OMS Configuration CI** is started. Each potential input is a “flat” file that contains one of the following types of data:

- ESDT collection(s).
- Media type(s).
- Ftp push destination(s).

The files can be used to specify either of the following dispositions for the data:

- Add the data in the file to the current types of data being processed in Synergy III mode.
- Delete the data in the file from the current types of data being processed in Synergy III mode.

Consequently, files may be created for the following six conditions:

- Add ESDT collection(s) to processing in Synergy III mode.
- Delete ESDT collection(s) from processing in Synergy III mode.
- Add media type(s) to processing in Synergy III mode.
- Delete media type(s) from processing in Synergy III mode.
- Add ftp push destination(s) to processing in Synergy III mode.
- Delete ftp push destination(s) from processing in Synergy III mode.

Each Synergy III mode exception file specified when starting the **OMS Configuration CI** must contain only one of the preceding types of data. For example, if a new ftp push destination is to be added and a current ftp push destination is to be deleted, two separate files must be created, one containing the destination to be added and the other containing the destination to be deleted.

The same principle applies whether the additions or deletions relate to ftp push destinations, media types, or ESDTs.

If order-tracking retention time (how long order-tracking information is kept in the OMS database) is to be modified using the **OMS Configuration CI**, a file of data “imported” from the OMS database (using the **OMS Configuration CI**) must be edited so the file can be included in an argument that is specified when the **OMS Configuration CI** is started the next time. The “imported” file contains the following three types of data:

- Order source [e.g., “D” (Data Pool), “S” (Spatial Subscription Server), “V” (V0 Gateway), or “M” (Machine-to-Machine Gateway)].
- Distribution medium.
- Retention time period in days.

The “imported” order-tracking retention time file is edited to incorporate the new configuration information (i.e., retention time for each set of order source/medium). The edited file is subsequently “exported” to the OMS database (using the **OMS Configuration CI**), where the new values are entered.

Table 18.5-56 presents (in a condensed format) the steps required to prepare input files for use with the **OMS Configuration CI**. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Access a terminal window logged in to the Sun Consolidation Internal Server host.
 - Examples of Sun Consolidation Internal Server host names include **e0acs11**, **g0acs11**, **l0acs03**, and **n0acs04**.
 - For detailed instructions refer to the **Log in to System Hosts** procedure (Section 18.2.1).
- 2 In the terminal window, at the command line prompt, enter:
cd /usr/ecs/<MODE>/CUSTOM/utilities
 - Change directory to the directory containing the Order Manager scripts (e.g., EcOmConfig.pl).
 - The <MODE> will most likely be one of the following operating modes:
 - OPS (for normal operation).
 - TS1 (for SSI&T).
 - TS2 (new version checkout).
 - Note that the separate subdirectories under /usr/ecs apply to different operating modes.

3 In the terminal window, at the command line prompt, enter:

vi <file name>

- **<file name>** is the name of a file to be opened.
 - It may be either the name of an existing file (e.g., a file of order-tracking retention time data “imported” from the OMS database) or the name of a new file (e.g., additional media types to be processed in Synergy III mode).
- For example:

```
x0acs11{cmops}[10]->vi ESDT20040109.dat
```

~

~

~

[...]

"ESDT20040109.dat" [New file]

- Many blank lines have been deleted from the example.
- The new file will specify the values to be sent to the OMS.
- Although this procedure has been written for the **vi** editor, any UNIX editor can be used to create the file.

4 Using **vi** editor commands create a file that specifies the relevant values to be sent to the OMS.

- Each Synergy III mode exception file contains one item per line.
 - White space is ignored, so multiple lines can separate groups of collection.
 - For example the following entries are included in an ESDT collection file:

```
MOD11_L2.001
```

```
MOD11_L2.002
```

```
GDAS_0ZF.001
```

```
GDAS_0ZF.002
```

- Another example shows entries included in a media file:

```
8MM
```

```
scp
```

- Another example shows entries included in an ftp push destination file:

```
“Fordham University”
```

```
“Yale University”
```

```
ftp.hbc.md.edu
```

```
223.516.34.14
```

- A destination may be a configured “Name” as created by the **OMS GUI** or a host/IP address.

- If the configured name is used, it must be enclosed in double quotes (e.g., “Fordham University”).
- Each line in an order-tracking retention time file contains an order source code, a distribution medium, and the retention time period in days.
 - For example, the following entries are included in an order-tracking retention time file:

D	FtpPull	0
S	FtpPull	0
V	FtpPull	0
M	FtpPull	0
D	FtpPush	0
S	FtpPush	0
V	FtpPush	0
M	FtpPush	0
D	CDROM	0
S	CDROM	0
V	CDROM	0
M	CDROM	0
D	DLT	0
S	DLT	0
V	DLT	0
M	DLT	0
D	DVD	0
S	DVD	0
V	DVD	0
M	DVD	0
D	8MM	0
S	8MM	0
V	8MM	0
M	8MM	3
D	scp	0
S	scp	0
V	scp	1.5
M	scp	0

- Order source codes include “D” (Data Pool), “S” (Spatial Subscription Server), “V” (V0 Gateway), and “M” (Machine-to-Machine Gateway).
- The following vi editor commands are useful:
 - **h** (move cursor left).
 - **j** (move cursor down).
 - **k** (move cursor up).
 - **l** (move cursor right).
 - **a** (append text).
 - **i** (insert text).

- **r** (replace single character).
- **x** (delete a character).
- **dw** (delete a word).
- **dd** (delete a line).
- **n dd** (delete *n* lines).
- **u** (undo previous change).
- **Esc** (switch to command mode).

5 Press the **Esc** key.

6 Type **ZZ**.

- **vi** exits and the new or edited file is saved.
 - To exit **vi** without saving the new entries in the file type **:q!** then press **Return/Enter**.
- UNIX command line prompt is displayed.

Table 18.5-56. Prepare Input Files for Use with the OMS Configuration CI - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	UNIX window (Sun Consolidation Internal Server host)	single-click or use procedure in Section 18.2.1
2	cd /usr/ecs/<MODE>/CUSTOM/utilities	enter text, press Enter
3	vi <file name>	enter text, press Enter
4	Use vi editor commands create a file that specifies the relevant values to be sent to the OMS	enter text
5	Esc key	press
6	ZZ (or :wq!)	enter text, press Enter

18.5.19.4 Start the OMS Configuration CI

If any Synergy III mode exceptions are to be applied using the **OMS Configuration CI**, the appropriate input file(s) must have been prepared first so the file(s) can be included in arguments that are specified when the **OMS Configuration CI** is started. The **OMS Configuration CI** script can take several options to process input files for Synergy III mode exceptions. Each potential input is a “flat” file that contains one of the following types of data:

- ESDT collection(s).
- Media type(s).
- FtpPush destination(s).

Based on the file names included in arguments when it is started, the **OMS Configuration CI** determines which file was specified for which purpose (media, ESDTs, or destinations) and

requests confirmation. Then the **OMS Configuration CI** requests whether the file entries are to be added or deleted from the relevant list.

Table 18.5-57 presents (in a condensed format) the steps required to start the **OMS Configuration CI**. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Access a terminal window logged in to the Sun Consolidation Internal Server host.
 - Examples of Sun Consolidation Internal Server host names include **e0acs11**, **g0acs11**, **l0acs03**, and **n0acs04**.
 - For detailed instructions refer to the **Log in to System Hosts** procedure (Section 18.2.1).

- 2 In the terminal window, at the command line prompt, enter:
cd /usr/ecs/<MODE>/CUSTOM/utilities
 - Change directory to the directory containing the Order Manager scripts (e.g., `EcOmConfig.pl`).
 - The **<MODE>** will most likely be one of the following operating modes:
 - OPS (for normal operation).
 - TS1 (for SSI&T).
 - TS2 (new version checkout).
 - Note that the separate subdirectories under `/usr/ecs` apply to different operating modes.

- 3 In the terminal window, at the command line prompt, enter:
EcOmConfig.pl <MODE> [-s3col <file name>] [-s3media <file name>] [-s3dest <file name>] [-ot <file name>] [-help]
 - The **OMS Configuration CI Main Menu** is displayed.
 - **-s3col <file name>** is an optional argument that specifies a flat file containing a list of ESDT collections to be added or deleted for processing in Synergy III mode, depending on the selection made by the operator.
 - **-s3media <file name>** is an optional argument that specifies a flat file containing a list of media types to be added or deleted for processing in Synergy III mode, depending on the selection made by the operator.
 - **-s3dest <file name>** is an optional argument that specifies a flat file containing a list of FtpPush destinations to be added or deleted for processing in Synergy III mode, depending on the selection made by the operator.
 - **-ot <file name>** is an optional argument that specifies a flat file containing edited order-tracking retention times for update in the OMS database.
 - **-help** is an optional argument that provides a brief overview of the input options that can be used with the **OMS Configuration CI** utility.

- 4 To perform another task using the **OMS Configuration CI** go to the applicable procedure from the following list:
- **Process Input Files Specified for Synergy III Exceptions** (Section 18.5.19.5) (to add or delete ESDT collections, media types, and/or FtpPush destinations to/from those processed in S3 (Synergy III) processing mode).
 - **Configure How Long Order-Tracking Information is Kept in the OMS Database** (Section 18.5.19.6) (to configure how long order-tracking information is kept in the OMS database).
 - **Switch Between Synergy IV and Synergy III Operations** (Section 18.5.19.7) (to switch OMS Server processing between S4 (Synergy IV) operations and S3 (Synergy III) operations).
 - **Get OMS Configuration CI Help** (Section 18.5.19.8) (to display help information for the **OMS Configuration CI**).
- 5 To exit from the **OMS Configuration CI** (when applicable) at the **OMS Configuration CI Main Menu** prompt enter:
- x
- The **OMS Configuration CI** is closed.

Table 18.5-57. Start the OMS Configuration CI - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	UNIX window (Sun Consolidation Internal Server host)	single-click or use procedure in Section 18.2.1
2	<code>cd /usr/ecs/<MODE>/CUSTOM/utilities</code>	enter text, press Enter
3	<code>EcOmConfig.pl <MODE> [-s3col <file name>] [-s3media <file name>] [-s3dest <file name>] [-ot <file name>] [-help]</code>	enter text, press Enter
4	Perform the appropriate operational procedure (as needed)	Use applicable procedure(s) in Sections 18.5.19.5 through 18.5.19.8
5	x (to exit from the OMS Configuration CI) (when applicable)	enter text, press Enter

18.5.19.5 Process Input Files Specified for Synergy III Exceptions

If any Synergy III mode exceptions are to be applied using the **OMS Configuration CI**, the appropriate input file(s) must have been prepared first and the file name(s) must have been included in arguments that were specified when the **OMS Configuration CI** was started. There may be as many as six Synergy III exception files to account for the following six conditions:

- Add ESDT collection(s) to processing in Synergy III mode.
- Delete ESDT collection(s) from processing in Synergy III mode.
- Add media type(s) to processing in Synergy III mode.
- Delete media type(s) from processing in Synergy III mode.

- Add ftp push destination(s) to processing in Synergy III mode.
- Delete ftp push destination(s) from processing in Synergy III mode.

The files can specify either types of data to be added to or types of data to be deleted from the current types of data being processed in Synergy III mode. For example, a file of media types can add to the media types processed in Synergy III mode or a file can specify media types to be deleted from the media types processed in Synergy III mode. The file specified when starting the **OMS Configuration CI** must contain either the one type of data or the other, not both. If both additions and deletions are to be made, two separate files must be created. The same principle applies whether additions or deletions of media types, ESDTs, or ftp push destinations are specified.

Based on the file names included in arguments when it is started, the **OMS Configuration CI** determines which file was specified for which purpose (media, ESDTs, or destinations) and requests confirmation. When the full-capability operator confirms the file and its content, the **OMS Configuration CI** requests whether the entries in the file are to be added or deleted from the relevant list.

Table 18.5-58 presents (in a condensed format) the steps required to process input files specified for Synergy III exceptions. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it has not been started already, start the **OMS Configuration CI** (refer to Section 18.5.19.4).
- 2 At the **OMS Configuration CI Main Menu** prompt enter:
 - 1
 - The **Synergy III Mode Exceptions Menu** is displayed.
- 3 At the **Synergy III Mode Exceptions Menu** prompt enter:

<number>

 - <number> is either **1** or **2**.
 - Enter **1** to process any of the input files specified for Synergy III Exceptions.
 - The following type of message is displayed:

**"media20040109.dat" has been specified as the file containing media types.
Use this file? [y/n]**
 - If the file specified in the confirmation message is the proper file, skip Steps 4 through 7 and go to Step 8.
 - If the file specified in the confirmation message is not the proper file, continue with Step 4.
 - Enter **2** to return to the **OMS Configuration CI Main Menu**.
 - The **OMS Configuration CI Main Menu** is displayed.
 - Return to Step 2.

- 4 If the file specified in the confirmation message is not the proper file, at the **Use this file? [y/n]** prompt enter:
- n**
- The **OMS Configuration CI Main Menu** is displayed.
 - A likely cause of the problem is having mistyped the file name when starting the **OMS Configuration CI**.
- 5 If the file specified in the confirmation message is not the proper file, at the **OMS Configuration CI Main Menu** prompt enter:
- x**
- 6 If the file specified in the confirmation message is not the proper file, start the **OMS Configuration CI** using the appropriate option (i.e., **-s3col**, **-s3media**, or **-s3dest**) and the proper file name as an argument.
- For detailed instructions refer to the **Start the OMS Configuration CI** procedure (Section 18.5.19.4).
- 7 If the file specified in the confirmation message is not the proper file, return to Step 2 of this procedure to start the process of processing the input file specified for Synergy III exception.
- 8 To process the file specified in the confirmation message, at the **Use this file? [y/n]** prompt enter:
- y**
- The **Synergy III Mode Actions Menu** is displayed.
- 9 To continue processing the file specified in the confirmation message, at the **Synergy III Mode Actions Menu** prompt enter:
- <number>**
- **<number>** is **1**, **2**, or **3**.
 - Enter **1** to add the data in the file to the types of data to be processed in Synergy III mode.
 - The following type of message is displayed:
Submission successful. Press <ENTER> to continue...
 - Enter **2** to remove the data in the file from the types of data to be processed in Synergy III mode.
 - The following type of message is displayed:
Submission successful. Press <ENTER> to continue...

- Enter **3** to abort the process of processing the file specified in the confirmation menu and return to the **OMS Configuration CI Main Menu**.
 - The **OMS Configuration CI Main Menu** is displayed.
 - Return to Step 2.
- 10** If a “**Submission successful. Press <ENTER> to continue...**” message was displayed, press **Return/Enter**.
- The specified Synergy III exceptions have been successfully processed.
 - The **OMS Configuration CI Main Menu** is displayed.
- 11** Repeat Steps 2 through 10 (as applicable) to apply additional Synergy III exceptions.
- 12** To perform another task using the **OMS Configuration CI** (if the **OMS Configuration CI Main Menu** is being displayed), go to the applicable procedure from the following list:
- **Configure How Long Order-Tracking Information is Kept in the OMS Database** (Section 18.5.19.6) (to configure how long order-tracking information is kept in the OMS database).
 - **Switch Between Synergy IV and Synergy III Operations** (Section 18.5.19.7) (to switch OMS Server processing between S4 (Synergy IV) operations and S3 (Synergy III) operations).
 - **Get OMS Configuration CI Help** (Section 18.5.19.8) (to display help information for the **OMS Configuration CI**).
- 13** To exit from the **OMS Configuration CI** (when applicable) at the **OMS Configuration CI Main Menu** prompt enter:
- x**
- The **OMS Configuration CI** is closed.
 - A UNIX command line prompt is displayed.

Table 18.5-58. Process Input Files Specified for Synergy III Exceptions - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	Start the OMS Configuration CI (if necessary)	Use procedure in Section 18.5.19.4
2	1 (to display the Synergy III Mode Exceptions Menu)	enter text, press Enter
3	1 (to process any of the input files specified for Synergy III Exceptions)	enter text, press Enter
4	y (to process the file specified in the confirmation message)	enter text, press Enter

Table 18.5-58. Process Input Files Specified for Synergy III Exceptions - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
5	<number> (1 to add the data in the file to the types of data to be processed in Synergy III mode; 2 to remove the data in the file from the types of data to be processed in Synergy III mode)	enter text, press Enter
6	Return/Enter key (to continue)	press
7	Repeat Steps 2 through 6 (as applicable)	
8	Perform the appropriate operational procedure (as needed)	Use applicable procedure(s) in Sections 18.5.19.6 through 18.5.19.8
9	x (to exit from the OMS Configuration CI) (when applicable)	enter text, press Enter

18.5.19.6 Configure How Long Order-Tracking Information is Kept in the OMS Database

The full-capability operator can configure how long order-tracking information is kept in the OMS database. The length of time can be different for each combination of media type and order source.

The process of configuring how long order-tracking information is kept in the OMS database involves “importing” the current configuration to a local file, editing the file, and exporting it back into the OMS database.

- When the full-capability operator requests the **OMS Configuration CI** to “import” the current configuration, the utility creates and saves a unique file in the current directory.
- The saved file contains the configuration for all media types and all order sources.
- The full-capability operator exits the **OMS Configuration CI** and edits the import file to incorporate changes.
- The full-capability operator starts the **OMS Configuration CI** using the **-ot** option and specifying the edited file.
- The full-capability operator uses the **OMS Configuration CI** to export the data in the file to the database.
- The **OMS Configuration CI** parses the file and submits the changes to the OMS database.

Table 18.5-59 presents (in a condensed format) the steps required to configure how long order-tracking information is kept in the OMS database. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it has not been started already, start the **OMS Configuration CI** (refer to Section 18.5.19.4).

- 2 At the **OMS Configuration CI Main Menu** prompt enter:
2
 - The **Configure Order Tracking Data Menu** is displayed.

- 3 At the **Configure Order Tracking Data Menu** prompt enter:
<number>
 - <number> is 1, 2, 3, or 4.
 - Enter 1 to import the current order-tracking retention time configuration (from the OMS database) into a file.
 - The following type of message is displayed:
**Importing to local file "MssOmsOrderTracking.1067729076"...
Import OK. Please edit this file and use this utility to export the new configuration.**
 - The utility creates and saves a unique file (containing the current order-tracking retention time configuration from the OMS database) in the current directory.
 - The “imported” order-tracking retention time file would be edited to incorporate the new configuration information. The edited file would subsequently be “exported” to the OMS database, where the new order-tracking retention time values would be applied.
 - Press **Return/Enter**: the **OMS Configuration CI Main Menu** is displayed; go to Step 4.
 - Enter 2 to export an edited order-tracking retention time file to the OMS database.
 - The following type of message is displayed:
You are about to export an edited configuration file. Please make sure the fields are properly edited. These changes will be submitted to the OMS database.

"MssOmsOrderTracking.1067729243" was specified as the export file. Do you want to use this one? [y/n]
 - The “exported” file would be used to update the OMS database, where the new order-tracking retention time values would be applied.
 - If the file specified in the confirmation message is not the proper file, go to Step 8.
 - If the file specified in the confirmation message is the proper file, go to Step 12.
 - Enter 3 to view the current configuration.
 - The current order-tracking retention time configuration (from the OMS database) is displayed.

- Each line of the order-tracking retention time configuration contains the following three items: **Order source code** [e.g., “D” (Data Pool), “S” (Spatial Subscription Server), “V” (V0 Gateway), and “M” (Machine-to-Machine Gateway)]; **Distribution medium**, **Retention time period in days**.
- For example:

Order Media Ret. Time
Source Type Period (Hours)

```

-----
D   FtpPull  0
S   FtpPull  0
V   FtpPull  0
M   FtpPull  0
D   FtpPush  0
S   FtpPush  0
V   FtpPush  0
M   FtpPush  0
D   CDROM   0
S   CDROM   0
V   CDROM   0
M   CDROM   0
D   DLT     0
S   DLT     0
V   DLT     0
M   DLT     0
D   DVD     0
S   DVD     0
V   DVD     0
M   DVD     0
D   8MM     0
S   8MM     0
V   8MM     0
M   8MM     0
D   scp     0
S   scp     0
V   scp     0
M   scp     0

```

Press <enter> to return to main menu...

- Press **Return/Enter**: the **OMS Configuration CI Main Menu** is displayed; return to Step 2.
- Enter **4** to return to the **OMS Configuration CI Main Menu**.
 - The **OMS Configuration CI Main Menu** is displayed.
 - Return to Step 2.

- 4 After importing the current order-tracking retention time configuration into a file, at the **OMS Configuration CI Main Menu** prompt enter:
x
 - The **OMS Configuration CI** is closed.
- 5 After importing the current order-tracking retention time configuration into a file and closing the **OMS Configuration CI**, edit the import file (to incorporate changes).
 - For detailed instructions refer to the **Prepare Input Files for Use with the OMS Configuration CI** procedure (Section 18.5.19.3).
- 6 After editing the order-tracking retention time file (to incorporate changes), start the **OMS Configuration CI** using the **-ot** option and the file name of the edited file as an argument.
 - For detailed instructions refer to the **Start the OMS Configuration CI** procedure (Section 18.5.19.4).
- 7 After starting the **OMS Configuration CI** with reference to the edited file, return to Step 2 of this procedure to start the process of exporting the edited order-tracking retention time file to the OMS database.
- 8 If the file specified in the confirmation message is not the proper file, at the **Do you want to use this one? [y/n]** prompt enter:
n
 - The **OMS Configuration CI Main Menu** is displayed.
 - A likely cause of the problem is having mistyped the file name when starting the **OMS Configuration CI**.
- 9 If the file specified in the confirmation message is not the proper file, at the **OMS Configuration CI Main Menu** prompt enter:
x
- 10 If the file specified in the confirmation message is not the proper file, start the **OMS Configuration CI** using the **-ot** option and the proper file name as an argument.
 - For detailed instructions refer to the **Start the OMS Configuration CI** procedure (Section 18.5.19.4).
- 11 If the file specified in the confirmation message is not the proper file, return to Step 2 of this procedure to start the process of exporting the edited order-tracking retention time file to the OMS database.

- 12 To export an edited order-tracking retention time file to the OMS database, at the **Do you want to use this one? [y/n]** prompt enter:
- y
- The following prompt is displayed:
You are about to export file "<file name>". Continue? [y/n]
- 13 To continue the process of exporting an edited order-tracking retention time file to the OMS database, at the **Continue? [y/n]** prompt enter:
- y
- If there is no problem exporting the file to the OMS database, the following messages are displayed:
Submitting file to database...
Syntax checking the input file...
Export OK. Press <ENTER> to continue...
 - The edited order-tracking retention time file was successfully exported to the OMS database
- 14 Press **Return/Enter**.
- The **OMS Configuration CI Main Menu** is displayed.
- 15 If there was a problem exporting the file to the OMS database, return to Step 2.
- 16 To perform another task using the **OMS Configuration CI** go to the applicable procedure from the following list:
- **Process Input Files Specified for Synergy III Exceptions** (Section 18.5.19.5) (to add or delete ESDT collections, media types, and/or FtpPush destinations to/from those processed in S3 (Synergy III) processing mode).
 - **Switch Between Synergy IV and Synergy III Operations** (Section 18.5.19.7) (to switch OMS Server processing between S4 (Synergy IV) operations and S3 (Synergy III) operations).
 - **Get OMS Configuration CI Help** (Section 18.5.19.8) (to display help information for the **OMS Configuration CI**).
- 17 To exit from the **OMS Configuration CI** (when applicable) at the **OMS Configuration CI Main Menu** prompt type **x** then press **Return/Enter**.
- The **OMS Configuration CI** is closed.
 - A UNIX command line prompt is displayed.

Table 18.5-59. Configure How Long Order-Tracking Information is Kept in the OMS Database - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Start the OMS Configuration CI (if necessary)	Use procedure in Section 18.5.19.4
2	2 (to display the Configure Order Tracking Data Menu)	enter text, press Enter
3	1 (import the current order-tracking retention time configuration into a file)	enter text, press Enter
4	x (after importing the current order-tracking retention time configuration into a file)	enter text, press Enter
5	Edit the import file (to incorporate changes)	Use procedure in Section 18.5.19.3
6	Start the OMS Configuration CI using the -ot option and the file name of the edited file as an argument	Use procedure in Section 18.5.19.4
7	2 (to display the Configure Order Tracking Data Menu)	enter text, press Enter
8	2 (to export the edited order-tracking retention time file to the OMS database)	enter text, press Enter
9	y (to export the file specified in the confirmation message)	enter text, press Enter
10	y (to continue exporting the file)	enter text, press Enter
11	Return/Enter key (to continue)	press
12	Perform the appropriate operational procedure (as needed)	Use applicable procedure(s) in Sections 18.5.19.5 through 18.5.19.8
13	x (to exit from the OMS Configuration CI) (when applicable)	enter text, press Enter

18.5.19.7 Switch Between Synergy IV and Synergy III Operations

The option to switch server (processing) mode allows the full-capability operator to switch the OMS Server processing between S4 (Synergy IV) operations and S3 (Synergy III) operations. The feature works like a toggle; i.e., if the current mode is S3, the only option is to switch to S4 and vice versa.

Invoking the option to switch server (processing) mode also causes the current status of the OMS Server (i.e., “up” or “down”) to be displayed. Because the processing mode is kept as a parameter in the OMS database, it can be changed regardless of OMS server status.

Table 18.5-60 presents (in a condensed format) the steps required to switch between Synergy IV and Synergy III operations. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it has not been started already, start the **OMS Configuration CI** (refer to Section 18.5.19.4).

2 At the **OMS Configuration CI Main Menu** prompt enter:

3

- If the OMS Server is “up,” the OMS Server status and current processing mode are displayed along with the following message:

Please shut down the OMS Server before switching the server mode. You may then select this option again from the main menu. (No need to exit this program)

- If the OMS Server is “down,” the **Switch Processing Mode Menu** is displayed.
 - The OMS Server status and current processing mode are displayed.
- If the OMS Server is “up,” continue with Step 3.
- If the OMS Server is “down,” skip Steps 3 through 5 and go to Step 6.

3 If a “**Please shut down the OMS Server**” message is being displayed, press the **Return/Enter** key.

- The **OMS Configuration CI Main Menu** is displayed.

4 If a “**Please shut down the OMS Server**” message was displayed, shut down the OMS Server (EcOmOrderManager) or make a request to the Operations Controller/System Administrator to shut down the OMS Server for the appropriate mode.

- There is no need to exit from the **OMS Configuration CI** while the OMS Server is being shut down.
 - The shutdown can be accomplished in a separate terminal window.

NOTE The OMS Server (EcOmOrderManager) is typically installed on the Sun Consolidation Internal Server. Examples of Sun Consolidation Internal Server host names include **e0acs11**, **g0acs11**, **l0acs03**, and **n0acs04**.

5 If a “**Please shut down the OMS Server**” message was displayed, return to Step 2 after the OMS Server has been shut down.

6 At the **Switch Processing Mode Menu** prompt enter:

<number>

- <number> is **1**, **2**, or **3**.
- Enter **1** to switch to the other processing mode.
 - The processing mode is switched (either from S3 to S4 or from S4 to S3, as applicable).
- Enter **2** to return to the **OMS Configuration CI Main Menu**.
 - The **OMS Configuration CI Main Menu** is displayed.
- Enter **3** - to exit from the **OMS Configuration CI**.
 - The **OMS Configuration CI** is closed.

- 7 If appropriate, start the OMS Server (EcOmOrderManager) or make a request to the Operations Controller/System Administrator to bring up (start) the OMS Server in the appropriate mode.
- 8 To perform another task using the **OMS Configuration CI** (if the **OMS Configuration CI Main Menu** is being displayed), go to the applicable procedure from the following list:
 - **Process Input Files Specified for Synergy III Exceptions** (Section 18.5.19.5) (to add or delete ESDT collections, media types, and/or FtpPush destinations to/from those processed in S3 (Synergy III) processing mode).
 - **Configure How Long Order-Tracking Information is Kept in the OMS Database** (Section 18.5.19.6) (to configure how long order-tracking information is kept in the OMS database).
 - **Get OMS Configuration CI Help** (Section 18.5.19.8) (to display help information for the **OMS Configuration CI**).
- 9 To exit from the **OMS Configuration CI** (when applicable) at the **OMS Configuration CI Main Menu** prompt enter:
 - x
 - The **OMS Configuration CI** is closed.
 - A UNIX command line prompt is displayed.

Table 18.5-60. Switch Between Synergy IV and Synergy III Operations - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Start the OMS Configuration CI (if necessary)	Use procedure in Section 18.5.19.4
2	3 (to display the Switch Processing Mode Menu)	enter text, press Enter
3	1 (to switch to the other processing mode)	enter text, press Enter
4	Either start the OMS Server (EcOmOrderManager) or make a request to the Operations Controller/System Administrator to bring up (start) the OMS Server in the appropriate mode (as appropriate)	contact Operations Controller
5	Perform the appropriate operational procedure (as needed)	Use applicable procedure(s) in Sections 18.5.19.5 through 18.5.19.8
6	x (to exit from the OMS Configuration CI) (when applicable)	enter text, press Enter

18.5.19.8 Get OMS Configuration CI Help

The “help” function of the **OMS Configuration CI** allows the full-capability operator to display a complete synopsis of the options and all available functions of the CI.

Table 18.5-61 presents (in a condensed format) the steps required to get **OMS Configuration CI** help. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 If it has not been started already, start the **OMS Configuration CI** (refer to Section 18.5.19.4).
- 2 At the **OMS Configuration CI Main Menu** prompt enter:
4
 - The first page of the **OMS Configuration CI Help** is displayed.
- 3 To view additional help information press either the **Return/Enter** key or the space bar.
 - Another line of the **OMS Configuration CI Help** is displayed if **Return/Enter** is pressed.
 - Another page of the **OMS Configuration CI Help** is displayed if the space bar is pressed.
- 4 To exit from **Help** enter:
q
 - A “**Press <ENTER> to return to main menu...**” message is displayed.
- 5 If a “**Press <ENTER> to return to main menu...**” message was displayed, press the **Return/Enter** key.
 - The **OMS Configuration CI Main Menu** is displayed.
- 6 To perform another task using the **OMS Configuration CI** (if the **OMS Configuration CI Main Menu** is being displayed), go to the applicable procedure from the following list:
 - **Process Input Files Specified for Synergy III Exceptions** (Section 18.5.19.5) (to add or delete ESDT collections, media types, and/or FtpPush destinations to/from those processed in S3 (Synergy III) processing mode).
 - **Configure How Long Order-Tracking Information is Kept in the OMS Database** (Section 18.5.19.6) (to configure how long order-tracking information is kept in the OMS database).
 - **Switch Between Synergy IV and Synergy III Operations** (Section 18.5.19.7) (to switch OMS Server processing between S4 (Synergy IV) operations and S3 (Synergy III) operations).

7 To exit from the **OMS Configuration CI** (when applicable) at the **OMS Configuration CI Main Menu** prompt enter:

x

- The **OMS Configuration CI** is closed.
- A UNIX command line prompt is displayed.

Table 18.5-61. Get OMS Configuration CI Help - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Start the OMS Configuration CI (if necessary)	Use procedure in Section 18.5.19.4
2	4 (to display the first page of the OMS Configuration CI Help)	enter text, press Enter
3	Either the Return/Enter key or the space bar (to view additional help information)	press
4	q (to exit from the OMS Configuration CI Help) (when applicable)	enter text, press Enter
5	Return/Enter key (to display the OMS Configuration CI Main Menu)	press
6	Perform the appropriate operational procedure (as needed)	Use applicable procedure(s) in Sections 18.5.19.5 through 18.5.19.7
7	x (to exit from the OMS Configuration CI) (when applicable)	enter text, press Enter

18.6 Troubleshooting DDIST and Order Manager GUI Problems

Troubleshooting is a process of identifying the source of problems on the basis of observed trouble symptoms. Most problems with data distribution can be traced to some part of the Data Server Subsystem:

- Data Distribution.
- Science Data Server.
- Storage Management.

However, a common source of problems involves the reliance on messages or data from other subsystems. Like many other operational areas in the system, data distribution has interfaces with other subsystems. Consequently, it is possible to trace some problems to another subsystem, including (but not necessarily limited to) those in the following list:

- Communications Subsystem (CSS).
- System Management Subsystem (MSS).
- Order Manager Subsystem (OMS).

The general process of troubleshooting involves the following activities:

- Review the trouble symptoms.
- Check the status of relevant hosts/servers (as necessary).
- Check log files (as necessary).
- Take action to correct the problem(s).

If the problem cannot be identified and fixed without help within a reasonable period of time, the appropriate response is to call the help desk and submit a trouble ticket in accordance with site Problem Management policy.

Table 18.6-1, below, provides an Activity Checklist for troubleshooting DDIST problems.

Table 18.6-1. Troubleshooting DDIST and Order Manager GUI Problems - Activity Checklist

Order	Role	Task	Section	Complete?
1	Distribution Technician	Troubleshoot a Data Distribution, Storage Management, or Order Manager GUI Failure	(P) 18.6.1	
2	Distribution Technician	Check Connections to Hosts/Servers	(P) 18.6.1.1	
3	Distribution Technician	Check Log Files	(P) 18.6.1.2	
4	Distribution Technician	Recover from a Data Distribution Failure	(P) 18.6.2	
5	Distribution Technician	Respond to Requests that Exceed the Distribution Request Threshold	(P) 18.6.2.1	
6	Distribution Technician	Check the Connection to the Remote FTP Host	(P) 18.6.2.2	
7	Distribution Technician	Check the Request Manager Server Debug Log	(P) 18.6.2.3	
8	Distribution Technician	Check the Science Data Server Log Files	(P) 18.6.2.4	
9	Distribution Technician	Check the Archive Server Log Files	(P) 18.6.2.5	
10	Distribution Technician	Check the Staging Disk	(P) 18.6.2.6	
12	Distribution Technician	Check the Space Available in the Staging Area	(P) 18.6.2.8	
11	Distribution Technician	Check the Staging Disk ALOG File	(P) 18.6.2.7	
13	Distribution Technician	Check Database Connections	(P) 18.6.2.9	

Fault Recovery

Each request that crosses a client/server boundary is assigned a system-unique identifier referred to as an RPC ID. (RPC refers to Remote Procedure Call, the mechanism by which requests are submitted from client to server.) The RPC ID facilitates the automatic fault recovery events that occur whenever there is a client or server failure.

- As a request propagates through the system, each associated client/server exchange is assigned a unique RPC ID.
 - The RPC ID for each interaction is derived from the previous RPC ID received by the client for the request. Consequently, all RPC IDs associated with a given request have a common portion that relates the various client/server calls to one another.
 - Given the previous RPC ID, clients consistently reproduce the same RPC ID that was submitted to the server on the subsequent event.
- The concept of reproducible RPC IDs is central to the system fault recovery capability.
 - When requests are retried from client to server, they are always submitted with the same RPC ID that was used in the original submission of the request, even if either the client or server has crashed between retries.
- The RPC ID is also central to the check-pointing aspect of fault recovery.
 - As requests arrive at fault recovery-enabled servers, they are recorded in a persistent store (typically a database), tagged with the RPC ID, which identifies the request.
 - As the request is serviced, check-pointing state information may be updated in the persistent store, up to and including the completion status of the request.
 - This allows the servers to resume servicing from the last check-pointed state, particularly upon resubmission from a client.

Data Server Subsystem and Order Manager Subsystem components check-point the following types of information:

- **EcDsScienceDataServer** - Asynchronous “acquire” requests that have been accepted for processing and subscription server event notifications.
- **EcDsHdfEosServer** - None.
- **EcDsDistributionServer** - Requests (which have been accepted for processing).
- **EcDsStArchiveServer** - “Store” and “retrieve” request state information.
- **EcDsStStagingDiskServer** - Resource allocation and ownership for staging disks.
- **EcDsStFtpServer** - Request state information.
- **EcDsStCacheManagerServer** - None.
- **EcDsStDTFServer** - None.
- **EcDsStRequestManagerServer** - None.
- **EcOmOrderManager** - Requests (which have been submitted).

Fault Handling

Failure events are classified according to the following three severity levels:

- Fatal error.
 - Returned when a request cannot be serviced, even with operator intervention.
 - For example, if a request is made to distribute data via ftp to a non-existent host, the request is failed with a fatal error.
- Retry error.
 - Potentially recoverable error.
 - Normally, a retry error would be returned to the client only when the server cannot recover from the error automatically.
 - A retry error may require operator assistance during recovery. For example, a tape left in a tape drive might have to be removed manually.
- Warning.
 - Provided when operations can proceed without interruption, but an unexpected circumstance was detected.
 - For example, the Distribution Technician would use the Data Distribution Operator GUI to manually request resumption of a distribution request that had been “suspended with errors.”

Transient errors (such as network errors) are always retry errors.

- In general, clients and servers that experience transient retry errors first attempt to recover by retrying the operation automatically.
- One special case of this is “rebinding,” which refers to the process by which a client automatically attempts to re-establish communication with a server in the event communication is disrupted.
 - The disruption may be caused by transient network failure, or by the server crashing or being brought down.
 - In any case, the client automatically attempts to reconnect to the server for a configurable period of time on a client-by-client basis.

System processes encountering an error or receiving an error from a server request can either pass the error back to a higher-level client or present it to the operator for operator intervention. The specific fault handling policies for Data Server Subsystem and Order Manager Subsystem client processes are shown in Table 18.6-2.

**Table 18.6-2. Data Server Subsystem and Order Manager Subsystem
Fault Handling Policies**

Client Process	Fault Handling Policy
EcDsScienceDataServer EcDsHdfEosServer	<p>Retry errors: Errors are retried a configurable number of times, then passed back to the calling client process unchanged. The default retry policy for Science Data Servers is “retry forever.” For asynchronous “acquire” requests involving subsetting, retry errors encountered with the HDF servers are not returned to the client. Instead, the request is queued for future execution.</p> <p>Fatal errors: Errors are passed back to the calling client process.</p> <p>NOTE: Errors associated with asynchronous requests are logged but do not appear on any GUI. The Operator restarts HDF servers manually.</p>
EcDsDistributionServer	<p>Errors are presented to the operator via the Data Distribution Operator GUI.</p> <p>Retry errors: Errors are presented as “Suspended with Errors” and can be resumed by the operator.</p> <p>Fatal errors: Errors are presented as “Failed.” For synchronous requests, fatal errors are also passed back to the calling client process. For asynchronous requests, fatal errors are sent as part of the e-mail notification.</p>
EcDsStRequestManagerServer EcDsStDTFServer	<p>Retry errors: Errors are passed back to the calling client process.</p> <p>Fatal errors: Errors are passed back to the calling client process.</p>
EcOmOrderManager	<p>Retry errors: Errors are retried a configurable number of times and then the request status is changed to “Operator Intervention” in the MSS database.</p>

Client Crash and Restart

When a client of a SDSRV or DDIST server crashes, the server (i.e., EcDsScienceDataServer, EcDsHdfEosServer, or EcDsDistributionServer) continues to service the requests that were in process at the time of the client’s crash. When a client of a STMGT server (i.e., EcDsStArchiveServer, EcDsStRequestManagerServer, EcDsStCacheManagerServer, EcDsStPullMonitorServer, EcDsStFtpServer, EcDsStDTFServer, or EcDsStStagingDiskServer) crashes, the requests that were in process are cancelled by another client process and there is no impact to the outside requester server.

The EcOmOrderManager does not care whether or not a client crashes.

When a client restarts in the system, it sends a restart notification to each server with which it interacts.

- Clients notify servers that they have come up either “cold” or “warm.”
- Generally, the notification temperature sent to the server matches the temperature at which the client process is restarted.

- However, there are some exceptions; for example:
 - EcDsScienceDataServer always notifies EcDsDistributionServer that it has performed a warm restart.
 - The default behavior for both EcDsHdfEosServer and EcDsStDTFServer is to send EcDsStRequestManagerServer cold restart notification.
- When a client sends restart notification to the EcDsStRequestManagerServer, the server calls a stored procedure to clean up the old request and staging disk (if any) created by the client, based on whether it was a cold or warm start.
 - The Storage Management Servers are not directly notified when a restart has occurred.
 - The Storage Management Servers respond to the event according to the fact that a previous request has been marked as failed and any staging disk resources they have allocated have been released.

The default server behavior in response to startup notification from a client is as follows:

- Warm Notification.
 - Outstanding requests for the restarted clients remain available in the persistent store.
 - The outstanding requests may be resubmitted by the client, and are serviced to completion upon resubmission.
 - Associated resources are left allocated until the requests are completed.
- Cold Notification.
 - All outstanding requests for the restarted client are cancelled.
 - If the client resubmits any cancelled request using the same RPC ID (e.g., by pressing the Retry button from an operator GUI), it is failed with a fatal error due to the client cold startup notification.
 - Any resources associated with the cancelled requests are released and reclaimed by the system.

The following servers have some non-standard responses to startup notification:

- **EcDsStArchiveServer.**
 - **Warm Notification:** Default server behavior (as previously described).
 - **Cold Notification:** For partially completed Ingest operations, all files stored are removed. (Partial granules are never permitted in the archive.)
- **EcDsStStagingDiskServer.**
 - **Warm Notification:** All staging disks owned by the restarted client are retained, including temporary staging disks.
 - **Cold Notification:** All staging disks owned by the restarted client are released.

Server Crash and Restart

When a server crashes, clients cannot continue to submit requests for processing.

- Synchronous requests in progress result in a Distributed Computing Environment (DCE) exception being thrown back to the client process, which enters a rebinding failure recovery mode (as previously mentioned).
- Attempts to submit requests while the server is down result in the client blocking until a communication timeout has been reached.
- Although DCE has been replaced by socket-based library calls (i.e., CCS Middleware), the DCE exception code is handled by the CCS Middleware.

When a server restarts, it may perform various resynchronization activities in order to recover from an unexpected termination.

- In the event of a server cold start or cold restart, the server typically cancels all outstanding requests and reclaims all associated resources.
- In general, existing request queues are retained for warm restarts and cleared for cold starts or cold restarts.
- **EcDsScienceDataServer-** and **EcDsHdfEosServer-**specific activities upon start/restart:
 - **Warm Restart:** Restart asynchronous “acquire” requests that were in progress before the crash; retain the queue of asynchronous “acquire” requests; it is expected that synchronous requests would be resubmitted by the respective senior client applications (i.e., PRONG or INGST); send event notifications to the Subscription Server for any services completed before the crash for which a subscribed event is registered but has not been sent to the Subscription Server.
 - **Cold Start or Cold Restart:** Purge the queue of asynchronous “acquire” requests; purge the queue of Subscription Server Event Notifications.
- **EcDsDistributionServer-**specific activities upon start/restart:
 - **Warm Restart:** Request Processing is restarted from the last check-pointed state.
 - **Cold Start or Cold Restart:** STMGT CI is informed of a cold start; EcDsDistributionServer deletes all (prior) request information from its database.
- **EcPdPDS-**specific activities upon start/restart:
 - **Warm Restart:** Request Processing is restarted from the last check-pointed state.
 - **Cold Start or Cold Restart:** STMGT CI is informed of a cold start; EcDsDistributionServer deletes all (prior) request information from its database.
- **EcDsStArchiveServer-**specific activities upon start/restart:
 - **Warm Restart:** Retains existing request queues.
 - **Cold Start or Cold Restart:** For partially completed “store” requests, the files copied into the archive are removed; for partially completed “retrieve” requests, the access count is decremented in the read-only cache.
- **EcDsStCacheManagerServer-**specific activities upon start/restart:
 - **Warm Restart:** The contents of the read-only cache are synchronized with the database; discrepancies are logged and removed.
 - **Cold Start or Cold Restart:** All files are removed from the read-only cache.

- **EcDsStStagingDiskServer**-specific activities upon start/restart:
 - **Warm Restart:** The set of staging disks in the staging area is synchronized with the database; discrepancies are logged and removed; existing request queues are cleared.
 - **Cold Start or Cold Restart:** All staging disks are removed.
- **EcDsStPullMonitorServer**-specific activities upon start/restart:
 - **Warm Restart:** The contents of the Pull Area and user request areas are synchronized with the database; discrepancies are logged and removed.
 - **Cold Start or Cold Restart:** All files in the Pull Area and all user request areas are removed.
- **EcDsStFtpServer**-specific activities upon start/restart:
 - **Warm Restart:** Existing request queues are retained.
 - **Cold Start or Cold Restart:** Existing request queues are cleared.

Request Resubmission

Upon restarting a crashed client or server, requests are typically resubmitted. If the restarted process was started warm, the fault-recovery capabilities permit the server to resume processing of the request from its last check-pointed state. This prevents needless repetition of potentially time-consuming activities.

- **EcDsScienceDataServer**- and **EcDsHdfEosServer**-specific activities upon resubmission of a request:
 - All requests are serviced as if they are new requests.
 - RPC IDs are generated automatically and reproducibly; consequently, the Science Data Server typically recreates the same allocation requests on a resubmission; this can trigger special logic to handle requests for which an allocated staging disk has been transferred to the Data Distribution Server.
- **EcDsDistributionServer**-specific activities upon resubmission of a request:
 - If previously submitted and completed with the same RPCId, the request status is returned based on the check-pointed request status.
 - If previously submitted and completed with different RPCIDs, the request is re-executed.
 - Otherwise, the client request thread is synchronized with the worker thread actually servicing the request.
- **EcDsStArchiveServer**-specific activities upon resubmission of a request:
 - The request is restored from the last check-pointed state.
 - For “store” requests, copies into the archive are resumed from the last file copied.
 - For “retrieve” requests, the entire “retrieve” request is reprocessed; however, files previously retrieved for the request are, in all likelihood, still in the read-only cache.

- **EcDsStCacheManagerServer**- and **EcDsStFtpServer**-specific activities upon resubmission of a request:
 - If previously submitted and completed, the request status is returned based on the check-pointed request status.
 - Otherwise, the request is processed anew.
- **EcDsStStagingDiskServer**-specific activities upon resubmission of a request:
 - For staging disk allocation, the results are returned to the client if the client resubmits the allocation request under which the disk was created.
- **EcDsStPullMonitorServer**- and **EcDsStDTFServer**-specific activities upon resubmission of a request:
 - The resubmitted request is processed as if it were a new request.
- **EcOmOrderManager**-specific activities upon resubmission of a request:
 - EcOmOrderManager uses a different RPC ID for request resubmission.

18.6.1 Troubleshoot a Data Distribution, Storage Management, or Order Manager GUI Failure

- 1 If it is not possible to log in to the Operations Workstation host or any other host, ask the Operations Controller/System Administrator to verify that the host is “up.”
 - Examples of Operations Workstation host names include **e0acs03**, **g0acs02**, **l0acs01**, and **n0acs03**.
- 2 If the GUI (e.g., the **Data Distribution Operator GUI** or the **Storage Management Control GUI**) or web browser is not displayed when the start-up script or command has been properly invoked, ensure that the DISPLAY variable was set properly.
 - For detailed instructions refer to the applicable procedure.
 - **Log in to System Hosts** (Section 18.2.1).
 - **Launch the Data Distribution Operator and Storage Management Control GUIs** (Section 18.2.2).
- 3 If an error message associated with the **Data Distribution Operator GUI** is received, refer to Table 18.6-3, Data Distribution Operator GUI User Messages and/or Table 18.6-4, Storage Management User Messages.
 - Table 18.6-3, Data Distribution Operator GUI User Messages, is adapted from the corresponding table in 609-EMD-001, *Release 7.10 Operations Tools Manual for the EMD Project*.
 - Table 18.6-4, Storage Management User Messages, is adapted from DsShErrorMessage.txt and DsStErrorMessage.txt in the /usr/ecs/<MODE>/CUSTOM/data/DSS directory on the DSS hosts.
- 4 If an error message associated with the **Storage Management Control GUI** is received, refer to Table 18.6-4, Storage Management User Messages.
 - The table is adapted from DsShErrorMessage.txt and DsStErrorMessage.txt in the /usr/ecs/<MODE>/CUSTOM/data/DSS directory on the DSS hosts.

- 5 If an error message associated with the **Order Manager GUI** is received, refer to Table 18.6-5, Order Manager GUI User Messages.
 - The table is adapted from the corresponding table in 609-EMD-001, *Release 7.10 Operations Tools Manual for the EMD Project*.
- 6 If the status of a request changes to “Suspended with Errors” (indicating a data distribution failure) and the suspended request is an FtpPush request to a remote host (e.g., ftp.averstar.com), ensure that it is possible to connect to the remote host.
 - For detailed instructions refer to the **Check the Connection to the Remote FTP Host** procedure (Section 18.6.2.2).
- 7 If the status of a request changes to “Suspended with Errors,” indicating a data distribution failure, ensure that it is possible to connect to the necessary hosts and servers.
 - For detailed instructions refer to the **Check Connections to Hosts/Servers** procedure (Section 18.6.1.1).
- 8 If the status of a request changed to “Suspended with Errors” and if the necessary hosts/servers are all “up,” notify the Operations Controller/System Administrator to have the STMGT servers bounced.
 - Bouncing servers involves shutting down and immediately restarting the servers.
- 9 If the status of a request changed to “Suspended with Errors” and if the STMGT servers have been bounced, resume processing of the suspended request.
 - For detailed instructions refer to the **Suspend/Resume Data Distribution Requests** procedure (Section 18.2.7).
- 10 If processing of a suspended request does not resume, go to the **Recover from a Data Distribution Failure** procedure (Section 18.6.2).
- 11 If some other type of problem is encountered, check the log files for error messages.
 - Examples of log files include EcDsDdistGui.ALOG, EcDsDistributionServer.ALOG, EcDsStRequestManagerServer.ALOG, and EcDsStStagingDiskServerDIP1.ALOG.
 - Log files are located in the /usr/ecs/<MODE>/CUSTOM/logs directory.
 - For detailed instructions refer to the **Check Log Files** procedure (Section 18.6.1.2).
- 12 If the problem cannot be identified and fixed without help within a reasonable period of time, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.

Table 18.6-3. Data Distribution Operator GUI User Messages (1 of 7)

Message Text	Impact	Cause and Corrective Action
Cannot create connection pool.	Attempt to create connection pool to database failed.	<ol style="list-style-type: none"> 1. Refresh the GUI display (single-click on the Refresh button). 2. Check the database connections. [For detailed instructions refer to the Check Database Connections procedure (Section 18.6.2.8).] 3. Refresh the GUI display (single-click on the Refresh button). 4. If the problem recurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.
Cannot create the DsDdDistRequestList.	The Data Distribution Request List was not created.	<ol style="list-style-type: none"> 1. Refresh the GUI display (single-click on the Refresh button). 2. Check the database connections. [For detailed instructions refer to the Check Database Connections procedure (Section 18.6.2.8).] 3. Refresh the GUI display (single-click on the Refresh button). 4. If the problem recurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.
Cannot get a dbInterface connection pool.	Attempt to get a dbInterface from connection pool to database failed.	<ol style="list-style-type: none"> 1. Refresh the GUI display (single-click on the Refresh button). 2. Check the database connections. [For detailed instructions refer to the Check Database Connections procedure (Section 18.6.2.8).] 3. Refresh the GUI display (single-click on the Refresh button). 4. If the problem recurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.

Table 18.6-3. Data Distribution Operator GUI User Messages (2 of 7)

Message Text	Impact	Cause and Corrective Action
DDist Cancel Failure.	GUI received failure from server. Request was not canceled.	<ol style="list-style-type: none"> 1. Check the current state of the distribution request (State column of the Data Distribution Requests list on the Distrib'n Requests tab). Canceling the request may not be a valid operation in the current state (e.g., if the current state is "Shipped"). 2. Enter: ps -ef grep EcDsDistributionServer (Ensure that the Distribution Server is "up.") 3. If the Distribution Server has gone down, notify the Operations Controller/System Administrator to have the server brought back up. 4. Refresh the GUI display (single-click on the Refresh button). 5. Try again to cancel the request. <p>[For detailed instructions refer to the Cancel Data Distribution Requests procedure (Section 18.2.8).]</p> <ol style="list-style-type: none"> 6. If repeated attempts to cancel the request fail, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.
DDist Mark Shipped Failure.	GUI received failure from server. Request was not marked "Shipped."	No Longer Applicable.
DDist Refresh Failure.	Data Distribution Refresh Error. Dialogue Message GUI was not able to get new request list from server.	<ol style="list-style-type: none"> 1. Check the database connections. <p>[For detailed instructions refer to the Check Database Connections procedure (Section 18.6.2.8).]</p> <ol style="list-style-type: none"> 2. Refresh the GUI display (single-click on the Refresh button). 3. If the problem recurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.

Table 18.6-3. Data Distribution Operator GUI User Messages (3 of 7)

Message Text	Impact	Cause and Corrective Action
DDist Resume All Failure.	GUI received failure from server. Requests were not resumed.	<ol style="list-style-type: none"> 1. Check the current state of the distribution request(s) (State column of the Data Distribution Requests list on the Distrib'n Requests tab). Resuming the request(s) may not be a valid operation in the current state(s) (e.g., if the current state is "Shipped"). 2. Enter: ps -ef grep EcDsDistributionServer (Ensure that the Distribution Server is "up.") 3. If the Distribution Server has gone down, notify the Operations Controller/System Administrator to have the server brought back up. 4. Refresh the GUI display (single-click on the Refresh button). 5. Try again to resume the request(s). <p>[For detailed instructions refer to the Suspend/Resume Data Distribution Requests procedure (Section 18.2.7).]</p> <ol style="list-style-type: none"> 6. If repeated attempts to resume request processing fail, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.
DDist Resume Failure.	GUI received failure from server. Request was not resumed.	<ol style="list-style-type: none"> 1. Check the current state of the distribution request (State column of the Data Distribution Requests list on the Distrib'n Requests tab). Resuming the request may not be a valid operation in the current state (e.g., if the current state is "Shipped"). 2. Enter: ps -ef grep EcDsDistributionServer (Ensure that the Distribution Server is "up.") 3. If the Distribution Server has gone down, notify the Operations Controller/System Administrator to have the server brought back up. 4. Refresh the GUI display (single-click on the Refresh button). 5. Try again to resume the request. <p>[For detailed instructions refer to the Suspend/Resume Data Distribution Requests procedure (Section 18.2.7).]</p> <ol style="list-style-type: none"> 6. If repeated attempts to resume request processing fail, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.

Table 18.6-3. Data Distribution Operator GUI User Messages (4 of 7)

Message Text	Impact	Cause and Corrective Action
DDist Set Priority Failure.	GUI received failure from server. Request set priority failed.	<ol style="list-style-type: none"> 1. Check the current state of the distribution request (State column of the Data Distribution Requests list on the Distrib'n Requests tab). Setting priority may not be a valid operation in the current state (e.g., if the current state is "Shipped"). 2. Enter ps -ef grep EcDsDistributionServer (Ensure that the Distribution Server is "up.") 3. If the server has gone down, notify the Operations Controller/System Administrator to have it brought back up. 4. Try again to set the priority of the selected distribution request. <p>[For detailed instructions refer to the Change the Priority of Data Distribution Requests procedure (Section 18.2.6).]</p> <ol style="list-style-type: none"> 5. If repeated attempts to set the request priority fail, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.
DDist Suspend All Failure.	GUI received failure from server. Requests will not be submitted in a SuspendAll state.	<ol style="list-style-type: none"> 1. Check the current state of the distribution request(s) (State column of the Data Distribution Requests list on the Distrib'n Requests tab). Suspending the request(s) may not be a valid operation in the current state(s) (e.g., if the current state is "Shipped"). 2. Enter: ps -ef grep EcDsDistributionServer (Ensure that the Distribution Server is "up.") 3. If the Distribution Server has gone down, notify the Operations Controller/System Administrator to have the server brought back up. 4. Refresh the GUI display (single-click on the Refresh button). 5. Try again to suspend the request(s). <p>[For detailed instructions refer to the Suspend/Resume Data Distribution Requests procedure (Section 18.2.7).]</p> <ol style="list-style-type: none"> 6. If repeated attempts to suspend request processing fail, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.

Table 18.6-3. Data Distribution Operator GUI User Messages (5 of 7)

Message Text	Impact	Cause and Corrective Action
DDist Suspend Failure.	GUI received failure from server. Request was not suspended.	<ol style="list-style-type: none"> 1. Check the current state of the distribution request (State column of the Data Distribution Requests list on the Distrib'n Requests tab). Suspending the request may not be a valid operation in the current state (e.g., if the current state is "Shipped"). 2. Enter: ps -ef grep EcDsDistributionServer (Ensure that the Distribution Server is "up.") 3. If the Distribution Server has gone down, notify the Operations Controller/System Administrator to have the server brought back up. 4. Refresh the GUI display (single-click on the Refresh button). 5. Try again to suspend the request. <p>[For detailed instructions refer to the Suspend/Resume Data Distribution Requests procedure (Section 18.2.7).]</p> <ol style="list-style-type: none"> 6. If repeated attempts to suspend request processing fail, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.
DsDdRequestMgrC Cancel Failure.	GUI received failure from server. Request was not canceled.	<ol style="list-style-type: none"> 1. Check the current state of the distribution request (State column of the Data Distribution Requests list on the Distrib'n Requests tab). Canceling the request may not be a valid operation in the current state (e.g., if the current state is "Shipped"). 2. Enter: ps -ef grep EcDsDistributionServer (Ensure that the Distribution Server is "up.") 3. If the Distribution Server has gone down, notify the Operations Controller/System Administrator to have the server brought back up. 4. Refresh the GUI display (single-click on the Refresh button). 5. Try again to cancel the request. <p>[For detailed instructions refer to the Cancel Data Distribution Requests procedure (Section 18.2.8).]</p> <ol style="list-style-type: none"> 6. If repeated attempts to cancel the request fail, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.
DsDdRequestMgrC create handle error.	Error cannot create Request Manager Handle to the Data Distribution Server.	<ol style="list-style-type: none"> 1. Single-click on the Refresh button to try again. 2. Check the database connections. <p>[For detailed instructions refer to the Check Database Connections procedure (Section 18.6.2.8).]</p> <ol style="list-style-type: none"> 3. Refresh the GUI display (single-click on the Refresh button). 4. If the problem recurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.

Table 18.6-3. Data Distribution Operator GUI User Messages (6 of 7)

Message Text	Impact	Cause and Corrective Action
DsDdRequestMgrC Mark Shipped Failure.	GUI received failure from server. Request was not marked "Shipped."	No Longer Applicable.
DsDdRequestMgrC Resume Failure.	GUI received failure from server. Request was not resumed.	<ol style="list-style-type: none"> 1. Check the current state of the distribution request (State column of the Data Distribution Requests list on the Distrib'n Requests tab). Resuming the request may not be a valid operation in the current state (e.g., if the current state is "Shipped"). 2. Enter: ps -ef grep EcDsDistributionServer (Ensure that the Distribution Server is "up.") 3. If the Distribution Server has gone down, notify the Operations Controller/System Administrator to have the server brought back up. 4. Refresh the GUI display (single-click on the Refresh button). 5. Try again to resume the request. [For detailed instructions refer to the Suspend/Resume Data Distribution Requests procedure (Section 18.2.7).] 6. If repeated attempts to resume request processing fail, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.
DsDdRequestMgrC Set Priority Failure.	GUI received failure from server. Request priority was not changed.	<ol style="list-style-type: none"> 1. Check the current state of the distribution request (State column of the Data Distribution Requests list on the Distrib'n Requests tab). Setting priority may not be a valid operation in the current state (e.g., if the current state is "Shipped"). 2. Enter: ps -ef grep EcDsDistributionServer (Ensure that the Distribution Server is "up.") 3. If the server has gone down, notify the Operations Controller/System Administrator to have it brought back up. 4. Try again to set the priority of the selected distribution request. [For detailed instructions refer to the Change the Priority of Data Distribution Requests procedure (Section 18.2.6).] 5. If repeated attempts to set the request priority fail, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.
Invalid text field entry.	Invalid data was entered.	<ol style="list-style-type: none"> 1. Enter valid data in the relevant field. 2. Retry the operation that led to the error message.

Table 18.6-3. Data Distribution Operator GUI User Messages (7 of 7)

Message Text	Impact	Cause and Corrective Action
No Ddist request selected. Please select one.	An operation was performed without first selecting a request from the scrolled list.	<ol style="list-style-type: none"> 1. Single-click on (highlight) the appropriate request in the list. 2. Retry the operation that led to the error message.

Table 18.6-4. Storage Management User Messages (1 of 39)

Message Text	Impact	Cause and Corrective Action
.lib section in a.out corrupted	Standard system error.	
550 The file to be ftp pulled does not exist at the source location. Either the file never existed at the source location or the source locations file system or network is having problems.	Error returned by the FTP protocol.	Retry.
553 The destination for the file does not exist or the destination exist but the permissions are such on the directory that the file cannot be written or the file already exist and can not be overwritten.	Error returned by the FTP protocol.	Retry.
A command to remove a file failed	Error from DsStStagingMonitor.	
A component of the path prefix is not a directory.	Error from SCSI.	
A configuration parameter had a null or invalid value	Error from DsStStagingMonitor.	
A daemon process was cold restarted so your request has been cancelled	Error returned from DsStCacheManagerServer.	

Table 18.6-4. Storage Management User Messages (2 of 39)

Message Text	Impact	Cause and Corrective Action
A [sic] error occurred [sic] using a class destructor [sic].	Error for Archive.	[This is an internal error in the system.] 1. Note all circumstances associated with the error (including capturing the Debug.log and ALOGs for both the reporting server and the Request Manager). 2. Submit a high-priority trouble ticket against STMGT. (Send logs in support of the trouble ticket.)
A file name was not found as expected in the database	Error from DsStStagingMonitor.	
A file size was not the length expected.	Error for Archive.	Retry.
A [sic] interrupted signal was caught.	Error from SCSI.	Retry.
A network error has occurred	Staging disk error message.	Retry.
A request has completed all processing	Error from DsStStagingMonitor.	[No action necessary.]
A request has not completed all processing	Error from DsStStagingMonitor.	[No action necessary.]
A Restart Backup request has failed.	Error for Archive.	Retry.
A search for a file to be retrieved has exhausted all locations.	Error for Archive.	Retry.
A staging disk object was not created in GetLocation()	Error for Archive.	1. Note all possible details related to the error. 2. Report all possible details to the vendor. 3. Retry.
A Store request failed because the volume group is closed.	Error for Archive.	1. Modify the desired volume group location to the valid path. 2. Retry.
Access to this science data is restricted	Standard system error (fatal).	
Accessing a corrupted shared library	Standard system error.	
Address already in use	Standard system error.	Specify a free port on the server or specify a different server.
Address family not supported by protocol family	Standard system error.	

Table 18.6-4. Storage Management User Messages (3 of 39)

Message Text	Impact	Cause and Corrective Action
Advertise error	Standard system error.	
After the directory was made, the directory could not be stat [sic]	Staging disk error message.	1. Check the SYSLOG for errors. [For detailed instructions refer to the Check Log Files procedure (Section 18.6.1.2).] 2. Retry after problems have been corrected.
All granules of request individually failed.	Media error message (retry).	Check each granule status.
All request slots are currently busy	Error returned from DsStCacheManagerServer.	Retry.
An attempt to delete a file failed.	Error for Archive.	1. Change the permissions on the file. 2. Retry the request.
An attempt to find a Cache Manager serverId has failed.	Error for Archive.	Retry.
An attempt to find a needed server has failed.	Error for Archive.	Retry.
An attempt to generate Restart Backup File requests failed.	Error for Archive.	Retry.
An attempt to generate Store File requests failed.	Error for Archive.	Retry.
An attempt to reserve space for a Retrieve request failed.	Error for Archive.	Retry.
An attempt to retrieve data values from the database failed.	Error from DsStStagingMonitor.	
An attempt to spawn a read thread failed.	Error for Archive.	Retry.
An attempt to spawn a service thread failed.	Error for Archive.	Retry.
An attempt to spawn a write thread failed.	Error for Archive.	Retry.
An attempt to submit a reserve file for a Retrieve request failed.	Error for Archive.	Retry.

Table 18.6-4. Storage Management User Messages (4 of 39)

Message Text	Impact	Cause and Corrective Action
An attempt to submit a reserve space for a Retrieve request failed.	Error for Archive.	Retry.
An error was encountered generating ArDeleteFile requests.	Error for Archive.	Retry.
An internal error has occurred while communicating with Sybase	Error from database.	<ol style="list-style-type: none"> 1. Check the Sybase error log for Sybase communication errors. 2. Ensure that Sybase is up and running properly. 3. Bounce the STMGT server warm to clear any transient error that may have corrupted the connection to the database.
An unknown exception has occurred	DsSt error.	<p>[This error is an internal error in STMGT. It should never happen.]</p> <p>Report the error to the DAAC Help Desk immediately.</p>
An unknown request checkpoint state was found in the database.	Error for Archive.	<p>[This is an internal error in the system.]</p> <ol style="list-style-type: none"> 1. Note all circumstances associated with the error (including capturing the Debug.log and ALOGs for both the reporting server and the Request Manager). 2. Submit a high-priority trouble ticket against STMGT. (Send logs in support of the trouble ticket.)
An unknown request type has been submitted to this server	Error returned from DsStCacheManagerServer.	<p>[This is an internal error in the system.]</p> <ol style="list-style-type: none"> 1. Note all circumstances associated with the error (including capturing the Debug.log and ALOGs for both the reporting server and the Request Manager). 2. Submit a high-priority trouble ticket against STMGT. (Send logs in support of the trouble ticket.)
Anode table overflow	Standard system error.	
Archive location does not contain requested file	Error for Archive.	Verify the spelling/path name of the requested file.
Archive location does not exist as defined in db tables	Error for Archive.	<ol style="list-style-type: none"> 1. Check the spelling of the archive location that was entered. 2. If the spelling is correct, contact the System Administrator to determine whether the name should be made a new entry.
Archive location does not have adequate permissions	Error for Archive.	<ol style="list-style-type: none"> 1. Ensure that the user ID used when logging in has the proper permissions. 2. If necessary, contact the Archive Administrator to have the permissions set properly.

Table 18.6-4. Storage Management User Messages (5 of 39)

Message Text	Impact	Cause and Corrective Action
Archive location does not have adequate permissions for files	Error for Archive.	<ol style="list-style-type: none"> 1. Ensure that the user ID used when logging in has the proper permissions. 2. If necessary, contact the Archive Administrator to have the permissions set properly. 3. Retry.
Archive Store failed due to illegal file path	Error for Archive.	<ol style="list-style-type: none"> 1. Verify that the file path given is a valid file path. 2. Retry.
Archive Store Failed EcUtFileCopy.Copy() failed	Error for Archive.	
Arg list too long	Standard system error.	
Attempting to link in more shared libraries than system limit	Standard system error.	
BackupOffsite() failed -- Offsite ID == DsCStEmptyString	Error for Archive.	<ol style="list-style-type: none"> 1. Modify the ID of the desired offsite location. (The ID of the desired offsite location must be given, and must not be an empty string.) 2. Retry
BackupOnlineLocation failed -- SP DsCStVGSelectHistory execute failed	Error for Archive.	Retry.
BackupTemporaryAndOffsite() failed -- Offsite ID == DsCStEmptyString	Error for Archive.	<ol style="list-style-type: none"> 1. Modify the ID of the desired offsite location. (The ID of the desired offsite location must be given, and must not be an empty string.) 2. Retry
Bad address	Standard system error.	If the error arose from a gethostname() call, check the name and namelen parameters.
Bad command sequence -- error in ftp #503	Error returned by the FTP protocol.	
Bad exchange descriptor	Standard system error.	
Bad file descriptor	Standard system error.	<ol style="list-style-type: none"> 1. Check whether the file exists. 2. Check file permissions.
Bad font file format	Standard system error.	
Bad request code	Standard system error.	
Bad request descriptor	Standard system error.	
Bad XDR Stream	Error from DsStFileInfo.	Retry.

Table 18.6-4. Storage Management User Messages (6 of 39)

Message Text	Impact	Cause and Corrective Action
Block device required	Standard system error.	
Broken pipe	Standard system error.	
Cache file entry not in db	Error returned from DsStCacheManagerServer.	[No action necessary.]
calculate checksum is disabled	DsSt message.	[Not an error.]
calculated checksum not equal to specified	DsSt error.	Retry.
Cancelled by a STMGT client	STMGT restart code.	
Cancelled due to client restart	STMGT restart code.	
Cancelled due to STMGT server cold start	STMGT restart code.	[The STMGT server reporting the error was cold started while the submitted request was in queue.] Resubmit the request. (It will be re-processed as if it were a new request.)
Cannot access a needed shared library	Standard system error.	
Cannot assign requested address	Standard system error.	Specify a free port on the server.
Cannot delete from DsStBackup Table -- SP DsCStBDelete execute() failed	Error for Archive.	[No action necessary.]
Cannot delete from DsStRestore Table -- SP DsCStRDelete execute() failed	Error for Archive.	[No action necessary.]
Cannot exec a shared library directly	Standard system error.	
Cannot insert key -- file already exist [sic] in list	Error from DsStStagingDataList.	[No action necessary.]
Cannot open input file	Error from DsStPosixUtil.	Verify that the current user ID has read permission for the file.
Cannot open output file	Error from DsStPosixUtil.	1. Verify that the file is not already open for output. 2. Verify that the current user ID has write permission for the file.
Cannot send after socket shutdown	Standard system error.	

Table 18.6-4. Storage Management User Messages (7 of 39)

Message Text	Impact	Cause and Corrective Action
Can't open data connection -- error in ftp #425	Error returned by the FTP protocol.	
CDS path is null	Error for DsStArchiveProxy.	
Channel number out of range	Standard system error.	
Command not available -- error in ftp #502	Error returned by the FTP protocol.	
Command not implemented for that parameter -- error in ftp #504	Error returned by the FTP protocol.	
Communication error on send	Standard system error.	
Components of path require hopping to multiple remote machines and the file system does not allow it.	Error from SCSI.	
Connecting to host failed	Error returned by the FTP protocol (retry).	Retry.
Connection closed, transfer aborted -- error in ftp #426	Error returned by the FTP protocol.	
Connection lost for some reason	Error returned by the FTP protocol (retry).	Retry.
Connection refused	Standard system error.	1. Verify that the target machine is connected. 2. Verify that the listening server is running.
Connection reset by peer	Standard system error.	
Connection timed out	Standard system error.	1. Check the condition of the network. 2. Retry.
Copy process was forcefully [sic] killed	Error returned by the FTP protocol (fatal).	
Copy source is a directory	Error returned by the FTP protocol (fatal).	
could not close input file	Error from DsStPosixUtil.	[No action necessary.]
could not close output file	Error from DsStPosixUtil.	[No action necessary.]
could not create a pull monitor object	Error from DsStDistributionFtp.	Retry.

Table 18.6-4. Storage Management User Messages (8 of 39)

Message Text	Impact	Cause and Corrective Action
could not create a stagingdisk for inftp	Error from inftp.	Retry.
could not create global pointer	Error from DsStDistributionFtp.	
could not create pointer to config file	Error from DsStDistributionFtp.	
Could not determine file size of file.	Error for Archive.	Verify the spelling/path name of the requested file.
Could not remove the staging disk entry from the database	Staging disk error message.	1. Check whether the staging disk exists in the database. (Probable that the disk does not exist.) 2. Retry.
Could not stat [sic] the file, possible NFS problems or file does not exist	Staging disk error message.	1. Check whether the file exists in the file system. 2. If the file does exist, check the SYSLOG for network file system (NFS) errors. [For detailed instructions refer to the Check Log Files procedure (Section 18.6.1.2).] 3. Retry after problems have been corrected.
Cross-device link	Standard system error.	Substitute a symbolic link.
DB Session unusable to previous error	Error from database.	[An attempt has been made to continue with a database operation when the previous operation failed. The previous failure has left the connection in a state that is unsuitable for continuing.] Retry.
DCE object not created	Error for DsStArchiveProxy.	Retry.
Deadlock situation detected/avoided	Standard system error.	
default	Error from DsStDistributionFtp.	
Denial of service -- error in ftp #702	Error returned by the FTP protocol.	
Destination address required	Standard system error.	
Destination directory does not exist	Error returned by the FTP protocol (fatal).	
Destination is not directory	Error returned by the FTP protocol (fatal).	
Device busy	Standard system error.	
Device is already open.	Error from SCSI.	
Device is not open.	Error from SCSI.	

Table 18.6-4. Storage Management User Messages (9 of 39)

Message Text	Impact	Cause and Corrective Action
Device Name should be specified to this device control operation	Media error message.	
Directory access to file denied	Error returned by the FTP protocol (fatal).	
Directory not empty	Standard system error.	
Distribution rejected request	Standard system error (fatal).	Contact User Services.
Distribution was not responding	Standard system error (retry).	Try again later.
Drive element number in database does not match any of the physical drives.	Media error message.	
Eject tape Failed	Media error message.	
Empty archive location -- (myArchiveLocation == DsCStEmptyString)	Error for Archive.	[The name of the desired archive location must be given.]
empty archive location -- failed in SetBackupOnlineLocation()	Error for Archive.	Retry.
Empty file in move request not added to database	Error from DsStStagingMonitor.	
Empty Offline Location	Error for Archive.	[The name of the off-line location must be given.]
empty VG Key	Error for Archive.	
Empty Volume group error	Error for DsStArchiveProxy.	
Environmental variable POSIXUTILCONFIG not set	Error from DsStPosixUtil.	<ol style="list-style-type: none"> 1. Determine an appropriate value for the variable. 2. Set the variable to the appropriate value. 3. Run the command.
Error : User Password Host Source RequestID are not entered	Error from inftp.	[Any one or more of the following have not been entered: User, Password, Host, Source, or RequestID.] Verify that non-empty strings have been provided for all fields.
Error 47	Standard system error.	

Table 18.6-4. Storage Management User Messages (10 of 39)

Message Text	Impact	Cause and Corrective Action
Error close ftp control connection	DsSt error.	Retry.
Error close ftp data connection	DsSt error.	Retry.
Error closing server	Error for DsStFtpUtility.	Retry.
Error encountered in stored procedure	Error for Archive.	[See the description from the stored procedure DsCStSPBSelectByName.] Retry.
Error encountered in stored procedure	Error from database.	[See the description from the stored procedure.] Retry.
Error in accepting socket with accept	DsSt error.	Retry.
Error in closing server	Error for DsStFtpUtility.	Retry.
Error in closing the server	Error for DsStFtpUtility.	Retry.
Error in closing the server	Error from DsStNetworkResource.	Retry.
Error in executing ftp command	DsSt error.	Retry.
Error in executing ftp Exec()	Error from DsStNetworkResource.	Retry.
Error in FTP Unable to open file to FTP	Error from DsStNetworkResource.	1. Verify that the file exists. 2. Retry.
Error in opening server	Error for DsStFtpUtility.	Retry.
Error in opening the server	Error from DsStNetworkResource.	Retry.
Error in Receiving files	Error for DsStFtpUtility.	Retry.
Error in receiving files	Error from DsStNetworkResource.	Retry.
Error in sending files	Error from DsStNetworkResource.	Retry.
Error in setting hostname	Error for DsStFtpUtility.	Retry.
Error in setting local directory	Error for DsStFtpUtility.	Retry.

Table 18.6-4. Storage Management User Messages (11 of 39)

Message Text	Impact	Cause and Corrective Action
Error in setting the local directory	Error from DsStNetworkResource.	Retry.
Error in setting the remote directory	Error from DsStNetworkResource.	Retry.
Error in setting user	Error for DsStFtpUtility.	Retry.
Error in setting user name	Error from DsStNetworkResource.	Retry.
Error in setting User Password	Error for DsStFtpUtility.	Retry.
Error Open File descriptor	DsSt error.	Fatal
Error opening the server	Error for DsStFtpUtility.	Retry.
Error receiving files	Error for DsStFtpUtility.	Retry.
Error Recieving [sic] file	Error for DsStFtpUtility.	Retry.
Error returned when distributes [sic] files from a staging disk to the tape media in tar format.	Error for tape.	
Error returned when ingests [sic] files from the tape media to a staging disk in tar format.	Error for tape.	
Error returned when verify [sic] the source file list.	Error for tape.	
Error selecting data from the database	Error for Archive.	[A stored procedure is returning a failed status code for a stored procedure.] 1. Set the debug level (for the relevant server) at 3 in the Registry database. 2. Reproduce the error.
Error setting hostname	Error for DsStFtpUtility.	Retry.
Error setting hostname -- host not exist [sic] or network error	Error from DsStNetworkResource.	Retry.

Table 18.6-4. Storage Management User Messages (12 of 39)

Message Text	Impact	Cause and Corrective Action
Error setting local directory	Error for DsStFtpUtility.	Retry.
Error setting remote directory	Error for DsStFtpUtility.	Retry.
Error setting server	Error for DsStFtpUtility.	Retry.
Error setting user	Error for DsStFtpUtility.	Retry.
Error setting user name	Error for DsStFtpUtility.	Retry.
Error setting user password	Error from DsStNetworkResource.	Retry.
Error setting user password function	Error for DsStFtpUtility.	Retry.
Error updating the initial RegMgrNotifiedFlag	Media error message.	[No action necessary.]
Error writing file in fast copy	Error from DsStPosixUtil.	Retry.
ESDT request failed	Standard system error (fatal).	Contact User Services.
Exceeded maximum number of allowable connections to Sybase	Error from database.	1. Verify that the Sybase database configuration has been configured with an adequate number of connections. 2. Retry.
Exceeded storage allocation for current directory or dataset -- error in ftp #552	Error returned by the FTP protocol.	
Exec format error	Standard system error.	
execute() of Stored Procedure -- DsStGRInsert -- failed	Error from DsStDistributionFtp.	[No action necessary.]
Failed attempting to connect to Sybase server	Error from database.	1. Ensure that DBServer for the server has been set properly in the Registry database. 2. Ensure that DBName for the server has been set properly in the Registry database. 3. Retry.
Failed attempting to login to Sybase	Error from database.	1. Verify that the Application ID for the server has been properly set in the Registry database. 2. Verify that login accounts have been properly set up in the Sybase database. 3. Retry.

Table 18.6-4. Storage Management User Messages (13 of 39)

Message Text	Impact	Cause and Corrective Action
Failed in checking the slot status.	Media error message.	
Failed in checking the status of tape drive	Media error message.	
Failed in executing stored procedure to retrieve device info by stackerId.	Media error message.	
Failed in executing stored procedure to retrieve slot info by stackerId.	Media error message.	
Failed in executing stored procedure to retrieve stacker info by stackerId.	Media error message.	
Failed to allocate a tape device	Error from SCSI.	
failed to build the client object with parameters for the CDS path	Error for DsStArchiveProxy.	
Failed to deallocate a tape device	Error from SCSI.	
Failed to get necessary information from database	Error for Archive.	[No action necessary.]
Failed to get the cellname	Error for DsStArchiveProxy.	
Failed to get the client mode	Error for DsStArchiveProxy.	1. Ensure that a mode has been specified as an option on the command line or in the calling script. 2. If a mode has been entered, ensure that it is a valid mode and that all other required command-line options have been entered.
Failed to get the PF config File Pointer	Error for DsStArchiveProxy.	[This command requires a ConfigFile option, where the word ConfigFile is followed by a valid PF config file name.]
Failed to get the PF Global pointer	Error for DsStArchiveProxy.	
Failed to insert the file into the staging disk inventory	Staging disk error message.	(This error should not occur.) 1. Verify that the staging disk exists. 2. Retry.
Failed to load tape (time out).	Error from SCSI.	Retry.

Table 18.6-4. Storage Management User Messages (14 of 39)

Message Text	Impact	Cause and Corrective Action
Failed to rename the file in the file system	Staging disk error message.	1. Check the SYSLOG for errors. [For detailed instructions refer to the Check Log Files procedure (Section 18.6.1.2).] 2. Resubmit the request after problems have been corrected.
Failed to rename the file in the file system and could not reset the original file in the staging disk inventory	Staging disk error message.	Retry.
Failed to rename the file in the staging disk inventory	Staging disk error message.	1. Check the staging disk inventory for the file to be renamed. 2. Retry if the file exists. (If the file does not exist, the request should not be attempted again.)
Failed to stat [sic] the created staging disk directory and the staging disk entry could not be removed from the database	Staging disk error message.	1. Check NFS for errors. 2. The directory entry should be cleaned out of the database upon a warm or cold startup. 3. Retry.
Failed to stat [sic] the created staging disk directory.	Staging disk error message.	1. Check for NFS errors. 2. Retry. [If the directory does exist, the directory entry should be removed upon a warm or cold start of the server.]
Failed trying to make the directory entry in the file system.	Staging disk error message.	1. Check the SYSLOG for NFS errors. [For detailed instructions refer to the Check Log Files procedure (Section 18.6.1.2).] 2. Check the permissions of the rootpath. 3. Retry after problems have been corrected.
Failed trying to make the directory entry in the file system. The directory entry could not be removed from the Database.	Staging disk error message.	1. Check the SYSLOG for NFS errors. [For detailed instructions refer to the Check Log Files procedure (Section 18.6.1.2).] 2. Check the permissions on the rootpath. (the directory entry will be cleaned out of the database upon a warm start or cold start of the server.)
Failure in updating database table(s).	Media error message.	
Failure to close file -- not enough space to flush unwritten bytes	Error from DsStStream.	Retry.
Failure to close file in DsStStream	Error from DsStStream.	
Failure to establish a tcp connection	Error returned by the FTP protocol.	
Failure to open file in DsStStream	Error from DsStStream.	Verify that the file name is spelled correctly and the path is correct.

Table 18.6-4. Storage Management User Messages (15 of 39)

Message Text	Impact	Cause and Corrective Action
Fatal error returned by Data Distribution.	Error detected by Data Distribution.	
Fildes is not a valid open file descriptor.	Error from SCSI.	
Fildes is not associated with a device driver that accepts control functions.	Error from SCSI.	
File descriptor in bad state	Standard system error.	
File does not exist	Error from DsStUnixCompress.	Verify that the file name is spelled correctly and its path is correct.
File does not exist to copy	Error from DsStPosixUtil.	Verify the path and the spelling of the file name.
File exists	Standard system error.	
File locking deadlock	Standard system error.	
File name of type RWCString is null	Error from DsStFileCompress.	[The file to be compressed was not given a name.] Enter a non-empty string to indicate file name before attempting this operation.
File name too long	Standard system error.	
File not found	Error from DsStFileCompress.	
File size in archive and DsMdFileStorage are different.	DsSt error.	1. Notify the Archive Manager to compare the entries in the SDSRV database DsMdFileStorage table and the file in the archive to determine whether the file size is incorrect in the database table or the file in archive is corrupted. 2. When the Archive Manager reports that the problem has been corrected, cancel the distribution request using the Data Distribution Operator GUI. 3. Resubmit the distribution request.
File table overflow	Standard system error.	
file to [sic] big for buffer -- cannot do fast copy	Error from DsStPosixUtil.	
file to [sic] big to read	Error from DsStPosixUtil.	
File too large	Standard system error.	

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Message Text	Impact	Cause and Corrective Action
File transfer protocol mismatch	Error returned by the FTP protocol (fatal).	
FTP file transfer failed without an FTP error code (unknown cause)	Error returned from DsStCacheManagerS server.	Retry.
Generic error returned by Data Distribution.	Error detected by Data Distribution.	
Get Location failed -- pathIndex > DsStNullIndex	Error for Archive.	
Get Sense Data failed.	Error from SCSI.	
GetVolGroupLocation failed -- SP DsCStVGSelectHistory execute failed	Error for Archive.	Retry.
Granule insert failed	Standard system error (retry).	Try again later.
Hdf server failer [sic] during processing.	Standard system error (retry).	To regain Hdf server all Hdf servers must be restarted.
Host is down	Standard system error.	
I/O error	Standard system error.	Retry.
ID not set	Error from DsStDistributionFtp.	[Could not find the parameter that indicates the request ID for this request (request parameter is currently an empty string).]
Identifier removed	Standard system error.	
If the file exist [sic] with enforced record locking enabled, record locks are on the file	Error from SCSI.	
Illegal byte sequence	Standard system error.	
Illegal seek	Standard system error.	
Inappropriate I/O control operation for device	Standard system error.	
Ingest starts	Media error message.	[No action necessary.]

Table 18.6-4. Storage Management User Messages (17 of 39)

Message Text	Impact	Cause and Corrective Action
InsertBackupTable() failed -- Unable to Insert into the DsStBackup table -- SP DsCStBInsert execute() failed	Error for Archive.	
InsertRestoreTable() failed - Unable to Insert into the DsStRestore table -- SP DsCStRInsert execute() failed	Error for Archive.	
Insufficient space to move file to the read only cache area	Error from DsStStagingMonitor.	Retry.
Insufficient storage -- error in ftp #452	Error returned by the FTP protocol.	
Interrupted system call, possibly during a select() call	Standard system error.	
Invalid Archive area specified for retrieve	Error for Archive.	
Invalid command line options	Error returned by the FTP protocol (fatal).	
Invalid command sent to Science Data Server	Standard system error (fatal).	
Invalid drive path.	Media error message.	
Invalid function argument.	Standard system error.	[If this occurred after the bind() command, the namelen parameter may indicate an incorrect size, or the indicated socket may already be bound.]
Invalid or unsupported checksum type	Standard system error (fatal).	
Invalid password	Error returned by the FTP protocol (fatal).	
Invalid put method type	Error returned from DsStCacheManagerServer.	
Invalid slot	Standard system error.	
Invalid slot number.	Media error message.	
Invalid stacker path.	Media error message.	

Table 18.6-4. Storage Management User Messages (18 of 39)

Message Text	Impact	Cause and Corrective Action
Invalid Transfer stage returned from DB -- err in RestartBackup() or RestartRestore()	Error for Archive.	
Is a directory	Standard system error.	Either select a different file name, select a file under the specified directory, or delete the directory.
Level 2 halted	Standard system error.	
Level 2 not synchronized	Standard system error.	
Level 3 halted	Standard system error.	
Level 3 reset	Standard system error.	
Link exists	Error returned from DsStCacheManagerServer.	
Link has been severed	Standard system error.	
Link number out of range	Standard system error.	
Link of files failed	Staging disk error message.	1. Check the staging disk log to identify the reason for the symlink failure. 2. Retry.
Local error in processing -- error in ftp #451	Error returned by the FTP protocol.	
Machine is not on the network	Standard system error.	
Making space	Error returned from DsStCacheManagerServer.	[Space needed in cache.] Retry
Managed directory path is invalid	Error returned from DsStCacheManagerServer.	Check path and mount points.
Math argument out of domain of function	Standard system error.	
Message tables full	Standard system error.	
Message too long for message buffer	Standard system error.	
Missing request parameters	Media error message.	

Table 18.6-4. Storage Management User Messages (19 of 39)

Message Text	Impact	Cause and Corrective Action
More granules match the search	Standard system message. This is only a warning, not an error.	[No action necessary.]
MountTape Failed	Media error message.	
msg	Error for DsStArchiveProxy.	Retry.
Multihop attempted	Standard system error.	
Name not unique on network	Standard system error.	
Need account for storing files -- error in ftp #532	Error returned by the FTP protocol.	
Network dropped connection because of reset	Standard system error.	
Network is down	Standard system error.	Wait for the network to come back up.
Network is unreachable	Standard system error.	
No available drive.	Media error message.	
No buffer space available	Standard system error.	
No child processes	Standard system error.	
No CSI structure available	Standard system error.	
No data available	Standard system error.	
No disk space in pull monitor	Error from DsStDistributionFtp.	Retry.
No entries available to be deleted by Batch Delete function	Error for Archive.	[No action necessary.]
No entries in the queue	From DsStDiskRequestManager.	[No action necessary.]
No filename to delete from the amass cache	Error for DsStArchiveProxy.	Retry.

Table 18.6-4. Storage Management User Messages (20 of 39)

Message Text	Impact	Cause and Corrective Action
No granules have been selected for request	Standard system error (fatal).	Correct the request and resubmit.
NO hwci	Error for DsStArchiveProxy.	1. Ensure that a Hardware Configuration Item (HWCI) has been specified as an option on the command line or in the calling script. 2. If an HWCI has been entered, ensure that it is valid and that all other required command-line options have been entered.
No hwci:volgrp error	Error for DsStArchiveProxy.	
No HWCI:volume group was passed	Error for Archive.	
No instance of queue exists	Error from DsStDiskRequestManager.	1. Note all circumstances related to the error. 2. Submit a trouble ticket.
No message of desired type	Standard system error.	
No online stacker.	Media error message.	
No permission to access file	Error returned by the FTP protocol (fatal).	
No permission to write file	Error returned by the FTP protocol (fatal).	
No record locks available	Standard system error.	
No records found in file to FTP	Error from DsStNetworkResource.	Check staging disk for file with list. Retry.
No requests have been cancelled for this server	Message returned from DsStCacheManagerServer.	[Not an error.] [The server is checking to see if any requests have been cancelled in order to process the cancellation. No requests have been cancelled. This error can be safely ignored as it is internal to STMGT.]
No resource (drive/slot) available for request	Error for tape.	1. Check stacker/drive status. 2. If appropriate, refill stacker. 3. Retry.
No route to host	Standard system error.	
NO SCSI device	Error from SCSI.	
No servers need to be awakened to service this request	Message returned from DsStCacheManagerServer.	[Not an error.] [The submitted request is a trivial request that can be fulfilled solely from the database. No servers will be notified as part of the request processing.]

Table 18.6-4. Storage Management User Messages (21 of 39)

Message Text	Impact	Cause and Corrective Action
No space left on device	Standard system error.	
No space left on device.	Error from SCSI.	
No such device	Standard system error.	
No such device or address; server exited before connection was complete	Standard system error.	
No such file or directory	Standard system error.	Verify the path name of the file or directory.
No such process	Standard system error.	
No such volume group	Error for Archive.	
No value for Capacity set in configuration file	Error from DsStFtpResourceCon fig.	<ol style="list-style-type: none"> 1. Ensure that the capacity has been queried on a valid device. 2. Ensure that the ftp resource config file exists. 3. Ensure that the ftp resource config file contains a value for CAPACITY.
Not a data message	Standard system error.	
Not a directory	Standard system error.	Verify the directory path.
Not a stream device	Standard system error.	
Not enough space	Standard system error.	<ol style="list-style-type: none"> 1. Kill unnecessary processes. 2. Re-nice necessary processes if possible.
Not logged in - error in ftp #530 - username or password incorrect	Error returned by the FTP protocol.	
Not owner	Standard system error.	Either change the permissions or ownership of the file/executable, or run as a different user.
Null UserId or Password	Error for Archive.	[A valid UNIX userID must be entered and must contain at least one character.]
Number of symbolic links encountered during path name traversal exceeds MAXSYMLINKS	Standard system error.	[There are probably symbolic links pointing to each other.]
Object is remote	Standard system error.	

Table 18.6-4. Storage Management User Messages (22 of 39)

Message Text	Impact	Cause and Corrective Action
Online Backup Failed EcUtFileCopy.Copy() failed	Error for Archive.	[No action necessary.]
Operation already in progress	Standard system error.	Wait for an operation on the socket or other object to complete.
Operation not applicable/not implemented	Standard system error.	
Operation not supported on transport endpoint	Standard system error.	
Operation now in progress	Standard system error.	
Option not supported by protocol	Standard system error.	
Out of stream resources	Standard system error.	Wait for other processes to release resources.
Package not installed	Standard system error.	
Page type unknown -- error in ftp #551	Error returned by the FTP protocol.	
Parameter syntax error in FTP -- error in ftp #501	Error returned by the FTP protocol.	
Partial failure. Some granules of request individually failed.	Media error message (retry).	Check each granule status.
Partial failure: some granules failed prior to reaching DDIST server.	Media error message (retry).	Check each granule status.
Path points to a remote machine, and the link to that machine is no longer active.	Error from SCSI.	
Path points to an illegal address.	Error from SCSI.	
path to pull monitor not set	Error from DsStDistributionFtp.	[Could not find the parameter that indicates the effective root directory for the pull monitor.] Verify that a path is being supplied.
Pending write is greater than the allocated space	Error from DsStStream.	Temporarily write data to a disk with more free space.

Table 18.6-4. Storage Management User Messages (23 of 39)

Message Text	Impact	Cause and Corrective Action
Permission denied	Standard system error.	1. Execute as root. 2. If already root, choose another socket type or protocol.
Possible space limitation or the disk does not exist in the database	Staging disk error message.	1. Check whether the server has space available. 2. Retry when sufficient space exists. (If the disk does not exist in the database, the request should be failed.)
Process chosen as database deadlock victim	Error from database.	[Command is automatically re-run.]
Protocol driver not attached	Standard system error.	
Protocol error	Standard system error.	
Protocol family not supported	Standard system error.	
Protocol not supported	Standard system error.	Call socket() with a different protocol.
Protocol wrong type for socket	Standard system error.	[Source code needs to be checked; name struct passed to connect command must reflect the protocol type used to open the socket.]
Pull monitors [sic] pull directory is null	Error from DsStDistributionFtp.	[Could not find the parameter that indicates the pull directory for this ftp request.] Verify that a path is being supplied.
Read only cache location does not have adequate permissions	Error for Archive.	1. Ensure that the user ID used when logging in has the proper permissions. 2. If necessary, contact the Cache Manager Administrator to have the permissions set properly.
Read-only file system	Standard system error.	1. Determine whether it is possible to write to the destination directory (i.e., check permissions). 2. If it is possible to write to the destination directory, remount the device that contains the directory.
Remote address changed	Standard system error.	
Remote archive not created for BackupOnline or BackupOffline	Error for Archive.	Retry.
Request has been cancelled	Standard system error (fatal).	Contact User Services.
Request or arg is not valid for this device.	Error from SCSI.	
Request size exceeds Capacity or Threshold.	Error detected by Data Distribution.	Retry.

Table 18.6-4. Storage Management User Messages (24 of 39)

Message Text	Impact	Cause and Corrective Action
Requested file action not taken -- error in ftp #450	Error returned by the FTP protocol.	
RequestMgrCleanupThread Logging status	Media error message (retry).	Retry.
Resource temporarily unavailable	Standard system error.	Either kill all unnecessary processes or wait for other processes to terminate.
RestartBackup() failed -- SP DsCStBSelectByName execute() failed	Error for Archive.	
RestartNotification function failed	Error for DsStArchiveProxy.	[No action necessary.]
RestartRestore() failed -- SP DsCStRSelectByName execute() failed	Error for Archive.	
Restore Offline failed	Error for Archive.	
Result too large	Standard system error.	
Retry error returned by Data Distribution.	Error detected by Data Distribution.	Retry.
SCSI device is busy	Error from SCSI.	Retry.
SCSI device is in check status	Error from SCSI.	Retry.
SCSI device is not accessible.	Error from SCSI.	
Server crashed	STMGT restart code.	1. Check the logs for the identified server to ascertain the cause of the crash. 2. Restart the server as soon as possible 3. Contact the DAAC Help Desk for additional support.
Server crashed and is being automatically restarted (warm)	STMGT restart code.	Check the logs for the identified server to ascertain the cause of the crash.
Server is temporarily unavailable	STMGT restart code.	[The requested server is not running.] 1. If the server is expected to be running, check the logs to determine why the server is no longer running. 2. Restart the server. 3. Resubmit the request.
Service not available -- error in ftp #421	Error returned by the FTP protocol.	
ShortName attribute value mismatch	Standard system error (fatal).	Check ShortName in both metadata file and PDR file.

Table 18.6-4. Storage Management User Messages (25 of 39)

Message Text	Impact	Cause and Corrective Action
Slot number in database does not match any of the physical slot numbers.	Media error message.	
Socket operation on non-socket	Standard system error.	[Source code needs to be checked; program should not attempt to perform socket operations on non-socket file descriptors.] Submit a trouble ticket.
Socket type not supported	Standard system error.	
Software caused connection abort	Standard system error.	
Some physical I/O error has occurred.	Error from SCSI.	
Source file does not exist	Error returned by the FTP protocol (fatal).	
Source file for a retrieve request was not found	Error for Archive.	1. Verify the spelling and pathname of the file to be retrieved. 2. Retry.
Source file for link or delete not found	Staging disk error message.	Verify the spelling and pathname of the file to be deleted or linked.
source parameters are not set	Error from DsStDistributionFtp.	[Could not find the parameter that indicates the source for the ftp transfer (source parameter is currently an empty string).] Ensure that the source is being supplied.
Space has not been reserved in cache for this file	Error returned from DsStCacheManagerServer.	1. Check for server cold start. 2. Resubmit request.
space not available on staging disk for inftp	Error from inftp.	1. If the file is bigger than the space allocated for staging disk, modify the staging disk configuration. 2. If the file is not bigger, wait for other requests to complete so that space will be freed on the staging disk. 3. Retry.
Spatial query against this ESDT is not supported	Standard system error (fatal).	
Srmount error	Standard system error.	
StagingMonitor object was not created in GetStagingMonitor()	Error for Archive.	Retry.
Stale NFS file handle	Standard system error.	

Table 18.6-4. Storage Management User Messages (26 of 39)

Message Text	Impact	Cause and Corrective Action
Stored procedure not found or invalid	Error from database.	1. Check the database and/or contact the Database Administrator. 2. Retry.
Suspended by a STMGT client, could be resumed later.	Media error message (retry).	Retry.
Sybase does not recognize the specified login name	Error from database.	1. Ensure that, if the DBLoginName parameter has been set in the Registry database, it has been set to a login that actually exists in the Sybase database. 2. Retry.
system compress 'compress' function failed	Error from DsStUnixCompress.	[There may not be enough space on the partition for the compressed and uncompressed versions to exist simultaneously.] 1. Temporarily move the file to a partition with more space. 2. Compress the file in the temporary location. 3. Move the compressed file back to the original location.
System copy function failed	Error from DsStFileCompress.	
system move 'mv' failed	Error from DsStUnixCompress.	1. Verify that the current user ID has write permission for the file. 2. Verify that the current user ID has write permission in the target directory. 3. Verify that the destination file does not exist already.
system symlink failed to make a symbolic link from a source file to the target filename	Error from DsStUtility.C.	
system uncompress 'uncompress' failed	Error from DsStUnixCompress.	[There may not be enough space on the partition for the compressed and uncompressed versions to exist simultaneously.] 1. Temporarily move the file to a partition with more space. 2. Compress the file in the temporary location. 3. Move the compressed file back to the original location.
Temporary Backup Failed EcUtFileCopy.Copy() failed	Error for Archive.	[No action necessary.]
Text file busy	Standard system error.	
The Cache Manager Copy Into Cache function failed	Error for Archive.	Retry.

Table 18.6-4. Storage Management User Messages (27 of 39)

Message Text	Impact	Cause and Corrective Action
The Cache Manager Reserve Space function failed	Error for Archive.	Retry.
The child of a daemon process servicing your request crashed	Error returned from DsStCacheManagerS server.	Retry.
The construction invoked is not valid for use.	Error for Archive.	
The database could not create a staging disk. Possible space limitations	Staging disk error message.	1. Check the available space of the staging disk server on the Storage Management Control GUI (Storage Config tab). 2. Retry.
The destination directory where the file is to be copied does not exist	Staging disk error message.	1. Check the SYSLOG for NFS errors. [For detailed instructions refer to the Check Log Files procedure (Section 18.6.1.2).] 2. If the destination is a staging disk, verify that the staging disk exists. 3. Retry after problems have been corrected.
The execute() failed in Commit Transaction	Error for Archive.	Retry.
The execute() failed in DsStCommonDBIF	Error for Archive.	Retry.
The file could not be removed from the staging disk database inventory and no attempt will be made to remove the file from the file system	Staging disk error message.	1. Check the staging disk logs for database errors concerning the removal of the file from the database. 2. Retry.
The file does not exist and write permission is denied by the parent directory of the file to be created.	Error from SCSI.	
The file to be deleted does not exist in the file system	Staging disk error message.	1. Check the SYSLOG for NFS errors. [For detailed instructions refer to the Check Log Files procedure (Section 18.6.1.2).] 2. Verify that the staging disk exists. 3. Retry after problems have been corrected.

Table 18.6-4. Storage Management User Messages (28 of 39)

Message Text	Impact	Cause and Corrective Action
The file was deleted from the staging disk database inventory but was unable to be removed from the file system.	Staging disk error message.	<ol style="list-style-type: none"> 1. Verify that the file exists. 2. Check for NFS errors in the SYSLOG. [For detailed instructions refer to the Check Log Files procedure (Section 18.6.1.2).] 3. Retry after problems have been corrected.
The file was not found	DsSt error.	<ol style="list-style-type: none"> 1. Verify that the file name is spelled correctly. 2. Verify that the path is correct. 3. Retry.
The host for ftp does not have a valid IP address and can not be connect to.	Media error message.	<ol style="list-style-type: none"> 1. Verify the host name. 2. Retry.
The host for ftp exist [sic] but cannot be connected to. Check the FtpServers [sic] debug log for the errno.	Media error message.	<ol style="list-style-type: none"> 1. Check the FtpServer debug log for the errno. 2. Respond to the error. 3. Retry.
The input path is neither a regular file nor a directory	Error from DsStUtility.C.	<p>[It appears that a device-special file has been passed as a source path for a copy operation. This type of operation is not supported.]</p> <ol style="list-style-type: none"> 1. Verify that the input path is correct. 2. Retry.
The length of the path argument exceeds {PATH_MAX}, or the length of a path component exceeds {NAME_MAX}.	Error from SCSI.	
The linked file created by the Cache Manger does not exist	Staging disk error message.	<ol style="list-style-type: none"> 1. Check the SYSLOG for NFS errors. [For detailed instructions refer to the Check Log Files procedure (Section 18.6.1.2).] 2. Check the CacheManager logs for errors. 3. Retry after problems have been corrected.
The method to suspend a request to be deleted failed	Error for DsStArchiveProxy.	Retry.
the mode the client passed does not match the mode the client is running in – backup mode should match primary mode	Error for Archive.	Retry.
the move request failed during the copy	Error from DsStStagingMonitor.	Retry.

Table 18.6-4. Storage Management User Messages (29 of 39)

Message Text	Impact	Cause and Corrective Action
The move request was failed because it is a dupe of a failed request	Error from DsStStagingMonitor.	Retry.
The named file does not exist.	Error from SCSI.	
The named file exists	Error from SCSI.	
The named file is a character special or block special file, and the device associated with this special file does not exist.	Error from SCSI.	
The named file is a directory and flag is write or read/write	Error from SCSI.	
The named file resides on a read-only file system.	Error from SCSI.	
The options provided for this request are not valid.	Standard system error (fatal).	Contact User Services.
the passed MasterList must be same size as retrieve from DB in ResumeStoreRequest or ResumeRetrieveRequest	Error for Archive.	
The process has too many open files	Error from SCSI.	
The request has invalid input parameters	Error for Archive.	
The request has invalid input parameters	Error from DsStStagingMonitor.	
The request has not completed in the maximum amount of time allocated	Error from DsStStagingMonitor.	Retry.
The request is already being serviced	Error returned from DsStCacheManagerServer.	[This is an internal error detected by STMGT. A request that is already being serviced by a thread was identified by a manager thread as being available for servicing. The attempt to assign the request to a second thread has failed.]

Table 18.6-4. Storage Management User Messages (30 of 39)

Message Text	Impact	Cause and Corrective Action
The request was cancelled because of a failure earlier in the processing.	Error for Archive.	<ol style="list-style-type: none"> 1. Check the error code of all sub-requests of the main request. 2. Retry.
The requested function cannot be performed due to the permission settings on the file/directory	Staging disk error message.	<ol style="list-style-type: none"> 1. Change the permissions on the file. 2. Retry.
The server was unable to allocate a socket for listening	Error returned from DsStCacheManagerServer.	<p>[A UNIX error has occurred preventing the allocation of a socket for listening purposes. This is an extremely unusual circumstance.]</p> <ol style="list-style-type: none"> 1. Document the error. 2. Refer the error to the System Administrator for investigation.
The slot or drive returned from allocate is invalid	Error for tape.	<ol style="list-style-type: none"> 1. Check stacker/drive status. 2. If appropriate, refill stacker. 3. Retry.
The source file for a link does not exist	Staging disk error message.	<ol style="list-style-type: none"> 1. Check the file system for the source file. 2. If the source file exists in the file system, check the SYSLOG for NFS errors. [For detailed instructions refer to the Check Log Files procedure (Section 18.6.1.2).] 3. Retry after problems have been corrected.
The source file to be copied does not exist in the file system	Staging disk error message.	<ol style="list-style-type: none"> 1. Check the SYSLOG for NFS error. [For detailed instructions refer to the Check Log Files procedure (Section 18.6.1.2).] 2. Retry after problems have been corrected.
The specified granule is not valid	Standard system error (fatal).	
The specified tape drive is empty.	Media error message.	
The specified tape drive is occupied.	Media error message.	
The Staging Disk no longer exist [sic] in the Database	Staging disk error message.	<ol style="list-style-type: none"> 1. Check whether the staging disk was cold started, which would have destroyed the disks. 2. If the disk was a virtual disk, check whether the path still exists. 3. Check the SYSLOG for file system errors. [For detailed instructions refer to the Check Log Files procedure (Section 18.6.1.2).] 4. Retry if possible after problems have been corrected.
The Staging Monitor Move function failed	Error for Archive.	

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Message Text	Impact	Cause and Corrective Action
The staging monitor request queue encountered an error retrieving or writing data.	Error from DsStStagingMonitor.	
The submission of a Cache Manager Copy Into Cache function failed	Error for Archive.	Retry.
The system file table is full.	Error from SCSI.	
The system is currently busy and cannot accept your request at this time	Standard system error (retry).	Resubmit the request later.
The system is currently undergoing maintenance and can not accept your request at this time	Standard system error (retry).	Resubmit the request later.
The system is unable to allocate a send descriptor.	Error from SCSI.	
The system remove function failed in Delete()	Error for Archive.	[No action necessary.]
The system was unable to process your order. Please contact User Services	Standard system error (fatal).	Contact User Services.
The thread pool is not configured for the server	Error returned from DsStCacheManagerServer.	1. Check the configuration of the server to be started (i.e., verify from the Storage Management Control GUI that the service thread pool has been defined.) 2. Retry.
This granule has been deleted and is no longer available	Standard system error (fatal).	
This granule has been deleted from the archive and is no longer available	Standard system error (fatal).	
This is not an error -- detailed portion is null	Message returned by the FTP protocol.	[No action necessary.]
This request is a duplicate	Standard system error (fatal).	

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Message Text	Impact	Cause and Corrective Action
Timeout during connect	Error returned by the FTP protocol (retry).	Retry.
Timeout during read	Error returned by the FTP protocol (retry).	Retry.
Timer expired	Standard system error.	
Too many links	Standard system error.	
Too many open files	Standard system error.	1. Direct the process to close some open files. 2. Retry.
Too many references: cannot splice	Standard system error.	
Too many symbolic links were encountered in translating path.	Error from SCSI.	
Too many users	Standard system error.	
Transport endpoint is already connected	Standard system error.	[It may not be necessary to attempt to establish a connection.] 1. If necessary, disconnect. 2. Retry.
Transport endpoint is not connected	Standard system error.	
Type mismatch in retrieving [sic] data from database	Error for Archive.	[A stored procedure is returning a different type of data than is expected by the code.] 1. Set the debug level (for the relevant server) at 3 in the Registry database. 2. Reproduce the error.
Type mismatch in retrieving [sic] data from database	Error from DsStDistributionFtp.	[A stored procedure is returning a different type of data than is expected by the code.] 1. Set the debug level (for the relevant server) at 3 in the Registry database. 2. Reproduce the error.
Unable to allocate a stream.	Error from SCSI.	
Unable to attach/stat [sic] to source location	Error returned from DsStCacheManagerServer.	1. Create/verify source path. 2. Retry.
Unable to checkpoint file -- SP DsCStSPCheckpoint File execute() failed	Error from DsStFileParameters.	[No action necessary.]

Table 18.6-4. Storage Management User Messages (33 of 39)

Message Text	Impact	Cause and Corrective Action
Unable to checkpoint inftp request as generic request -- SP DsCStSPCheckpointGenericRequest execute() failed	Error from inftp.	[No action necessary.]
Unable to checkpoint inftp request as inftp request	Error from inftp.	[No action necessary.]
Unable to checkpoint retrieve request as generic request	Error for Archive.	[No action necessary.]
Unable to checkpoint store request as generic request	Error for Archive.	[No action necessary.]
Unable to clean files from destination dir when cancelling a push	Error from DsStNetworkResource.	1. Check destination permissions. 2. Retry.
Unable to clean files from pull cache when cancelling a pull	Error from DsStNetworkResource.	1. Check pull cache permissions. 2. Retry.
Unable to construct SQL for query	Standard system error (fatal).	Verify query constraints and resubmit.
Unable to create entry for link	Error returned from DsStCacheManagerServer.	1. Check the database for permissions/errors. 2. Verify that the entry exists. 3. Retry.
Unable to free sufficient space	Error returned from DsStCacheManagerServer.	1. Manually expire cache files to free more space. 2. Retry.
Unable to get the temporary directory from Backup -- SP DsCStBSelectTempDir execute() failed	Error for Archive.	
Unable to get the temporary directory from restore -- SP DsCStRSelectTempDir execute() failed	Error for Archive.	
Unable to insert BackupID -- BackupID is Null	Error from DsStFileParameters.	1. Modify the BackupID. (A valid BackupID is required. It must be a string with at least one character.) 2. Retry.
Unable to insert checksum of file -- CheckSum = 0	Error from DsStFileParameters.	If possible, rerun the checksum on the file. (A checksum of 0 is meaningless.)

Table 18.6-4. Storage Management User Messages (34 of 39)

Message Text	Impact	Cause and Corrective Action
Unable to insert current position of a search of a volume group	Error from DsStFileParameters.	[This is an internal error in the system.] 1. Note all circumstances associated with the error (including capturing the Debug.log and ALOGs for both the reporting server and the Request Manager). 2. Submit a high-priority trouble ticket against STMGT. (Send logs in support of the trouble ticket.)
Unable to insert file size of file -- file size = 0	Error from DsStFileParameters.	Try to get file size again. (File size of 0 represents a file containing no information.)
Unable to insert managed directory entry	Error returned from DsStCacheManagerServer.	1. Check the database for permissions/errors. 2. Verify that the entry exists. 3. Retry
Unable to insert OffsiteID -- OffsiteID is Null	Error from DsStFileParameters.	1. Modify the ArchiveID. (A valid ArchiveID is required. It must be a string with at least one character.) 2. Retry.
Unable to insert the archive unique name of file -- UniqueFileName is Null	Error from DsStFileParameters.	[A non-empty unique file name must be entered here.]
Unable to Insert the ArchiveID -- ArchiveID is Null	Error from DsStFileParameters.	1. Modify the ArchiveID. (A valid ArchiveID is required. It must be a string with at least one character.) 2. Retry.
Unable to insert the checkpoint state of the request -- CheckpointState is Null	Error from DsStFileParameters.	[This is an internal error in the system.] 1. Note all circumstances associated with the error (including capturing the Debug.log and ALOGs for both the reporting server and the Request Manager). 2. Submit a high-priority trouble ticket against STMGT. (Send logs in support of the trouble ticket.)
Unable to insert the file index of the request -- EventMessage is Null	Error from DsStFileParameters.	
Unable to insert the file index of the request -- file index is less than 0	Error from DsStFileParameters.	[This is an internal error in the system.] 1. Note all circumstances associated with the error (including capturing the Debug.log and ALOGs for both the reporting server and the Request Manager). 2. Submit a high-priority trouble ticket against STMGT. (Send logs in support of the trouble ticket.)
Unable to insert the location of a source file.	Error from DsStFileParameters.	[This is an internal error in the system.] 1. Note all circumstances associated with the error (including capturing the Debug.log and ALOGs for both the reporting server and the Request Manager). 2. Submit a high-priority trouble ticket against STMGT. (Send logs in support of the trouble ticket.)

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Message Text	Impact	Cause and Corrective Action
Unable to insert the serverid of a remote archive server.	Error from DsStFileParameters.	[This is an internal error in the system.] 1. Note all circumstances associated with the error (including capturing the Debug.log and ALOGs for both the reporting server and the Request Manager). 2. Submit a high-priority trouble ticket against STMGT. (Send logs in support of the trouble ticket.)
Unable to Insert the StagingID -- StagingID is Null	Error from DsStFileParameters.	1. Modify the ArchiveID. (A valid StagingID is required. It must be a string with at least one character.) 2. Retry.
Unable to insert the status of the file (success or failure) -- errorMsg is Null	Error from DsStFileParameters.	[No action necessary.]
Unable to insert the user(client) name of file -- UserFileName is Null	Error from DsStFileParameters.	1. Modify the path/filename. (The file name must have a full path or staging disk ID and must be non-empty.) 2. Retry.
Unable to insert the VolumeGroupld.	Error from DsStFileParameters.	[This is an internal error in the system.] 1. Note all circumstances associated with the error (including capturing the Debug.log and ALOGs for both the reporting server and the Request Manager). 2. Submit a high-priority trouble ticket against STMGT. (Send logs in support of the trouble ticket.)
Unable to insert type of search on a retrieve request.	Error from DsStFileParameters.	[This is an internal error in the system.] 1. Note all circumstances associated with the error (including capturing the Debug.log and ALOGs for both the reporting server and the Request Manager). 2. Submit a high-priority trouble ticket against STMGT. (Send logs in support of the trouble ticket.)
Unable to make the directory	Staging disk error message.	1. Check the SYSLOG for errors. [For detailed instructions refer to the Check Log Files procedure (Section 18.6.1.2).] 2. Retry after problems have been corrected.
Unable to mark request as suspended	Error returned from DsStCacheManagerServer.	[The stored procedure used to mark a request as suspended (or internally pending) failed. The request cannot be marked as suspended. This may result in the request needlessly being processed repeatedly.] Retry.
Unable to mark server as up in the database	Error returned from DsStCacheManagerServer.	[The database could not be updated to reflect that the server is up.] 1. Check for previous errors that might indicate why the stored procedure could not be executed. 2. Correct the errors.
Unable to read files from source directory when storing a file	DsSt error.	Check the source directory file.

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Message Text	Impact	Cause and Corrective Action
Unable to remove a stored file from the archive.	Error from DsStFileParameters.	<ol style="list-style-type: none"> 1. Check the archive for permission errors. 2. Submit a request to the System Administrator to correct permission errors. 3. Retry when permission errors have been corrected.
Unable to remove link entry	Error returned from DsStCacheManagerServer.	<ol style="list-style-type: none"> 1. Check the database for permissions/errors. 2. Verify that the entry exists. 3. Retry
Unable to remove managed directory entry	Error returned from DsStCacheManagerServer.	<ol style="list-style-type: none"> 1. Check the database for permissions/errors. 2. Verify that the entry exists. 3. Retry
Unable to restore checkpointed IngestFtp request from DB	Error from inftp.	
Unable to restore checkpointed retrieve request from database	Error for Archive.	
Unable to restore checkpointed store request from database	Error for Archive.	
Unable to retrieve granule from database	Standard system error (retry).	Try again later.
Unable to retrieve the base block size value from configuration file	Error from DsStFtpResourceConfig.	<ol style="list-style-type: none"> 1. Ensure that the block size has been queried on a valid device. 2. Ensure that the ftp resource config file exists. 3. Ensure that the ftp resource config file contains a value for BLOCKSIZE.
Unable to retrieve the number of FTP retries from configuration file	Error from DsStFtpResourceConfig.	<ol style="list-style-type: none"> 1. Ensure that the number of retries has been queried on a valid device. 2. Ensure that the ftp resource config file exists. 3. Ensure that the ftp resource config file contains a value for RETRIES.
Unable to retrieve the pause time from the resource configuration file	Error from DsStFtpResourceConfig.	<ol style="list-style-type: none"> 1. Ensure that the sleep time has been queried on a valid device. 2. Ensure that the ftp resource config file exists. 3. Ensure that the ftp resource config file contains a value for SLEEPTIME.
Unable to retrieve the value for Pullfile from the configuration file	Error from DsStFtpResourceConfig.	<ol style="list-style-type: none"> 1. Ensure that the pullfile name has been queried on a valid device. 2. Ensure that the ftp resource config file exists. 3. Ensure that the ftp resource config file contains a value for PULLFILENAME.

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Message Text	Impact	Cause and Corrective Action
Unable to update checkpoint state for checkpointed request	Error for Archive.	[No action necessary.]
Unable to update checkpoint state for checkpointed request	Error from inftp.	[No action necessary.]
Unable to update checkpoint state for file -- SP DsCStSPCheckpoint FileState execute() failed	Error from DsStFileParameters.	[No action necessary.]
Unable to update checkpoint status for checkpointed request	Error for Archive.	
Unable to update checksum for file -- SP DsCStSPCheckpoint Checksum execute() failed	Error from DsStFileParameters.	[A checksum is a way of validating a file. From this point, it may not be possible to verify the file's completeness and genuineness.] [No action necessary.]
Unable to update file index for checkpointed request	Error for Archive.	[No action necessary.]
Unable to update file size	Error returned from DsStCacheManagerS erver.	1. Check the database for permissions/errors. 2. Verify that the entry exists. 3. Retry.
Unable to update file state	Error returned from DsStCacheManagerS erver.	1. Check the database for permissions/errors. 2. Verify that the entry exists. 3. Retry
Unable to update fileSize for file -- SP DsStFUpdateFileSize execute() failed	Error from DsStFileParameters.	N/A
Unable to update physical location for file -- SP DsCStSPCheckpoint FileLoc execute() failed	Error from DsStFileParameters.	[No action necessary.]
Unable to update stage and status in DsStBackup table -- SP DsCStBUpdStageAnd Status execute() failed	Error for Archive.	[No action necessary.]

Table 18.6-4. Storage Management User Messages (38 of 39)

Message Text	Impact	Cause and Corrective Action
Unable to update stage and status in DsStRestoreTable -- SP DsCStRUpdStageAndStatus execute() failed	Error for Archive.	[No action necessary.]
Unable to update staging disk tag for file -- SP DsCStSPCheckpointSDTag execute() failed	Error from DsStFileParameters.	[No action necessary.]
Unable to update status(failed) for file -- SP DsCStSPCheckpointFileFailure execute() failed	Error from DsStFileParameters.	
Unable to write a block of data. Check if the destination directory is full or if there are network errors	Error from DsStNetworkResource.	1. Check whether the destination directory has space available. 2. Check for network errors. 3. Retry when sufficient space exists or network errors have been corrected.
Unauthenticated [sic] kftp user -- error in ftp #705	Error returned by the FTP protocol.	
Undetermined error from sshfilexfers, possibly remote directory missing	Error returned by the FTP protocol (retry).	Retry.
Undetermined error within sshfilecopy	Error returned by the FTP protocol (retry).	Retry.
Unknown command -- error in ftp #500	Error returned by the FTP protocol.	
Unknown device error returned.	Error from SCSI.	
Unknown Error	Error returned by the FTP protocol (fatal).	
Unknown failure in secure copy	Error returned by the FTP protocol (retry).	Retry.
Unknown or unsupported checksum type	Standard system error (retry).	Retry.

Table 18.6-4. Storage Management User Messages (39 of 39)

Message Text	Impact	Cause and Corrective Action
Unknown RPC failure	Staging disk error message.	Retry.
UnMountTape Failed	Media error message.	
Update of multiple row selects not supported	Error from database.	[This is an internal STMGT error.] 1. Note all circumstances associated with the error, including the identity of the server reporting the error. 2. Report the error to the DAAC Help Desk as soon as possible.
Users [sic] quota full	Error from SCSI.	
Value too large for defined data type	Standard system error.	
Your granule search was taking too long to complete and has been aborted	Standard system error (fatal).	Further constrain the spatial or temporal coverage and try again.
Your order contains too many granules. Please break into two or more orders.	Standard system error (fatal).	Break the request into two or more smaller requests.
Your request is still in process -- please be patient	Error returned from DsStCacheManagerServer.	1. Wait. 2. Retry if necessary.
Your request specified invalid distribution media options and could not be accepted	Standard system error (fatal).	Contact User Services.

Table 18.6-5. Order Manager GUI User Messages (1 of 13)

Message Text	Impact	Cause and Corrective Action
<p>!!! ERROR: It appears that all granules have been failed. You can not submit or partition a request with all FAILED granules. This request should be failed. To do this, Select "Fail Request" from the Request Disposition section and try again. [Displayed in a dialogue box]</p>	<p>Intervention cannot be resolved.</p>	<p>The message appears on the Open Intervention Detail page. If all the granules in a request have been failed, the request can no longer be submitted or partitioned. The only corrective action is to fail the entire request or place it on hold. 1. Single-click on the OK button to dismiss the dialogue box. 2. Either fail the entire request or place it on hold. [For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]</p>
<p>All of the granules for this request have been failed. You can not submit or partition the request because the submission will fail and another operator intervention will be created for it. This request should be failed. Return to the previous page and select "Fail Request" under the Request Disposition section.</p>	<p>Intervention cannot be resolved.</p>	<p>The operator failed all the granules for a particular request and tried to submit or partition it. Since there are no granules, there is nothing to submit or partition. The entire request should be failed. 1. Single-click on the  icon in the OM GUI navigation frame to redisplay the Open Intervention Detail (Intervention for Request x) page. 2. Fail the entire request. [For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]</p>
<p>An error has occurred with the page you are requesting. Error Message: <message></p>	<p>Various.</p>	<p>The message appears on the Error page and is displayed in response to a stored procedure or system fault. Although the previously attempted operation can be retried, in most cases the error is a fatal one (e.g., a binary was installed incorrectly or is missing). 1. If feasible, retry the operation that resulted in the error message. 2. If repeated attempts to perform the operation fail, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.</p>
<p>An error message was not available. Please contact the system administrator for further assistance.</p>	<p>Various.</p>	<p>The message appears on the Error page when there is a problem with the Perl code or a stored procedure that did not give a specific reason as to why it failed. There is no operator-level corrective action to take in this case. Call the help desk and submit a trouble ticket in accordance with site Problem Management policy.</p>

Table 18.6-5. Order Manager GUI User Messages (2 of 13)

Message Text	Impact	Cause and Corrective Action
An undefined error occurred executing the stored procedure	Various.	<p>The problem is an internal error due to a bad database connection, incorrect stored procedure arguments, or a system fault. It is not due to operator error. The first possible solution is to resubmit the changes for the Intervention (essentially retrying the database connection).</p> <ol style="list-style-type: none"> 1. Resubmit the changes for the intervention. [For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).] 2. If resubmitting the changes for the intervention is not successful, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.
Error executing SweeperStart: <message>	Server Statistics or Queue Status page does not display correct information, or the affected pages do not display at all.	<p>The message appears either on the Error page, OM Queue Status page, or OM Server Statistics page. SweeperStart is a shell script that runs the Sweeper binary, which tells the system whether or not certain servers are up and running. If either the shell script or the Sweeper binary is corrupt, missing, not executable, or has the wrong permissions, the error message is displayed. The OM GUI must be reinstalled or the binary or shell script must be manually copied to its proper location and given the proper permissions. Call the help desk and submit a trouble ticket in accordance with site Problem Management policy.</p>
Error: <VALUE> is an invalid number for this parameter." [Displayed in a dialogue box]	A parameter value does not get modified.	<p>The error message can appear on the Media Configuration page or Server Configuration page. It is probably the result of trying to change a parameter value (which requires a number) to a value that either contains non-numeric characters, is outside the valid range for the parameter, or contains a decimal point when the value should be an integer.</p> <ol style="list-style-type: none"> 1. Single-click on the OK button to dismiss the dialogue box. 2. Enter a valid value for the parameter. [For detailed instructions refer to the Check/Modify OM Configuration Parameters procedure (Section 18.5.11.1).]

Table 18.6-5. Order Manager GUI User Messages (3 of 13)

Message Text	Impact	Cause and Corrective Action
<p>Error: A worker must be assigned to this intervention before any actions may be taken. [Displayed in a dialogue box]</p>	<p>Actions cannot be taken on an intervention.</p>	<p>The message appears on the Open Intervention Detail page if the operator attempted to take an action on an open intervention before assigning a name in the Worked by: text box. (No worker name is required to view the intervention without taking any action.) A real name or a user ID must be entered in the field. Numbers and spaces are allowed.</p> <ol style="list-style-type: none"> 1. Single-click on the OK button to dismiss the dialogue box. 2. Enter a valid name in the Worked by: text entry box on the Open Intervention Detail page. <p>[For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]</p>
<p>ERROR: An [sic] database error was encountered: deadlock could not be resolved after <NUMBER> tries</p>	<p>An action requiring a call to a stored procedure or access to a database table is not taken.</p>	<p>The message appears on the Error page after a stored procedure could not be executed due to a database (or table) deadlock. The command is retried a number of times (depending on the DEADLOCK_RETRIES parameter in the configuration file) before the message is displayed. Retrying later may be successful. However, it may be that the OMS or MSS database is experiencing a heavy load or is corrupt in some way. If the problem cannot be quickly resolved, there might be a performance issue or the stored procedure may contain an error.</p> <ol style="list-style-type: none"> 1. At a later time retry the operation that resulted in the error message. 2. If the operation fails again, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.
<p>ERROR: Can't open session file: <message></p>	<p>Requested page does not display.</p>	<p>This error message can occur on any page. The session file is like a cookie – it can expire or become corrupt. For this reason, bookmarks should not be saved for specific OM GUI pages. If a session is more than five (5) days old, and the GUI has not been restarted in that amount of time, the error is certain to occur.</p> <p>Reload the GUI by starting it from a bookmark or manually typing the base URL (without a session ID). [For detailed instructions refer to the Launch the Order Manager GUI procedure (Section 18.5.1).]</p>

Table 18.6-5. Order Manager GUI User Messages (4 of 13)

Message Text	Impact	Cause and Corrective Action
<p>ERROR: Invalid name entered into Worked by field. You must enter a name into this field before proceeding. [Displayed in a dialogue box]</p>	<p>Actions cannot be taken on an intervention.</p>	<p>The message appears on the Open Intervention Detail page when the operator attempts to enter non-alphanumeric characters, nothing, or just white space into the Worked by: field. A real name or a user ID must be entered in the field. Numbers and spaces are allowed.</p> <ol style="list-style-type: none"> 1. Single-click on the OK button to dismiss the dialogue box. 2. In the Worked by: text entry box on the Open Intervention Detail page enter: <name> [valid name] [For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]
<p>ERROR: It appears that all granules have been failed. You can not submit or partition a request with all FAILED granules. This request should be failed. To do this, Select "Fail Request" from the Request Disposition section and try again. [Displayed in a dialogue box]</p>	<p>Intervention cannot be resolved.</p>	<p>The message appears on the Open Intervention Detail page.</p> <p>If all the granules in a request have been failed, the request can no longer be submitted or partitioned. The only corrective action is to fail the entire request or place it on hold.</p> <ol style="list-style-type: none"> 1. Single-click on the OK button to dismiss the dialogue box. 2. Either fail the entire request or place it on hold. [For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]
<p>Error: Not that many rows or invalid row number. [Displayed in a dialogue box]</p>	<p>The Operator is unable to navigate through rows (on various pages).</p>	<p>An invalid row number was entered in the navigation box at the top of a listing. The error can appear on any page with the navigation feature.</p> <ol style="list-style-type: none"> 1. Single-click on the OK button to dismiss the dialogue box. 2. In the navigation box enter: <number> [row number within the range of rows displayed on the GUI screen] 3. Single-click on the ok button.

Table 18.6-5. Order Manager GUI User Messages (5 of 13)

Message Text	Impact	Cause and Corrective Action
<p>ERROR: Partition days must be an integer. [Displayed in a dialogue box]</p>	<p>Intervention cannot be resolved.</p>	<p>The message appears on the Open Intervention Detail page if the operator was partitioning the request and entered a fractional number (or some garbage characters) in the days field. The number of days should be entered as a whole number only.</p> <ol style="list-style-type: none"> 1. Single-click on the OK button to dismiss the dialogue box. 2. Verify that the Partition (current size is x MB) button has been selected (single-click on the button if necessary). 3. In the days text box enter: <number of days> [whole number of days for the time period] 4. Complete the intervention. <p>[For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]</p>
<p>ERROR: Partition hours must be an integer. [Displayed in a dialogue box]</p>	<p>Intervention cannot be resolved.</p>	<p>The message appears on the Open Intervention Detail page if the operator was partitioning the request and entered a fractional number (or some garbage characters) in the hours field. The number of hours should be entered as a whole number only.</p> <ol style="list-style-type: none"> 1. Single-click on the OK button to dismiss the dialogue box. 2. Verify that the Partition (current size is x MB) box has been selected (single-click on the box if necessary). 3. In the hours text box enter: <number of hours> [whole number of hours for the time period] 4. Complete the intervention. <p>[For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]</p>

Table 18.6-5. Order Manager GUI User Messages (6 of 13)

Message Text	Impact	Cause and Corrective Action
<p>ERROR: You can not change the media type and update the FTP Push parameters. [Displayed in a dialogue box]</p>	<p>Intervention cannot be resolved.</p>	<p>The message appears on the Open Intervention Detail page, probably due to inadvertently checking the Update FtpPush Parameters box. Either the button should be un-checked or the distribution medium should be changed the proper way.</p> <ol style="list-style-type: none"> 1. Single-click on the OK button to dismiss the dialogue box. 2. If the Update FtpPush Parameters box was inadvertently checked, single-click on the box to uncheck it. 3. If the Update FtpPush Parameters box was checked on purpose, verify that the Change Media to: box is not checked. (Single-click on it if necessary). 4. If the Update FtpPush Parameters box was checked on purpose, verify that the New Medium option button is displaying "- -". [If necessary, single-click and hold the New Medium option button to display a menu of media, move the mouse cursor to the desired selection (highlighting it), then release the mouse button.] 5. Complete the intervention. <p>[For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]</p>
<p>ERROR: You can not change the media type from <MEDIA> to <MEDIA> - the media types are the same. [Displayed in a dialogue box]</p>	<p>Intervention cannot be resolved.</p>	<p>The message appears on the Open Intervention Detail page if the operator tried to change the media type to whatever it already is. If the media type should not be changed, the New Medium option button should be set to "- -".</p> <ol style="list-style-type: none"> 1. Single-click on the OK button to dismiss the dialogue box. 2. Verify that the Change Media to: box is not checked. (Single-click on it if necessary). 3. Verify that the New Medium option button is displaying "- -". [If necessary, single-click and hold the New Medium option button to display a menu of media, move the mouse cursor to the desired selection (highlighting it), then release the mouse button.] 4. Complete the intervention. <p>[For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]</p>

Table 18.6-5. Order Manager GUI User Messages (7 of 13)

Message Text	Impact	Cause and Corrective Action
<p>ERROR: You can not modify request-level attributes and place the intervention on hold. [Displayed in a dialogue box]</p>	<p>Intervention cannot be resolved.</p>	<p>The message appears on the Open Intervention Detail page if the operator attempted to modify request-level attributes (e.g., change the media type, update ftp push parameters, or disable limit checking) and then tried to place the intervention on hold. If the selected request-level attribute(s) should be implemented, the request should either be submitted or partitioned. If the selected request-level attribute(s) should not be implemented, the intervention may be placed on hold.</p> <ol style="list-style-type: none"> 1. Single-click on the OK button to dismiss the dialogue box. 2. If the selected request-level attribute(s) should be implemented, either submit or partition the request. [For detailed instructions refer to the View Open Intervention Information on the OM GUI procedure (Section 18.5.2).] 3. If the selected request-level attribute(s) should not be implemented, single-click on the Reset button, then place the intervention on hold. [For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]
<p>ERROR: You can not modify request-level attributes if you are failing the request. [Displayed in a dialogue box]</p>	<p>Intervention cannot be resolved.</p>	<p>The message appears on the Open Intervention Detail page if the operator attempted to modify request-level attributes (e.g., change the media type, update ftp push parameters, or disable limit checking), then tried to fail the entire request. If the request should be failed, the request-level attribute changes should be deselected, then the request can be failed.</p> <ol style="list-style-type: none"> 1. Single-click on the OK button to dismiss the dialogue box. 2. If the selected request-level attribute(s) should be implemented, either submit or partition the request. [For detailed instructions refer to the View Open Intervention Information on the OM GUI procedure (Section 18.5.2).] 3. If the request should be failed, first deselect the request-level attribute(s), then fail the request. [For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]

Table 18.6-5. Order Manager GUI User Messages (8 of 13)

Message Text	Impact	Cause and Corrective Action
<p>ERROR: You must assign a worker to this intervention before proceeding. [Displayed in a dialogue box]</p>	<p>Actions cannot be taken on an intervention.</p>	<p>The message appears on the Open Intervention Detail page if the operator attempted to take an action on an open intervention before assigning a name in the Worked by: text box. (No worker name is required to view the intervention without taking any action.) A real name or a user ID must be entered in the field. Numbers and spaces are allowed.</p> <ol style="list-style-type: none"> 1. Single-click on the OK button to dismiss the dialogue box. 2. In the Worked by: text entry box on the Open Intervention Detail page enter: <name> [valid name] [For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]
<p>ERROR: You must enter a name into the Worked by field before proceeding. [Displayed in a dialogue box]</p>	<p>Actions cannot be taken on an intervention.</p>	<p>The message appears on the Open Intervention Detail page if the operator attempted to take an action on an open intervention before assigning a name in the Worked by: text box. (No worker name is required to view the intervention without taking any action.) A real name or a user ID must be entered in the field. Numbers and spaces are allowed.</p> <ol style="list-style-type: none"> 1. Single-click on the OK button to dismiss the dialogue box. 2. In the Worked by: text entry box on the Open Intervention Detail page enter: <name> [valid name] [For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]
<p>INPUT ERROR: There was a problem with the input parameter for a User Profile. Please contact your system's administrator to fix this problem.</p>	<p>Information about a User profile is not displayed.</p>	<p>The error message is rare; it appears when the UserId parameter (usually embedded in the URL) is empty. It indicates that the page was probably accessed directly (i.e., the operator did not arrive at the page via a link). If the operator did arrive at the page through a link, there could be a serious database error or a problem with the Perl code, since the User ID associated with the order was not passed to the page.</p> <ol style="list-style-type: none"> 1. Single-click on the  icon in the OM GUI navigation frame to redisplay the previous page. 2. Single-click on the appropriate link to access the desired page. 3. If the same error message is displayed again, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.

Table 18.6-5. Order Manager GUI User Messages (9 of 13)

Message Text	Impact	Cause and Corrective Action
<p>INPUT ERROR: There was a problem with the input parameter for ECS Order. Please contact your system's administrator to fix this problem.</p>	<p>Information about an ECS Order does not get displayed.</p>	<p>The error message is rare; it appears when the ecs_order parameter (usually embedded in the URL) is empty. It indicates that the page was accessed directly (i.e., the operator did not arrive at the page via a link). If the operator did arrive at that page through a link, there could be a serious database error or a problem with the Perl code, since the ECS Order ID was not passed to the page.</p> <ol style="list-style-type: none"> 1. Single-click on the  icon in the OM GUI navigation frame to redisplay the previous page. 2. Single-click on the appropriate link to access the desired page. 3. If the same error message is displayed again, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.
<p>Please hit your browser's Back button and enter a valid name into the "worked by" field and click on "Override Current Worker</p>	<p>Intervention cannot be resolved.</p>	<p>No name has been entered in the Worked by: field on the Open Intervention Detail page . Before any action on the intervention will be accepted, a name must be entered.</p> <ol style="list-style-type: none"> 1. Single-click on the  icon in the OM GUI navigation frame to redisplay the Open Intervention Detail page. 2. In the Worked by: text entry box on the Open Intervention Detail page enter: <name> [valid name] [For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]
<p>Please hit your browser's Back button and select a disposition.</p>	<p>Intervention cannot be resolved.</p>	<p>No disposition was selected on the Open Intervention Detail page. Go to the previous page and select a disposition.</p> <ol style="list-style-type: none"> 1. Single-click on the  icon in the OM GUI navigation frame to redisplay the Open Intervention Detail page. 2. Select an appropriate disposition on the Open Intervention Detail page. [For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]

Table 18.6-5. Order Manager GUI User Messages (10 of 13)

Message Text	Impact	Cause and Corrective Action
Sweeper error: <message>	Server Statistics or Queue Status page does not display correct information, or the affected pages do not display at all.	The message appears either on the Error page, Queue Status page, or OM Server Statistics page. SweeperStart is a shell script that runs the Sweeper binary, which tells the system whether or not certain servers are up and running. If either the shell script or the Sweeper binary is corrupt, missing, not executable, or has the wrong permissions, the error message is displayed. The OM GUI must be reinstalled or the binary or shell script must be manually copied to its proper location and given the proper permissions. Call the help desk and submit a trouble ticket in accordance with site Problem Management policy.
The e-mail text box is empty – it should contain a message to the user if you want e-mail sent out. [Displayed in a dialogue box]	Intervention resolution cannot be submitted.	The message appears if there is an e-mail text box on the Close Confirmation page and the operator did not enter any message text. Some text should be entered and the form should be resubmitted. 1. Single-click on the OK button to dismiss the dialogue box. 2. Either single-click on the Don't send e-mail box or in the e-mail text box enter: <text> [supplemental e-mail text] (as applicable). 3. Complete the intervention. [For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]
You can not change the FTP Push parameters and change the media type at the same time. Please hit your browser's Back button and correct this	Intervention cannot be resolved.	The message appears if the media type for the request is ftp push. The operator probably elected to change the media type and checked the Update FtpPush Parameters box at the same time. The operator should go back to the previous page and uncheck the box. 1. Single-click on the  icon in the OM GUI navigation frame to redisplay the Open Intervention Detail page. 2. Single-click on the Update FtpPush Parameters box to uncheck it. 3. Complete the intervention. [For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]

Table 18.6-5. Order Manager GUI User Messages (11 of 13)

Message Text	Impact	Cause and Corrective Action
<p>You can not update the FTP Push parameters for this request because the media type is <old media>. Please hit your browser's Back button and correct this.</p>	<p>Intervention cannot be resolved.</p>	<p>This message appears if the operator inadvertently checked the Update FtpPush Parameters box, even though the media type for the request is not ftp push. The operator should go back and uncheck this box. The error message should be quite rare, because normally the Update FtpPush Parameters box does not appear if the media type is not ftp push.</p> <ol style="list-style-type: none"> 1. Single-click on the  icon in the OM GUI navigation frame to redisplay the Open Intervention Detail page. 2. Single-click on the Update FtpPush Parameters box to uncheck it. 3. Complete the intervention. <p>[For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]</p>
<p>You have entered partitioning days/hours, but have not indicated that you want to spread the request over this time period! (you probably forgot to check the AND box). Hit your browser's Back button to correct this.</p>	<p>Intervention cannot be resolved.</p>	<p>The operator probably intended to partition the request but forgot to check the "and" box. The redundancy is intended to ensure that the correct action is taken.</p> <ol style="list-style-type: none"> 1. Single-click on the  icon in the OM GUI navigation frame to redisplay the Open Intervention Detail page. 2. Single-click on the box in front of and spread request over. 3. Complete the intervention. <p>[For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]</p>

Table 18.6-5. Order Manager GUI User Messages (12 of 13)

Message Text	Impact	Cause and Corrective Action
<p>You have indicated you want to change the media, but did not select the media type. Hit your browser's Back button to correct this</p>	<p>Intervention cannot be resolved.</p>	<p>The operator checked the Change Media to: but did not select a different medium from the New Medium option button. The operator should go back to the previous page and either select a new medium or uncheck the Change Media to: box and ensure that the New Medium option button is set to "- -".</p> <ol style="list-style-type: none"> 1. Single-click on the  icon in the OM GUI navigation frame to redisplay the Open Intervention Detail page. 2. If a new distribution medium is being selected, verify that the Change Media to: box is checked. (Single-click on it if necessary). 3. If a new distribution medium is being selected, verify that the New Medium option button is displaying the appropriate medium. [If necessary, single-click and hold the New Medium option button to display a menu of media, move the mouse cursor to the desired selection (highlighting it), then release the mouse button.] 4. If the old distribution medium is being retained, verify that the Change Media to: box is not checked. (Single-click on it if necessary). 5. If the old distribution medium is being retained, verify that the New Medium option button is displaying "- -". [If necessary, single-click and hold the New Medium option button to display a menu of media, move the mouse cursor to the desired selection (highlighting it), then release the mouse button.] 6. Complete the intervention. <p>[For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]</p>

Table 18.6-5. Order Manager GUI User Messages (13 of 13)

Message Text	Impact	Cause and Corrective Action
<p>You have selected a new media type, but not did indicate you actually wanted the media changed. Hit your browser's Back button to correct this.</p>	<p>Intervention cannot be resolved.</p>	<p>The operator changed the distribution medium for the request on the Open Intervention Detail page but did not check the Change Media to: box. The redundancy is intended to ensure that the operator does indeed want to change the distribution medium. The operator should go back to the previous page and either check the Change Media to: box or ensure that the New Medium option button is set to "- -". (indicating no change).</p> <ol style="list-style-type: none"> 1. Single-click on the  icon in the OM GUI navigation frame to redisplay the Open Intervention Detail page. 2. If a new distribution medium is being selected, verify that the Change Media to: box is checked. (Single-click on it if necessary). 3. If a new distribution medium is being selected, verify that the New Medium option button is displaying the appropriate medium. [If necessary, single-click and hold the New Medium option button to display a menu of media, move the mouse cursor to the desired selection (highlighting it), then release the mouse button.] 4. If the old distribution medium is to be retained, verify that the Change Media to: box is not checked. (Single-click on it if necessary). 5. If the old distribution medium is to be retained, verify that the New Medium option button is displaying "- -". [If necessary, single-click and hold the New Medium option button to display a menu of media, move the mouse cursor to the desired selection (highlighting it), then release the mouse button.] 6. Complete the intervention. <p>[For detailed instructions refer to the Respond to an Open Intervention procedure (Section 18.5.2.2).]</p>

18.6.1.1 Check Connections to Hosts/Servers

The procedure to **Check Connections to Hosts/Servers** is a part of the **Troubleshoot a Data Distribution, Storage Management, or Order Manager GUI Failure** procedure (Section 18.6.1). Table 18.6-6 presents (in a condensed format) the steps required to check connections to hosts/servers. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Access a terminal window logged in to the Distribution Server host.
 - Examples of Distribution Server host (Sun internal server host) names include **e0acs06**, **g0acs06**, **l0acs06**, and **n0acs06**.
 - Most other system hosts are acceptable for checking connections.
 - Log-in is described in the **Log in to System Hosts** procedure (Section 18.2.1).

- 2 At the command line prompt enter:


```
cd /usr/ecs/<MODE>/CUSTOM/utilities
```

 - Change directory to the directory containing the utility scripts.

- 3 At the command line prompt enter:


```
EcCsIdPingServers <MODE>
```

 - The following type of response is displayed (only a few representative lines are shown):


```
/usr/ecs/TS2/CUSTOM/bin/CSS/Sweeper -nsh x0icg01 -nsp 18202
FoSwSweeper application started...
We made a connection with EntryId =x0acs06:38709:23057 ---
EcSrTransportSubServer
We made a connection with EntryId =x0acs06:38712:23057 ---
EcSrTransportSubEventServer
We made a connection with EntryId =x0acs06:33379:17033 --- DsShQuitIDL
[...]
```

- 4 Observe the results displayed on the screen to determine whether connections can be made with the necessary hosts and servers.
 - The necessary hosts and servers are listed in Table 18.6-7, Hosts, Servers, Clients and Other Software Relevant to Data Distribution and the Order Manager GUI.

- 5 If pinging the servers (Step 3) indicated a problem with any connection, ping the servers again (at the command line prompt enter: **EcCsIdPingServers <MODE>**).

- 6 Observe the results displayed on the screen to determine whether connections can be made with the necessary hosts and servers.

- 7 If it is not possible to connect to any needed host(s)/server(s), notify the Operations Controller/System Administrator to check the hosts/servers and bring them back up if necessary.

- 8 Return to the procedure that recommended checking connections to hosts.

Table 18.6-6. Check Connections to Hosts/Servers - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	UNIX window (Sun internal server)	single-click or use procedure in Section 18.2.1
2	cd /usr/ecs/<MODE>/CUSTOM/utilities	enter text, press Enter
3	EcCsldPingServers <MODE>	enter text, press Enter
4	EcCsldPingServers <MODE> [again]	enter text, press Enter
5	Identify hosts and servers with which connections cannot be made	read text
6	Notify the Operations Controller/System Administrator to bring hosts/servers back up (if applicable)	contact Operations Controller
7	Return to the procedure that recommended checking connections to hosts	

Table 18.6-7. Hosts, Servers, Clients and Other Software Relevant to Data Distribution and the Order Manager GUI (1 of 2)

HOST	SERVER/CLIENT/OTHER SOFTWARE
Sun internal server (e.g., x0acs06)	Distribution Server (EcDsDistributionServer) 8mm Server (EcDsSt8MMServer) Storage Management Request Manager (EcDsStRequestManagerServer) Staging Disk Server (EcDsStStagingDiskServer) Granule Deletion Process (EcDsGranuleDelete) Science Data Server (EcDsScienceDataServer) Science Data Server Client (EcDsScienceDataServerClient) Subscription Server (EcSbSubServer)
Operations Workstation (e.g., x0acs02)	Data Distribution Operator GUI (EcDsDdistGui) Storage Management Control GUI (EcDsStmgtGui) Science Data Server GUI (EcDsSdSrvGui)
Access/Process Coordinators (APC) Server (e.g., x0acg01)	Archive Server (EcDsStArchiveServer) Cache Manager Servers (EcDsStCacheManagerServer) (including Pull Area Manager) FTP Server (EcDsStFtpServer) Staging Disk Server (EcDsStStagingDiskServer)
FSMS Server (e.g., x0drg01)	HDF EOS Server (EcDsHdfEosServer) Archive Server (EcDsStArchiveServer) Cache Manager Server (EcDsStCacheManagerServer) FTP Server (EcDsStFtpServer) Staging Disk Server (EcDsStStagingDiskServer)

Table 18.6-7. Hosts, Servers, Clients and Other Software Relevant to Data Distribution and the Order Manager GUI (2 of 2)

HOST	SERVER/CLIENT/OTHER SOFTWARE
Ingest Server (e.g., x0icg01)	Name Server (EcCsIdNameServer) Registry Server (EcCsRegistry)
Data Pool Server (e.g., x0dps01)	Order Manager GUI (EcOmGuiHomePage.pl)

18.6.1.2 Check Log Files

The procedure to **Check Log Files** is a part of the **Troubleshoot a Data Distribution, Storage Management, or Order Manager GUI Failure** procedure (Section 18.6.1). Checking log files can provide indications of the following types of problems (among others):

- Communication problems.
- Database problems.
- Lack of disk space.

Table 18.6-8 presents (in a condensed format) the steps required to check log files. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Access a terminal window logged in to the appropriate host.
 - Sun internal server (e.g., **e0acs06**, **g0acs06**, **l0acs06**, or **n0acs06**) has the following data distribution, storage management, science data server, and subscription server (SBSRV) log files:
 - EcDsDistributionServer.ALOG.
 - EcDsSt8MMServerNONE.ALOG.
 - EcDsStRequestManagerServer.ALOG
 - EcDsStStagingDiskServerDIP1.ALOG.
 - EcDsGranuleDelete.ALOG.
 - EcDsScienceDataServer.ALOG.
 - EcDsScienceDataServerClient.ALOG.
 - EcDsSdSrvGui.ALOG.
 - EcSbSubServer.ALOG file.
 - APC Server (e.g., **e0acg11**, **g0acg01**, **l0acg02**, or **n0acg01**) has the following storage management ALOG files:
 - EcDsStArchiveServerACM1.ALOG.
 - EcDsStCacheManagerServerACM1.ALOG.
 - EcDsStFtpServerNONE.ALOG.
 - EcDsStStagingDiskServerACM1.ALOG.
 - FSMS Server (e.g., **e0drg11**, **g0drg01**, **l0drg01**, or **n0drg01**) has the following storage management ALOG files:

- EcDsHdfEosServer.ALOG.
- EcDsStArchiveServerDRP1.ALOG
- EcDsStCacheManagerServerDRP1.ALOG.
- EcDsStFtpServerDRP1.ALOG.
- EcDsStStagingDiskServerDRP1.ALOG.
- Operations Workstation (e.g., **e0acs03**, **g0acs02**, **l0acs01**, or **n0acs03**) has the following science data server log files:
 - EcDsDdistGui.ALOG.
 - EcDsStmgtGui.ALOG.
 - EcDsSdSrvGui.ALOG.
- In addition to the ALOG files mentioned the preceding hosts have corresponding debug log files.

2 At the command line prompt enter:

cd /usr/ecs/<MODE>/CUSTOM/logs

- **<MODE>** is current mode of operation.
 - TS1 - Science Software Integration and Test (SSI&T)
 - TS2 - New Version Checkout
 - OPS - Normal Operations
- "**logs**" is the directory containing data distribution, science data server, or storage management log files (e.g., EcDsDdistGui.ALOG, EcDsDistributionServer.ALOG).

3 At the command line prompt enter:

pg <file name>

- **<file name>** refers to the log file to be reviewed (e.g., EcDsDdistGui.ALOG, EcDsDistributionServer.ALOG).
- The first page of the log file is displayed.
- Although this procedure has been written for the **pg** command, any UNIX editor or visualizing command (e.g., **more**, **vi**, **view**) can be used to review the log file.

4 Review the log file to identify problems that have occurred.

- To exit from **pg** at the **:** prompt enter:

q

- The command line prompt is displayed.

5 Respond to problems as follows:

- DDIST- or STMGT-related problems.
 - Perform the appropriate procedure(s) from those listed in Table 18.6-1, Troubleshooting DDIST Problems.
- Communication problems.
 - Notify the Operations Controller/System Administrator of suspected communication problems.

- Database problems.
 - Verify that relevant database servers are running.
 - Check for lack of (or corruption of) data in the database using either a database browser or interactive structured query language (isql) commands.
 - Notify the Database Administrator of suspected database problems.
- Lack of disk space.
 - Remove unnecessary files.
 - Notify the Operations Controller/System Administrator of recurring disk space problems.

Table 18.6-8. Check Log Files - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	UNIX window logged in to appropriate host	single-click or use procedure in Section 18.2.1
2	cd /usr/ecs/<MODE>/CUSTOM/logs	enter text, press Enter
3	pg <file name>	enter text, press Enter
4	Identify problems indicated in the log file	read text
5	Respond to problems as necessary	

18.6.2 Recover from a Data Distribution Failure

The automated data distribution processes (push and pull) normally do not require intervention by the Distribution Technician. However, when a data distribution fault (error) occurs, there may be a requirement for action to recover from the error. For example, recovery actions may be made necessary by the failure of storage management to acquire granules from the archive so they can be distributed. When a fault (error) occurs, the request status on the **Distrib'n Requests** tab of the **Data Distribution Operator GUI** is likely to change to “Suspended with Errors.”

The Distribution Technician may use the **Data Distribution Operator GUI Distrib'n Requests** tab and/or log files on various host machines to review the failure event.

Diagnosing an acquire failure involves examining the following system log files and directories involved in the process:

- Request Manager server debug log file (EcDsStRequestManagerServerDebug.log), if available.
- Science Data Server ALOG file (EcDsScienceDataServer.ALOG) and/or Science Data Server debug log file (EcDsScienceDataServerDebug.log).
- Archive Server ALOG file (EcDsStArchiveServer<HWCIn>.ALOG) and/or Archive Server debug log file (EcDsArchiveServerDebug.log).

- <HWCIn> represents a particular hardware configuration item; for example, EcDsStArchiveServerACM1.ALOG would be located on the APC Server x0acg01.
- Staging Area.
 - Presence of the relevant file(s).
 - Staging disk log files (EcDsStStagingDiskServer<HWCIn>.ALOG, EcDsStagingDiskServerDebug.log) or cache manager log files (EcDsStCacheManagerServer<HWCIn>.ALOG, EcDsCacheManagerServerDebug.log).
 - Space available in the staging area.

Table 18.6-9 presents (in a condensed format) the steps required to respond to recover from a data distribution failure. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Observe the information displayed on the **Distrib'n Requests** tab of the **Data Distribution Operator GUI** to identify distribution requests with a status of “Suspended with Errors.”
- 2 If a suspended request has the error mnemonic **DsEDdXLargeRequest** associated with it, perform the **Respond to Requests that Exceed the Distribution Request Threshold** procedure (Section 18.6.2.1).
- 3 Perform the appropriate procedure(s) for responding to an acquire failure:
 - **Check the Connection to the Remote FTP Host** (Section 18.6.2.2).
 - **Check the Request Manager Server Debug Log** (Section 18.6.2.3).
 - **Check the Science Data Server Log Files** (Section 18.6.2.4).
 - **Check the Archive Server Log Files** (Section 18.6.2.5).
 - **Check the Staging Disk** (Section 18.6.2.6).
 - **Check the Staging Disk ALOG File** (Section 18.6.2.7).
 - **Check the Space Available in the Staging Area** (Section 18.6.2.8).
- 4 If additional information is needed, open and read the appropriate log file in the **/usr/ecs/<MODE>/CUSTOM/logs** directory on the appropriate host machine(s).
 - Applicable host machines are listed in Table 18.6-7, Hosts, Servers, Clients and Other Software Relevant to Data Distribution and the Order Manager GUI.
 - For detailed instructions refer to the **Check Log Files** procedure (Section 18.6.1.2).
- 5 If the problem could not be identified through any of the preceding steps, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.
- 6 When the problem has been corrected, review the information displayed on the **Distrib'n Requests** tab of the **Data Distribution Operator GUI** to determine whether the distribution request resumed processing.

- 7 If the distribution request does not resume processing after the problem has been corrected, return to Step 3.

Table 18.6-9. Recover from a Data Distribution Failure - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Identify distribution requests with a status of "Suspended with Errors" (on the Distrib'n Requests tab of the Data Distribution Operator GUI)	read text
2	Respond to requests that exceed the distribution request threshold (if applicable)	Use procedure in Section 18.6.2.1
3	Respond to the acquire failure (if applicable)	Use applicable procedure(s) in Sections 18.6.2.2 through 18.6.2.8
4	Check log files (if applicable)	Use procedure in Section 18.6.1.2
5	Submit a trouble ticket (if applicable)	Use procedure in Chapter 8
6	Determine whether the distribution request resumed processing (on the Distrib'n Requests tab of the Data Distribution Operator GUI)	read text
7	Return to Step 3 (if necessary)	

18.6.2.1 Respond to Requests that Exceed the Distribution Request Threshold

The procedure to **Respond to Requests that Exceed the Distribution Request Threshold** is a part of the **Recover from a Data Distribution Failure** procedure (Section 18.6.2).

When a distribution request exceeds the corresponding distribution request threshold (e.g., FtpPushThreshold or FtpPullThreshold), the request is suspended in DDIST with the following error mnemonic:

- DsEDdXLargeRequest

Table 18.6-10 presents (in a condensed format) the steps required to respond to requests that exceed the distribution request threshold. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Record (e.g., write down) the Request ID (as displayed on the **Distrib'n Requests** tab of the **Data Distribution Operator GUI**) for the request that exceeds the distribution request threshold.
- 2 Cancel the request.
 - For detailed instructions refer to the **Cancel Data Distribution Requests** procedure (Section 18.2.8).

- 3 Contact User Services to determine whether or not the user’s request should be processed.
 - User Services may contact the requester to verify whether or not the requester intended to order so much data.
- 4 If User Services responds that the request should be completed, determine whether User Services or Distribution will partition and resubmit the request.
- 5 If User Services responds that the request should be completed and that Distribution should partition the request, partition and resubmit the request.
 - For detailed instructions refer to the **View Distribution Request Information on the OM GUI** procedure (Section 18.5.3).

Table 18.6-10. Respond to Requests that Exceed the Distribution Request Threshold - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Record the Request ID	write text
2	Cancel the data distribution request	Use procedure in Section 18.2.8
3	Determine whether or not the user’s request should be processed	contact User Services
4	Determine whether User Services or Distribution will partition and resubmit the request	contact User Services
5	Partition/resubmit the request (as applicable)	Use procedure in Section 18.5.3

18.6.2.2 Check the Connection to the Remote FTP Host

The problem is that a distribution request for FtpPush of data to a remote host (e.g., ftp.averstar.com) shows a status of “Suspended with Errors” and it is suspected that it may not be possible to connect to the remote host.

In order to check the connection to remote hosts the necessary script to support pinging (e.g., “st”) must be available on the system and the Distribution Technician must know its location. For example, at one DAAC the script “st” (written to support operations in the OPS mode) might be available in the home directory for the “train1” user.

Table 18.6-11 presents (in a condensed format) the steps required to check the connection to the remote ftp host. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Access a terminal window logged in to the APC Server host.
 - Examples of APC Server host names include **e0acg11**, **g0acg01**, **l0acg02**, and **n0acg01**.

- For detailed instructions refer to the **Log in to System Hosts** procedure (Section 18.2.1).

2 At the UNIX command line prompt enter:

cd <path>

- **<path>** represents the directory path (e.g., /home/train1) to the directory containing the necessary script.
- The necessary script (e.g., “st”) to support pinging the remote host through the firewall must be available and the Distribution Technician must know its location.

3 At the UNIX command line prompt enter:

./st -ping <remotehost>

- **<remotehost>** represents the remote host to be checked.
- For example:

./st -ping ftp.averstar.com

- The following type of response indicates successful pinging of the remote host:

```
PING 192.5.114.4: (192.5.114.4): 56 data bytes  
64 bytes from 192.5.114.4: icmp_seq=0 ttl=247 time=26 ms  
64 bytes from 192.5.114.4: icmp_seq=1 ttl=247 time=23 ms  
64 bytes from 192.5.114.4: icmp_seq=2 ttl=247 time=23 ms  
64 bytes from 192.5.114.4: icmp_seq=3 ttl=247 time=28 ms  
64 bytes from 192.5.114.4: icmp_seq=4 ttl=247 time=25 ms
```

- If there is no such response within a few seconds (no more than 20 seconds), it is likely that pinging has failed and the remote host is not currently accessible.
- The same general syntax can be used to perform a trace; i.e., at the UNIX command line prompt enter:

./st -trace <remotehost>

4 To stop sending packets to the remote host at the UNIX command line prompt enter:

Ctrl-c

- The following type of response after entering **Ctrl-c** is another type of indication that pinging failed:

```
----ftp.averstar.com PING Statistics----  
43 packets transmitted, 0 packets received, 100.0% packet loss
```

5 If pinging the remote host failed, go to Step 12.

6 If pinging the remote host was successful, at the UNIX command line prompt enter:

ftp <firewall host>

- **<firewall host>** represents the firewall host.

- The System Administrator can identify the firewall host if necessary.
- The following type of response should be displayed:
Connected to x0host0.daac.ecs.nasa.gov.
220-*****
220-*
220-* THIS U.S. GOVERNMENT COMPUTING SYSTEM IS FOR
AUTHORIZED USERS
220-* ONLY. ANYONE USING IT IS SUBJECT TO MONITORING AND
RECORDING
220-* OF ALL KEYSTROKES WITHOUT FURTHER NOTICE. THIS RECORD
MAY BE
220-* PROVIDED AS EVIDENCE TO LAW ENFORCEMENT OFFICIALS.
220-*
220-*****
220 [002-0018] x0host0.daac.ecs.nasa.gov FTP proxy 4.0.1 ready.
Name (x0host0:user1):

7 At the **Name (...):** prompt press the **Enter** key.

- The following type of response should be displayed:
230- user user1 logged in.
230 [002-0024] Specify Remote Destination with: quote site hostname
Remote system type is UNIX.
ftp>

8 At the **ftp>** prompt enter:
quote site <remotehost>

- **<remotehost>** represents the remote host to be checked.
- For example:
quote site ftp.averstar.com
- The following type of response should be displayed:
220-([002-0059] Firewall connected to ftp.averstar.com (192.5.114.4).)
220-(220 ftp FTP server (Version wu-2.4(3) Thu Jan 9 12:48:46 EST 1997)
ready.)
220 [002-0060] login with: user name
ftp>

9 At the **ftp>** prompt enter:
user anonymous

- Log in to the remote host for anonymous ftp.
- The following type of response should be displayed:

**331 Guest login ok, send your complete e-mail address as password.
Password:**

10 At the **ftp>** prompt enter:

<password>

- Use a valid e-mail address as the password for anonymous ftp.
- The following type of response should be displayed:

**230 Guest login ok, access restrictions apply.
ftp>**

11 At the **ftp>** prompt enter:

ls

- The following type of response should be displayed:

**200 PORT command successful.
150 Opening ASCII mode data connection for /bin/ls.
total 16
dr-xr-xr-x 6 root other 512 Feb 11 1997 .
dr-xr-xr-x 6 root other 512 Feb 11 1997 ..
-r----- 1 root other 0 Feb 10 1997 .forward
-r----- 1 root other 0 Feb 10 1997 .rhosts
lrwxrwxrwx 1 root other 7 Feb 7 1997 bin -> usr/bin
dr-xr-xr-x 2 root other 512 Feb 7 1997 dev
d--x--x--x 2 root other 512 Feb 7 1997 etc
dr-xr-sr-x 57 root ftp 1536 Jan 8 2002 pub
d--x--x--x 5 root other 512 Feb 7 1997 usr
226 Transfer complete.
ftp>**

- The purpose of this step is to verify accessibility to directories on the remote host.

12 At the **ftp>** prompt enter:

quit

- The connection to the ftp host is terminated.

13 If a connection could not be made with the remote ftp server or if pinging was successful but the ftp could not be negotiated, notify the remote system's point of contact of the problem.

14 If the remote system's point of contact has been notified of a problem pinging or making an ftp connection, wait until the communication problem has been resolved.

- 15** When the communication problem has been resolved (or after waiting a reasonable period of time), return to Step 1.
- If necessary, the supervisor can provide guidance concerning what is a “reasonable” period of time to wait.
- 16** After a successful ftp test of the connection with the remote host, resume the affected distribution request(s).
- For detailed instructions refer to the **Suspend/Resume Data Distribution Requests** procedure (Section 18.2.7).
- 17** If the same distribution request(s) show(s) a status of “Suspended with Errors” again, recover from the data distribution failure using the **Recover from a Data Distribution Failure** procedure (Section 18.6.2).

Table 18.6-11. Check the Connection to the Remote FTP Host - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	UNIX window (APC Server)	single-click or use procedure in Section 18.2.1
2	<code>cd <path></code>	enter text, press Enter
3	<code>./st -ping <remotehost></code>	enter text, press Enter
4	Ctrl-c	enter text
5	Go to Step 12 (if pinging failed)	
6	<code>ftp <firewall host></code>	enter text, press Enter
7	Enter key	press
8	<code>quote site <remotehost></code>	enter text, press Enter
9	<code>user anonymous</code>	enter text, press Enter
10	<code><password></code>	enter text, press Enter
11	<code>ls</code>	enter text, press Enter
12	<code>quit</code>	enter text, press Enter
13	Notify the remote system’s point of contact of the problem (if applicable)	contact remote system’s point of contact
14	Wait until the communication problem has been resolved (if applicable)	wait
15	Return to Step 1 (if applicable)	
16	Resume the affected distribution request(s) (after successful ftp test)	Use procedure in Section 18.2.7
17	Go the Recover from a Data Distribution Failure procedure [if the same distribution request(s) is (are) suspended with errors again]	Use procedure in Section 18.6.2

18.6.2.3 Check the Request Manager Server Debug Log

The procedure to **Check the Request Manager Server Debug Log** is a part of the **Recover from a Data Distribution Failure** procedure (Section 18.6.2). It is performed in response to an acquire failure.

The Request Manager server processes requests from external clients (processes outside of Storage Management). Requests between Storage Management servers are passed directly from one server to another.

- Requests that require one of the Storage Management servers to perform processing are checkpointed (except requests that can be serviced solely through SQL).
 - Checkpointing involves recording the request's state (e.g., "checkpointed," "failed," "completed") in the database to assist in error recovery.
- Requests that can be serviced solely through SQL are considered "trivial" requests.
 - Trivial requests are not checkpointed.
 - Examples include attaching to a staging disk, getting capacity, and getting block size.
 - Trivial requests submitted from outside Storage Management are serviced by the Request Manager server.
 - Trivial requests originating within Storage Management are passed directly from the client to the database server.

The Request Manager server (like other Storage Management servers) can manage several concurrent activities. This is accomplished through the use of threads. There are several different kinds of threads:

- Manager thread.
 - One per Storage Management server.
 - Responsible for dequeuing requests and assigning them to service threads.
 - Checks for cancelled requests.
- Service thread.
 - Multiple threads per Storage Management server.
 - Responsible for the actual servicing of requests.
 - Logs all progress including all changes of request state.
 - Notifies submitter when request has been completed.
- Receptionist thread.
 - One per Storage Management server.
 - Registers the server as "up" in the database.
 - Sits on a socket, waiting for connections from other Storage Management servers.
 - Unregisters the server at shutdown.
- Inbound RPC thread.
 - Spawned by a request from a Storage Management client.
 - Hands off the request to the manager thread and waits for completion of the request.
- Housekeeper thread.

- Watches for completed requests, which haven't previously been seen and processed.

Information concerning Request Manager server processing of requests (identified by thread) is recorded in the Request Manager server debug log (assuming some level of debug log recording is specified in the Registry database).

Trivial requests typically involve the following types of activities:

- Inbound RPC thread appears with a request.
- Manager thread dequeues the request and assigns it to a service thread.
- Service thread recognizes the thread as "trivial."
 - A "No checkpointing required -- going straight to responded" message is recorded in the Request Manager server debug log.
- Service thread executes the database transaction for results.
 - When the request is completed, a "Done servicing" message is recorded in the Request Manager server debug log.
 - If the request fails, an "Unable to service" message is recorded in the Request Manager server debug log.
- Service thread hands the results to the inbound RPC thread.
 - A "Notifying the client" message is recorded in the Request Manager server debug log.
- Inbound RPC thread silently returns to the client with the results.

Non-trivial requests are forwarded to the appropriate Storage Management server (e.g., EcDsStFtpServer, EcDsStStagingDiskServer, EcDsStArchiveServer) for processing.

- Some of the same types of entries are made in the Request Manager server debug log for non-trivial requests as for trivial requests. For example:
 - "Waking up service thread" (Request Manager is preparing to process the request).
 - "Done servicing" (request processing has been completed).
 - "Unable to service" (the request has failed).
- Although some trivial requests include "token" statements, tokens are characteristic of non-trivial requests.
- A token includes request information that varies with the type of operation to be performed.
- For example, a token for an ftp request might include the following types of data:
 - Stored procedure (e.g., DsStFRInsert) [other types of stored procedures include DsStSDRInsert and DsStGRMapLogicalArchiveId].
 - RPC ID (e.g., RPCId=1821_535_1109-1124464729_171062001_x0acs06.xdc.ecs.nasa.gov:SBSVSDSV1DSDD1DSDD4:).
 - Username.
 - Encrypted password.
 - Host.
 - Source path.

- Destination path.
- External request ID.
- Server name (e.g., EcDsStFtpServerNONE) [other types of operations might involve the EcDsStStagingDiskServerDRP1 for example].
- Type of operation (e.g., FtpPush) [other types of operations include ArRetrieve, SDAllocateDisk, SDLinkFile].
- Submitter (e.g., DSDD) [other types of operations might involve SDSV].
- Priority.
- The server to which the request was sent is identified by name (ServerName).
- Transaction ID is embedded in the RPC ID (the portion before the first colon in the RPC ID).

A "transaction" may involve multiple operations on a host or several hosts. Consequently, multiple threads may be used on each relevant host.

Table 18.6-12 presents (in a condensed format) the steps required to check the Request Manager Server debug log. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Access a terminal window logged in to the Distribution Server host.
 - Examples of Distribution Server host (Sun internal server host) names include **e0acs06**, **g0acs06**, **l0acs06**, and **n0acs06**.
 - For detailed instructions refer to the **Log in to System Hosts** procedure (Section 18.2.1).

- 2 At the UNIX command line prompt enter:


```
cd /usr/ecs/<MODE>/CUSTOM/logs
```

 - **<MODE>** is current mode of operation.
 - **"logs"** is the directory containing Request Manager Server debug log files (e.g., EcDsStRequestManagerServerDebug.log).

- 3 At the command line prompt enter:


```
pg <file name>
```

 - **<file name>** refers to the appropriate Request Manager debug log file.
 - For example:


```
pg EcDsStRequestManagerServerDebug.log
```

 - The content of the first page of the specified file is displayed.
 - Although this procedure has been written for the **pg** command, any UNIX editor or visualizing command (e.g., **vi**, **view**, **more**) can be used to review the log file.

- 4 At the **:** prompt enter:


```
/<date> <time>
```

- **<date> <time>** refers to the approximate date and time of the problem.
 - For example:
06/18/01 12:17:31
- The file is searched for the specified text.
 - If the specified text is in the log file, the following type of response is displayed.
...skipping forward
06/18/01 12:17:31: Thread ID : 105 : DsShTSSStorage: creating the MutexVec for this thread
[...]
 - If the specified text is not in the log file, the following type of response is displayed.
Pattern not found:
 - If the specified text is not in the log file, verify that the proper file was opened (Step 3) and that the date and time were entered correctly (Step 4).

5 At the **:** prompt enter:

/Unable to service

- **pg** searches the file for the specified text.
 - If the specified text is in the log file, the following type of response is displayed.
...skipping forward
2:IngestRQ409GR1 Unable to service | Thread 52
[...]
 - If the specified text is not in the log file, the following type of response is displayed.
Pattern not found:
- If the specified text is in the file, go to Step 7.
- If the specified text is not in the file, go to Step 6.

6 Examine the contents of the log file to determine which thread is associated with the problem being investigated.

- The following **pg** commands (at the **:** prompt) are useful:
 - **n** then **Return/Enter** (go to Page *n*).
 - **Return/Enter** or **+1** then **Return/Enter** (go down to the next page).
 - **-1** then **Return/Enter** (go back to the preceding page).
 - **+n** then **Return/Enter** (go down *n* number of pages).
 - **-n** then **Return/Enter** (go back *n* number of pages).
 - **+nl** then **Return/Enter** (go down *n* number of lines).
 - **-nl** then **Return/Enter** (go back *n* number of lines).
 - **\$** then **Return/Enter** [go to the last page (end of file)].
 - **q** then **Return/Enter** (exit from **pg**).

7 At the : prompt enter:

<search text>

- To search back toward the beginning of the file enter:

^Waking up service thread <number>^

- To search back toward the end of the file enter:

/Waking up service thread <number>

- For example:

^Waking up service thread 52^

– The file is searched back toward the beginning of the file for the specified text.

- If the specified text is in the log file, the following type of response is displayed.

...skipping backward

**06/18/01 12:17:31: Thread ID : 102 : Waking up service thread 52 | Thread 102
[...]**

- If the specified text is not in the log file, the following type of response is displayed.

Pattern not found:

- The entries "Waking up service thread <number>" and "Unable to service | Thread <number>" bracket the thread servicing in which an error occurred.

NOTE: Thread IDs are reused frequently. There are likely to be many processes with the same thread ID in any particular log file. It is important to follow the correct instance of the thread.

NOTE: It is likely that the Request Manager would try again to process a failed request. Subsequent request processing may use the same thread ID or a different thread ID. However, it would involve the same transaction ID.

- A "No checkpointing required -- going straight to responded" entry associated with the thread ID indicates that the request is "trivial."

8 At the : prompt enter:

/SEARCHING

- The file is searched for the specified text.
 - If the specified text is in the log file, the following type of response is displayed.

...skipping forward

**06/18/01 12:17:31: Thread ID : 52 : SEARCHING FOR: 30148 (Found) |
Thread 52**

**06/18/01 12:17:31: Thread ID : 52 : SEARCHING FOR: 30148 (Found) |
Thread 52**

```

06/18/01 12:17:31: Thread ID : 52 : DsStStoredProcedures::Execute -
ERROR: Could not execute stored procedure | Thread 52
06/18/01 12:17:31: Thread ID : 52 : Error encountered in stored procedure
| Thread 52
06/18/01 12:17:31: Thread ID : 52 : DBIF:Execute: Ultimate SQL:
ROLLBACK TRANSACTION OUTER_7077776 | Thread 52
06/18/01 12:17:32: Thread ID : 52 : 1_4501810_1217-
1124633447_169062001_x0icg01.xdc.ecs.nasa.gov:IPOBIPOB1INRM1IGS
A15:IngestRQ409GR1 Done servicing | Thread 52
06/18/01 12:17:32: Thread ID : 52 : 1_4501810_1217-
1124633447_169062001_x0icg01.xdc.ecs.nasa.gov:IPOBIPOB1INRM1IGS
A15:IngestRQ409GR1 Unable to service | Thread 52
06/18/01 12:17:32: Thread ID : 52 : 1_4501810_1217-
1124633447_169062001_x0icg01.xdc.ecs.nasa.gov:IPOBIPOB1INRM1IGS
A15:IngestRQ409GR1 Marked as unassigned | Thread 52
06/18/01 12:17:32: Thread ID : 52 : 1_4501810_1217-
1124633447_169062001_x0icg01.xdc.ecs.nasa.gov:IPOBIPOB1INRM1IGS
A15:IngestRQ409GR1 Notifying the client | Thread 52
06/18/01 12:17:32: Thread ID : 52 : Waiting for work | Thread 52
06/18/01 12:17:32: Thread ID : 52 : Waking up manager thread | Thread
52
[...]

```

- In the example the expression **SEARCHING** is associated with Thread ID 52.
- The context of the **SEARCHING** statement indicates the type and source of the problem; in this case there appears to be a problem executing a stored procedure.
- If the specified text is not in the log file, the following type of response is displayed.

Pattern not found:

9 If the expression **SEARCHING** is not associated with the specified thread in the lines displayed, repeat Step 8.

10 If necessary, at the **:** prompt enter:

-2l

- **pg** simulates scrolling the screen backward two lines (or any other number of lines that is typed at the prompt).
 - The file is redisplayed to include the two lines that preceded the page previously displayed.
 - For example:

...skipping backward

```

06/18/01 12:17:31: Thread ID : 52 : DBIF:Execute: Ultimate SQL: exec
DsStSDAttachDisk
"/usr/ecs/TS2/CUSTOM/pdps/x0spg01/data/DpPrRm/x0spg01_disk",

```

```

"SDSV", 0 | Thread 52
06/18/01 12:17:31: Thread ID : 52 : SEARCHING FOR: 30148 (Found) |
Thread 52
06/18/01 12:17:31: Thread ID : 52 : SEARCHING FOR: 30148 (Found) |
Thread 52
06/18/01 12:17:31: Thread ID : 52 : DsStStoredProcedures::Execute -
ERROR: Could not execute stored procedure | Thread 52
06/18/01 12:17:31: Thread ID : 52 : Error encountered in stored procedure
| Thread 52
[...]

```

- The additional lines preceding "SEARCHING FOR" in the example indicate that the stored procedure in which the error was encountered is DsStSDAttachDisk.

11 To quit the **pg** application at the **:** prompt enter:

q

- **pg** exits from the Request Manager server debug log file.

12 If the request is a trivial request, go to Step 22.

13 If the request is a non-trivial request, open a separate UNIX window.

- The results of related operations on the server involved in performing copy or ftp functions for the transaction are going to be checked in a separate UNIX window.

14 Access a terminal window logged in to the appropriate server host for the server involved in performing copy or ftp functions for the transaction.

- Examples of appropriate server host names include **e0drg01**, **g0drg01**, **l0drg01**, and **n0drg01**.
- For detailed instructions refer to the **Log in to System Hosts** procedure (Section 18.2.1).

15 At the shell prompt enter:

```
grep '<Transaction ID>' <file name> | grep 'LogProgress'
```

- For example:

```
grep 'af610628-' EcDsStArchiveServerDebug.log | grep 'LogProgress'
```
- **<file name>** refers to the name of the log file for the process involved in performing copy or ftp functions for the transaction.
- **<Transaction ID>** refers to the Transaction ID associated with the applicable request.
- In this example af610628-1dd1-11b2-a047-af3a589fd88e is the relevant Transaction ID.

- However, usually it is not necessary to use the entire Transaction ID in the command; a representative sample (e.g., af610628- from the example) should be sufficient.
- References to other Transaction IDs and entries that do not contain the string "LogProgress" are filtered out so references to the specified Transaction ID that contain the string "LogProgress" are the only log entries displayed. (The string "LogProgress" is a filter for references to stored procedure DsStGRLogProgress.)
- Progress is logged for copy and ftp input/output at each block.
- The following type of response is displayed:

```

06/26/01 12:46:00: Thread ID : 65674 : myTransactionList[1]: exec
DsStGRLogProgress "af610628-1dd1-11b2-a047-
af3a589fd88e:PDPSSDSV1DSDD1DSDD10DSDD1DSDD1:MoPGE02#sy14
182000TS2SC:MOD03.001:55732", 0, 1, "files" | Thread 65674
06/26/01 12:46:00: Thread ID : 65674 : DBIF:Execute: Ultimate SQL: exec
DsStGRLogProgress "af610628-1dd1-11b2-a047-
af3a589fd88e:PDPSSDSV1DSDD1DSDD10DSDD1DSDD1:MoPGE02#sy14
182000TS2SC:MOD03.001:55732", 0, 1, "files" | Thread 65674
06/26/01 12:46:43: Thread ID : 65674 : : 06/26/01 12:46:43: read ID :
2:46:43: myTransactionmyTransactionList[1]: exec DsStGRLogProgress
"af610628-1dd1-11b2-a047-
af3a589fd88e:PDPSSDSV1DSDD1DSDD10DSDD1DSDD1:MoPGE02#sy14
182000TS2SC:MOD03.001:55732", 60, 60, "MB"List[1]: exec
DsStGRLogProgress "af610628-1dd1-11b2-a047-
af3a589fd88e:PDPSSDSV1DSDD1DSDD10DSDD1DSDD1:MoPGE02#sy14
182000TS2SC:MOD03.001:55732", 60, 60, "MB"65714read 65674 : 74
06/26/01 12:46:43: Thread ID : 65674 : DBIF:Execute: Ultimate SQL: exec
DsStGRLogProgress "af610628-1dd1-11b2-a047-
af3a589fd88e:PDPSSDSV1DSDD1DSDD10DSDD1DSDD1:MoPGE02#sy14
182000TS2SC:MOD03.001:55732", 60, 60, "MB"0DBIF:Execute: Ultimate
SQL: exec DsStGRLogProgress "af610628-1dd1-11b2-a047-
af3a589fd88e:PDPSSDSV1DSDD1DSDD10DSDD1DSDD1:MoPGE02#sy14
182000TS2SC:MOD03.001:55732", 60, 60, "MB"06/26/01 12:46:43: 6/26/01
12:46:43: | Thread : 65714read 65674 : 74

```

- If no progress is indicated, go to Step 22.

16 **Single-click** in the UNIX window for the Distribution Server host (Sun internal server host).

17 In the UNIX window for the Distribution Server host (Sun internal server host) at the command line prompt enter:

```
/usr/ecs/<MODE>/CUSTOM/logs
```

- Change to the "logs" directory in the appropriate mode.

18 At the command line prompt enter:

```
grep '<Transaction ID>' <file name> | grep 'Done servicing'
```

- <file name> refers to the appropriate Request Manager debug log.
- For example:

```
grep 'af610628-' EcDsStRequestManagerServerDebug.log | grep 'Done servicing'
```

- If the operation has been completed, the following type of response is displayed:

```
06/26/01 12:46:00: Thread ID : 52 : af610628-1dd1-11b2-a047-af3a589fd88e:PDPSSDSV1DSDD1DSDD10DSDD1DSDD1:MoPGE02#sy14182000TS2SC:MOD03.001:55732 Done servicing | Thread 52
```

```
06/26/01 12:46:44: Thread ID : 52 : af610628-1dd1-11b2-a047-af3a589fd88e:PDPSSDSV1DSDD1DSDD10DSDD1DSDD1:MoPGE02#sy14182000TS2SC:MOD03.001:55732 Done servicing | Thread 52
```

```
06/26/01 12:46:45: Thread ID : 52 : af610628-1dd1-11b2-a047-af3a589fd88e:PDPSSDSV1DSDD1DSDD2DSDD1DSDD3:MoPGE02#sy14182000TS2SC:MOD03.001:55732 Done servicing | Thread 52
```

```
06/26/01 12:46:47: Thread ID : 52 : af610628-1dd1-11b2-a047-af3a589fd88e:PDPSSDSV1DSDD1DSDD2DSDD1DSDD3:MoPGE02#sy14182000TS2SC:MOD03.001:55732 Done servicing | Thread 52
```

```
06/26/01 12:46:47: Thread ID : 52 : af610628-1dd1-11b2-a047-af3a589fd88e:PDPSSDSV1DSDD1DSDD2DSDD1DSDD7:MoPGE02#sy14182000TS2SC:MOD03.001:55732 Done servicing | Thread 52
```

```
06/26/01 12:46:50: Thread ID : 52 : af610628-1dd1-11b2-a047-af3a589fd88e:PDPSSDSV1DSDD1DSDD2DSDD1DSDD7:MoPGE02#sy14182000TS2SC:MOD03.001:55732 Done servicing | Thread 52
```

```
06/26/01 12:46:51: Thread ID : 52 : af610628-1dd1-11b2-a047-af3a589fd88e:PDPSSDSV1DSDD1DSDD4:MoPGE02#sy14182000TS2SC:MOD03.001:55732 Done servicing | Thread 52
```

```
06/26/01 12:46:56: Thread ID : 52 : af610628-1dd1-11b2-a047-af3a589fd88e:PDPSSDSV1DSDD1DSDD4:MoPGE02#sy14182000TS2SC:MOD03.001:55732 Done servicing | Thread 52
```

```
06/26/01 12:46:56: Thread ID : 52 : af610628-1dd1-11b2-a047-af3a589fd88e:PDPSSDSV1DSDD1DSDD8:MoPGE02#sy14182000TS2SC:MOD03.001:55732 Done servicing | Thread 52
```

```
06/26/01 12:46:59: Thread ID : 52 : af610628-1dd1-11b2-a047-af3a589fd88e:PDPSSDSV1DSDD1DSDD8:MoPGE02#sy14182000TS2SC:MOD03.001:55732 Done servicing | Thread 52
```

- The statement "Done servicing" shows that the operation has been completed; however, it provides no indication as to whether the operation succeeded or failed.
- If "Done servicing" is followed by "Unable to service," (as described in Step 19) the operation failed.
- If the operation has not been completed, no file entries are displayed (the UNIX prompt is displayed).

- It may just be slow to complete.
- If the operation has been completed, go to Step 19.
- If the operation has not been completed, go to Step 20.

19 At the shell prompt enter:

grep '<Transaction ID>' <file name> | grep 'Unable to service'

- <file name> refers to the appropriate Request Manager debug log.
- For example:

grep '2a7d4168-' EcDsStRequestManagerServerDebug.log | grep 'Unable to service'

- If the request has failed, the following type of response is displayed:

06/26/01 12:56:22: Thread ID : 52 : 2a7d4168-1dd2-11b2-8c52-99d0f708dce5:PDPSSDSV1:MoPGE02#sy14182000TS2MOD02OBC Unable to service | Thread 52

06/26/01 12:56:22: Thread ID : 52 : 2a7d4168-1dd2-11b2-8c52-99d0f708dce5:PDPSSDSV4:MoPGE02#sy14182000TS2MOD02OBC Unable to service | Thread 52

- If the operation has failed, return to Step 7.
- If the operation has not failed, no file entries are displayed (the UNIX prompt is displayed).

20 At the shell prompt enter:

tail -f <file name> | grep '<Transaction ID>'

- <file name> refers to the appropriate Request Manager debug log.
- <Transaction ID> refers to the Transaction ID associated with the applicable request.
- For example:

tail -f EcDsStRequestManagerServerDebug.log | grep 'af610628-'

- If new entries are being posted to the log, the operation has not finished yet.
 - If the same entries continue to be repeated over and over, there could be a problem with the server.
 - Notify the Operations Controller/System Administrator of suspected server problems.
- If it is necessary to exit from a tailed log, enter:

^c [Ctrl-c]

21 If the operation has not finished yet, monitor the tailed log for awhile.

- If the operation does not seem to finish (i.e., if entries continue to be made to the tailed log) after a reasonable period of time (e.g., 30 minutes), notify the Operations Controller/System Administrator of the problem.

- If it is necessary to exit from a tailed log, enter:
^c [Ctrl-c]

- 22 If problems were detected in the Request Manager server debug log and/or the log file for the process involved in performing copy or ftp functions for the transaction, notify the Operations Controller/System Administrator of the problem.
- 23 If problems were detected and corrected in the preceding steps, return to the **Recover from a Data Distribution Failure** procedure (Section 18.6.2).
- 24 If no problems were detected in the Request Manager server debug log or the log file for the process involved in performing copy or ftp functions for the transaction, continue with the **Check the Science Data Server Log Files** procedure (Section 18.6.2.4).

Table 18.6-12. Check the Request Manager Server Debug Log - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	UNIX window (Sun internal server)	single-click or use procedure in Section 18.2.1
2	cd /usr/ecs/<MODE>/CUSTOM/logs	enter text, press Enter
3	pg <file name> (Request Manager debug log)	enter text, press Enter
4	/<date> <time>	enter text, press Enter
5	/Unable to service	enter text, press Enter
6	Determine which thread is associated with the problem being investigated	read text
7	<search text> (Waking up service thread <number>)	enter text, press Enter
8	/SEARCHING	enter text, press Enter
9	Repeat the preceding step (if necessary)	
10	-2l (if necessary)	enter text, press Enter
11	q (when necessary)	enter text, press Enter
12	UNIX window (appropriate server host)	single-click or use procedure in Section 18.2.1
13	grep '<Transaction ID>' <file name> grep 'LogProgress'	enter text, press Enter
14	UNIX window (Sun internal server)	single-click
15	/usr/ecs/<MODE>/CUSTOM/logs	enter text, press Enter
16	grep '<Transaction ID>' <file name> grep 'Done servicing'	enter text, press Enter
17	grep '<Transaction ID>' <file name> grep 'Unable to service'	enter text, press Enter
18	tail -f <file name> grep '<Transaction ID>'	enter text, press Enter
19	Monitor the tailed log for awhile (if applicable)	read text

Table 18.6-12. Check the Request Manager Server Debug Log - Quick-Step Procedures (2 of 2)

Step	What to Enter or Select	Action to Take
20	If problems were detected in the log files, notify the Operations Controller/System Administrator of the problem	contact Operations Controller
21	If problems were detected and corrected in preceding steps, return to the Recover from a Data Distribution Failure procedure	Use procedure in Section 18.6.2
22	If problems were detected, continue with the Check the Science Data Server Log Files procedure	Use procedure in Section 18.6.2.4

18.6.2.4 Check the Science Data Server Log Files

The procedure to **Check the Science Data Server Log Files** is a part of the **Recover from a Data Distribution Failure** procedure (Section 18.6.2). It is performed in response to an acquire failure.

Acquire requests are processed through the Science Data Server. Consequently, it may be useful to inspect the Science Data Server log files (e.g., EcDsScienceDataServer.ALOG) to check for error messages associated with the ShortName of the file type.

Table 18.6-13 presents (in a condensed format) the steps required to check the Science Data Server log files. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Access a terminal window logged in to the SDSRV Server host.
 - Examples of SDSRV Server host (Sun internal server host) names include **e0acs06**, **g0acs06**, **l0acs06**, and **n0acs06**.
 - For detailed instructions refer to the **Log in to System Hosts** procedure (Section 18.2.1).

- 2 At the UNIX command line prompt enter:


```
cd /usr/ecs/<MODE>/CUSTOM/logs
```

 - <MODE> is current mode of operation.
 - "logs" is the directory containing archive server log files (e.g., EcDsScienceDataServer.ALOG).

- 3 At the command line prompt enter:


```
view <file name>
```

 - <file name> is the name of the applicable Science Data Server ALOG file.

- For example:
view EcDsScienceDataServer.ALOG
- Although this procedure has been written for the **view** command, any UNIX editor or visualizing command (e.g., **vi**, **pg**, **more**) can be used to review the log file.

4 Review the log file to determine whether the relevant file(s) was (were) successfully acquired.

- The following **view** editor commands are useful:
 - **h** (move cursor left).
 - **j** (move cursor down).
 - **k** (move cursor up).
 - **l** (move cursor right).
 - **a** (append text).
 - **i** (insert text).
 - **x** (delete a character).
 - **u** (undo previous change).
 - **Esc** (switch to command mode).
- The EcDsScienceDataServer.ALOG file should contain entries identifying the file to be acquired by the ShortName of the corresponding ESDT.
- The EcDsScienceDataServer.ALOG file should contain entries regarding the acquire activity. The following types of messages should be included in the ALOG file:


```
PID : 5497:Thread ID : 525 : MsgLink :0 meaningfulname
:DsSrWorkingCollectionDistributeOneDistributFile

Msg: File 1 to be distributed: :SC:MOD03.001:55732:1.HDF-EOS, rpcID =
4_18442_1727-1124614837_169062001_x0sps06.xdc.ecs.nasa.gov:PDPS: MoPGE
02#sy14182000TS2SC:MOD03.001:55732 Priority: 0 Time : 06/18/01 17:27:47

PID : 5497:Thread ID : 525 : MsgLink :0 meaningfulname
:DsSrWorkingCollectionDistributeOneDistributFile

Msg: File 2 to be distributed: SCMOD03.00155732.met, rpcID = 4_18442_1727-
1124614837_169062001_x0sps06.xdc.ecs.nasa.gov:PDPS:MoPGE02#
sy14182000TS2SC:MOD03.001:55732 Priority: 0 Time : 06/18/01 17:27:47

PID : 5497:Thread ID : 525 : MsgLink :0 meaningfulname
:DsSrWorkingCollectionDoDitributeCreateDsDdRequestMgrC

Msg: Calling routine to execute DsDdRequestMgrC::Create,
ddistRpcID=4_18442_1727-1124614837_169062001_x0sps06.xdc.ecs.nasa.gov:
PDPSSDSV1:MoPGE02#sy14182000TS2SC:MOD03.001:55732 Priority: 0 Time
: 06/18/01 17:27:47

PID : 5497:Thread ID : 525 : MsgLink :0 meaningfulname
:DsSrWorkingCollectionDoDitributeSubmitAcquireToDDist
```

**Msg: Calling routine to execute DsDdRequestMgrC::Submit(),
ddistRpcID=4_18442_1727-1124614837_169062001_x0sps06.xdc.ecs.nasa.gov:
PDPSSDSV1:MoPGE02#sy14182000TS2SC:MOD03.001:55732 Priority: 0 Time
: 06/18/01 17:27:47**

**PID : 5497:Thread ID : 525 : MsgLink :0 meaningfulname
:DsSrWorkingCollectionDDISTSubmitDDistSubmitReturned**

**Msg: Calling routine to execute DsDdRequestMgrC::Submit,
DDistRpcID=4_18442_1727-1124614837_169062001_x0sps06.xdc.ecs.nasa.gov:
PDPSSDSV1:MoPGE02#sy14182000TS2SC:MOD03.001:55732 Priority: 0 Time
: 06/18/01 17:27:47**

**PID : 5497:Thread ID : 525 : MsgLink :0 meaningfulname
:DsSrWorkingCollectionDDISTSubmitDDistSubmitReturned**

**Msg: Returned from DsDdRequestMgrC::Submit(),
DDistRpcID=4_18442_1727-1124614837_169062001_x0sps06.xdc.ecs.nasa.gov:
PDPSSDSV1:MoPGE02#sy14182000TS2SC:MOD03.001:55732 Priority: 0 Time
: 06/18/01 17:28:16**

**PID : 5497:Thread ID : 525 : MsgLink :0 meaningfulname
:DsSrWorkingCollectionDoDistributeDistributeFile**

**Msg: Acquire Succeeded - DISTRIBUTED 2 filecount, rpcID = 4_18442_1727-
1124614837_169062001_x0sps06.xdc.ecs.nasa.gov:PDPS:MoPGE02#sy14182000
TS2SC:MOD03.001:55732 Priority: 0 Time : 06/18/01 17:28:16**

**PID : 5497:Thread ID : 525 : MsgLink :0 meaningfulname
:DsSrSessionExecuteCommandComplt**

**Msg: Command 1/1 execution complete for Request ID 4_18442_1727-
1124614837_169062001_x0sps06.xdc.ecs.nasa.gov:PDPS:MoPGE02#sy14182000
TS2SC:MOD03.001:55732, Success: 1 Priority: 0 Time : 06/18/01 17:28:16**

**PID : 5497:Thread ID : 525 : MsgLink :0 meaningfulname
:DsShSRequestRealSetStateSettingState**

**Msg: Request 4_18442_1727-1124614837_169062001_x0sps06.xdc.ecs.nasa.gov:
PDPS:MoPGE02#sy14182000TS2SC:MOD03.001:55732 state set to DONE
Priority: 0 Time : 06/18/01 17:28:16**

- If the ShortName does not appear in the ALOG file, with a timestamp corresponding to the time of the attempted acquire, SDSRV may not be running, or may not be communicating with other servers.
- If the ALOG file does contain entries for that ShortName and indicates that two files (the file and its associated metadata file) are being distributed, SDSRV has completed its role in the acquire.

- If the ALOG contains the ShortName and also contains an error showing that the data file time stamp does not match the time stamp required by the acquire, the data file needs to be removed from the Science Data Server and reinserted.
 - This is usually done using a script called DsDbCleanGranules.
- 5 To quit the view application at the **view** program prompt enter:
:q!
 - 6 If the ShortName does **not** appear in the ALOG file, with a timestamp corresponding to the time of the attempted acquire, ensure that it is possible to connect to the necessary hosts and servers.
 - For detailed instructions refer to the **Check Connections to Hosts/Servers** procedure (Section 18.6.1.1).
 - 7 If the ALOG contains the ShortName and also contains an error showing that the data file time stamp does not match the time stamp required by the acquire, notify the Archive Manager to have the data file(s) removed from the Science Data Server and reinserted.
 - 8 If a problem was detected and corrected in one of the preceding steps (as indicated in the log file), return to the **Recover from a Data Distribution Failure** procedure (Section 18.6.2).
 - 9 If the ALOG file does contain entries for the ShortName and indicates that the relevant data file(s) and associated metadata file(s) are being distributed, continue with the **Check the Archive Server Log Files** procedure (Section 18.6.2.5).

Table 18.6-13. Check the Science Data Server Log Files - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	UNIX window (Sun internal Server)	single-click or use procedure in Section 18.2.1
2	cd /usr/ecs/<MODE>/CUSTOM/logs	enter text, press Enter
3	view <file name> (Science Data Server ALOG)	enter text, press Enter
4	Determine whether the relevant file(s) was (were) successfully acquired	read text
5	:q! (when applicable)	enter text, press Enter
6	If the ShortName does not appear in the ALOG file, check the connections to hosts	Use procedure in Section 18.6.1.1
7	If the ALOG contains an error showing that the data file time stamp does not match the time stamp required by the acquire, notify the Archive Manager to have the data file(s) reacquired	contact Archive Manager

**Table 18.6-13. Check the Science Data Server Log Files - Quick-Step Procedures
(2 of 2)**

Step	What to Enter or Select	Action to Take
8	If a problem was detected and corrected in one of the preceding steps, return to the Recover from a Data Distribution Failure procedure	Use procedure in Section 18.6.2
9	If the file(s) was (were) successfully acquired, continue with the Check the Archive Server Log Files procedure	Use procedure in Section 18.6.2.5

18.6.2.5 Check the Archive Server Log Files

The procedure to **Check the Archive Server Log Files** is a part of the **Recover from a Data Distribution Failure** procedure (Section 18.6.2). It is performed in response to an acquire failure.

Files to be acquired are retrieved from storage in the archive so the Archive Server is involved during an acquire. Consequently, it may be useful to inspect the Archive Server log files (e.g., EcDsStArchiveServer<HWCIn>.ALOG) to check for error messages associated with the ShortName of the file type.

Table 18.6-14 presents (in a condensed format) the steps required to check the Archive Server log files. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Access a terminal window logged in to the APC Server host.
 - Examples of APC Server host names include **e0acg11**, **g0acg01**, **l0acg02**, and **n0acg01**.
 - For detailed instructions refer to the **Log in to System Hosts** procedure (Section 18.2.1).

- 2 At the UNIX command line prompt enter:


```
cd /usr/ecs/<MODE>/CUSTOM/logs
```

 - <MODE> is current mode of operation.
 - "logs" is the directory containing archive server log files (e.g., EcDsStArchiveServerACM1.ALOG).

- 3 At the command line prompt enter:


```
view <file name>
```

 - <file name> is the name of the applicable archive server ALOG file.

- For example:
view EcDsStArchiveServerACM1.ALOG
 - Although this procedure has been written for the **view** command, any UNIX editor or visualizing command (e.g., **vi**, **pg**, **more**) can be used to review the log file.
- 4 Review the log file to determine whether the relevant file(s) was (were) successfully acquired.
 - The following **view** editor commands are useful:
 - **h** (move cursor left).
 - **j** (move cursor down).
 - **k** (move cursor up).
 - **l** (move cursor right).
 - **a** (append text).
 - **i** (insert text).
 - **x** (delete a character).
 - **u** (undo previous change).
 - **Esc** (switch to command mode).
 - 5 To quit the view application at the **view** program prompt enter:
:q!
 - 6 If the relevant file(s) was (were) **not** successfully acquired, notify the Archive Manager to have the data file(s) reacquired.
 - 7 If a problem was detected and corrected in one of the preceding steps, return to the **Recover from a Data Distribution Failure** procedure (Section 18.6.2).
 - 8 If the relevant file(s) had been successfully acquired (as indicated in the log file), continue with the **Check the Staging Disk** procedure (Section 18.6.2.6).

Table 18.6-14. Check the Archive Server Log Files - Quick-Step Procedures (1 of 2)

Step	What to Enter or Select	Action to Take
1	UNIX window (APC Server)	single-click or use procedure in Section 18.2.1
2	cd /usr/ecs/<MODE>/CUSTOM/logs	enter text, press Enter
3	view <file name>(Archive Server ALOG)	enter text, press Enter
4	Determine whether the relevant file(s) was (were) successfully acquired	read text
5	:q! (when applicable)	enter text, press Enter

**Table 18.6-14. Check the Archive Server Log Files - Quick-Step Procedures
(2 of 2)**

Step	What to Enter or Select	Action to Take
6	If the file(s) was (were) not successfully acquired, notify the Archive Manager to have the data file(s) reacquired	contact Archive Manager
7	If a problem was detected and corrected in one of the preceding steps, return to the Recover from a Data Distribution Failure procedure	Use procedure in Section 18.6.2
8	If the file(s) had been successfully acquired, continue with the Check the Staging Disk procedure	Use procedure in Section 18.6.2.6

18.6.2.6 Check the Staging Disk

The procedure to **Check the Staging Disk** is a part of the **Recover from a Data Distribution Failure** procedure (Section 18.6.2). It is performed in response to an acquire failure.

During an acquire, files are copied to a staging area as an intermediate step before distributing them to their destination. As part of diagnosing an acquire failure it is useful to check the staging area to ascertain whether the files have completed part of their journey. A subdirectory containing both the data granule and metadata file should have been written to the staging area.

Table 18.6-15 presents (in a condensed format) the steps required to check the staging disk. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Access a terminal window logged in to the Distribution Server host.
 - Examples of Distribution Server host (Sun internal server host) names include **e0acs06**, **g0acs06**, **l0acs06**, and **n0acs06**.
 - For detailed instructions refer to the **Log in to System Hosts** procedure (Section 18.2.1).

- 2 At the UNIX command line prompt enter:


```
cd /usr/ecs/<MODE>/CUSTOM/drp/<archive host>/data/staging/<disk number>
```

 - **<MODE>** is current mode of operation.
 - **<archive host>** refers to the applicable archive host (e.g., e0drg11, g0drg01, l0drg01, or n0drg01).
 - **<disk number>** is the relevant staging disk for the distribution.

- 3 At the UNIX command line prompt enter:
ls -lrt
 - A listing of the staging disk subdirectory contents is displayed.
- 4 Review the subdirectory contents to determine whether the relevant file(s) was (were) successfully staged.
 - The subdirectory should contain both the relevant data granule(s) and corresponding metadata file(s).
- 5 If the relevant file(s) was (were) successfully staged, ensure that it is possible to connect to the necessary hosts and servers.
 - For detailed instructions refer to the **Check Connections to Hosts/Servers** procedure (Section 18.6.1.1).
- 6 If the relevant file(s) was (were) successfully staged and if it is possible to connect to the necessary hosts and servers, return to the **Recover from a Data Distribution Failure** procedure (Section 18.6.2).
- 7 If the relevant file(s) was (were) **not** successfully staged, continue with the **Check the Staging Disk ALOG File** procedure (Section 18.6.2.7) to determine why the data were not successfully staged.

Table 18.6-15. Check the Staging Disk - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	UNIX window (Sun internal server)	single-click or use procedure in Section 18.2.1
2	cd /usr/ecs/<MODE>/CUSTOM/drp/<archive host>/data/staging/<disk number>	enter text, press Enter
3	ls -lrt	enter text, press Enter
4	Determine whether the relevant file(s) was (were) successfully staged	read text
5	If the relevant file(s) was (were) successfully staged, check the connections to hosts	Use procedure in Section 18.6.1.1
6	If the file(s) was (were) successfully staged, return to the Recover from a Data Distribution Failure procedure	Use procedure in Section 18.6.2
7	If the file(s) was (were) not successfully staged, continue with the Check the Staging Disk ALOG File procedure	Use procedure in Section 18.6.2.7

18.6.2.7 Check the Staging Disk ALOG File

The procedure to **Check the Staging Disk ALOG File** is a part of the **Recover from a Data Distribution Failure** procedure (Section 18.6.2). It may be performed in conjunction with the procedure to **Check the Staging Disk** (Section 18.6.2.6) in response to an acquire failure. If a failure occurs in copying files to the staging area, then the staging disk ALOG files (e.g., EcDsStStagingDiskServer.ALOG or EcDsStCacheManagerServer.ALOG) may reveal the cause.

Table 18.6-16 presents (in a condensed format) the steps required to check the staging disk ALOG file. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Access a terminal window logged in to the Distribution Server host.
 - Examples of Distribution Server host (Sun internal server host) names include **e0acs06**, **g0acs06**, **l0acs06**, and **n0acs06**.
 - For detailed instructions refer to the **Log in to System Hosts** procedure (Section 18.2.1).

- 2 At the UNIX command line prompt enter:
cd /usr/ecs/<MODE>/CUSTOM/logs
 - **<MODE>** is current mode of operation.
 - TS1 - Science Software Integration and Test (SSI&T)
 - TS2 - New Version Checkout
 - OPS - Normal Operations
 - "**logs**" is the directory containing data distribution, science data server, or storage management log files (e.g., EcDsDdistGui.ALOG, EcDsDistributionServer.ALOG).

- 3 At the command line prompt enter:
view <file name>
 - **<file name>** refers to the Staging Disk Server ALOG or Cache Manager Server ALOG as applicable.
 - For example:
view EcDsStStagingDiskServer.ALOG
 - Although this procedure has been written for the **view** command, any UNIX editor or visualizing command (e.g., **vi**, **pg**, **more**) can be used to review the log file.

- 4 Review the log file to determine whether the relevant file(s) was (were) successfully staged.
 - The following **view** editor commands are useful:
 - **h** (move cursor left).
 - **j** (move cursor down).

- **k** (move cursor up).
- **l** (move cursor right).
- **a** (append text).
- **i** (insert text).
- **x** (delete a character).
- **u** (undo previous change).
- **Esc** (switch to command mode).

5 To quit the view application at the **view** program prompt enter:

:q!

- 6 If the relevant file(s) was (were) successfully staged, ensure that it is possible to connect to the necessary hosts and servers.
- For detailed instructions refer to the **Check Connections to Hosts/Servers** procedure (Section 18.6.1.1).
- 7 If the relevant file(s) was (were) successfully staged and if it is possible to connect to the necessary hosts and servers, return to the **Recover from a Data Distribution Failure** procedure (Section 18.6.2).
- 8 If the relevant file(s) was (were) **not** successfully staged, continue with the **Check the Space Available in the Staging Area** procedure (Section 18.6.2.8).

Table 18.6-16. Check the Staging Disk ALOG File - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	UNIX window (Sun internal server)	single-click or use procedure in Section 18.2.1
2	cd /usr/ecs/<MODE>/CUSTOM/logs	enter text, press Enter
3	view <file name> (Staging Disk Server ALOG or Cache Manager Server ALOG as applicable)	enter text, press Enter
4	Determine whether the relevant file(s) was (were) successfully staged	read text
5	:q! (when applicable)	enter text, press Enter
6	If the relevant file(s) was (were) successfully staged, check the connections to hosts	Use procedure in Section 18.6.1.1
7	If the file(s) was (were) successfully staged, return to the Recover from a Data Distribution Failure procedure	Use procedure in Section 18.6.2
8	If the file(s) was (were) not successfully staged, continue with the Check the Space Available in the Staging Area procedure	Use procedure in Section 18.6.2.8

18.6.2.8 Check the Space Available in the Staging Area

The procedure to **Check the Space Available in the Staging Area** is a part of the **Recover from a Data Distribution Failure** procedure (Section 18.6.2). It may be performed in conjunction with the procedures to **Check the Staging Disk ALOG File** (Section 18.6.2.7) and **Check the Staging Disk** (Section 18.6.2.6) in response to an acquire failure. An acquire failure can be caused by a lack of space in the staging area.

Table 18.6-17 presents (in a condensed format) the steps required to check the space available in the staging area. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Access a terminal window logged in to the Distribution Server host.
 - Examples of Distribution Server host (Sun internal server host) names include **e0acs06**, **g0acs06**, **l0acs06**, and **n0acs06**.
 - For detailed instructions refer to the **Log in to System Hosts** procedure (Section 18.2.1).
- 2 At the UNIX command line prompt enter:
cd /usr/ecs/<MODE>/CUSTOM/drp/<archive host>/data/
 - Change to the appropriate data subdirectory.
 - **<MODE>** is current mode of operation.
 - **<archive host>** refers to the applicable archive host (e.g., e0drg11, g0drg01, l0drg01, or n0drg01).
- 3 At the UNIX command line prompt enter:
df -k .
 - Be sure to include the dot at the end of the command.
 - The **df -k .** command generates a report of the number of free disk blocks and files.
 - For example:

Filesystem	kbytes	used	avail	capacity	Mounted on
x0drg01:/usr/ecs/TS2/CUSTOM/drp/x0drg01/data	278586880	156217472	122369408	57%	/data1/ecs/TS2/CUSTOM/drp/x0drg01/data
- 4 Review the available space listed to determine whether there is adequate space for staging the relevant file(s).
- 5 If there is **not** adequate space for staging the relevant file(s), notify the Operations Controller/System Administrator of the lack of space.

- 6 If there is adequate space for staging the relevant file(s), notify the Archive Manager to have the data file(s) reacquired.
- 7 Return to the **Recover from a Data Distribution Failure** procedure (Section 18.6.2) after the problem has been corrected.

Table 18.6-17. Check the Space Available in the Staging Area - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	UNIX window (Sun internal server)	single-click or use procedure in Section 18.2.1
2	cd /usr/ecs/<MODE>/CUSTOM/drp/<archive host>/data/	enter text, press Enter
3	df -k .	enter text, press Enter
4	Determine whether there is adequate space for staging the relevant file(s)	read text
5	Notify the Operations Controller/System Administrator of the lack of space (if applicable)	contact Operations Controller
6	Notify the Archive Manager to have the data file(s) reacquired (if there is adequate space)	contact Archive Manager
7	Return to the Recover from a Data Distribution Failure procedure	Use procedure in Section 18.6.2

18.6.2.9 Check Database Connections

The storage management/data distribution shared database is the repository of data concerning data distribution requests. If applications (including the **Data Distribution Operator GUI**) are unable to connect to the database, the data distribution request data cannot be retrieved or (in the case of the GUI) displayed. Consequently, if the GUI does not display data or if the display does not refresh, checking the database connections is a logical step in trying to isolate the problem.

Table 18.6-18 presents (in a condensed format) the steps required to check database connections. If you are already familiar with the procedures, you may prefer to use the quick-step table. If you are new to the system, or have not performed this task recently, you should use the detailed procedures that follow.

- 1 Submit a request to the Database Administrator to identify the values for the following parameters associated with the EcDsDistributionServer:
 - **DBName.**
 - **DBServer.**
 - **DBMaxConnections.**

- 2 Access a terminal window logged in to the APC Server host.
- Examples of APC Server host names include **e0acg11**, **g0acg01**, **l0acg02**, and **n0acg01**.
 - For detailed instructions refer to the **Log in to System Hosts** procedure (Section 18.2.1).
 - APC Server typically hosts Sybase for the storage management/data distribution shared database.

- 3 At the UNIX command line prompt enter:

isql -U <user ID> -S <database server>

- **<user ID>** is the database user's identification; e.g., **stmgt_role**.
- **<database server>** is the database server; e.g., **x0acg01_srvr**.
- For example:

isql -U stmgt_role -S x0acg01_srvr

- 4 At the **Password:** prompt enter:

<database password>

- **<database password>** is the password for logging in to the database using the specified **<user ID>**.
- A **1>** prompt is displayed, indicating that a connection has been made with the database.

- 5 At the **1>** prompt enter:

sp_who

- A **2>** prompt is displayed.

- 6 At the **2>** prompt enter:

go

- A listing of current log-ins to the database is displayed; it includes data in the following columns:
 - **spid.**
 - **status.**
 - **loginame.**
 - **hostname.**
 - **blk.**
 - **dbname.**
 - **cmd.**
- A listing similar to the following one is displayed (most lines have been deleted):

spid	status	loginame	hostname	blk
	dbname		cmd	

```

-----
1 recv sleep  stmgt_role          x0acs03  0
  stmgtdb1_TS1          AWAITING COMMAND
2 sleeping  NULL                      0
  master           NETWORK HANDLER
3 sleeping  NULL                      0
  master           DEADLOCK TUNE

```

7 At the 1> prompt enter:
sp_configure "user connections"

8 At the 2> prompt enter:
go

- A listing similar to the following one is displayed:

Parameter Name	Default	Memory Used	Config Value
number of user connections	25	20195	255

Run Value

255
(1 row affected)
(return status = 0)

9 At the 1> prompt enter:
quit

- The connection with the database is discontinued.
- A UNIX command line prompt is displayed.

10 Compare the number of actual connections with the number of connections for which the database has been configured.

- Number of actual connections is displayed in response to the **sp_who** isql command.
- Number of connections for which the database has been configured is displayed in response to the **sp_configure "user connections"** isql command.

11 If the number of actual connections is very close to the number of connections for which the database has been configured, notify the Database Administrator of the fact.

- 12** If the number of actual connections is **not** very close to the number of connections for which the database has been configured, compare the number of actual connections with the value for DBMaxConnections that the Database Administrator specified (Step 1).
- In Step 1 of this procedure a request was made to the Database Administrator to identify the value assigned to DBMaxConnections.
- 13** If the number of actual connections is very close to the value for DBMaxConnections, notify the Database Administrator of the fact.
- It may be advisable to increase the value assigned to the DBMaxConnections parameter in the Configuration Registry.

Table 18.6-18. Check Database Connections - Quick-Step Procedures

Step	What to Enter or Select	Action to Take
1	Request the Database Administrator to identify values for EcDsDistributionServer parameters DBName , DBServer , and DBMaxConnections	contact Database Administrator
2	UNIX window (APC Server)	single-click or use procedure in Section 18.2.1
3	isql -U <user ID> -S <database server>	enter text, press Enter
4	<database password>	enter text, press Enter
5	sp_who	enter text, press Enter
6	go	enter text, press Enter
7	sp_configure "user connections"	enter text, press Enter
8	go	enter text, press Enter
9	quit	enter text, press Enter
10	Compare the number of actual connections with the number for which the database has been configured	read text
11	Notify the Database Administrator that the number of actual connections is very close to the number of connections for which the database has been configured (if applicable)	contact Database Administrator
12	Compare the number of actual connections with the value for DBMaxConnections (If applicable)	read text
13	Notify the Database Administrator that the number of actual connections is very close to the value for DBMaxConnections (if applicable)	contact Database Administrator

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19. User Services

User Services personnel at the DAACs provide support services to the scientists, graduate and undergraduate students, and students in grades K-12, as well as teachers, or commercial users who may pull ECS data products for their programs. In this role, User Services exercises five major responsibilities (at the LP DAAC, there are two additional responsibilities):

- Help create new users – creating new accounts and performing other account management activities.
- Support order tracking – keeping logs of user contacts, retrieving user information, and helping trace and report the status of order processing.
- Resolve user requests/problems – respond to user requests and act on behalf of users to provide ECS services and products.
- Initiate/track problem reports – initiate an ECS problem report based on a user called-in (or e-mailed) advice of a system problem (i.e., an instance in which the system does not conform to specified or advertised performance).
- Coordinate external and internal sources to resolve user issues/problems – respond to user issues and resolve problems by identifying and energizing the necessary resources, both internal (e.g., DAAC operations personnel) and external (e.g., engineering from the Sustaining Engineering Organization, resources from the System Monitoring and Control Center, personnel from other DAACs).
- (LP DAAC Only) support users of the ASTER Data Acquisition Request (DAR) tool for preparing and submitting requests for acquisition of data by the ASTER instrument.
- (LP DAAC Only) support users of the EOS Data Gateway (EDG) Search and Order tool for preparing and submitting requests for production of ASTER on-demand products.

To fulfill their responsibilities, User Services personnel may use custom software tools, including ECS account management tools, an order tracking tool, subscription tools, the Data Dictionary Maintenance Tool, the ASTER DAR tool, and the ODFRM tool. They may also use a customized commercial software, Remedy, to create and maintain user contact records. Finally, they may use the EOS Data Gateway tool for creating data searches and orders.

Subsequent sections related to User Services address procedures for the following functions:

- Section 19.1 ECS User Account Management.
- Section 19.2 Creating and Maintaining User Contact Log Records.
- Section 19.3 Processing an Order.
- Section 19.4 Working with the Spatial Subscription Server and Data Pool
- Section 19.5 Using the ECS Order Tracking Tool.
- Section 19.6 Using the Data Dictionary Maintenance Tool.
- Section 19.7 (LP DAAC Only) Creating and Managing ASTER Data Acquisition Requests.

- Section 19.8 (LP DAAC Only) On-Demand Product Requests.

For each set of functions, an **Activity Checklist** table provides an overview of the tasks to be completed. The outline of the Activity Checklist is as follows:

Column one - **Order** shows the order in which tasks could be accomplished.

Column two - **Role** lists the Role/Manager/Operator responsible for performing the task.

Column three - **Task** provides a brief explanation of the task.

Column four - **Section** provides the Procedure (P) section number or Instruction (I) section number where details for performing the task can be found.

Column five - **Complete?** is used as a checklist to keep track of which task steps have been completed.

19.1 ECS User Account Management

All registered users of the ECS have a personal "user account" that is maintained within the ECS User Profile database. The account contains the user's name, User ID, e-mail address, preferred shipping address, billing address, and other information regarding the user that is needed when processing user requests. Table 19.1-1 provides an Activity Checklist for ECS User Account Management functions.

Table 19.1-1. ECS User Account Management - Activity Checklist (1 of 2)

Order	Role	Task	Section	Complete?
1	User Services	Launch Account Management Application using UNIX Commands	(P) 19.1.1	
2	User Services	Retrieve Individual Account Screens on Local Read-Only GUI	(P) 19.1.2.1	
3	User Services	Retrieve Full User Profile on SMC GUI	(P) 19.1.2.2	
4	User Services	Enter Personal Information for Account	(P) 19.1.3.1	
5	User Services	Enter Mailing Address for Account	(P) 19.1.3.2	
6	User Services	Enter Shipping Address for Account	(P) 19.1.3.3	
7	User Services	Enter Billing Address for Account	(P) 19.1.3.4	
8	User Services	Enter Account Information and Create the User Account	(P) 19.1.3.5	
9	User Services	Edit/Modify Personal Information	(P) 19.1.4.1	
10	User Services	Edit/Modify Mailing Address	(P) 19.1.4.2	
11	User Services	Edit/Modify Shipping Address	(P) 19.1.4.3	
12	User Services	Edit/Modify Billing Address	(P) 19.1.4.4	
13	User Services	Edit/Modify Account Information	(P) 19.1.4.5	
14	User Services	Edit/Modify DAR Information	(P) 19.1.4.6	
15	User Services	Delete an ECS Account	(P) 19.1.5	

Table 19.1-1. ECS User Account Management - Activity Checklist (2 of 2)

Order	Role	Task	Section	Complete?
16	User Services	Cancel an ECS Account (Probation)	(P) 19.1.6	
17	User Services	Troubleshooting: Check Log Files for Account Management	(P) 19.1.7	

19.1.1 Launch Account Management Application Using UNIX Commands

The Account Management tool at the DAAC is read-only, permitting display of information in the local User Profile database. Changes to a user's profile are accomplished through use of the Account Management tool at the SMC; any changes made at the SMC are replicated for read-only access to the DAACs. Access to the Account Management functions at the DAAC or at the SMC is gained through the use of UNIX commands. Launching the Account Management application starts with the assumption that the applicable servers are running and the operator has logged in to the system or has logged in remotely to the SMC. Table 19.1-2 presents the steps required to launch the Account Management application using UNIX commands. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 At the UNIX command shell prompt, type **setenv DISPLAY *clientname*:0.0** and then press the **Return/Enter** key.
 - For *clientname*, use either the local terminal/workstation IP address or its machine name.
- 2 Start the log-in to the MSS client server by typing **/tools/bin/ssh *hostname*** (e.g., g0mss21, l0mss21, e0mss21, n0mss21, m0mss16) at the UNIX command shell prompt, and then press the **Return/Enter** key.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type **yes** (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed **sshremote**, a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears; continue with Step 3.
 - If you have not previously set up a secure shell passphrase, go to Step 4.
- 3 If a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears, type your **Passphrase** and then press the **Return/Enter** key. Go to Step 5.
- 4 At the **<user@remotehost>'s password:** prompt, type your **Password** and then press the **Return/Enter** key.

- 5 To change to the directory containing the utility scripts to start Account Management GUIs, type `cd /usr/ecs/MODE/CUSTOM/utilities`, where *MODE* will likely be **TS1**, **TS2**, or **OPS**, and then press the **Return/Enter** key.
 - The working directory is changed to `/usr/ecs/MODE/CUSTOM/utilities`.

- 6 Type `EcMsAcDAACRegUserGUIStart MODE` (to launch the GUI at your local site) or `EcMsAcSMCRegUserGUIStart MODE` (to launch the GUI at the SMC), where *MODE* is **TS1**, **TS2**, or **OPS** (or other) as selected in Step 5, and then press the **Return/Enter** key.
 - The **ECS User Account Management** window is displayed.
 - On the SMC tool, the window shows two folders: **Request Account** and **Profile Account**; on the DAAC tool, only the **Profile Account** folder appears.

Table 19.1-2. Launch Account Management Application Using UNIX Commands

Step	What to Do	Action to Take
1	<code>setenv DISPLAY <i>clientname</i>:0.0</code>	enter text; press Return/Enter
2	<code>/tools/bin/ssh <i>hostname</i></code>	enter text; press Return/Enter
3	<i>Passphrase</i> (or Step 4)	enter text; press Return/Enter
4	<i>Password</i>	enter text; press Return/Enter
5	<code>cd /usr/ecs/<i>MODE</i>/CUSTOM/utilities</code>	enter text; press Return/Enter
6	<code>EcMsAcDAACRegUserGUIStart <i>MODE</i></code> (at DAAC) OR <code>EcMsAcSMCRegUserGUIStart <i>MODE</i></code> (at SMC)	enter text; press Return/Enter

19.1.2 Retrieve a User Account/Validate a User

When a user contacts User Services with any request, it is typical for User Services to retrieve the user's account. User account information can be used to validate the user and/or provide information that will be needed to process the user's request. At the DAAC, to view all user profile data for an account it is necessary to retrieve (select tabs for) individual account screens (e.g., Personal Information, Mailing Address, Shipping Address, Account Information) one at a time. Although you are not likely to log into the SMC just to retrieve account information, if you are logged in there, the Account Management tool at the SMC provides for display of a screen showing the entire profile at once. If desired, it is also possible to retrieve individual screens at the SMC. A separate procedure is provided for each of the two different retrieval approaches.

19.1.2.1 Retrieve Individual Account Screens on the Local Read-Only GUI

Table 19.1-3 presents the steps required to retrieve individual account screens on the local read-only GUI. If you are already familiar with the procedure, you may prefer to use this quick-step

table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the local **ECS User Account Management** application GUI (refer to Procedure 19.1.1 **Launch Account Management Application Using UNIX Commands**).
 - The **ECS User Account Management** window is displayed; at the DAAC, the only top-level tab displayed is **Profile Account**.
 - Folders and fields applicable to existing accounts are displayed.
- 2 Click on the **Retrieve by DAAC** option button and select your DAAC from the displayed list, or select **All**.
 - The selected choice is displayed on the option button.
- 3 Click on the **Retrieve** button.
 - The account list field displays the list of accounts for the option selected in Step 2.
- 4 If desired, enter a search criterion, either using the **Find** field (located to the right of the **Find** button just below the account listing box) and clicking **Find**, or by clicking on the **User ID** or **Last Name** button and entering an appropriate ID or name in the associated text field; click on the **Retrieve** button.
 - Account(s) meeting the entered search criterion are displayed (*Note:* The search functions are case-sensitive.)
- 5 Scroll through the accounts listed (if necessary) until the desired account is visible, then click on the account to highlight it.
 - Six folders are displayed that contain detailed information about the selected account: **Account Information, Personal Information, Shipping Address, Billing Address, Mailing Address, and DAR Information**.
- 6 Click on each folder to display desired information. The user account information needed in order to validate the user is displayed.

Table 19.1-3. Retrieve Individual Account Screens on Local Read-Only GUI

Step	What to Do	Action to Take
1	Launch the ECS User Account Management GUI	Use procedure in Section 19.1.1
2	Select DAAC (Retrieve by DAAC option button)	click option
3	Activate Retrieve button	single-click
4	Filter with Find or search criterion field and Retrieve	enter text; single-click
5	Scroll and highlight desired account	single-click
6	Click tabs to review folders	single-click each tab

19.1.2.2 Retrieve Full User Profile on the SMC GUI

Table 19.1-4 presents the steps required to retrieve a user's entire account profile on the SMC Account Management GUI. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1** Launch the **ECS User Account Management** application GUI at the SMC (refer to Procedure 19.1.1 **Launch Account Management Application Using UNIX Commands**).
 - The **ECS User Account Management** window is displayed; at the SMC, two top-level tabs are displayed: **Request Account** and **Profile Account**.
- 2** Click on the **Profile Account** tab.
 - Folders and fields applicable to existing accounts are displayed.
- 3** Click on the **Retrieve by DAAC** option button and select your DAAC from the displayed list, or select **All**.
 - The selected choice is displayed on the option button.
- 4** Click on the **Retrieve** button.
 - The account list field displays the list of accounts for the option selected in Step 2.
- 5** If desired, enter a search criterion, either using the **Find** field (located to the right of the **Find** button just below the account listing box) and clicking **Find**, or by clicking on the **User ID** or **Last Name** button and entering an appropriate ID or name in the associated text field; click on the **Retrieve** button.
 - Account(s) meeting the entered search criterion are displayed (*Note:* The search functions are case-sensitive.)
- 6** Scroll through the accounts listed (if necessary) until the desired account is visible, then click on the account to highlight it.
 - Six folders are displayed that contain detailed information about the selected account: **Account Information**, **Personal Information**, **Shipping Address**, **Billing Address**, **Mailing Address**, and **DAR Information**.
- 7** Click on the **View Entire Profile** button at the bottom of the window.
 - The User Profile screen is displayed.
 - This is a read only screen; no changes can be made without going to each individual folder.
 - The User Profile screen displays the information contained in the Personal Information folder, Account Information folder, Shipping Address folder, Billing Address folder, Mailing Address folder, and the DAR Information folder.

- 8 After examining the displayed information to verify the user's account, click the **Close** button to exit from the User Profile screen.

Table 19.1-4. Retrieve Full User Profile on SMC GUI

Step	What to Do	Action to Take
1	Launch the ECS User Account Management GUI	Use procedure in Section 19.1.1
2	Select Profile Account	single-click
3	Select DAAC (Retrieve by DAAC option button)	click option
4	Activate Retrieve button	single-click
5	Filter with Find or search criterion field and Retrieve	enter text; single-click
6	Scroll and highlight desired account	single-click
7	Activate View Entire Profile button	single-click
8	Activate Close button	single-click

19.1.3 Create a User Account

If a user registers through the **Become a registered user** link on the EOS Data Gateway tool (URL: <http://redhook.gsfc.nasa.gov/~imswww/pub/imswelcome/>), a user account with basic privileges is created in the database at the SMC and replicated to the DAAC sites. However, it is possible to create an account for a user by entering user information in five subordinate folders under the **Request Account** tab on the ECS User Account Management tool at the SMC. If User Services is creating an account in this manner, it is essential to have the needed user information. This information should be obtained at the time the user requests assistance in registration. A separate procedure is provided for entering the data in each of the five required subfolders, and a sixth procedure is provided for entering data to authorize an approved user for submission of an ASTER Data Acquisition Request (DAR).

19.1.3.1 Enter Personal Information for Account

The **Personal Information** folder contains the user name, e-mail address, organization, telephone number, mother's maiden name, affiliation, project, home DAAC, and primary area of study. The user may need to be contacted in order to obtain all the information needed. This procedure assumes that the operator has the ECS User Account Management tool opened at the SMC with the **Request Account** tab selected. Table 19.1-5 presents the steps required to enter personal information for an account. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Click the **Personal Information** folder.
 - The **Personal Information** folder opens.

- 2 Click on the **Title** field.
 - The cursor moves to the **Title** field.
- 3 Enter the user's **Title**, then press **Tab**.
 - A pull-down menu is available and may be used instead of typing the **Title**:
 - Point the mouse on the arrow to the right of the **Title** field.
 - While holding the mouse pointer button down, **highlight** the **Title** you require.
 - **Release** the mouse button.
- 4 The title you have chosen appears in the **Title** field.
- 5 The Titles in the drop-down box are **Dr, Mr, Ms, Miss, Mrs, and Rev.**
 - The cursor moves to the **First Name** field.
- 6 Enter the user's **first name**, then press **Tab**.
 - The cursor moves to the **MI** field.
- 7 Enter the user's **middle initial**, then press **Tab**.
 - The cursor moves to the **Last Name** field.
- 8 Enter the user's **last name**, then press **Tab**.
 - The cursor moves to the **Email:** field.
- 9 Enter the user's **Email:** address, then press **Tab**.
 - The cursor moves to the **User ID:** field.
- 10 Enter the **User ID:** and then press **Tab**.
 - The cursor moves to the **Organization:** field.
- 11 Enter the user's **organization:** and then press **Tab**.
 - The cursor moves to pull-down arrow next to the **Affiliation:** field.
- 12 Click on the pull-down arrow next to the **Affiliation:** field.
- 13 A pull-down menu appears with choices of **K-12, Commercial, Government, University, and Other.**
- 14 Click on the choice indicating the user's affiliation.
- 15 The selected choice appears in the **Affiliation:** field.

- 16 Click on the **User Verification Key:** field.
 - The cursor moves to the **User Verification Key:** field.
- 17 Enter the user's **User Verification Key:** then press **Tab**.
 - The cursor moves to the pull-down arrow next to the **Home DAAC:** field.
- 18 Click on the pull-down arrow next to the **Home DAAC:** field.
- 19 A pull-down menu appears with choices of **ASF, CSN, EDC, GSF, JPL, LAR, MDC, MSF, NSC, ORN, RBD, SMC,** and **VTC**.
- 20 Click on the three-letter choice for the home DAAC.
 - The selected three-letter choice appears in the **Home DAAC:** field.
- 21 Click on the **Project:** field.
 - The cursor moves to the **Project:** field.
- 22 Enter the **Project:** and then press **Tab**.
 - The cursor moves to the pull-down arrow next to the **Primary Area of Study:** field.
- 23 Click on the pull-down arrow next to the **Primary Area of Study:** field.
 - A pull-down menu appears with a number of choices.
- 24 Click on the choice reflecting the user's Primary Area of Study.
 - The **Personal Information** folder is complete.

Table 19.1-5. Enter Personal Information for Account (1 of 2)

Step	What to Do	Action to Take
1	Select Personal Information folder	single-click
2	Move cursor to Title: field	single-click
3	Enter user's Title	enter text; press Tab
4	Enter user's First Name	enter text; press Tab
5	Enter user's Middle Initial	enter text; press Tab
6	Enter user's Last Name	enter text; press Tab
7	Enter user's Email address	enter text; press Tab
8	Enter the User ID	enter text; press Tab
9	Enter the user's Organization	enter text; press Tab
10	Open Affiliation: pull-down menu	single-click
11	Select the user's Affiliation	single-click
12	Move cursor to User Verification Key: field	single-click
13	Enter the user's User Verification Key	enter text; press Tab

Table 19.1-5. Enter Personal Information for Account (2 of 2)

Step	What to Do	Action to Take
14	Open Home DAAC : pull-down menu	single-click
15	Select the user's Home DAAC	single-click
16	Move cursor to Project : field	single-click
17	Enter the user's Project	enter text; press Tab
18	Open Primary Area of Study : pull-down menu	single-click
19	Select the user's Primary Area of Study	single-click

19.1.3.2 Enter Mailing Address for Account

The **Mailing Address** is used for normal correspondence, and may be different from the shipping and billing addresses. User Services is responsible for maintaining up-to-date mailing addresses. This procedure assumes that the operator has the ECS User Account Management tool opened at the SMC with the **Request Account** tab selected. Table 19.1-6 presents the steps required to enter the mailing address for an account. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Click the **Mailing Address** folder tab.
 - The **Mailing Address** folder opens.
- 2 Click on the first **Address**: field.
- 3 Enter the user's **mailing address**, then press **Tab**.
 - The cursor moves to the second **Address**: field.
- 4 If a second address field is needed to complete the user's **mailing address**, enter the **mailing address**, then press **Tab**.
 - If a second address field is not needed, press **Tab** to bypass the field.
 - The cursor moves to the third **Address**: field.
- 5 If a third address field is needed to complete the user's **Mailing Address**, enter the **mailing address**, then press **Tab**.
 - If a third address field is not needed, press **Tab** to bypass the field.
 - The cursor moves to the **City**: field.
- 6 Enter the **City**: to which regular correspondence is sent, then press **Tab**.
 - The cursor moves to the pull-down arrow next to the **State/Province**: field.
- 7 Click on the pull-down arrow next to the **State/Province**: field.
 - A pull-down menu appears permitting choice among a list of states.

- 8 Click on the choice for the user's **State** or **Province** for the **mailing address**, then press **Tab**.
 - The cursor moves to the **Zip/Postal Code**: field.
- 9 Enter the **Zip/Postal Code**: for the mailing address, then press **Tab**.
 - The cursor moves to the pull-down arrow next to the **Country**: field.
- 10 Click on the pull-down arrow next to the **Country**: field.
 - A pull-down menu appears permitting choice among a list of countries.
- 11 Click on the choice for the **Country**: for the **mailing address**, then press **Tab**.
 - The cursor moves to the **Telephone**: field.
- 12 Enter the **Telephone number** used at the mailing address, then press **Tab**.
 - The cursor moves to the **Fax**: field.
- 13 Enter the **Fax number** used at the mailing address, then press **Tab**.
 - The **Mailing Address** folder is now complete.

Table 19.1-6. Enter Mailing Address for Account

Step	What to Do	Action to Take
1	Select Mailing Address folder	single-click
2	Move cursor to first Address : field	single-click
3	Enter user's mailing address	enter text; press Tab
4	Enter any second line of user's mailing address	enter text; press Tab
5	Enter any third line of user's mailing address	enter text; press Tab
6	Enter city of user's mailing address	enter text; press Tab
7	Open State/Province : pull-down menu	single-click
8	Select State/Province of the user's mailing address	single-click; press Tab
9	Enter the Zip/Postal Code	enter text; press Tab
10	Open Country : pull-down menu	single-click
11	Select Country of the user's mailing address	single-click; press Tab
12	Enter telephone number	enter text; press Tab
13	Enter fax number	enter text; press Tab

19.1.3.3 Enter Shipping Address for Account

The **Shipping Address** folder contains the address for shipping data and may be different from the mailing and billing addresses. User Services always confirms the shipping address with the user before shipping data. This procedure assumes that the operator has the ECS User Account Management tool opened at the SMC with the **Request Account** tab selected. Table 19.1-7 presents the steps required to enter the shipping address for an account. If you are already

familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1** Click the **Shipping Address** folder tab.
 - The **Shipping Address** folder opens.
- 2** Click on the **Title:** field.
 - The cursor moves to the **Title:** field.
- 3** Enter the user's **Title**, then press **Tab**.
 - A pull-down menu is available and may be used instead of typing the **Title**:
 - Point the mouse on the arrow to the right of the **Title:** field.
 - While holding the mouse pointer button down, **highlight** the **Title** you require.
 - **Release** the mouse button.
- 4** The title you have chosen appears in the **Title:** field.
- 5** The Titles in the drop-down box are **Dr, Mr, Ms, Miss, Mrs,** and **Rev.**
 - The cursor moves to the **First Name:** field.
- 6** Enter the user's **first name**, then press **Tab**.
 - The cursor moves to the **MI:** field.
- 7** Enter the user's **middle initial**, then press **Tab**.
 - The cursor moves to the **Last Name:** field.
- 8** Enter the user's **last name**, then press **Tab**.
 - The cursor moves to the first **Address:** field.
- 9** Enter the user's **Shipping Address**, then press **Tab**.
 - The cursor moves to the second **Address:** field.
- 10** If a second address field is needed to complete the user's **Shipping Address**, enter the **Shipping Address**, then press **Tab**.
 - If a second address field is not needed, press **Tab** to bypass the field.
 - The cursor moves to the third **Address:** field.
- 11** If a third address field is needed to complete the user's **Shipping Address**, enter the **Shipping Address**, then press **Tab**.
 - If a third address field is not needed, press **Tab** to bypass the field.
 - The cursor moves to the **Organization:** field.

- 12 Enter the user's **Organization**, then press **Tab**.
 - The cursor moves to the **State/Province:** field.
- 13 Click on the pull-down arrow next to the **State/Province:** field.
 - A pull-down menu appears permitting choice among a list of states.
- 14 Click on the choice for the user's **State** or **Province** for the shipping address, then press **Tab**.
 - The cursor moves to the **City:** field.
- 15 Enter the **City:** to which the data will be shipped, then press **Tab**.
 - The cursor moves to the pull-down arrow next to the **Zip/Postal Code:** field.
- 16 Enter the **Zip/Postal Code:** for the shipping address, then press **Tab**.
 - The cursor moves to the pull-down arrow next to the **Country:** field.
- 17 Click on the pull-down arrow next to the **Country:** field.
 - A pull-down menu appears permitting choice among a list of countries.
- 18 Click on the choice for the **Country:** to which the data will be shipped, then press **Tab**.
 - The cursor moves to the **Telephone:** field.
- 19 Enter the **Telephone number** used at the shipping address, then press **Tab**.
 - The cursor moves to the **Fax:** field.
- 20 Enter the **Fax number** used at the shipping address, then press **Tab**.
 - The **Shipping Address** folder is now complete.

Table 19.1-7. Enter Shipping Address for Account (1 of 2)

Step	What to Do	Action to Take
1	Select Shipping Address folder	single-click
2	Move cursor to Title: field	single-click
3	Enter user's Title	enter text; press Tab
4	Enter user's First Name	enter text; press Tab
5	Enter user's Middle Initial	enter text; press Tab
6	Enter user's Last Name	enter text; press Tab
7	Enter user's shipping address	enter text; press Tab
8	Enter any second line of user's shipping address	enter text; press Tab
9	Enter any third line of user's shipping address	enter text; press Tab
10	Enter the user's organization	enter text; press Tab

Table 19.1-7. Enter Shipping Address for Account (2 of 2)

Step	What to Do	Action to Take
11	Open State/Province : pull-down menu	single-click
12	Select State/Province of the user's shipping address	single-click; press Tab
13	Enter city of user's shipping address	enter text; press Tab
14	Enter the Zip/Postal Code	enter text; press Tab
15	Open Country : pull-down menu	single-click
16	Select Country of the user's shipping address	single-click; press Tab
17	Enter telephone number	enter text; press Tab
18	Enter fax number	enter text; press Tab

19.1.3.4 Enter Billing Address for Account

The **Billing Address** is the address to which payment-due billings are sent and may be different from the mailing and shipping addresses. User Services is responsible for maintaining up-to-date billing addresses. This procedure assumes that the operator has the ECS User Account Management tool opened at the SMC with the **Request Account** tab selected. Table 19.1-8 presents the steps required to enter the billing address for an account. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Click the **Billing Address** folder tab.
 - The **Billing Address** folder opens.
- 2 Click on the **Title:** field.
 - The cursor moves to the **Title:** field.
- 3 Enter the user's **Title**, then press **Tab**.
 - A pull-down menu is available and may be used instead of typing the **Title**:
 - Point the mouse on the arrow to the right of the **Title:** field.
 - While holding the mouse pointer button down, **highlight** the **Title** you require.
 - **Release** the mouse button.
- 4 The title you have chosen appears in the **Title:** field.
- 5 The Titles in the drop-down box are **Dr, Mr, Ms, Miss, Mrs,** and **Rev.**
 - The cursor moves to the **First Name:** field.
- 6 Enter the user's **first name**, then press **Tab**.
 - The cursor moves to the **MI:** field.

- 7 Enter the user's **middle initial**, then press **Tab**.
 - The cursor moves to the **Last Name:** field.
- 8 Enter the user's **last name**, then press **Tab**.
 - The cursor moves to the first **Address:** field.
- 9 Enter the user's **Billing Address**, then press **Tab**.
 - The cursor moves to the second **Address:** field.
- 10 If a second address field is needed to complete the user's **Billing Address**, enter the **Billing Address**, then press **Tab**.
 - If a second address field is not needed, press **Tab** to bypass the field.
 - The cursor moves to the third **Address:** field.
- 11 If a third address field is needed to complete the user's **Billing Address**, enter the **Billing Address**, then press **Tab**.
 - If a third address field is not needed, press **Tab** to bypass the field.
 - The cursor moves to the **Organization:** field.
- 12 Enter the user's **Organization**, then press **Tab**.
 - The cursor moves to the **City:** field.
- 13 Enter the **City:** to which the payment due billings will be sent, then press **Tab**.
 - The cursor moves to the pull-down arrow next to the **State/Province:** field.
- 14 Click on the pull-down arrow next to the **State/Province:** field.
 - A pull-down menu appears permitting choice among a list of states.
- 15 Click on the choice for the user's **State** or **Province** for the billing address, then press **Tab**.
 - The cursor moves to the **Zip/Postal Code:** field.
- 16 Enter the **Zip/Postal Code:** for the billing address, then press **Tab**.
 - The cursor moves to the pull-down arrow next to the **Country:** field.
- 17 Click on the pull-down arrow next to the **Country:** field.
 - A pull-down menu appears permitting choice among a list of countries.
- 18 Click on the choice for the **Country:** to which the payment due billings will be sent, then press **Tab**.
 - The cursor moves to the **Telephone:** field.

- 19** Enter the **Telephone number** used at the billing address, then press **Tab**.
- The cursor moves to the **Fax:** field.
- 20** Enter the **Fax number** used at the billing address, then press **Tab**.
- The **Billing Address** folder is now complete.

Table 19.1-8. Enter Billing Address for Account

Step	What to Do	Action to Take
1	Select Billing Address folder	single-click
2	Move cursor to Title: field	single-click
3	Enter user's Title	enter text; press Tab
4	Enter user's First Name	enter text; press Tab
5	Enter user's Middle Initial	enter text; press Tab
6	Enter user's Last Name	enter text; press Tab
7	Enter user's billing address	enter text; press Tab
8	Enter any second line of user's billing address	enter text; press Tab
9	Enter any third line of user's billing address	enter text; press Tab
10	Enter the user's organization	enter text; press Tab
11	Enter city of user's billing address	enter text; press Tab
12	Open State/Province: pull-down menu	single-click
13	Select State/Province of the user's billing address	single-click; press Tab
14	Enter the Zip/Postal Code	enter text; press Tab
15	Open Country: pull-down menu	single-click
16	Select Country of the user's billing address	single-click; press Tab
17	Enter telephone number	enter text; press Tab
18	Enter fax number	enter text; press Tab

19.1.3.5 Enter Account Information and Create the User Account

The **Account Information** folder contains the date the account was created, expiration date, account number, privilege level, NASA User designation, V0 Gateway User Category, V0 Gateway User Type, V0 Gateway Password, and indication whether the user is authorized to order ASTER L1B data. Once the information is entered in this folder, completing all required information in the five sub-folders under the **Request Account** tab, a click on the **Create Account** button at the bottom of the window establishes the account. It also results in automatic dispatch of an e-mail message to the user's e-mail address with notification that the account has been created. The User Services representative will complete the account registration process by providing the user with the initial ECS account password (in this special case where User Services is creating an account for a user; normally, when a user registers through access to the URL and web interface, the password is selected at that time by the user as part of the registration process). The password dissemination is done in accordance with local DAAC

policy. The system deletes an account when the expiration date is reached. One week prior to the expiration date, an e-mail message is sent to the user and to User Services with notification that the account will be deleted on the expiration date. This date is ordinarily used when an account is "cancelled" (placed on probation due to non-payment of bills). This procedure assumes that the operator has the ECS User Account Management tool opened at the SMC with the **Request Account** tab selected. Table 19.1-9 presents the steps required to enter the account information. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Click the **Account Information** folder.
 - The **Account Information** folder information is displayed.
- 2 Click on the **Expiration Date:** field.
 - The cursor moves to the **Expiration Date:** field.
- 3 Enter the **Expiration Date** only if required by the DAAC for new accounts, then press **Tab**.
 - The cursor moves to the **Privilege Level:** field.
- 4 Click on the pull-down arrow next to the **Privilege Level:** field.
 - A pull-down menu appears with choices of **XPRESS**, **VHigh**, **HIGH**, **NORMAL**, and **LOW**.
- 5 Click on the appropriate choice for **Privilege Level**.
 - The selected choice appears in the **Privilege Level:** field.
- 6 Click on the pull-down arrow next to the **NASA User:** field.
 - A pull-down menu appears with choices of **Privileged**, **Regular**, and **Non-NASA**.
- 7 Click on the appropriate choice for **NASA User**.
 - The selected choice appears in the **NASA User:** field.
- 8 Click on the pull-down arrow next to the **V0 Gateway Category:** field.
 - A pull-down menu appears with the choices of **USA** and **Non-USA**.
- 9 Click on the appropriate choice for **V0 Gateway Category**.
 - The selected choice appears in the **V0 Gateway Category:** field.
- 10 Click on the pull-down arrow next to the **V0 Gateway User Type:** field.
 - A pull-down menu appears with the choices of **DAACOPS**, **ECSDEV**, **V0CERES**, and **GUEST**.

- 11 Click on the appropriate choice for **V0 Gateway User Type**.
 - The selected choice appears in the **V0 Gateway User Type:** field.
- 12 Click in the **V0 Gateway Password:** field.
 - The cursor moves to the **V0 Gateway Password:** field.
- 13 Enter a password that can be used temporarily with the account until the user changes it to a personally selected one, and note the password to be sent to the user.
 - The typed entry appears in the **V0 Gateway Password:** field.
- 14 If the user is to be authorized for ASTER L1B requests, click on the check button next to **Authorize for ASTER L1B**.
 - The check button appears to be depressed.
 - The Account Information folder is complete.
- 15 When the information is complete, click the **Create Account** button.
 - The account is created; a confirming email is sent to the user and the account and its information is now available in the approved list on the **Profile Account** folder.

Table 19.1-9. Enter Account Information and Create the User Account

Step	What to Do	Action to Take
1	Select Account Information folder	single-click
2	Move cursor to Expiration Date: field	single-click
3	If required by DAAC, enter expiration date	enter text; press Tab
4	Open Privilege Level: pull-down menu	single-click
5	Select appropriate privilege level	single-click
6	Open NASA User: pull-down menu	single-click
7	Select choice for NASA User	single-click
8	Open V0 Gateway Category: pull-down menu	single-click
9	Select choice for V0 Gateway Category	single-click
10	Open V0 Gateway User Type: pull-down menu	single-click
11	Select choice for V0 Gateway User Type	single-click
12	Move cursor to V0 Gateway Password: field	single-click
13	Enter Password	enter text
14	If appropriate, select check button to Authorize for ASTER L1B	single-click
15	Activate the Create Account button	single-click

19.1.4 Edit/Modify an Existing Account

User Services has the responsibility of maintaining ECS user accounts. Part of this responsibility is to stay in close contact with the user to ensure that the records containing the

users' shipping and billing addresses, as well as the remainder of the information maintained in the user account folders, are up-to-date. There are six folders containing information about the user. The six folders are maintained in the ECS User Account Management tool. Three of the folders contain addresses: **Mailing Address**, **Shipping Address**, and **Billing Address**. All the addresses can be the same; however, some companies may have different addresses for accounts receivable, regular correspondence, and the shipment of data. When an address change requested by a user does not indicate which address folder to change, User Services must contact the user for this information. User Services may have reviewed the previous address folders and noticed that the three folders contained the same previous address; however, it is inappropriate to assume that the same circumstances apply now. Always contact the user to make sure. The remaining three folders contain **Personal Information**, **Account Information**, and **DAR Information**. The **Profile Account** folder, which is located in the ECS User Account Management tool, is used for all editing and modifications.

19.1.4.1 Edit/Modify Personal Information

Table 19.1-10 presents the steps required to edit/modify personal information for a user's account. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the **ECS User Account Management** application GUI at the SMC (refer to Procedure 19.1.1 **Launch Account Management Application Using UNIX Commands**).
 - The **ECS User Account Management** window is displayed; at the SMC, two top-level tabs are displayed: **Request Account** and **Profile Account**.
- 2 Click on the **Profile Account** tab.
 - Folders and fields applicable to existing accounts are displayed.
- 3 Click on the **Retrieve by DAAC** option button and select your DAAC from the displayed list, or select **All**.
 - The selected choice is displayed on the option button.
- 4 Click on the **Retrieve** button.
 - The account list field displays the list of accounts for the option selected in Step 2.
- 5 If desired, enter a search criterion, either using the **Find** field (located to the right of the **Find** button just below the account listing box) and clicking **Find**, or by clicking on the **User ID** or **Last Name** button and entering an appropriate ID or name in the associated text field; click on the **Retrieve** button.
 - Account(s) meeting the entered search criterion are displayed (*Note*: The search functions are case-sensitive.)

- 6 Scroll through the accounts listed (if necessary) until the desired account is visible, then click on the account to highlight it.
 - Six folders are displayed that contain detailed information about the selected account: **Account Information, Personal Information, Shipping Address, Billing Address, Mailing Address, and DAR Information.**
- 7 Click on the **Personal Information** tab.
 - The **Personal Information** folder information is displayed.
- 8 Click in the field where the information is to be modified (e.g., if the organization with which the user is affiliated is to be changed, click in the **Organization:** field).
 - The cursor moves to the selected field.
- 9 Enter the new information, and then press the **Tab** key.
 - The cursor moves to the next field.
- 10 Repeat Steps 8 and 9 for any additional information to be changed.
- 11 Click the **Apply Edit** button to implement the change(s) to the **Personal Information** folder.
 - A confirmation dialog is displayed asking **Do you really want to apply the edit?** and providing buttons labeled **Yes, No, and Help.**
- 12 Click on the **Yes** button in the dialog box.
 - The edit is applied and the changed information is reflected in the account data.

Table 19.1-10. Edit/Modify Personal Information

Step	What to Do	Action to Take
1	Launch the ECS User Account Management GUI at the SMC	Use procedure in Section 19.1.1
2	Select Profile Account tab	single-click
3	Select DAAC (Retrieve by DAAC option button)	click option
4	Activate Retrieve button	single-click
5	Filter with Find or search criterion field and Retrieve	enter text; single-click
6	Scroll and highlight desired account	single-click
7	Select Personal Information tab	single-click
8	Move cursor to field to be changed	single-click
9	Enter changes	enter text; press Tab
10	Repeat Steps 8 and 9 for any additional changes	
11	Activate the Apply Edit button	single-click
12	Activate the Yes button	single-click

19.1.4.2 Edit/Modify Mailing Address

Table 19.1-11 presents the steps required to edit/modify the mailing address for a user's account. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1** Launch the **ECS User Account Management** application GUI at the SMC (refer to Procedure 19.1.1, **Launch Account Management Application Using UNIX Commands**).
 - The **ECS User Account Management** window is displayed; at the SMC, two top-level tabs are displayed: **Request Account** and **Profile Account**.
- 2** Click on the **Profile Account** tab.
 - Folders and fields applicable to existing accounts are displayed.
- 3** Click on the **Retrieve by DAAC** option button and select your DAAC from the displayed list, or select **All**.
 - The selected choice is displayed on the option button.
- 4** Click on the **Retrieve** button.
 - The account list field displays the list of accounts for the option selected in Step 2.
- 5** If desired, enter a search criterion, either using the **Find** field (located to the right of the **Find** button just below the account listing box) and clicking **Find**, or by clicking on the **User ID** or **Last Name** button and entering an appropriate ID or name in the associated text field; click on the **Retrieve** button.
 - Account(s) meeting the entered search criterion are displayed (*Note:* The search functions are case-sensitive.)
- 6** Scroll through the accounts listed (if necessary) until the desired account is visible, then click on the account to highlight it.
 - Six folders are displayed that contain detailed information about the selected account: **Account Information**, **Personal Information**, **Shipping Address**, **Billing Address**, **Mailing Address**, and **DAR Information**.
- 7** Click on the **Mailing Address** tab.
 - The **Mailing Address** folder information is displayed.
- 8** Click in the field where the information is to be modified (e.g., if the city in the mailing address is to be changed, click in the **City:** field).
 - The cursor moves to the selected field.
- 9** Enter the new information, and then press the **Tab** key.
 - The cursor moves to the next field.

- 10 Repeat Steps 8 and 9 for any additional information to be changed.
- 11 Click the **Apply Edit** button to implement the change(s) to the **Mailing Address** folder.
 - A confirmation dialog is displayed asking **Do you really want to apply the edit?** and providing buttons labeled **Yes**, **No**, and **Help**.
- 12 Click on the **Yes** button in the dialog box.
 - The edit is applied and the changed information is reflected in the account data.

Table 19.1-11. Edit/Modify Mailing Address

Step	What to Do	Action to Take
1	Launch the ECS User Account Management GUI at the SMC	Use procedure in Section 19.1.1
2	Select Profile Account tab	single-click
3	Select DAAC (Retrieve by DAAC option button)	click option
4	Activate Retrieve button	single-click
5	Filter with Find or search criterion field and Retrieve	enter text; single-click
6	Scroll and highlight desired account	single-click
7	Select Mailing Address tab	single-click
8	Move cursor to field to be changed	single-click
9	Enter changes	enter text; press Tab
10	Repeat Steps 8 and 9 for any additional changes	
11	Activate the Apply Edit button	single-click
12	Activate the Yes button	single-click

19.1.4.3 Edit/Modify Shipping Address

Table 19.1-12 presents the steps required to edit/modify the shipping address for a user's account. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the **ECS User Account Management** application GUI at the SMC (refer to Procedure 19.1.1 **Launch Account Management Application Using UNIX Commands**).
 - The **ECS User Account Management** window is displayed; at the SMC, two top-level tabs are displayed: **Request Account** and **Profile Account**.
- 2 Click on the **Profile Account** tab.
 - Folders and fields applicable to existing accounts are displayed.

- 3 Click on the **Retrieve by DAAC** option button and select your DAAC from the displayed list, or select **All**.
 - The selected choice is displayed on the option button.
- 4 Click on the **Retrieve** button.
 - The account list field displays the list of accounts for the option selected in Step 2.
- 5 If desired, enter a search criterion, either using the **Find** field (located to the right of the **Find** button just below the account listing box) and clicking **Find**, or by clicking on the **User ID** or **Last Name** button and entering an appropriate ID or name in the associated text field; click on the **Retrieve** button.
 - Account(s) meeting the entered search criterion are displayed (*Note*: The search functions are case-sensitive.)
- 6 Scroll through the accounts listed (if necessary) until the desired account is visible, then click on the account to highlight it.
 - Six folders are displayed that contain detailed information about the selected account: **Account Information**, **Personal Information**, **Shipping Address**, **Billing Address**, **Mailing Address**, and **DAR Information**.
- 7 Click on the **Shipping Address** tab.
 - The **Shipping Address** folder information is displayed.
- 8 Click in the field where the information is to be modified (e.g., if the city in the shipping address is to be changed, click in the **City:** field).
 - The cursor moves to the selected field.
- 9 Enter the new information, and then press the **Tab** key.
 - The cursor moves to the next field.
- 10 Repeat Steps 8 and 9 for any additional information to be changed.
- 11 Click the **Apply Edit** button to implement the change(s) to the **Shipping Address** folder.
 - A confirmation dialog is displayed asking **Do you really want to apply the edit?** and providing buttons labeled **Yes**, **No**, and **Help**.
- 12 Click on the **Yes** button in the dialog box.
 - The edit is applied and the changed information is reflected in the account data.

Table 19.1-12. Edit/Modify Shipping Address

Step	What to Do	Action to Take
1	Launch the ECS User Account Management GUI at the SMC	Use procedure in Section 19.1.1
2	Select Profile Account tab	single-click
3	Select DAAC (Retrieve by DAAC option button)	click option
4	Activate Retrieve button	single-click
5	Filter with Find or search criterion field and Retrieve	enter text; single-click
6	Scroll and highlight desired account	single-click
7	Select Shipping Address tab	single-click
8	Move cursor to field to be changed	single-click
9	Enter changes	enter text; press Tab
10	Repeat Steps 8 and 9 for any additional changes	
11	Activate the Apply Edit button	single-click
12	Activate the Yes button	single-click

19.1.4.4 Edit/Modify Billing Address

Table 19.1-13 presents the steps required to edit/modify the billing address for a user's account. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the **ECS User Account Management** application GUI at the SMC (refer to Procedure 19.1.1, **Launch Account Management Application Using UNIX Commands**).
 - The **ECS User Account Management** window is displayed; at the SMC, two top-level tabs are displayed: **Request Account** and **Profile Account**.
- 2 Click on the **Profile Account** tab.
 - Folders and fields applicable to existing accounts are displayed.
- 3 Click on the **Retrieve by DAAC** option button and select your DAAC from the displayed list, or select **All**.
 - The selected choice is displayed on the option button.
- 4 Click on the **Retrieve** button.
 - The account list field displays the list of accounts for the option selected in Step 2.

- 5 If desired, enter a search criterion, either using the **Find** field (located to the right of the **Find** button just below the account listing box) and clicking **Find**, or by clicking on the **User ID** or **Last Name** button and entering an appropriate ID or name in the associated text field; click on the **Retrieve** button.
 - Account(s) meeting the entered search criterion are displayed (*Note*: The search functions are case-sensitive.)
- 6 Scroll through the accounts listed (if necessary) until the desired account is visible, then click on the account to highlight it.
 - Six folders are displayed that contain detailed information about the selected account: **Account Information, Personal Information, Shipping Address, Billing Address, Mailing Address, and DAR Information.**
- 7 Click on the **Billing Address** tab.
 - The **Billing Address** folder information is displayed.
- 8 Click in the field where the information is to be modified (e.g., if the city in the billing address is to be changed, click in the **City**: field).
 - The cursor moves to the selected field.
- 9 Enter the new information, and then press the **Tab** key.
 - The cursor moves to the next field.
- 10 Repeat Steps 8 and 9 for any additional information to be changed.
- 11 Click the **Apply Edit** button to implement the change(s) to the **Billing Address** folder.
 - A confirmation dialog is displayed asking **Do you really want to apply the edit?** and providing buttons labeled **Yes, No, and Help.**
- 12 Click on the **Yes** button in the dialog box.
 - The edit is applied and the changed information is reflected in the account data.

Table 19.1-13. Edit/Modify Billing Address (1 of 2)

Step	What to Do	Action to Take
1	Launch the ECS User Account Management GUI at the SMC	Use procedure in Section 19.1.1
2	Select Profile Account tab	single-click
3	Select DAAC (Retrieve by DAAC option button)	click option
4	Activate Retrieve button	single-click
5	Filter with Find or search criterion field and Retrieve	enter text; single-click
6	Scroll and highlight desired account	single-click
7	Select Billing Address tab	single-click
8	Move cursor to field to be changed	single-click

Table 19.1-13. Edit/Modify Billing Address (2 of 2)

Step	What to Do	Action to Take
9	Enter changes	enter text; press Tab
10	Repeat Steps 8 and 9 for any additional changes	
11	Activate the Apply Edit button	single-click
12	Activate the Yes button	single-click

19.1.4.5 Edit/Modify Account Information

Table 19.1-14 presents the steps required to edit/modify the account information for a user's account. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the **ECS User Account Management** application GUI at the SMC (refer to Procedure 19.1.1, **Launch Account Management Application Using UNIX Commands**).
 - The **ECS User Account Management** window is displayed; at the SMC, two top-level tabs are displayed: **Request Account** and **Profile Account**.
- 2 Click on the **Profile Account** tab.
 - Folders and fields applicable to existing accounts are displayed.
- 3 Click on the **Retrieve by DAAC** option button and select your DAAC from the displayed list, or select **All**.
 - The selected choice is displayed on the option button.
- 4 Click on the **Retrieve** button.
 - The account list field displays the list of accounts for the option selected in Step 2.
- 5 If desired, enter a search criterion, either using the **Find** field (located to the right of the **Find** button just below the account listing box) and clicking **Find**, or by clicking on the **User ID** or **Last Name** button and entering an appropriate ID or name in the associated text field; click on the **Retrieve** button.
 - Account(s) meeting the entered search criterion are displayed (*Note*: The search functions are case-sensitive.)
- 6 Scroll through the accounts listed (if necessary) until the desired account is visible, then click on the account to highlight it.
 - Six folders are displayed that contain detailed information about the selected account: **Account Information**, **Personal Information**, **Shipping Address**, **Billing Address**, **Mailing Address**, and **DAR Information**.

- 7 Click on the **Account Information** tab.
 - The **Account Information** folder information is displayed.
- 8 Click in the field where the information is to be modified (e.g., if the user's privilege level is to be changed, click on the pull-down arrow next to the **Privilege Level:** field).
 - A pull-down menu appears with choices of **XPRESS**, **VHigh**, **HIGH**, **NORMAL**, and **LOW**.
- 9 Click on the choice for the new privilege level, and then press the **Tab** key.
 - The selected choice appears in the **Privilege Level:** field.
- 10 Repeat Steps 8 and 9 for any additional information to be changed by use of pull-down menus.
 - **Note:** The **V0 Gateway Password:** field is not available for change (grayed out). If a user forgets the password, there is a link on the EOS Data Gateway (EDG) start page for **Forgot My Password**, through which a user can have a new, system-generated password sent by email. There is no requirement for User Services to change a user's password.
- 11 If the change is to authorize the user for ASTER L1B requests, or if the user is currently authorized for ASTER L1B requests but the authorization is to be removed, click on the check button next to **Authorize for ASTER L1B**.
 - The check button appears to change state, from unselected to depressed or depressed to unselected, respectively.
- 12 Click the **Apply Edit** button to implement the change(s) to the **Account Information** folder.
 - A confirmation dialog is displayed asking **Do you really want to apply the edit?** and providing buttons labeled **Yes**, **No**, and **Help**.
- 13 Click on the **Yes** button in the dialog box.
 - The edit is applied and the changed information is reflected in the account data.

Table 19.1-14. Edit/Modify Account Information (1 of 2)

Step	What to Do	Action to Take
1	Launch the ECS User Account Management GUI at the SMC	Use procedure in Section 19.1.1
2	Select Profile Account tab	single-click
3	Select DAAC (Retrieve by DAAC option button)	click option
4	Activate Retrieve button	single-click
5	Filter with Find or search criterion field and Retrieve	enter text; single-click
6	Scroll and highlight desired account	single-click
7	Select Shipping Address tab	single-click

Table 19.1-14. Edit/Modify Account Information (2 of 2)

Step	What to Do	Action to Take
8	Open pull-down menu in field to be changed by selection from pull-down menu	single-click
9	Select choice from pull-down menu	single-click
10	Repeat Steps 8 and 9 for any additional changes for fields with pull-down menus	
11	If ASTER L1B access is to be changed, activate check button for Authorize for ASTER L1B	single-click
12	Activate the Apply Edit button	single-click
13	Activate the Yes button	single-click

19.1.4.6 Edit/Modify DAR Information for Account

The **DAR Information** folder contains an indication of user privileges for ASTER expedited data requests and ASTER categories. Such special privileges cannot be selected by a user when registering on the registration web page accessible from the EOS Data Gateway (EDG) tool. Instead the user who needs special privileges (e.g., permission to submit an ASTER Data Acquisition Request) must contact User Services to request the authorization. For a user approved for the special privilege, User Services then accesses the Account Management tool at the SMC and edits the **DAR Information** folder to provide the authorization. Table 19.1-15 presents the steps required to modify the DAR information for authorization. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the **ECS User Account Management** application GUI at the SMC (refer to Procedure 19.1.1, **Launch Account Management Application Using UNIX Commands**).
 - The **ECS User Account Management** window is displayed; at the SMC, two top-level tabs are displayed: **Request Account** and **Profile Account**.
- 2 Click on the **Profile Account** tab.
 - Folders and fields applicable to existing accounts are displayed.
- 3 Click on the **Retrieve by DAAC** option button and select your DAAC from the displayed list, or select **All**.
 - The selected choice is displayed on the option button.
- 4 Click on the **Retrieve** button.
 - The account list field displays the list of accounts for the option selected in Step 2.

- 5 If desired, enter a search criterion, either using the **Find** field (located to the right of the **Find** button just below the account listing box) and clicking **Find**, or by clicking on the **User ID** or **Last Name** button and entering an appropriate ID or name in the associated text field; click on the **Retrieve** button.
 - Account(s) meeting the entered search criterion are displayed (*Note*: The search functions are case-sensitive.)

- 6 Scroll through the accounts listed (if necessary) until the desired account is visible, then click on the account to highlight it.
 - Six folders are displayed that contain detailed information about the selected account: **Account Information, Personal Information, Shipping Address, Billing Address, Mailing Address, and DAR Information.**

- 7 Click the **DAR Information** folder.
 - The **DAR Information** folder opens.
 - The displayed fields indicate no ASTER privileges.

- 8 Click on the pull-down arrow to the right of the **Dar Expedited Data** field.
 - A pull-down menu appears with choices of **Yes** and **No**.

- 9 Click on the choice to indicate whether the user is (**Yes**) or is not (**No**) approved for requesting expedited data, then press **Tab**.
 - The selected choice appears in the **Dar Expedited Data** field and the cursor moves to the **Aster Category** field.

- 10 Click on the pull-down arrow to the right of the **Aster Category** field.
 - A pull-down menu appears with numerous choices for ASTER DAR privileges.

- 11 Click on the choice to indicate the category for which the user has been approved.
 - The **Aster Category** field displays the selected category.

- 12 Click the **Apply Edit** button to implement the change(s) to the **DAR Information** folder.
 - A confirmation dialog is displayed asking **Do you really want to apply the edit?** and providing buttons labeled **Yes, No, and Help.**

- 13 Click on the **Yes** button in the dialog box.
 - The edit is applied and the changed information is reflected in the account data.

Table 19.1-15. Edit/Modify DAR Information (1 of 2)

Step	What to Do	Action to Take
1	Launch the ECS User Account Management GUI at the SMC	Use procedure in Section 19.1.1
2	Select Profile Account tab	single-click

Table 19.1-15. Edit/Modify DAR Information (2 of 2)

Step	What to Do	Action to Take
3	Select DAAC (Retrieve by DAAC option button)	click option
4	Activate Retrieve button	single-click
5	Filter with Find or search criterion field and Retrieve	enter text; single-click
6	Scroll and highlight desired account	single-click
7	Select DAR Information tab	single-click
8	Open pull-down menu in Dar Expedited Data field	single-click
9	Select choice from pull-down menu	single-click
10	Open pull-down menu in Aster Category field	single-click
11	Select choice from pull-down menu	single-click
12	Activate Apply Edit button	single-click
13	Activate the Yes button	single-click

19.1.5 Delete an ECS Account

An ECS user can be deleted from the ECS database through the ECS User Account Management tool. Upon receipt of instructions to delete a user, User Services retrieves the user's account, validates the account scheduled for deletion, then completes the deletion. The Personal Information folder is generally the folder used to validate an account because it has the most information about the user (e.g., Name, Title, E-mail address, Organization, Telephone Number). Table 19.1-16 presents the steps required to delete an ECS account. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the **ECS User Account Management** application GUI at the SMC (refer to Procedure 19.1.1, **Launch Account Management Application Using UNIX Commands**).
 - The **ECS User Account Management** window is displayed; at the SMC, two top-level tabs are displayed: **Request Account** and **Profile Account**.
- 2 Click on the **Profile Account** tab.
 - Folders and fields applicable to existing accounts are displayed.
- 3 Click on the **Retrieve by DAAC** option button and select your DAAC from the displayed list, or select **All**.
 - The selected choice is displayed on the option button.
- 4 Click on the **Retrieve** button.
 - The account list field displays the list of accounts for the option selected in Step 2.
- 5 If desired, enter a search criterion, either using the **Find** field (located to the right of the **Find** button just below the account listing box) and clicking **Find**, or by clicking on the

User ID or **Last Name** button and entering an appropriate ID or name in the associated text field; click on the **Retrieve** button.

- Account(s) meeting the entered search criterion are displayed (*Note:* The search functions are case-sensitive.)
- 6** Scroll through the accounts listed (if necessary) until the desired account is visible, then click on the account to highlight it.
- Six folders are displayed that contain detailed information about the selected account: **Account Information, Personal Information, Shipping Address, Billing Address, Mailing Address, and DAR Information.**
- 7** Click the **View Entire Profile** button to review the account information and verify that the selected account is the one to be deleted.
- The User Profile screen displays the information contained in the **Personal Information** folder, **Account Information** folder, **Shipping Address** folder, **Billing Address** folder, **Mailing Address** folder, and the **DAR Information** folder.
 - View the folder to validate the account scheduled for deletion.
- 8** After examining the displayed information to verify the user’s account, click the **Close** button to exit from the User Profile screen.
- The User Profile screen is closed.
- 9** Click the **Delete Account** button.
- A confirmation dialog is displayed asking **Do you really want to delete the user account?** and providing buttons labeled **Yes, No, and Help.**
- 10** Click on the **Yes** button in the dialog box.
- The account is deleted and its entry is removed from the list of accounts.

Table 19.1-16. Delete an ECS Account

Step	What to Do	Action to Take
1	Launch the ECS User Account Management GUI at the SMC	Use procedure in Section 19.1.1
2	Select Profile Account tab	single-click
3	Select DAAC (Retrieve by DAAC option button)	click option
4	Activate Retrieve button	single-click
5	Filter with Find or search criterion field and Retrieve	enter text; single-click
6	Scroll and highlight desired account	single-click
7	Activate the View Entire Profile button	single-click
8	Activate the Close button	single-click
9	Activate the Delete Account button	single-click
10	Activate the Yes button	single-click

19.1.6 Cancel an ECS Account (Probation)

User Services may cancel an ECS user account, which differs from deleting the account because it does not immediately remove the account from the database. It merely imposes a temporary probation period for the user's privileges, for an appropriate cause, such as failure to satisfy a payment due for services previously provided, or some other abuse of privileges. The process involves establishing an expiration date, upon which the account will be deleted from the database unless the cause of sanction is removed. If it becomes necessary to cancel an account, use the ECS User Account Management tool to retrieve and verify the account, and then proceed with the cancellation/sanction. Then contact the user with information that the account will be deleted and account privileges will be lost if the payment has not been received (or other cause has been rectified) by a specified date. Table 19.1-17 presents the steps required to cancel an ECS account (impose an expiration date). If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the **ECS User Account Management** application GUI at the SMC (refer to Procedure 19.1.1 **Launch Account Management Application Using UNIX Commands**).
 - The **ECS User Account Management** window is displayed; at the SMC, two top-level tabs are displayed: **Request Account** and **Profile Account**.
- 2 Click on the **Profile Account** tab.
 - Folders and fields applicable to existing accounts are displayed.
- 3 Click on the **Retrieve by DAAC** option button and select your DAAC from the displayed list, or select **All**.
 - The selected choice is displayed on the option button.
- 4 Click on the **Retrieve** button.
 - The account list field displays the list of accounts for the option selected in Step 2.
- 5 If desired, enter a search criterion, either using the **Find** field (located to the right of the **Find** button just below the account listing box) and clicking **Find**, or by clicking on the **User ID** or **Last Name** button and entering an appropriate ID or name in the associated text field; click on the **Retrieve** button.
 - Account(s) meeting the entered search criterion are displayed (*Note*: The search functions are case-sensitive.)
- 6 Scroll through the accounts listed (if necessary) until the desired account is visible, then click on the account to highlight it.
 - Six folders are displayed that contain detailed information about the selected account: **Account Information**, **Personal Information**, **Shipping Address**, **Billing Address**, **Mailing Address**, and **DAR Information**.

- 7 Click the **View Entire Profile** button to review the account information and verify that the selected account is the one to be canceled (placed on probation).
 - The User Profile screen displays the information contained in the **Personal Information** folder, **Account Information** folder, **Shipping Address** folder, **Billing Address** folder, **Mailing Address** folder, and the **DAR Information** folder.
 - View the folder to validate the account scheduled for cancellation.
- 8 After examining the displayed information to verify the user's account, click the **Close** button to exit from the User Profile screen.
 - The User Profile screen is closed.
- 9 Click the **Account Information** folder.
 - The **Account Information** folder information is displayed.
- 10 Click on the **Expiration Date:** field.
 - The cursor moves to the **Expiration Date:** field.
- 11 Enter an **Expiration Date** specifying the date on which the account is to be deleted if the user does not remove the cause for the probation.
 - The entered date is displayed in the **Expiration Date:** field.
- 12 Click the **Apply Edit** button to implement the change to the **Account Information** folder.
 - A confirmation dialog is displayed asking **Do you really want to apply the edit?** and providing buttons labeled **Yes**, **No**, and **Help**.
- 13 Click on the **Yes** button in the dialog box.
 - The edit is applied and the changed information is reflected in the account data.
 - When the expiration date is reached, the account is automatically deleted from the system.
 - If the user takes action to resolve the issue before the expiration date is reached, the account may be reinstated by repeating this procedure, but at Step 11 removing the expiration date or setting it back to any limit specified by DAAC policy.

Table 19.1-17. Cancel an ECS Account (Probation)

Step	What to Do	Action to Take
1	Launch the ECS User Account Management GUI at the SMC	Use procedure in Section 19.1.1
2	Select Profile Account tab	single-click
3	Select DAAC (Retrieve by DAAC option button)	click option
4	Activate Retrieve button	single-click
5	Filter with Find or search criterion field and Retrieve	enter text; single-click
6	Scroll and highlight desired account	single-click
7	Activate the View Entire Profile button	single-click
8	Activate the Close button	single-click
9	Select the Account Information tab	single-click
10	Move the cursor to the Expiration Date: field	single-click
11	Enter Expiration Date	enter text
12	Activate the Apply Edit button	single-click
13	Activate the Yes button	single-click

19.1.7 Troubleshooting: Check Log Files for Account Management

Troubleshooting is a process of identifying the source of problems on the basis of observed trouble symptoms. The User Account Management tool is part of the ECS System Management Support Subsystem (MSS), and uses database functions in that subsystem. If the tool cannot be launched, or does not function (e.g., cannot retrieve accounts), you will need to ask the System Administrator to ensure that the User Registration/User Profile Server is functioning properly. It may be necessary to have the Database Administrator check to ensure that there are no problems with the database.

It is also possible to receive error messages when using the GUI while it is apparently functioning normally. Error messages and suggested corrective actions associated with the User Account Management tool are listed in Appendix A of 609-EMD-001, *Release 7.11 Operations Tools Manual for the EMD Project*.

Log files can often provide information that will identify possible sources of disruption in Account Management server function or communications, suggesting additional checks or actions that may help resolve the problem. Table 19.1-18 presents the steps required to check log files for account management. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 To log in to the host for the server and log(s) to be examined, type **/tools/bin/ssh <hostname>** and then press the **Return/Enter** key.
 - For **<hostname>**, use **<x>0mss21**, where **<x>** = **e** for LP DAAC, **g** for GSFC, **l** for LaRC, or **n** for NSIDC.

- If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type **yes** (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed **sshremote**, a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears; continue with Step 2.
 - If you have not previously set up a secure shell passphrase, go to Step 3.
- 2** If a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears, type your *Passphrase* and then press the **Return/Enter** key. Go to Step 4.
- The prompt reflects the login to the selected host.
- 3** At the **<user@remotehost>'s password:** prompt, type your *Password* and then press the **Return/Enter** key.
- The prompt reflects the login to the selected host.
- 4** Type **cd /usr/ecs/<MODE>/CUSTOM/logs** and then press the **Return/Enter** key.
- The prompt reflects the change to directory **/usr/ecs/<MODE>/CUSTOM/logs**.
- 5** To view a server log, type **pg filename** and then press the **Return/Enter** key.
- *filename* refers to the account management log file to be reviewed (e.g., **EcMsAcRegUserSrvr.ALOG**, **EcMsAcRegUserSrvrDebug.log**).
 - The first page of the log file is displayed; additional sequential pages can be displayed by pressing the **Return/Enter** key at the **:** prompt.
 - Although this procedure has been written for the **pg** command, any UNIX editor or visualizing command (e.g., **vi**, **more**, **tail**) can be used to review the log file.
 - Typically, the **<server>Debug.log** captures more detailed information than the **<server>.ALOG**. However, for some servers (e.g., **SDSRV**), there may be significant detail in the **<server>.ALOG**. It is also important to note that the **DebugLevel** setting in the **<server>.CFG** file determines the level of detail captured in the **<server>Debug.log** (**0** is off, a setting of **1** captures status and errors, a setting of **2** captures major events, and a setting of **3** is a full trace recording of all activity). If the **DebugLevel** has been set to one of the lower levels during operations, the System Administrator may set it to **3** during troubleshooting.
- 6** Review the log file(s) to determine if there are any indications of connection problems or errors at start up.
- The **EcMsAcRegUserSrvrDebug.log** file for the User Profile/User Registration server may contain an error message concerning **PF Init** or some connection error or problem (notify the System Administrator).
 - The **EcMsAcRegUserSrvr.ALOG** file may contain evidence of a Sybase error (e.g., **SybaseErrorCode1 =92014;SybaseErrorMessage1 ="x0mss21_srvr"** or **SybaseErrorCode2 =16;SybaseErrorMessage2 =""**) (notify the Database Administrator).

- 7 To exit the **pg** review of the log file, type **q** at the **:** prompt and then press the **Return/Enter** key.

Table 19.1-18. Check Log Files for Account Management

Step	What to Do	Action to Take
1	/tools/bin/ssh hostname	enter text; press Return/Enter
2	Passphrase (or Step 3)	enter text; press Return/Enter
3	Password	enter text; press Return/Enter
4	cd /usr/ecs/MODE/CUSTOM/logs	enter text; press Return/Enter
5	pg filename	enter text; press Return/Enter
6	Review log file	read text
7	To exit, type q at the : prompt	enter text; press Return/Enter

19.2 Create/Update a User Contact Log Record

Any User Services event (user contact for any reason) is a cue for the User Services representative to create a record in the User Contact Log. Each record is assigned a unique Log ID, which can be used later to retrieve the record for review or updating with new information. The record contains other information about the user, referred to as the “contact,” such as name, telephone number, e-mail address, home DAAC, and organization. It also documents the means of contact, the name of the person who received the contact, and the time of the contact, as well as descriptions of the reason for it.

The User Contact Log is a customized application of the Remedy commercial software package. The application is launched from the Remedy initial screen with a menu or button action. The contact log entries may then be saved, searched, retrieved, and modified. The capability to modify existing records permits tracking and updating information related to a user contact that has follow-up actions until it is closed.

Table 19.2-1 provides an Activity Checklist for creating and updating User Contact Log entries.

Table 19.2-1. Create/Update a User Contact Log Record - Activity Checklist

Order	Role	Task	Section	Complete?
1	User Services	Launch the Remedy User Contact Log Application	(P) 19.2.1	
2	User Services	Create a User Contact Log Record	(P) 19.2.2	
3	User Services	Update a User Contact Log Record	(P) 19.2.3	

19.2.1 Launch the Remedy User Contact Log Application

Table 19.2-2 presents the steps required to launch the Remedy User Contact Log application. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 At the UNIX command shell prompt, type **setenv DISPLAY *clientname*:0.0** and then press the **Return/Enter** key.
 - For *clientname*, use either the local terminal/workstation IP address or its machine name.
- 2 Start the log-in to the MSS client server by typing **/tools/bin/ssh *hostname*** (e.g., g0mss21, l0mss21, e0mss21, n0mss21) at the UNIX command shell prompt, and then press the **Return/Enter** key.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type **yes** (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed **sshremote**, a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears; continue with Step 3.
 - If you have not previously set up a secure shell passphrase, go to Step 4.
- 3 If a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears, type your **Passphrase** and then press the **Return/Enter** key. Go to Step 5.
- 4 At the **<user@remotehost>'s password:** prompt, type your **Password** and then press the **Return/Enter** key.
- 5 To change to the directory containing the utility script to start the Remedy tool, type **cd /usr/ecs/*MODE*/COTS/remedy/bin**, where *MODE* will likely be **TS1**, **TS2**, or **OPS**, and then press the **Return/Enter** key.
 - The working directory is changed to **/usr/ecs/*MODE*/COTS/remedy/bin**.
- 6 Type **aruser &** and then press the **Return/Enter** key.
 - A Remedy Action Request System logo window is displayed briefly, followed by a Remedy initial screen from which a number of ECS application forms, including the User Contact Log, may be launched.
- 7 Follow menu path **File → Open** or click on the leftmost button near the top of the window.
 - The **Open** dialog box is displayed, showing choices including: **RelB-Contact Log**, **RelB-TT-ForwardToSite**, **RelB-TroubleTickets**, and **TroubleTicket-Xfer**.

- 8 Click on **RelB-Contact Log** to highlight it and then click on the **New** button.
 - The **New RelB Contact Log** window is displayed.

Table 19.2-2. Launch the Remedy User Contact Log Application

Step	What to Do	Action to Take
1	<code>setenv DISPLAY clientname:0.0</code>	enter text; press Return/Enter
2	<code>/tools/bin/ssh hostname</code>	enter text; press Return/Enter
3	<i>Passphrase</i> (or Step 4)	enter text; press Return/Enter
4	<i>Password</i>	enter text; press Return/Enter
5	<code>cd /usr/ecs/MODE/COTS/remedy/bin</code>	enter text; press Return/Enter
6	<code>aruser &</code>	enter text; press Return/Enter
7	Menu path File → Open	click option
8	Highlight RelB-Contact Log and activate New button	clicks

19.2.2 Create a User Contact Log Record

Table 19.2-3 presents the steps required to create a User Contact Log record. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the **Remedy User Contact Log** application (refer to Procedure 19.2.1 **Launch the Remedy User Contact Log Application**).
 - The **New RelB Contact Log** window is displayed.
- 2 Click on the **Contact Method** field.
 - The cursor moves to the **Contact Method** field.
- 3 Enter the **Contact Method** (optional).
 - A drop-down menu may also be used:
 - Place the mouse pointer on the arrow to the right of the **Contact Method** field.
 - While holding the mouse pointer button down, drag to **highlight** the **Contact Method** of your choice.
 - **Release** the mouse button.
 - The highlighted contact method appears in the **Contact Method** field.
 - The methods in the drop-down box are **Phone, E-mail, Fax, US Mail, and Walk-in**.
- 4 Click on the **Short Description** field.
 - The cursor moves to the **Short Description** field, which is 128 characters long.

- Queries that may later be used to locate existing User Contact Log records will search information in the **Short Description** field. Therefore, when you enter a short description, enter it with “search criteria” in mind.
- 5** Enter the **Short Description** (required).
 - The typed entry appears in the **Short Description** field.
 - 6** Click on the **Set Received Time** button (optional).
 - The current time is displayed in the **Received Time** field.
 - 7** Click on the **Long Description** field.
 - The cursor moves to the **Long Description** field (used when the description requires more detail than the **Short Description** field will allow).
 - The **Long Description** field is often used when a problem exists: it can help with the resolution of Trouble Tickets.
 - 8** Enter a **Long Description** if needed (optional).
 - The typed entry appears in the **Long Description** field.
 - 9** Click on the **Contact Id** field.
 - The cursor moves to the **Contact Id** field.
 - 10** Enter the **Id** (User ID) of the person who contacted User Services.
 - The **Contact Id** is not required unless a Trouble Ticket is being created from the User Contact Log.
 - 11** If a **Contact Id** was entered at **Step 10**, click the **Set Contact Information** button and then go to **Step 22**; otherwise, go to **Step 12**.
 - The system will automatically complete the **Contact Name**, **Contact Phone**, **Contact E-mail**, **Contact Home DAAC**, and **Contact Organization** fields, if the **Contact Id** has been entered (go to **Step 22**).
 - If the contact is not a registered Remedy user, the contact fields must be manually completed (go to **Step 12**).
 - 12** If the contact information was not automatically entered at **Step 11**, click in the **Contact Name** field.
 - The cursor moves to the **Contact Name** field.
 - 13** Enter the **Contact's Name** (optional).
 - The typed entry appears in the **Contact Name** field.
 - 14** Click in the **Contact Phone** field.
 - The cursor moves to the **Contact Phone** field.

- 15 Enter the **Contact Phone** number (optional).
 - The typed entry appears in the **Contact Phone** field.
- 16 Click on the **Contact E-mail** field.
 - The cursor moves to the **Contact E-mail** field.
- 17 Enter the **Contact's E-mail address** (optional).
 - The typed entry appears in the **Contact E-mail** field.
- 18 Click on the **Contact Home DAAC** field.
 - The cursor moves to the **Contact Home DAAC** field.
- 19 Enter the **Contact Home DAAC** (optional).
 - The typed entry appears in the **Contact Home DAAC** field.
- 20 Click on the **Contact Organization** field.
 - The cursor moves to the **Contact Organization** field.
- 21 Enter the **Contact Organization** (optional).
 - The typed entry appears in the **Contact Organization** field.
- 22 When all contact information has been entered, click in the **Receiving Operator** field.
 - The cursor moves to the **Receiving Operator** field.
- 23 In the **Receiving Operator** field, enter the name of the operator (User Services Representative) who is creating the User Contact Log record.
 - The typed entry appears in the **Receiving Operator** field.
- 24 Click in the **Category** field.
 - The cursor moves to the **Category** field.
- 25 Enter the **Category**.
 - A drop-down menu may also be used:
 - Place the mouse pointer on the arrow to the right of the **Category** field.
 - While holding the mouse pointer button down, drag to **highlight** the **Category** of your choice.
 - **Release** the mouse button.
 - The highlighted category appears in the **Category** field.
 - The categories in the drop-down box are **Suggestion, Complaint, Concern, Order, and Subscription**.
- 26 Click the **Save** button near the upper right corner of the window (or follow menu path **Actions→Save**).
 - The User Contact Log record is created and submitted to the database.

- A unique Id is generated for the record and entered into the **Log Id** field.
- A message **Submit successful: ID=<site><nnn . . .>** to indicate the submission and provide the record ID number.

Table 19.2-3. Create a User Contact Log Record

Step	What to Do	Action to Take
1	Launch the Remedy User Contact Log application	Use procedure in Section 19.2.1
2	Move cursor to Contact Method field	single-click
3	Enter Contact Method	enter text (or use drop-down menu)
4	Move cursor to Short Description field	single-click
5	Enter Short Description	enter text
6	Activate Set Received Time button	single-click
7	Move cursor to Long Description field	single-click
8	Enter Long Description	enter text
9	Move cursor to Contact Id field	single-click
10	Enter Contact Id (required for Trouble Ticket)	enter text
11	Activate Set Contact Information button (if Id entered at Step 10; Go to Step 22)	single-click
12	Move cursor to Contact Name field	single-click
13	Enter Contact Name	enter text
14	Move cursor to Contact Phone field	single-click
15	Enter Contact Phone	enter text
16	Move cursor to Contact E-mail field	single-click
17	Enter Contact E-mail	enter text
18	Move cursor to Contact Home DAAC field	single-click
19	Enter Contact Home DAAC	enter text
20	Move cursor to Contact Organization field	single-click
21	Enter Contact Organization	enter text
22	Move cursor to Receiving Operator field	single-click
23	Enter Receiving Operator	enter text
24	Move cursor to Category field	single-click
25	Enter Category	enter text (or use drop-down menu)
26	Activate Save button (or menu Actions → Save)	single-click (or use menu)

19.2.3 Update a User Contact Log Record

When action is taken in relation to a user request for which there is an existing User Contact Log record, User Services updates the record. An update to the User Contact Log record therefore provides documentation of response to a request. The total record has several characteristics:

- It documents a user's initial request.
- It shows the progress or resolution of the contact that started the process.
- The User Contact Log record remains open until the request is completed.
- A User Contact Log record can be modified several times.
- For each modification, the log displays the operator that made the modification along with the date and time of the modification.

Table 19.2-4 presents the steps required to update a User Contact Log record. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1** Launch the **Remedy User Contact Log** application (refer to Procedure 19.2.1, **Launch the Remedy User Contact Log Application**).
 - The **New RelB Contact Log** window is displayed.
- 2** Follow menu path **File→Open** or click on the leftmost button near the top of the window.
 - The **Open** dialog box is displayed, showing choices including: **RelB-Contact Log**, **RelB-TT-ForwardToSite**, **RelB-TroubleTickets**, and **RelB-TT-ForwardToSMC**.
- 3** Click on **RelB-Contact Log** to highlight it and then click on the **Search** button.
 - The **Search RelB Contact Log** window is displayed.
- 4** Click on the field to be used for finding the User Contact Log record to be updated (i.e., **Log Id** field, **Contact Name** field, **E-mail Address** field, or the **Short Description** field).
 - The cursor is displayed in the selected field.
- 5** Enter the information appropriate for the selected field (i.e., **Log Id**, **Contact Name**, **E-mail Address**, or something remembered from the **Short Description**).
 - The typed entry is displayed in the field.
- 6** Follow menu path **Actions→Search**.
 - The User Contact Log record for the data request is displayed.
- 7** Click on the **Comment Log** field.

- 8 Enter a **Comment** describing the update.
 - The comment should indicate the action(s) taken (e.g., **Order for data completed; 10 granules ordered.**).
- 9 Click the **Save** button near the upper right corner of the window (or follow menu path **Actions→Save**).
 - The User Contact Log record update is submitted to the database.
 - The **Modified-date** field will display the date and time of the modification.
 - The **Last-Modified-by** field will display the name of the User Services Representative under whose log-in the edit is made.
- 10 To close a User Contact Log record, select the **Log Status** button, while holding the mouse button down, drag it to **Close**, then release the mouse button. Then save as in Step 9.
 - The User Contact Log record is now closed.

Table 19.2-4. Update a User Contact Log Record

Step	What to Do	Action to Take
1	Launch the Remedy User Contact Log application	Use procedure in Section 19.2.1
2	Menu path File→Open	click option
3	Highlight RelB-Contact Log and activate New button	clicks
4	Move cursor to field for search	single-click
5	Enter search information	enter text
6	Menu path Actions → Search	click option
7	Move cursor to Comment Log field	single-click
8	Enter Comment describing action taken for update	enter text
9	Activate Save button (or menu Actions→Save)	single-click (or use menu)
10	To close a record, use Log Status button to select Close (then save as in Step 9)	click-hold and drag; then single-click (or use menu)

19.3 Process an Order

User Services may be called upon to assist a user in working with the EOS Data Gateway (EDG) Search and Order Tool to locate and order data from ECS archives. Under some circumstances, a user may need even more help, requesting User Services to perform the entire process of locating and ordering data on behalf of that user. User Services may also be called upon to provide user support for access to ECS data through the Data Pool, a repository of selected granules with associated metadata and, if available, browse granules accessible through use of a web browser to search and download by FTP. Table 19.3-1 provides an activity checklist for tasks associated with data search and order.

Table 19.3-1. Process an Order - Activity Checklist

Order	Role	Task	Section	Complete?
1	Science User/ User Services	Search and Order Data using the EDG Search and Order Tool	(P) 19.3.1	
2	Science User/ User Services	Locate and Download Data from the Data Pool using the Data Pool Web Access GUI	(P) 19.3.2	

19.3.1 Search and Order Data Using the EDG Search and Order Tool

As a general rule, users trying to locate and obtain data from ECS probably should be directed to the EOS Data Gateway (EDG) web site to conduct their own searches. However, User Services can provide assistance or conduct the search for the user if needed. General information about data search and order, as well as specific on-line instructions, are available as follows:

- Guidance for user (User Manual for EOS Data Gateway) available on the WWW at the following URL:
<http://redhook.gsfc.nasa.gov/~imswww/pub/imswelcome/>
 - User Support links and News: technical information.
 - Frequently Asked Questions (FAQ): captures commonly sought information on terminology, search, data, and ordering with the EOS Data Gateway.
 - Tutorial: introduction to the tool and how to find and order data.
- Several approaches are available to the user.
 - Web-based Search and Order tool, for quick data access using simple search criteria; also allows easy downloading of pre-selected popular data and images; available at location <http://redhook.gsfc.nasa.gov/~imswww/pub/imswelcome/>.
 - Data center-specific searches; if user knows where the desired data are stored, the specific center may have a specialized tool for ordering data. Furthermore, at <http://redhook.gsfc.nasa.gov/~imswww/pub/imswelcome/> the initial page contains a link to "Other Data Gateway Sites" that offer access to the EDG tool at various DAACs with useful information and links specific to those sites.
 - User Services assistance; the user may elect to have User Services do the search instead of personally accessing one of the available tools; use the EDG Web Client Search and Order Tool.

If a user requests support from User Services to locate and order data, it is appropriate to retrieve the (registered) user's account profile (see Procedure 19.1.1.1 **Retrieve Individual Account Screens on Local Read-Only GUI**) and to create a User Contact Log record for the request (see Procedure 19.2.2 **Create a User Contact Log Record**). Table 19.3-2 presents the steps required to search and order data using the EDG search and order tool. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 At the UNIX command shell prompt, type **setenv DISPLAY *clientname*:0.0** and then press the **Return/Enter** key.
 - For *clientname*, use either the local terminal/workstation IP address or its machine name.
- 2 Start the log-in to a Netscape host by typing **/tools/bin/ssh *hostname*** (e.g., g0ins02, e0ins02, l0ins02, n0ins02) at the UNIX command shell prompt, and press the **Return/Enter** key.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type **yes** (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed **sshremote**, a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears; continue with Step 3.
 - If you have not previously set up a secure shell passphrase, go to Step 4.
- 3 If a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears, type your **Passphrase** and then press the **Return/Enter** key. Go to Step 5.
- 4 At the **<user@remotehost>'s password:** prompt, type your **Password** and then press the **Return/Enter** key.
 - You are logged in and a UNIX command shell prompt is displayed.
- 5 Type **netscape** and then press the **Return/Enter** key.
 - The Netscape web browser is displayed.
- 6 Click in the **Netsite:** field.
 - The field is highlighted.
- 7 Type **http://redhook.gsfc.nasa.gov/~imswww/pub/imswelcome/** then press the **Return/Enter** key.
 - The EOS Data Gateway welcome screen is displayed, offering choices for types of entry, registration, news, user manual, sample data, and other information.
- 8 Click on the link for **Enter as guest**.
 - If you are a registered user, you may instead click on the link for Enter as registered user and log in with your registered ID and password.
 - The EOS Data Gateway Web Search and Order Tool initial Search Creation: Primary Data Search screen is displayed.
 - Note: At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when this warning is displayed.

- 9 Click on the **Choose Keywords for Selected Data Sets** button.
 - The search screen displays an option to **Choose Keywords for One or More Categories**.
- 10 In the **Choose Keywords for One or More Categories** field, click on **DATA SET** and then click on the **Choose Keywords for >>** button.
 - The **Keyword Selection: Data Set** screen is displayed.
- 11 On the **Keyword Selection: Data Set** screen, in the **Data Set List 1:** field, scroll down the list and select the data set of your choice, and then click on the **OK!** button.
 - The primary search screen is displayed, indicating the selected choice as the selected data set.
- 12 In the **Choose Keywords for One or More Categories** field, click on **PARAMETER** and then click on the **Choose Keywords for >>** button.
 - The **Keyword Selection: Parameter** screen is displayed.
 - *Note:* The Primary Data Search screen provides a user with a button to **Show List of All Data Sets Available** as a first step in data search and order. The user may filter the list by site, or enter patterns and look for matching data sets.
- 13 On the **Keyword Selection: Parameter** screen, in the **Parameters:** field, select the parameter of your choice, and then click on the **OK!** button.
 - The primary search screen is displayed, indicating the selected choice as the selected parameter.
 - *Note:* The **Filters for Parameter:** field permits a reduction in the number of parameters from which to choose. For example, if you are searching for **OZONE** and know that it is an **ATMOSPHERIC CHEMISTRY** parameter, you can select **ATMOSPHERIC CHEMISTRY** in the **Filters for Parameter:** field and then click the **Apply** button so that only those parameters are displayed. You can even reduce the choice to one by using a wild card filter, e.g., **OZ***.
- 14 In the **Choose Search Area** section of the primary data search screen, click on the radio button at the left of **Type in Lat/Lon Range** field.
 - The radio button is filled in to indicate selection.
 - If you select a radio button for one of the map entries, a map window is displayed; to use the map, follow instructions on the screen to create a rectangle over the area of interest on the map (the corresponding lat/lon values will be displayed in the appropriate fields when you return to the primary search screen).
- 15 In the Latitude and Longitude fields, enter values to define a rectangle corresponding to the requested area.
 - The entered values appear in the fields.

- If desired, a click on the **<-Display lat/lon range on map** button will result in a rectangle corresponding to the selected area on the map on the left side of the **Choose Search Area** section.
- 16** Click in the **Start Date:** field.
- The cursor moves to the **Start Date:** field.
- 17** Type the date for the beginning of the time window desired for the acquisition of the desired data, in format **YYYY-MM-DD**.
- The typed entry is displayed in the field.
- 18** Click in the **End Date:** field.
- The cursor moves to the **End Date:** field.
- 19** Type the date for the end of the time window desired for the acquisition of the desired data in format **YYYY-MM-DD**.
- The typed entry is displayed in the field.
- 20** If desired, in the **Choose Additional Options** block near the bottom of the screen, click in one or more of the available fields to enter data specifying additional restrictions on the search (i.e., number of granules to be returned per data set, limit returns to granules with browse products, limit search time).
- Entered restrictions are reflected in the fields.
 - *Note:* There is also an indication that default metadata are returned in the search results and a **CUSTOMIZE** button for access to a screen permitting a user to select specific metadata to be returned.
 - *Note:* At the bottom of the screen, there is a block permitting a user to save the specified search criteria, and to retrieve a previously saved set of search criteria.
- 21** Click on the **Start Search!** Button.
- The search status screen is displayed, indicating **Search in progress**
 - After a few moments, the **Results: Granule: Listing** screen is displayed.
 - The system offers *Integrated Browse*; if a browse image is available for a listed granule, an **Image** link is available in the **Image Quicklook** column of the listing for that granule. A click on the **Image** link displays the available browse image.
- 22** If desired, click on the **Granule Attributes** link next to one of the listed granules.
- A **Data Granule Attributes** screen is displayed.
 - Attributes for additional granules may be reviewed by clicking on one of the **Next/Previous Granule** links at the top of the **Data Granule Attributes** screen, or by clicking the browser **Back** button and clicking on the **Granule Attributes** link next to other listed items.

- 23** At the **Results: Granule: Listing** screen, click in the **Select** box(es) to select one or more granules to be ordered.
- The selected box(es) is/are filled in to indicate the selection(s).
- 24** Click on the **Add selections to cart** button near the top of the screen to add the *selected* data granules to the shopping cart.
- A **Data Quality Summary** screen may be displayed describing the quality status of any selected granule(s) and requiring a click on an **Accept** button at the bottom to proceed with the order.
 - The **Step 1: Choose Ordering Options** screen is displayed with the list of items to be ordered (i.e., in the shopping cart).
- 25** Click on the **Choose Options** link next to one of the data granules selected for order.
- The **Choose Ordering Options** screen is displayed.
- 26** Click on the **Select** button for the desired option (e.g., **FtpPull FILEFORMAT**).
- The **Select** button is filled to indicate selection of the option.
- 27** Below the list of options, make a selection to indicate whether the selected packaging option is to apply to all items in the data set in the shopping cart, or just to the single granule. If the selection is to apply just to the single granule, use the browser **Back** button to go back and then repeat Steps 25 and 26 for any additional granules.
- 28** Click on the **Ok! Accept my choice & return to the shopping cart!** button.
- The **Step 1: Choose Ordering Options** screen is displayed with indications that the selected granules are ready to order.
- 29** Click on the **Go to Step 2: Order Form** button.
- The **Step 2: Order Form** screen is displayed.
- 30** Click in the **First name:** field
- The cursor moves to the **First name:** field.
- 31** Type the user's **first name**.
- The typed entry appears in the field.
- 32** Click in the **Last name:** field.
- The cursor moves to the **Last name:** field.
- 33** Type the user's **last name**.
- The typed entry appears in the field.

- 34 Fill in the other required fields (**Internet email address: Street Address: City: State/Province: Country: and Telephone:**) by clicking in each field and typing an appropriate entry.
- The typed entries are displayed in the fields.
 - **Note:** The user can save the entered information in a profile, and provide information about ECS access. This is accomplished by clicking on the **User Preferences** link in the "navigator" area on the left side of the screen, and making appropriate entries on the resulting **User Preferences** screen. At the bottom of this screen, a user who is registered as an ECS user can enter a user name and password for ECS access.
- 35 Click on the option button to the right of the **Type:** field and select the appropriate type of organization or location for the user from the displayed list.
- The selected option is displayed in the field.
- 36 Click on the option button to the right of the **Category:** field and select **USA** (or **Non-USA** if appropriate) from the displayed list.
- The selected option is displayed in the field.
- 37 Click on the **Submit Order Now!** button or the **Go to Step 3: Review Order Summary** button.
- If you clicked on **Submit Order Now!** the order is submitted and an **Order Submitted!** confirmation screen is displayed; the procedure is complete.
 - If you clicked on **Go to Step 3: Review Order Summary**, the **Step 3: Order Summary** screen is displayed; go to Step 38.
- 38 When satisfied that the order information is correct, click on the **Go to Step 4: Submit Order!** button.
- The order is submitted and an **Order Submitted!** confirmation screen is displayed.

**Table 19.3-2. Search and Order Data Using the EDG Search and Order Tool
(1 of 2)**

Step	What to Do	Action to Take
1	setenv DISPLAY <i>clientname</i> :0.0	enter text; press Return/Enter
2	/tools/bin/ssh <i>hostname</i>	enter text; press Return/Enter
3	Passphrase (or Step 4)	enter text; press Return/Enter
4	Password	enter text; press Return/Enter
5	Netscape	enter text; press Return/Enter
6	Move cursor to Netsite: field	single-click
7	http://redhook.gsfc.nasa.gov/~imsww/pub/imswelcome	enter text; press Return/Enter
8	Select Enter as guest / Enter as registered user)	single-click
9	Choose Keywords for Selected Data Sets	single-click
10	Highlight DATA SET and Choose Keywords for>>	click choice and click button
11	Select Data Set and activate OK! button	click choice and click button

**Table 19.3-2. Search and Order Data Using the EDG Search and Order Tool
(2 of 2)**

Step	What to Do	Action to Take
12	Highlight PARAMETER and Choose Keywords for>>	click choice and click button
13	Select Parameter and activate OK! button	click choice and click button
14	Select Type in Lat/Lon Range (or map type)	single-click
15	Enter Lat/Lon values (or use map)	enter text
16	Move cursor to Start Date: field	single-click
17	Enter date (YYYY-MM-DD)	enter text
18	Move cursor to End Date: field	single-click
19	Enter date (YYYY-MM-DD)	enter text
20	Choose additional options; save search (optional)	click(s) and enter text
21	Activate Start Search! button	single-click
22	Review Granule Attributes / Browse image	click(s)
23	Choose (Select) granules to be ordered	click(s)
24	Activate Add to Cart button	single-click
25	Activate Choose Options button for a granule	single-click
26	Activate Select button for desired option	single-click
27	Apply options to all granules or repeat Steps 25 - 26	single-click
28	Activate Ok! Accept my choice & return to shopping cart! Button	single-click
29	Activate Go to Step 2: Order Form button	single-click
30	Move cursor to First name: field	single-click
31	Enter first name	enter text
32	Move cursor to Last name: field	single-click
33	Enter last name	enter text
34	Move cursor and enter Internet email address, Street Address, City, State/Province, Country, and Telephone.	single-click and enter text; repeat for each entry
35	Select Type (Type: option button)	click option
36	Select Category (Category: option button)	click option
37	Submit Order Now! or Go to Step 3: Review Order Summary	single-click
38	Activate Go to Step 4: Submit Order! button	single-click

19.3.1.1 Data Pool Access Using the EDG

The EDG indicates to a user any granules among the search results that are accessible on line – i.e., in the Data Pool – and provides links to the data, metadata, and browse data to allow download from the Data Pool. When a user searches ECS data holdings and obtains a list of granules, if the Data Pool contains a copy of any of the granules and associated metadata or browse data, there will be links in the **On-line Access** column of the listing. A click on a link for data or metadata results in display of a filter dialog to specify a location for download of the

information from the Data Pool. A click on a link for browse data launches the browse image in a browse viewer.

19.3.2 Locate and Download Data from the Data Pool Using the Data Pool Web Access GUI

The Data Pool provides users with a rapid means to obtain granules with associated metadata and any available browse granules. The access is through a web browser and download by FTP. User Services must be familiar with the tool and able to provide user assistance and support. Table 19.3-3 presents the steps required to locate and download data from the Data Pool using the Data Pool Web Access GUI. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Access a terminal window logged in to a host (e.g., the Operations Workstation or Sun external server) that has access to the Netscape web browser.
 - Examples of Operations Workstation host names include **e0acs03**, **g0acs02**, **l0acs01**, and **n0acs03**.
 - Examples of Sun external server host names include **e0ins01**, **g0ins01**, **l0ins01**, and **n0ins01**.

- 2 At the UNIX prompt enter:
netscape &
 - It may be necessary to type the path as well as the netscape command (e.g., **/tools/bin/netscape &**).
 - It may be necessary to respond to dialogue boxes, especially if the browser is already being used by someone else who has logged in with the same user ID.
 - The Netscape web browser is displayed.

- 3 If a bookmark has been created for the **Data Pool Web Access GUI**, select the appropriate bookmark from those listed on the browser's **Bookmarks** button (or the **Communicator** → **Bookmarks** pull-down menu).
 - The **Data Pool Web Access GUI Home Page** is displayed.

- 4 If no bookmark has been created for the **Data Pool Web Access GUI**, in the browser's **Location (Go To)** field enter:
http://<host>:<port>/<path>/
 - For example:
http://x0dps01.daac.ecs.nasa.gov:54321/OPS/home
 - The **Data Pool Web Access GUI Home Page** is displayed.

- 5 To view or modify the order in which parameters are presented during drill-down first **single-click** on the **set the order** link on the **Data Pool Web Access GUI Home Page**.
 - The **Set Search Order** page is displayed.
- 6 To modify the order in which parameters are presented during drill-down **single-click** on the relevant **Parameter** option button to display a menu of parameters then **single-click** on the desired selection.
 - The following choices are available:
 - **Data_Group.**
 - **Data_Set.**
 - **Date.**
 - **Time_of_Day.**
 - **Spatial.**
 - **Cloud_Cover.**
 - **Day/Night_Flag.**
 - **Science_QA.**

NOTE: The order in which the steps that follow are performed varies according to the order established in Steps 6 through 9 and the relevance of individual parameters to the search. In fact, none of the following criteria are mandatory for drill-down:

- Date.
- Time_of_Day.
- Spatial.
- Cloud_Cover.
- Day/Night_Flag.
- Science_QA.

Some of the criteria are irrelevant to some types of data and are not included in the drill-down process when searching for granules of those types.

- 7 To continue the process of modifying the order in which parameters are presented during drill-down repeat Step 6 as necessary until all parameters have been assigned appropriately.
- 8 To continue the process of modifying the order in which parameters are presented during drill-down **single-click** on the appropriate button from the following selections:
 - **Set** - to confirm the new order in which parameters are presented during drill-down.
 - **Reset** - to reset the order in which parameters are presented during drill-down to the original order.
- 9 To complete the process of modifying the order in which parameters are presented during drill-down and return to the **Data Pool Web Access GUI Home Page** click on the Netscape browser **Back** button.
 - The **Data Pool Web Access GUI Home Page** is displayed.

- 10 To select a search parameter for starting the drill-down **single-click** on the appropriate choice from the option list on the **Data Pool Web Access GUI Home Page**.
- The following choices are available:
 - **Data_Group**.
 - **Theme**.
 - **Data_Set**.
 - The first selection screen is displayed.
 - If the search was started by clicking on **Data_Group**, the page lists data holdings by data group with a brief description of each group, granule count for each group, and a list of links to data groups for selection to start the search.
 - If the search was started by clicking on **Theme**, the page lists themes with a brief description and granule count for each, with the theme names functioning as links for selection to start the search.
 - If the search was started by clicking on **Data_Set**, the page lists data sets with a brief description and granule count for each, with the data set names functioning as links for selection to start the search.
- 11 If **Theme** was selected as the first search parameter, **single-click** on the name of the theme for which the Data Pool is to be searched.
- The **Selecting [Data] Group** page is displayed.
 - The **Selecting [Data] Group** page lists data holdings by group with a brief description of each, granule count for each group, and a list of links to data groups for selection to continue the search.
- 12 If either **Theme** or **Data_Group** was selected as the first search parameter, **single-click** on the link for the **Data Group** to be searched for appropriate or desired data.
- The **Selecting ESDT (Data Set)** page is displayed.
 - The **Selecting ESDT (Data Set)** page has a list of links to Earth Science Data Types (ESDTs) for narrowing the search, along with information about the number of granules and volume of data available in the selected data group.
- 13 **Single-click** on the link for the **Data Set (ESDT)** to be searched for appropriate or desired data.
- The **Selecting Date** page is displayed (if the default drill-down sequence is being followed).
 - Alternatives for selecting date criteria: (1) **Calendar tool (Select a Day, Week or Month)** on which active links indicate which days have available data; (2) **Date Range** feature with option buttons for selecting a **Start Date** (year/month/day) and an **End Date** (year/month/day) for the date range.
 - Alternatives for exiting the page without selecting date criteria: (1) links to revisit to any of the previous selection criteria (e.g., **Theme**, **Data Group**, or **Data Set**) displayed under **Current Search Criteria**; (2) **Get the granules** link permitting an immediate search for granules based on the previously selected criteria

(without specifying values for the criterion on the current page) (the number of granules and volume of data available if the search were to be conducted using the previously selected criteria are listed); (3) option button for skipping the criterion on the current page and selecting one of the other search criteria to be visited; (4) **Start a new search** link for restarting the drill-down from the beginning.

- 14** If the **Selecting Date** page is being displayed, either **single-click** on the appropriate link for day, week, or month on the **Select a Day, Week or Month** calendar tool or **single-click** on the option buttons in the **Select a Date Range** table to select a **Start Date** (year/month/day) and an **End Date** (year/month/day) for the date range then **single-click** on the **add it to your search criteria** button.
- The **Selecting Time** page is displayed (if the default drill-down sequence is being followed).
 - Alternatives for selecting time criteria: (1) **Select a Time of Day** matrix on which active links indicate which time periods have available data; (2) **Time Range** feature with option buttons for selecting a **Start Time** (hour/minute) and an **End Time** (hour/minute) that define a time range for the granule search.
 - Alternatives for exiting the page without selecting time criteria: (1) links to revisit to any of the previous selection criteria (e.g., **Theme, Data Group, or Data Set**) displayed under **Current Search Criteria**; (2) **Get the granules** link permitting an immediate search for granules based on the previously selected criteria (without specifying values for the criterion on the current page) (the number of granules and volume of data available if the search were to be conducted using the previously selected criteria are listed); (3) option button for skipping the criterion on the current page and selecting one of the other search criteria to be visited; (4) **Start a new search** link for restarting the drill-down from the beginning.
- 15** If the **Selecting Time** page is being displayed, either **single-click** on the appropriate link for the time of day on the **Select a Time of Day (GMT)** tool or **single-click** on the option buttons in the **Select a Time-of-Day Range (GMT)** table to select a **Start Time** (hour/minute) and an **End Time** (hour/minute) for the time range then **single-click** on the **add it to your search criteria** button.
- The **Selecting Spatial Area-of-Interest** page is displayed (if the default drill-down sequence is being followed).
 - Alternatives for selecting spatial criteria: (1) **Select from Map** section that features a density map from which the user (using a Java-enabled browser) can use the mouse to outline a spatial search region in which granules of interest would be located; (2) **Select Bounding Rectangle** feature with text boxes for typing the coordinates (latitude and longitude) of an area of interest.
 - Alternatives for exiting the page without selecting spatial criteria: (1) links to revisit to any of the previous selection criteria (e.g., **Theme, Data Group, or Data Set**) displayed under **Current Search Criteria**; (2) **Get the granules** link permitting an immediate search for granules based on the previously selected

criteria (without specifying values for the criterion on the current page) (the number of granules and volume of data available if the search were to be conducted using the previously selected criteria are listed); (3) option button for skipping the criterion on the current page and selecting one of the other search criteria to be visited; (4) **Start a new search** link for restarting the drill-down from the beginning.

- 16** If the **Selecting Spatial Area-of-Interest** page is being displayed, either **single-click/drag** to designate an area on the density map on the **Select from Map** section or in the **Select Bounding Rectangle** text boxes enter:

<coordinates>

then **single-click** on the **Add Selection to Search** button.

- The **Selecting Cloud Cover Percentage** page is displayed (if the default drill-down sequence is being followed).
 - Alternatives for selecting cloud cover criteria: (1) **Select an Upper Limit** table has links for selecting a value that is less than or equal to one of nine maximum percentage values that are 10% apart from 10% to 90% (the number of granules that meets each percentage level is listed); (2) **Select a Range** feature has text boxes for typing two values (i.e., less than X% and greater than Y%) that define a range.
 - Alternatives for exiting the page without selecting cloud cover criteria: (1) links to revisit to any of the previous selection criteria (e.g., **Theme**, **Data Group**, or **Data Set**) displayed under **Current Search Criteria**; (2) **Get the granules** link permitting an immediate search for granules based on the previously selected criteria (without specifying values for the criterion on the current page) (the number of granules and volume of data available if the search were to be conducted using the previously selected criteria are listed); (3) option button for skipping the criterion on the current page and selecting one of the other search criteria to be visited; (4) **Start a new search** link for restarting the drill-down from the beginning.

- 17** If the **Selecting Cloud Cover Percentage** page is being displayed, either **single-click** on the appropriate link for the cloud cover value in the **Select an Upper Limit** table or in the **Cloud Cover is less than or equal to ... %** and **Cloud Cover is greater than or equal to ...%** text boxes enter:

<percentage>

then **single-click** on the **Add range to search** button.

- The **Selecting Day/Night Flag** page is displayed (if the default drill-down sequence is being followed).
 - The **Selecting Day/Night Flag** page displays a **Select a value for Day/Night Flag** table on which active links indicate what selections [i.e., D (Day), N (Night), or B (Both)] are available and the number of granules available for each choice.

- Alternatives for exiting the page without selecting day/night flag criteria: (1) links to revisit to any of the previous selection criteria (e.g., **Theme, Data Group, or Data Set**) displayed under **Current Search Criteria**; (2) **Get the granules** link permitting an immediate search for granules based on the previously selected criteria (without specifying values for the criterion on the current page) (the number of granules and volume of data available if the search were to be conducted using the previously selected criteria are listed); (3) option button for skipping the criterion on the current page and selecting one of the other search criteria to be visited; (4) **Start a new search** link for restarting the drill-down from the beginning.

18 If the **Selecting Day/Night Flag** page is being displayed, **single-click** on the appropriate link [i.e., **D** (Day), **N** (Night), or **B** (Both)] for the day/night flag value in the **Select a value for Day/Night Flag** table.

- The **Selecting Measured Parameter Science QA Flag** page is displayed (if the default drill-down sequence is being followed).
 - The **Selecting Measured Parameter Science QA Flag** page displays a **Select Measured Parameter** option button for selecting a parameter relevant to the granules being sought and a **Select Science QA Flag** table on which active links indicate what science QA selections (e.g., Passed or Being Investigated) are available for the selected parameter and the number of granules available for each choice.
 - Alternatives for exiting the page without selecting QA flag criteria: (1) links to revisit to any of the previous selection criteria (e.g., **Theme, Data Group, or Data Set**) displayed under **Current Search Criteria**; (2) **Get the granules** link permitting an immediate search for granules based on the previously selected criteria (without specifying values for the criterion on the current page) (the number of granules and volume of data available if the search were to be conducted using the previously selected criteria are listed); (3) option button for skipping the criterion on the current page and selecting one of the other search criteria to be visited; (4) **Start a new search** link for restarting the drill-down from the beginning.

19 If the **Selecting Measured Parameter Science QA Flag** page is being displayed, first **single-click** on the **Select Measured Parameter** option button to display a menu of parameters then **single-click** on the desired selection.

- The **Selecting Measured Parameter Science QA Flag** page is displayed (if the default drill-down sequence is being followed).

- 20 If the **Selecting Measured Parameter Science QA Flag** page is being displayed, **single-click** on the appropriate link for the QA flag value in the **Select Science QA Flag** table.
- The **Viewing Search Results** page is displayed (if the default drill-down sequence is being followed).
 - In the **Results** section of the page the granules located through the search are listed in a table that has the following columns: **Granule**, **Size (MB)**, **Date (Begin and End)**, **Time (Begin and End)**, and **Day/Night (Flag)**.
 - There is an option button for displaying either of the following columns (rather than the Std. Metadata): **Science QA** or **Cloud Cover**.
 - The **Granule** column in the **Results** table displays multiple icons for each listed granule (although not all icons are relevant to all granules): Download granule; Download granule using zip compression (*.zip); Download granule using gnu zip compression (*.gz); Download granule using UNIX compression (*.Z); View complete metadata for [granule]; View browse for [granule]; View metadata and browse images; Supports HEG operations; Add to shopping cart.
 - Alternatives for exiting the page without selecting granules to download or order: (1) links to revisit to any of the previous selection criteria (e.g., **Theme**, **Data Group**, or **Data Set**) displayed under **Current Search Criteria**; (2) **Create a new search** link for restarting the drill-down from the beginning.
- 21 To view the metadata for a particular granule **single-click** on the **View complete metadata for ...** icon for the granule in the **Granule** column of the **Results** table on the **Viewing Search Results** page.
- A separate **Granule Metadata Viewer** window containing the granule's metadata is displayed.
 - The viewer shows XML metadata for the selected granule.
 - A scroll bar permits scrolling through the displayed metadata.
 - There is a link for displaying metadata for other granules in the results list.
 - There is an icon for saving the metadata file.
- 22 To view the browse image(s) for a particular granule **single-click** on the **View browse for ...** icon for the granule in the **Granule** column of the **Results** table on the **Viewing Search Results** page.
- A separate **Browser Viewer** window containing the granule's browse image(s) is displayed.
 - A scroll bar permits scrolling of the image(s).
 - There are links for displaying browse images for other granules in the results list.
- 23 To view both the metadata and the browse image(s) for a particular granule **single-click** on the **View metadata and browse images** icon for the granule in the **Granule** column of the **Results** table on the **Viewing Search Results** page.
- A separate **Metadata and Browser Viewer** window containing the granule's browse image(s) and metadata is displayed.
 - A scroll bar permits scrolling of the image(s)/metadata.

- There are links for displaying browse images/metadata for other granules in the results list.
- 24** To view the HEG processing information for a particular granule **single-click** on the **Supports HEG operations** icon for the granule in the **Granule** column of the **Results** table on the **Viewing Search Results** page.
- A separate **HEG Processing Information** window describing the HEG processing options for the granule is displayed.
- 25** To add an individual granule to the shopping cart **single-click** on the **Add to shopping cart** icon for the granule in the **Granule** column of the **Results** table on the **Viewing Search Results** page.
- A red checkmark is superimposed over the **Add to shopping cart** icon for the granule.
- 26** To add all granules displayed on the current page (there may be multiple pages of granules in the result set) to the shopping cart **single-click** on the **Add Granules in this page to Shopping Cart** link below the **Results** table on the **Viewing Search Results** page.
- 27** To add all granules in the **Results** table (including granules on all pages of the result set) to the shopping cart **single-click** on the **Add All Granules in Result Set to Shopping Cart** link below the **Results** table on the **Viewing Search Results** page.
- 28** To select the distribution medium for a granule in the **Granule** column of the **Results** table on the **Viewing Search Results** page first **single-click** on the **Download granule** icon or the granule identification link or one of the compression option icons.
- The **Media Selection (Media Options)** page is displayed.
 - Go to Step 43.
- 29** To view the current contents of the shopping cart **single-click** on the **View Shopping Cart** link below the **Results** table on the **Viewing Search Results** page.
- The **Your Shopping Cart** page is displayed.
 - The total number of granules and volume of data currently in the shopping cart are listed.
 - The page has links for returning to the **Viewing Search Results** page or starting a new search.
 - In the **Cart Contents** section of the **Your Shopping Cart** page the granules added to the cart are listed in a table that has the following columns:
 - **Granule.**
 - **Size (MB).**
 - **Format.**
 - **Projection.**
 - **Subsetting.**

- 30 To view the metadata associated with a granule listed on the **Your Shopping Cart** page **single-click** on the **View complete metadata for ...** icon for the granule in the **Granule** column.
- A separate **Granule Metadata Viewer** window containing the granule's metadata is displayed.
- 31 To view the browse image(s) for a particular granule listed on the **Your Shopping Cart** page **single-click** on the **View browse for ...** icon for the granule in the **Granule** column.
- A separate **Browser Viewer** window containing the granule's browse image(s) is displayed.
- 32 To remove a granule from the shopping cart page **single-click** on the **Remove from Shopping Cart** icon for the granule in the **Granule** column.
- 33 To designate HDF-EOS to GeoTIFF (HEG) conversion **single-click** on the option button in the **Format** column of the **Your Shopping Cart** page to display a menu of formats then **single-click** on the desired selection.
- The selected option (e.g., HDF-EOS or GeoTIFF) is displayed in the **Format** column of the **Your Shopping Cart** page.
- 34 To designate selected HDF-EOS to GeoTIFF (HEG) conversion to all granules in the shopping cart **single-click** on the **Apply the selection for [granule] to all granules in the Shopping Cart** icon adjacent to the option button in the **Format** column of the **Your Shopping Cart** page.
- The selected option (e.g., HDF-EOS or GeoTIFF) is displayed in the **Format** column for all granules on the **Your Shopping Cart** page.
- 35 To specify the application of a particular projection to a granule in the shopping cart first **single-click** on the option button in the **Projection** column of the **Your Shopping Cart** page to display a menu of projections then **single-click** on the desired selection.
- The following types of projections may be available:
 - **No Change** [default].
 - **Geographic.**
 - **Lambert's Azimuthal Equal Area.**
 - **Lambert's Conformal Conic.**
 - **Polar Stereographic.**
 - **Sinusoidal.**
 - **State Plane Coordinate System.**
 - **Transverse Mercator.**
 - **Universal Transverse Mercator.**
 - A **Projection Input Parameters** dialogue box is displayed.

36 To continue the process of specifying the application of a particular projection to a granule in the shopping cart in the **Longitude in zone** and **Latitude in zone** text boxes in the **Projection Input Parameters** dialogue box enter:

<values>

- *<values>* in the **Longitude in zone** and **Latitude in zone** text boxes in the **Projection Input Parameters** dialogue box are to be expressed in decimal degrees.
- To apply the specified projection input parameters to all granules in the shopping cart **single-click** in the **Apply these settings to all granules in the shopping cart** check box in the **Projection Input Parameters** dialogue box.
- To make the specified projection input parameters the default for all incoming granules in the shopping cart **single-click** in the **Make these settings the default for incoming granules** check box in the **Projection Input Parameters** dialogue box.

37 To complete the process of specifying the application of a particular projection to a granule in the shopping cart **single-click** on the appropriate button from the following selections:

- **OK** - to apply the specified projection and dismiss the **Projection Input Parameters** dialogue box.
 - The **Projection Input Parameters** dialogue box is dismissed.
 - The **Your Shopping Cart** page is displayed.
- **Cancel** - to dismiss the **Projection Input Parameters** dialogue box without applying the specified projection.
 - The **Projection Input Parameters** dialogue box is dismissed.
 - The **Your Shopping Cart** page is displayed.

38 To specify spatial subsetting of a granule in the shopping cart first **single-click** on the **Enter spatial subsetting parameters for [granule]** icon in the **Subsetting** column of the **Your Shopping Cart** page.

- A **Spatial Subsetting** dialogue box is displayed.

39 To continue the process of specifying spatial subsetting of a granule in the shopping cart in the **West Longitude**, **East Longitude**, **North Latitude**, and **South Latitude** text boxes (in the **Spatial Subsetting** dialogue box) enter:

<coordinates>

- *<coordinates>* in the **West Longitude**, **East Longitude**, **North Latitude**, and **South Latitude** text boxes are to be expressed in decimal degrees.
- To apply the specified spatial subsetting parameters to all granules in the shopping cart **single-click** in the **Apply these settings to all applicable granules in the shopping cart** check box in the **Spatial Subsetting** dialogue box.
- To make the specified spatial subsetting parameters the default for all incoming granules in the shopping cart **single-click** in the **Make these settings the default for incoming granules** check box in the **Spatial Subsetting** dialogue box.

- 40 To complete the process of specifying spatial subsetting parameters for a granule in the shopping cart click on the appropriate button from the following selections:
- **OK** - to apply the specified spatial subsetting parameters and dismiss the **Spatial Subsetting** dialogue box.
 - The **Spatial Subsetting** dialogue box is dismissed.
 - The **Your Shopping Cart** page is displayed.
 - **Cancel** - to dismiss the **Spatial Subsetting** dialogue box without applying the specified spatial subsetting parameters.
 - The **Spatial Subsetting** dialogue box is dismissed.
 - The **Your Shopping Cart** page is displayed.
- 41 To select the distribution media for granules in the shopping cart first **single-click** on the **Select Media** button on the **Your Shopping Cart** page.
- The **Media Selection (Media Options)** page is displayed.
 - The **Media Options** page makes it possible to order data on physical media (e.g., CD, DVD, or DLT tape) as an alternative to downloading the data.
 - The **Media Options** page lists the types of media available for the granules in the shopping cart and (if applicable) explains why certain media cannot be selected.
 - The table on the Media Options page has the following columns: **Select One**, **Media Type**, **Media Format**, **Max. Size Limit (MB)**, **Min. Size Limit (MB)**, **Media Capacity (MB)**, **Max. Granule Counts**.
- 42 To continue the process of selecting the distribution media for granules **single-click** in the button (in the **Select One** column) corresponding to the appropriate distribution medium on the **Media Selection (Media Options)** page.
- 43 To complete the process of selecting the distribution media for granules click on the appropriate button from the following selections:
- **OK** - to apply the specified distribution media and dismiss the **Media Selection (Media Options)** page.
 - The **Media Selection (Media Options)** page is dismissed.
 - The **Checkout** page is displayed.
 - **Choose Later** - to dismiss the **Media Selection (Media Options)** page without specifying a distribution medium.
 - The **Media Selection (Media Options)** page is dismissed.
 - The previous page is displayed.
- 44 To check out if the download option was selected in the **User Name** and **E-mail** text boxes on the **Checkout** page enter:
- <text>
- Entering a **User Name** is optional (not required).
 - To get e-mail notification of the order **single-click** in the **Send an order notification e-mail** check box on the **Checkout** page.

- 45 To continue the process of checking out if the download option was selected **single-click** on the appropriate button from the following selections:
- **Order the data** - to order the data and dismiss the **Checkout** page.
 - The **Checkout** page is dismissed.
 - A “Your order cannot be changed once you have submitted it. Are you ready to submit this order?” dialogue box is displayed.
 - **Back to Cart**- to dismiss the **Checkout** page without ordering the data and return to the **Your Shopping Cart** page.
 - The **Checkout** page is dismissed.
 - The **Your Shopping Cart** page is displayed.
 - **Back to Media**- to dismiss the **Checkout** page without ordering the data and return to the **Media Selection (Media Options)** page.
 - The **Checkout** page is dismissed.
 - The **Media Selection (Media Options)** page is displayed.
- 46 To complete the process of checking out if the download option was selected **single-click** on the appropriate button from the following selections:
- **OK** - to order the data and dismiss the dialogue box.
 - The “Your order cannot be changed once you have submitted it. Are you ready to submit this order?” dialogue box is dismissed.
 - A “**Remember Values**” **Confirmation** dialogue box is displayed.
 - **Cancel** - to dismiss the dialogue box without ordering the data.
 - The “Your order cannot be changed once you have submitted it. Are you ready to submit this order?” dialogue box is dismissed.
 - The previous page is displayed.
- 47 If the download option was selected and a “**Remember Values**” **Confirmation** dialogue box is displayed, click on the appropriate button from the following selections:
- **Yes.**
 - **Never for this site.**
 - **No.**
 - A **Download Ordered Data** page is displayed; it lists an order number and a set of links for compression options (including “no compression”) for downloading the data.
- 48 To download the data if the download option was selected first click on the appropriate link from the **Download Ordered Data** page.
- The following links may be available:
 - **No compression**
 - **zip**
 - **tar**
 - **tar.gz**
 - **tar.Z**

- 49 To continue the process of downloading the data if the download option was selected verify (enter text as necessary) the appropriate directory path/file name in the **Save As** dialogue box.
- 50 To complete the process of downloading the data if the download option was selected **single-click** on the **OK** button in the **Save As** dialogue box.
- The data are saved in the specified directory:
 - The **Save As** dialogue box is dismissed.
- 51 To check out if a physical medium option was selected from the **Media Selection (Media Options)** page first click on the appropriate radio button (i.e., **Yes** or **No**) for each of the following questions (as applicable) on the **Checkout** page:
- **Include input granule metadata file?**
 - **Include output granule metadata file(s)?**
- 52 To continue the process of checking out if a physical medium option was selected from the **Media Selection (Media Options)** page in the **User Comments** text box on the **Checkout** page enter:
- <text>
- <text> includes relevant comments (if any).
 - Entering user comments is optional (not required).
- 53 To continue the process of checking out if a physical medium option was selected from the **Media Selection (Media Options)** page, in the relevant fields of the **Shipping Address** block on the **Checkout** page enter:
- <text>
- The following fields are listed in the **Shipping Address** block:
 - **User Name.**
 - **E-mail.**
 - **Telephone.**
 - **Organization.**
 - **Street Address.**
 - **City.**
 - **State/Province.**
 - **Postal Code.**
 - **Country.**
- 54 To continue the process of checking out if a physical medium option was selected from the **Media Selection (Media Options)** page and if the contact address is different from the shipping address, **single-click** on **Contact Address** on the **Checkout** page.
- **Contact Address** fields do not have to be filled out if the Contact Address is the same as the Shipping Address.

- 55 To continue the process of checking out if a physical medium option was selected from the **Media Selection (Media Options)** page and if the contact address is different from the shipping address, in the relevant fields of the **Contact Address** block on the **Checkout** page enter:
- <text>
- **Contact Address** fields do not have to be filled out if the Contact Address is the same as the Shipping Address.
- 56 To continue the process of checking out if a physical medium option was selected from the **Media Selection (Media Options)** page **single-click** on the appropriate button from the following selections on the **Checkout** page:
- **Confirm Your Order** - to go to the **Confirm Order** page and dismiss the **Checkout** page.
 - The **Checkout** page is dismissed.
 - A **Confirm Order** page is displayed.
 - **Clear Your Entries**- to clear the entries on the **Checkout** page.
 - The entries on the **Checkout** page are cleared.
 - **Back to Cart**- to dismiss the **Checkout** page without ordering the data and return to the **Your Shopping Cart** page.
 - The **Checkout** page is dismissed.
 - The **Your Shopping Cart** page is displayed.
 - **Back to Media**- to dismiss the **Checkout** page without ordering the data and return to the **Media Selection (Media Options)** page.
 - The **Checkout** page is dismissed.
 - The **Media Selection (Media Options)** page is displayed.
- 57 To continue the process of checking out if a physical medium option was selected from the **Media Selection (Media Options)** page observe the information displayed on the **Confirm Order** page.
- The following types of information are displayed on the **Confirm Order** page:
 - Data contents of the order [granules].
 - Media selection.
 - Packaging selections.
 - Shipping address.
 - Contact address.
- 58 To complete the process of checking out if a physical medium option was selected from the **Media Selection (Media Options)** page **single-click** on the appropriate button from the following selections on the **Confirm Order** page:
- **Please Submit Your Order** - to submit the order and dismiss the **Confirm Order** page.
 - The **Confirm Order** page is dismissed.

- An **Order Acknowledgement** page is displayed.
- **Back to Cart**- to dismiss the **Confirm Order** page without ordering the data and return to the **Your Shopping Cart** page.
 - The **Confirm Order** page is dismissed.
 - The **Your Shopping Cart** page is displayed.
- **Back to Media**- to dismiss the **Confirm Order** page without ordering the data and return to the **Media Selection (Media Options)** page.
 - The **Confirm Order** page is dismissed.
 - The **Media Selection (Media Options)** page is displayed.
- **Back to Checkout**- to dismiss the **Confirm Order** page without ordering the data and return to the **Checkout** page.
 - The **Confirm Order** page is dismissed.
 - The **Checkout** page is displayed.

- 59 Observe the information displayed on the **Order Acknowledgement** page.
- The following types of information are displayed on the **Order Acknowledgement** page:
 - Order ID.
 - Order Status.
 - The **Order Acknowledgement** page has a link to the **EOS Data Gateway** to help find data that could not be located in the Data Pool.

60 Repeat Steps 3 through 59 as necessary to locate and download additional data from the Data Pool using the **Data Pool Web Access GUI**.

61 To shut down the Netscape browser (when applicable) execute the following menu path:

File → Exit

- The Netscape browser is dismissed.

Table 19.3-3. Locate and Download Data from the Data Pool using the Data Pool Web Access GUI (1 of 3)

Step	What to Do	Action to Take
1	UNIX window on a host that has access to the Netscape web browser (e.g., the Operations Workstation or Sun external server)	single-click
2	netscape &	enter text; press Return/Enter
3	<bookmark> (for Data Pool Web Access GUI) or http://<host>:<port>/<path>/	single-click or enter text; press Return/Enter
4	set the order link (if applicable)	single-click
5	<parameter> option button (if applicable)	single-click
6	Repeat Step 5 as necessary	
7	Set button (if applicable)	single-click

Table 19.3-3. Locate and Download Data from the Data Pool using the Data Pool Web Access GUI (2 of 3)

Step	What to Do	Action to Take
8	browser Back button (if applicable)	single-click
9	<link> to start search (Data_Group , Theme , or Data_Set)	single-click
10	Select Theme (if applicable)	single-click
11	Select Data Group (if applicable)	single-click
12	Select Data Set (ESDT)	single-click
13	Select Date (or specify Date Range) (if applicable)	single-click (or click options)
14	Select Time (or specify Start Time and End Time) (if applicable)	single-click (or click options)
15	Select spatial search region from map or enter latitude and longitude (if applicable)	click/drag or enter text; press Return/Enter
16	Add Selection to Search button (if applicable)	single-click
17	Select cloud cover or enter cloud cover percentages (if applicable)	single-click or enter text; press Return/Enter
18	Add range to search button (if applicable)	single-click
19	Select Day/Night flag (if applicable)	single-click
20	<parameter> (Select Measured Parameter option button) (if applicable)	single-click
21	Select QA flag value (if applicable)	single-click
22	View complete metadata for ... icon (if applicable)	single-click
23	View browse for ... icon (if applicable)	single-click
24	View metadata and browse images icon (if applicable)	single-click
25	Supports HEG operations icon (if applicable)	single-click
26	Select granules to add to shopping cart (Add to shopping cart icons or Add Granules in this page to Shopping Cart link or Add All Granules in Result Set to Shopping Cart link) (as applicable)	single-click
27	Download granule icon or the granule identification link or one of the compression option icons (as applicable); go to Step 41	single-click
28	View Shopping Cart link (as applicable)	single-click
29	View complete metadata for ... icon (as applicable)	single-click
30	View browse for ... icon (as applicable)	single-click
31	Remove from Shopping Cart icon (if applicable)	single-click
32	Select HDF-EOS to GeoTIFF (HEG) (option button in the Format column) (if applicable)	single-click
33	Apply the selection for [granule] to all granules in the Shopping Cart icon (if applicable)	single-click
34	Select projection (option button in the Projection column) (if applicable)	single-click

**Table 19.3-3. Locate and Download Data from the Data Pool
using the Data Pool Web Access GUI (3 of 3)**

Step	What to Do	Action to Take
35	<latitude/longitude> (in the Longitude in zone and Latitude in zone text boxes) (if applicable)	enter text; press Return/Enter
36	OK button (if applicable)	single-click
37	Enter spatial subsetting parameters for [granule] icon (if applicable)	single-click
38	<latitude/longitude> (in the West Longitude, East Longitude, North Latitude, and South Latitude text boxes) (if applicable)	enter text; press Return/Enter
39	OK button (if applicable)	single-click
40	Select Media button (if applicable)	single-click
41	Select distribution medium (if applicable)	single-click
42	OK button (if applicable)	single-click
43	<text> (in the User Name and E-mail text boxes) (as applicable)	enter text; press Return/Enter
44	Order the data button (as applicable)	single-click
45	OK button (if applicable)	single-click
46	Yes, Never for this site, or No (as applicable) (in the “ Remember Values ” Confirmation dialogue box)	single-click
47	Select compression option (if applicable)	single-click
48	<directory path/file name> (in the Save As dialogue box) (if necessary)	single-click
49	OK button (if applicable)	single-click
50	Yes button or No button (if applicable)	single-click
51	<text> (in the User Comments text box) (if applicable)	enter text; press Return/Enter
52	<text> (in the relevant fields of the Shipping Address block) (if applicable)	enter text; press Return/Enter
53	Contact Address link	single-click
54	<text> (in the relevant fields of the Contact Address block) (if applicable)	enter text; press Return/Enter
55	Confirm Your Order button (if applicable)	single-click
56	Information displayed on the Confirm Order page (if applicable)	read text
57	Please Submit Your Order button (if applicable)	single-click
58	Information displayed on the Order Acknowledgement page (if applicable)	read text
59	Repeat Steps 3 through 58 as necessary	
60	File → Exit	single-click

19.4 Working with the Spatial Subscription Server and Data Pool

User Services and Science Data Specialists use the Spatial Subscription Server GUI to create subscriptions for inserting data into the Data Pool and to perform other tasks necessary to manage the Data Pool. Table 19.4-1 provides an activity checklist for tasks using the Spatial Subscription Server GUI for Data Pool Management.

Table 19.4-1. Use the Spatial Subscription Server GUI for Data Pool Management - Activity Checklist (1 of 3)

Order	Role	Task	Section	Complete?
1	User Services/ Science Data Specialist [full-capability or limited- capability]	Launch the Spatial Subscription Server GUI	(P) 19.4.1	
2	User Services/ Science Data Specialist [full-capability or limited- capability]	Shut Down the Spatial Subscription Server GUI (End a Spatial Subscription Server GUI Session)	(P) 19.4.2	
3	User Services/ Science Data Specialist [full-capability or limited- capability]	Use the Spatial Subscription Server GUI to List Subscribable Events	(P) 19.4.3	
4	User Services/ Science Data Specialist [full-capability or limited- capability]	Use the Spatial Subscription Server GUI to List and View Subscriptions in the NBSRV Database	(P) 19.4.4	
5	User Services/ Science Data Specialist [full-capability only]	Use the Spatial Subscription Server GUI to Add a Subscription to the NBSRV Database	(P) 19.4.5	
6	User Services/ Science Data Specialist [full-capability only]	Use the Spatial Subscription Server GUI to Update a Subscription in the NBSRV Database	(P) 19.4.6	

**Table 19.4-1. Use the Spatial Subscription Server GUI for
Data Pool Management - Activity Checklist (2 of 3)**

Order	Role	Task	Section	Complete?
7	User Services/ Science Data Specialist [full-capability only]	Use the Spatial Subscription Server GUI to Delete (Cancel) a Subscription in the NBSRV Database	(P) 19.4.7	
8	User Services/ Science Data Specialist [full-capability or limited- capability]	Use the Spatial Subscription Server GUI to List Subscriptions Associated with a Theme	(P) 19.4.8	
9	User Services/ Science Data Specialist [full-capability or limited- capability]	Use the Spatial Subscription Server GUI to Obtain a List of Bundling Orders and View a Bundling Order	(P) 19.4.9	
10	User Services/ Science Data Specialist [full-capability only]	Use the Spatial Subscription Server GUI to Cancel a Bundling Order and Its Associated Subscriptions	(P) 19.4.10	
11	User Services/ Science Data Specialist [full-capability only]	Use the Spatial Subscription Server GUI to Add a Bundling Order	(P) 19.4.11	
12	User Services/ Science Data Specialist [full-capability only]	Use the Spatial Subscription Server GUI to Update a Bundling Order	(P) 19.4.12	
13	User Services/ Science Data Specialist [full-capability; limited- capability has read-only access]	Use the Spatial Subscription Server GUI to Configure Bundling Order Completion Criteria Default Values	(P) 19.4.13	
14	User Services/ Science Data Specialist [full-capability or limited- capability]	Use the Spatial Subscription Server GUI to View the Acquire and Notification Actions Being Processed	(P) 19.4.14	

Table 19.4-1. Use the Spatial Subscription Server GUI for Data Pool Management - Activity Checklist (3 of 3)

Order	Role	Task	Section	Complete?
15	User Services/ Science Data Specialist [full-capability; limited- capability has read-only access]	Use the Spatial Subscription Server GUI to View and Remove Failed Actions	(P) 19.4.15	
16	User Services/ Science Data Specialist [full-capability or limited- capability]	Use the Spatial Subscription Server GUI to View Statistics on Processing of Events and Actions by the NBSRV	(P) 19.4.16	
17	User Services/ Science Data Specialist [full-capability only]	Prepare Input Files for Use with the SSS CLI	(P) 19.4.17	
18	User Services/ Science Data Specialist [full-capability only]	View a Subscription Using the SSS CLI	(P) 19.4.18	
19	User Services/ Science Data Specialist [full-capability only]	Add a New Subscription Using the SSS CLI	(P) 19.4.19	
20	User Services/ Science Data Specialist [full-capability only]	Update a Subscription Using the SSS CLI	(P) 19.4.20	
21	User Services/ Science Data Specialist [full-capability only]	Delete a Subscription Using the SSS CLI	(P) 19.4.21	

19.4.1 Launch the Spatial Subscription Server GUI

The procedure for launching the GUI is provided separately here and is referenced in other procedures. It applies to both full-capability and limited-capability operators.

Table 19.4-2 presents the steps required to launch the Spatial Subscription Server GUI. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 At the UNIX command shell prompt, type **setenv DISPLAY *clientname*:0.0** and then press the **Return/Enter** key.
 - For *clientname*, use either the local terminal/workstation IP address or its machine name.
- 2 Start the log-in to a Netscape host by typing **/tools/bin/ssh *hostname*** (e.g., g0ins02, e0ins02, l0ins02, n0ins02) at the UNIX command shell prompt, and press the **Return/Enter** key.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type **yes** (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed **sshremote**, a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears; continue with Step 3.
 - If you have not previously set up a secure shell passphrase, go to Step 4.
- 3 If a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears, type your *Passphrase* and then press the **Return/Enter** key. Go to Step 5.
- 4 At the **<user@remotehost>'s password:** prompt, type your *Password* and then press the **Return/Enter** key.
 - You are logged in and a UNIX command shell prompt is displayed.
- 5 Type **netscape &** then press **Return/Enter**.
 - It may be necessary to type the path as well as the netscape command (e.g., **/tools/bin/netscape &**).
 - It may be necessary to respond to dialogue boxes, especially if the browser is already being used by someone else who has logged in with the same user ID.
 - The Netscape web browser is displayed.
- 6 If a bookmark has been created for the **Spatial Subscription Server GUI**, select the appropriate bookmark from those listed on the browser's **Bookmarks** button (or the **Communicator** → **Bookmarks** pull-down menu).
 - The security login **Prompt** is displayed.

- 7 If no bookmark has been created for the **Spatial Subscription Server GUI**, type **http://<host>:<port>/<path>/** in the browser's **Location (Go To)** field then press **Return/Enter**.
 - For example:
 - http://x0dps01.daac.ecs.nasa.gov:54321/cgi-bin/EcNbHomePage.pl**
 - The security login **Prompt** is displayed.
- 8 Type the appropriate user name in the **User Name** box of the security login **Prompt**.
- 9 Type the appropriate password in the **Password** box of the security login **Prompt**.

NOTE: If the security login prompt reappears after the first time the user name and password have been entered (and the **OK** button has been clicked), it may not be due to a data entry problem. Try again to log in using the same user name and password. Sometimes it is necessary to enter the user name and password for the GUI more than once.

- 10 Click on the appropriate button from the following selections:
 - **OK** - to complete the log-in and dismiss the dialogue box.
 - The dialogue box is dismissed.
 - The **NBSRV Home Page** is displayed.
 - **Cancel** - to dismiss the dialogue box without logging in.
 - The dialogue box is dismissed.
 - The Netscape web browser is displayed.

Table 19.4-2. Launch the Spatial Subscription Server GUI

Step	What to Do	Action to Take
1	setenv DISPLAY <i>clientname</i>:0.0	enter text; press Return/Enter
2	/tools/bin/ssh <i>hostname</i>	enter text; press Return/Enter
3	<i>Passphrase</i> (or Step 4)	enter text; press Return/Enter
4	<i>Password</i>	enter text; press Return/Enter
5	netscape &	enter text; press Return/Enter
6	<i>bookmark</i> (for Spatial Subscription Server GUI)	single-click
7	http://<host>:<port>/<path>/ (if no bookmark is available)	enter text; press Return/Enter
8	<i>username</i>	enter text
9	<i>password</i>	enter text
10	OK button	single-click

19.4.2 Shut Down the Spatial Subscription Server GUI (End a Spatial Subscription Server GUI Session)

At some point it becomes necessary to shut down the Spatial Subscription Server GUI (end a Spatial Subscription Server GUI session). Table 19.4-3 presents the steps required to shut down the DPM GUI. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Click on the **Home Page** link at the top of the **Spatial Subscription Server GUI**.
 - The **Home Page** is displayed.
- 2 Click on the **End Session** link at the top of the **Spatial Subscription Server GUI**.
 - A log-out page containing the message “Click on Button Below to End Session: NOTE: THIS WOULD ALSO SHUT DOWN THE BROWSER :” is displayed.

NOTE: To abort the log-out and return to the **Home Page**, click on the browser **Back** button.

- 3 Click on the **ShutDown** button.
 - The Netscape browser is dismissed.

Table 19.4-3. Shut Down the Spatial Subscription Server GUI (End a Spatial Subscription Server GUI Session)

Step	What to Do	Action to Take
1	Home Page link	single-click
2	End Session link	single-click
3	ShutDown button	single-click

19.4.3 Use the Spatial Subscription Server GUI to List Subscribable Events

Suppose you want to obtain and examine a list of events for which subscriptions may be established, and to find insert events for MOD01 data. Use the procedure that follows, which is applicable to both full-capability and limited-capability operators.

Table 19.4-4 presents the steps required to use the Spatial Subscription Server GUI to list subscribable events. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the Spatial Subscription Server GUI (refer to Section 19.4.1, **Launch the Spatial Subscription Server GUI**).
 - The **Home Page** is the default display, offering links for access to Spatial Subscription Server function pages (i.e., **List Events**, **Manage Subscriptions**, **Manage Bundling Orders**, **Monitor Queues**, **Help**, and **End Session**).
- 2 Click on the **List Events** link.
 - The **List Events** page is displayed with a table of all events for which a subscription can be created.
- 3 Observe information displayed on the **Manage Subscriptions** page.
 - The table on the **List Events** page has columns containing the following types of subscription information:
 - **Collection**.
 - **Version**.
 - **Event Type**.
 - The column headers in the table are links for sorting the list. There are also buttons for filtering the list.
 - There are option lists for filtering the table data by **Collection**, **Version**, and/or **Event Type**.
 - Event Type options include **ALL**, **DELETE**, **INSERT**, **UNDELETE**, **DELETEPHYSICAL**, and **UPDATEMETADATA**.
- 4 To **sort** the list click on the appropriate column header link (i.e., **Collection**, **Version**, or **Event Type**).
 - If the list were sorted by **Event Type**, it would display events grouped by type: **DELETE** events would be listed first, followed by **INSERT** events, etc.
- 5 To **filter** the list to display certain types of information only, click on the appropriate option button (i.e., **Collection**, **Version**, or **Event Type**) and then click to select the desired option from the option list.
 - The selected choice is displayed in the option field.
- 6 Repeat Step 5 to select an additional filter, if applicable.
- 7 Click on the **Filter** button to implement the selected filter.
 - A list is displayed showing selected information only.
- 8 Return to Step 3.

Table 19.4-4. Use the Spatial Subscription Server GUI to List Subscribable Events

Step	What to Do	Action to Take
1	Launch the Spatial Subscription Server GUI	Use procedure in Section 19.4.1
2	List Events link	single-click
3	Observe information displayed on the Manage Subscriptions page	read text
4	Collection, Version or Event Type link (to sort list) (if applicable)	single-click
5	Subscribable events filter option (from the appropriate option list) (if applicable)	click option
6	Repeat Step 5 (if applicable)	
7	Filter button (to implement the selected filter) (if applicable)	single-click
8	Return to Step 3	

19.4.4 Use the Spatial Subscription Server GUI to List and View Subscriptions in the NBSRV Database

Suppose that you now want to view subscriptions related to MOD01 data, and then to review detailed information about a particular subscription. To obtain the list you will need to use the **Manage Subscriptions** link, filter on **Collection**, and then select and apply an option to **View** the particular subscription. Use the following procedure, which is applicable to both full-capability and limited-capability operators.

Table 19.4-5 presents the steps required to use the Spatial Subscription Server GUI to list and view subscriptions in the NBSRV database. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the Spatial Subscription Server GUI (refer to Section 19.4.1, **Launch the Spatial Subscription Server GUI**).
 - The **Home Page** is the default display, offering links for access to Spatial Subscription Server function pages (i.e., **List Events**, **Manage Subscriptions**, **Manage Bundling Orders**, **Monitor Queues**, **Help**, and **End Session**).
- 2 Click on the **Manage Subscriptions** link.
 - The **Manage Subscriptions** page is displayed with a table listing all subscriptions in the NBSRV database.
- 3 Observe information displayed on the **Manage Subscriptions** page.
 - The table on the **Manage Subscriptions** page has columns containing the following types of subscription information:
 - **Subscription Id.**

- **User.**
 - **Collection.**
 - **Version.**
 - **Event Type.**
 - **Status.**
 - **Data Pool.**
 - **Start Date.**
 - **Expiration Date.**
 - **Time Last Updated.**
 - **Choose Subscription Action.**
 - The column headers in the table, except for **Version**, **Event Type**, **Start Date**, and **Choose Subscription Action** are links for sorting the list.
 - The **Choose Subscription Action** column has radio buttons for taking the following actions with respect to the corresponding subscription:
 - **View.**
 - **Update.**
 - **Cancel.**
 - There are option lists for filtering the table data by **User**, **Collection**, **Status**, and/or **Data Pool**.
 - There is a “**Change Collection Display to**” option button for switching the display between **TextEntry** and **SelectableList**.
- 4** To filter the list to display certain types of subscriptions only, click on the appropriate option button (i.e., **User**, **Collection**, **Status**, or **Data Pool**) and then click to select the desired option from the option list.
- The selected choice is displayed in the option field.
- 5** Repeat Step 4 to select an additional filter, if applicable.
- 6** Click on the **Filter** button to implement the selected filter.
- A list is displayed showing subscriptions that meet the filter criteria only.
- 7** To view a particular subscription first click on the **View** radio button in the **Choose Subscription Action** column for the subscription.
- The button is filled to indicate selection of the option.
- 8** To implement the selected action with respect to the particular subscription click on the **Apply** button in the **Choose Subscription Action** column for the subscription.
- A **View Subscriptions** page is displayed.
- 9** Observe information displayed on the **View Subscriptions** page.
- The table on the **Manage Subscriptions** page has columns containing the following types of subscription information:
 - **User.**

- **Status.**
 - **Start Date.**
 - **Expiration Date.**
 - **Short Name.**
 - **Version.**
 - **Event Type.**
 - **Retention Period** (if applicable).
 - **Retention Priority** (if applicable).
 - **Science Granules and/or Metadata** (if applicable).
 - **Data Pool Action is associated with theme *x*** (if applicable).
 - etc.
- There are **View another subscription** and **Return to Home Page** links on the page.
- 10** Click on the **View another subscription** link or the **Return to Home Page** link (as appropriate) when finished viewing the subscription data on the **View Subscriptions** page.
- 11** Repeat Steps 3 through 10 as necessary to view additional subscriptions.

Table 19.4-5. Use the Spatial Subscription Server GUI to List and View Subscriptions in the NBSRV Database

Step	What to Do	Action to Take
1	Launch the Spatial Subscription Server GUI	Use procedure in Section 19.4.1
2	Manage Subscriptions link	single-click
3	Observe information displayed on the Manage Subscriptions page	read text
4	Subscription filter option (from the appropriate option list) (if applicable)	click option
5	Repeat Step 4 (if applicable)	
6	Filter button (to implement the selected filter(s)) (if applicable)	single-click
7	View radio button (in the Choose Subscription Action column for the subscription)	single-click
8	Apply button (in the Choose Subscription Action column for the subscription) (to implement the selected action)	single-click
9	Observe information displayed on the View Subscriptions page	read text
10	View another subscription link	single-click
11	Repeat Steps 3 through 10 (as necessary)	

19.4.5 Use the Spatial Subscription Server GUI to Add a Subscription to the NBSRV Database

A user who wants to have data made available for downloading through the Data Pool must contact the DAAC to request that a subscription be placed so that when data of the specified type are inserted in ECS, a copy is inserted in the Data Pool. User Services or Science Data Specialists then create the subscription, adding Data Pool qualification and retention criteria to meet the user's requirement within any constraints imposed for the Data Pool at the DAAC.

Suppose that a registered user requests Data Pool insert for MOD04_L2 003 data, specifying that the data granules inserted during the next two years be kept in the Data Pool for a period of 30 days. The user requests granules from daytime collection, in a geographic area bounded by 0 degrees North Latitude, -50 degrees East Longitude, -20 degrees South Latitude, and -70 degrees West Longitude. The user also requests notification as well as the Data Pool insert. Full-capability operators (only) can use the procedure that follows to create the necessary subscription.

Table 19.4-6 presents the steps required to use the Spatial Subscription Server GUI to add a subscription to the NBSRV database. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the Spatial Subscription Server GUI (refer to Section 19.4.1, **Launch the Spatial Subscription Server GUI**).
 - The **Home Page** is the default display, offering links for access to Spatial Subscription Server function pages (i.e., **List Events**, **Manage Subscriptions**, **Manage Bundling Orders**, **Monitor Queues**, **Help**, and **End Session**).

NOTE: At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when the warning is displayed.

- 2 Click on the **Manage Subscriptions** link.
 - The **Manage Subscriptions** page is displayed, providing a table of subscription information showing 11 columns: **Subscription Id**, **User**, **Collection**, **Version**, **Event Type**, **Status**, **Data Pool**, **Start Date**, **Expiration Date**, **Time Last Updated**, and **Choose Subscription Action** (containing radio buttons for selecting an action to take and **Apply** buttons for implementing the selected actions).
- 3 Click on the **Add Subscriptions** link.
 - The **Add Subscriptions** page is displayed.
- 4 Type the User Id for the requesting user in the **User Id** text entry field.
 - The entered User Id must be a valid registered user (i.e., must be listed in the User Profile database).

- The typed entry is displayed in the **User Id** field.
- 5 To select a **Status** option click on the appropriate choice from the option list.
 - **Active.**
 - **Inactive.**
 - 6 If the start date for the subscription is different from the default (current date and time) type the appropriate date and time in the **Start Date (mm/dd/yyyy hh:mm)** text entry box.
 - The date and time should be entered in *mm/dd/yyyy hh:mm* format
 - 7 If the expiration date for the subscription is different from the default (one year from the current date and time) type the appropriate date and time in the **Expiration Date (mm/dd/yyyy hh:mm)** text entry box.
 - The date and time should be entered in *mm/dd/yyyy hh:mm* format
 - 8 Type the first few characters of the name of the collection for which the subscription is to be created (e.g., **MOD04**) in the **Collection Short Name** text entry box.
 - 9 Click on the **Apply** button.
 - A **SELECT Short Name/Version/Event Type** option button and a **Numbers of String Qualifiers** button are displayed, along with an **Apply** button.
 - 10 To select a **Short Name/Version/Event Type** option click on the appropriate choice (e.g., **MOD04_L2 003 INSERT**) from the option list.
 - 11 To select a **Numbers of String Qualifiers** option click on the appropriate choice (e.g., **1**) from the option list.
 - 12 Click on the **Apply** button.
 - Option buttons and fields are displayed to permit the entry of data in two general categories; i.e., **Subscription Qualifiers** and **Action Information**.
 - In the **Subscription Qualifiers** section it is possible to select **Attribute Name/Type** and enter **Min Value** and **Max Value** for any valid **Integer/Float/Date** qualifiers, string **Value** qualifiers, and **Latitude** and **Longitude** coordinates to define a bounding rectangle spatial qualifier for the subscription to be created.
 - In the **Action Information** section there is a button to specify that the subscription is to be associated with a bundling order; if that button is not selected, one has the choice of one or more of three actions (i.e., **Acquire**, **E-Mail Notification**, or **Data Pool**). There are blocks with option lists and text entry fields for defining the selected action(s) to be taken upon occurrence of the event for which the subscription is to be created.
 - At the bottom of the page is an **Add Subscription** button for submitting the subscription.

- 13 To select a different **Logical Basis** option (if applicable) click on the appropriate choice (e.g., **AND**) from the option list.
- 14 To select an integer, float, or date **Attribute Name/Type** option (if applicable) click on the appropriate choice from the **Integer/Float/Date Attribute Name/Type** option list.
- 15 To specify a minimum value for an integer, float, or date attribute (if applicable) type the appropriate value in the **Integer/Float/Date Min Value** text entry box.
- 16 To specify a maximum value for an integer, float, or date attribute (if applicable) type the appropriate value in the **Integer/Float/Date Max Value** text entry box.
- 17 Repeat Steps 14 through 16 as necessary to specify additional integer, float, or date attributes.
- 18 To select a string **Attribute Name/Type** option (if applicable) click on the appropriate choice from the **String Attribute Name/Type** option list.
- 19 To specify a value for a string attribute (if applicable) type the appropriate value in the **String Value** text entry box.
- 20 Repeat Steps 18 and 19 as necessary to specify additional string attributes.
- 21 To specify spatial coordinates of intersecting LLBox (if applicable) type the appropriate values in the following text entry boxes.
 - **North Latitude.**
 - **West Longitude.**
 - **East Longitude.**
 - **South Latitude.**
 - For example:
North Latitude 0
West Longitude -70
East Longitude -50
South Latitude -20

NOTE: Every subscription must have at least one action specified and may have more than one.

- 22 To associate the subscription with a bundling order (if applicable) first click in the **Bundling Order** box.

- 23** To continue the process of associating a subscription with a bundling order (if applicable) click on the appropriate choice from the **Bundling Order Selection** option list.
- If a subscription is associated with a bundling order, skip Steps 24 through 27 and go to Step 28.
- 24** To select subscription action(s) click in the following boxes as applicable (a check mark in a box indicates that the action has been selected):
- **Acquire** – to request shipment of the data specified in the subscription.
 - **E-Mail Notification** - to request e-mail notification of the event specified in the subscription.
 - **Data Pool** - to request insertion of data specified in the subscription into the Data Pool.

NOTE: Multiple actions can be selected.

- 25** If **Acquire** was selected in Step 24, either type the appropriate data or click on the appropriate choice from the option list in the relevant fields of the **Acquire Information** block:
- **User Profile.**
 - **User String** [if applicable (to distinguish the subscription from others)].
 - **Email Address.**
 - **Media Type.**
 - **Priority.**
 - **User** [applicable to ftp push or secure copy distributions only].
 - **Password** [applicable to ftp push or secure copy distributions only].
 - **Enter password again for verification** [applicable to ftp push or secure copy distributions only].
 - **Host** [applicable to ftp push or secure copy distributions only].
 - **Directory** [applicable to ftp push or secure copy distributions only].
- 26** If **E-Mail Notification** was selected in Step 24, either type the appropriate data or click on the appropriate choice from the option list in the relevant fields of the **E-Mail Notification Information** block:
- **Action Address.**
 - **User String** [if applicable (to distinguish the subscription from others)].
 - **Metadata.**
- 27** If **Data Pool** was selected in Step 24, either type the appropriate data or click on the appropriate choice from the option list in the relevant fields of the **Data Pool Information** block:
- **Retention Period (in days)** [e.g., 30].
 - **Retention Priority (valid range 1 thru 255)** [e.g., 200].
 - **Science Granules and/or Metadata** [e.g., science and metadata].

- **Click here to add theme:** [click in the box if the granules to be added to the Data Pool as a result of the subscription are to be associated with a theme].
 - **Enter first few characters of name** [optional - if associating the granules from the subscription with a theme].
- 28 Click on the **Add Subscription** button.
- If the **Click here to add theme:** box was checked, a **Select Theme for Data Pool Action** page is displayed.
 - If the **Click here to add theme:** box was not checked, a message is displayed confirming that “Subscription *x* was added” to the database and buttons permit **Add another subscription** or **Return to Home Page**.
- 29 To select a theme for Data Pool action (if applicable) first click on the appropriate choice from the **Select Theme for Data Pool Action** option list.
- 30 To make the theme association retroactive (if applicable) first click in the **To make theme association retroactive check here:** box.
- 31 To implement the theme association (if applicable) click on the **Apply** button on the **Select Theme for Data Pool Action** page.
- A message is displayed confirming that “Subscription *x* was updated/added” to the database and buttons permit **Add another subscription** or **Return to Home Page**.
- 32 Click on the appropriate link from the following selections:
- **Add... another subscription.**
 - The **Manage Subscriptions** page is displayed.
 - **Update another subscription.**
 - The **Manage Subscriptions** page is displayed.
 - **Return to Home Page.**
 - The **Home Page** is displayed.

Table 19.4-6. Use the Spatial Subscription Server GUI to Add a Subscription to the NBSRV Database (1 of 3)

Step	What to Do	Action to Take
1	Launch the Spatial Subscription Server GUI	Use procedure in Section 19.4.1
2	Manage Subscriptions link	single-click
3	Add Subscriptions link	single-click
4	UserId (in the User Id text entry field)	enter text
5	Status option (i.e., Active or Inactive from the Status option list)	single-click
6	mm/dd/yyyy hh:mm (in the Start Date (mm/dd/yyyy hh:mm) text entry box) (if applicable)	enter text

Table 19.4-6. Use the Spatial Subscription Server GUI to Add a Subscription to the NBSRV Database (2 of 3)

Step	What to Do	Action to Take
7	mm/dd/yyyy hh:mm (in the Expiration Date (mm/dd/yyyy hh:mm) text entry box) (if applicable)	enter text
8	collection (first few letters) (in the Collection Short Name text entry box)	enter text
9	Apply button	single-click
10	Short Name/Version/Event Type option (from the option list)	single-click
11	Numbers of String Qualifiers option (from the option list)	single-click
12	Apply button	single-click
13	Logical Basis option (from the option list) (if applicable)	single-click
14	Attribute Name/Type option (from the Integer/Float/Date Attribute Name/Type option list) (if applicable)	single-click
15	value (in the Integer/Float/Date Min Value text entry box) (if applicable)	enter text
16	value (in the Integer/Float/Date Max Value text entry box) (if applicable)	enter text
17	Repeat Steps 14 through 16 as necessary	
18	Attribute Name/Type option (from the String Attribute Name/Type option list) (if applicable)	single-click
19	value (in the String Value text entry box) (if applicable)	enter text
20	Repeat Steps 18 and 19 (as necessary)	
21	coordinate (in North Latitude text entry box) (if applicable)	enter text
22	coordinate (in West Longitude text entry box) (if applicable)	enter text
23	coordinate (in East Longitude text entry box) (if applicable)	enter text
24	coordinate (in South Latitude text entry box) (if applicable)	enter text
25	Bundling Order box (to associate the subscription with a bundling order) (if applicable)	single-click
26	Bundling Order option (from the Bundling Order Selection option list) (if applicable)	single-click
27	action options (Acquire, E-Mail Notification , and/or Data Pool box(es)) (as applicable)	single-click
28	acquire options (in the relevant fields of the Acquire Information block) (if applicable)	enter text/single-click
29	notification options (in the relevant fields of the E-Mail Notification Information block) (if applicable)	enter text/single-click
30	datapool options (in the relevant fields of the Data Pool Information block) (if applicable)	enter text/single-click

Table 19.4-6. Use the Spatial Subscription Server GUI to Add a Subscription to the NBSRV Database (3 of 3)

Step	What to Do	Action to Take
31	Add Subscription button.	single-click
32	Theme option (from the Select Theme for Data Pool Action option list) (if applicable)	single-click
33	To make theme association retroactive check here: box (if applicable)	single-click
34	Apply button (on the Select Theme for Data Pool Action page) (if applicable)	single-click

19.4.6 Use the Spatial Subscription Server GUI to Update a Subscription in the NBSRV Database

On occasion, it may be necessary to modify or delete existing subscriptions in the NBSRV database. The **Spatial Subscription Server GUI** web access supports these requirements. However, only full-capability operators can modify or delete existing subscriptions using the **Spatial Subscription Server GUI**. Limited-capability operators can view subscriptions but may not modify or delete them.

It may become desirable to extend the period of retention in a Data Pool insert subscription. For example, if conditions arise that increase user interest in the data that will be inserted as a result of the subscription, keeping the data in the Data Pool longer is a way to be responsive to that user interest. Such conditions might be unusual weather activity, flooding, volcanic activity, or other events in the area covered by the subscription.

The update procedure for extending the period of retention in a Data Pool insert overlaps extensively with procedures for updating other information in an existing subscription, either for Data Pool insert (for example, to change qualifiers or to associate the subscription with a theme) or for notification/distribution of standard ECS products (for example, to change the distribution media type or other information defining the distribution). The operator accesses the subscription in the same way, makes the necessary inputs to specify the changes, and uses the **Update Subscription** button to submit the changes.

Table 19.4-7 presents the steps required to use the Spatial Subscription Server GUI to update a subscription in the NBSRV database. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the Spatial Subscription Server GUI (refer to Section 19.4.1, **Launch the Spatial Subscription Server GUI**).
 - The **Home Page** is the default display, offering links for access to Spatial Subscription Server function pages (i.e., **List Events**, **Manage Subscriptions**, **Manage Bundling Orders**, **Monitor Queues**, **Help**, and **End Session**).

NOTE: At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when the warning is displayed.

- 2 Click on the **Manage Subscriptions** link.
 - The **Manage Subscriptions** page is displayed, providing a table of subscription information showing 11 columns: **Subscription Id, User, Collection, Version, Event Type, Status, Data Pool, Start Date, Expiration Date, Time Last Updated,** and **Choose Subscription Action** (containing radio buttons for selecting an action to take and **Apply** buttons for implementing the selected actions).
- 3 Find the subscription to be updated in the list of subscriptions on the **Manage Subscriptions** page.
 - Scroll, sort, and/or filter the list as necessary.
 - For detailed instructions refer to the **Use the Spatial Subscription Server GUI to List and View Subscriptions in the NBSRV Database** procedure (Section 19.4.4).
- 4 Click on the **Update** radio button in the **Choose Subscription Action** column for the subscription to be updated.
 - The button is filled to indicate selection of the option.
- 5 To implement the “update” action with respect to the subscription click on the **Apply** button in the **Choose Subscription Action** column for the subscription.
 - An **Update Subscriptions** page is displayed.
- 6 To change the User Id (if applicable) type the User Id for the requesting user in the **User Id** text entry field.
 - The entered User Id must be a valid registered user (i.e., must be listed in the User Profile database).
 - The typed entry is displayed in the **User Id** field.
- 7 To change the status (if applicable) click on the appropriate choice from the **Status** option list.
 - **Active.**
 - **Inactive.**
- 8 To change the start date for the subscription (if applicable) type the appropriate date and time in the **Start Date (mm/dd/yyyy hh:mm)** text entry box.
 - The date and time should be entered in *mm/dd/yyyy hh:mm* format
- 9 To change the expiration date for the subscription (if applicable) type the appropriate date and time in the **Expiration Date (mm/dd/yyyy hh:mm)** text entry box.
 - The date and time should be entered in *mm/dd/yyyy hh:mm* format

NOTE: It is not possible to update the subscription event [**Short Name/Version/Event Type** (e.g., **MOD04_L2 003 INSERT**)].

NOTE: Option buttons and fields are displayed to permit the entry of data in two general categories; i.e., **Subscription Qualifiers** and **Action Information**. In the **Subscription Qualifiers** section it is possible to select **Attribute Name/Type** and enter **Min Value** and **Max Value** for any valid **Integer/Float/Date** qualifiers, string **Value** qualifiers, and **Latitude** and **Longitude** coordinates to define a bounding rectangle spatial qualifier for the subscription to be created. In the **Action Information** section there is a button to specify that the subscription is to be associated with a bundling order; if that button is not selected, one has the choice of one or more of three actions (i.e., **Acquire**, **E-Mail Notification**, or **Data Pool**). There are blocks with option lists and text entry fields for defining the selected action(s) to be taken upon occurrence of the event for which the subscription was created.

- 10 To select a different **Logical Basis** option (if applicable) click on the appropriate choice (e.g., **AND**) from the option list.
- 11 To change, add, or delete an integer, float, or date **Attribute Name/Type** option (if applicable) click on the appropriate choice from the **Integer/Float/Date Attribute Name/Type** option list.
- 12 To change, add, or delete a minimum value for an integer, float, or date attribute (if applicable) type (or delete, if necessary) the appropriate value in the **Integer/Float/Date Min Value** text entry box.
- 13 To change, add, or delete a maximum value for an integer, float, or date attribute (if applicable) type (or delete, if necessary) the appropriate value in the **Integer/Float/Date Max Value** text entry box.
- 14 Repeat Steps 11 through 13 as necessary to change, add, or delete integer, float, or date attributes.
- 15 To change, add, or delete a string **Attribute Name/Type** option (if applicable) click on the appropriate choice from the **String Attribute Name/Type** option list.
- 16 To change, add, or delete a value for a string attribute (if applicable) type (or delete, if necessary) the appropriate value in the **String Value** text entry box.
- 17 Repeat Steps 15 and 16 as necessary to change or specify additional string attributes.

- 18** To change, add, or delete spatial coordinates of intersecting LLBox (if applicable) type (or delete, if necessary) the appropriate values in the following text entry boxes (as necessary).
- **North Latitude.**
 - **West Longitude.**
 - **East Longitude.**
 - **South Latitude.**

NOTE: Every subscription must have at least one action specified and may have more than one.

- 19** To associate the subscription with a bundling order (if applicable) first click in the **Bundling Order** box.
- 20** To continue the process of associating a subscription with a bundling order (if applicable) click on the appropriate choice from the **Bundling Order Selection** option list.
- If a subscription is associated with a bundling order, skip Steps 21 through 24 and go to Step 25.
- 21** To select or deselect subscription action(s) click in the following boxes as applicable (a check mark in a box indicates that the action has been selected):
- **Acquire** – to request shipment of the data specified in the subscription.
 - **E-Mail Notification** - to request e-mail notification of the event specified in the subscription.
 - **Data Pool** - to request insertion of data specified in the subscription into the Data Pool.

NOTE: Multiple actions can be selected.

- 22** If **Acquire** was selected in Step 21, change or add shipment data (if applicable) by either typing the appropriate data or clicking on the appropriate choice from the option list in the relevant fields of the **Acquire Information** block:
- **User Profile.**
 - **User String** [if applicable (to distinguish the subscription from others)].
 - **Email Address.**
 - **Media Type.**
 - **Priority.**
 - **User** [applicable to ftp push or secure copy distributions only].
 - **Password** [applicable to ftp push or secure copy distributions only].
 - **Enter password again for verification** [applicable to ftp push or secure copy distributions only].
 - **Host** [applicable to ftp push or secure copy distributions only].
 - **Directory** [applicable to ftp push or secure copy distributions only].

- 23 If **E-Mail Notification** was selected in Step 21, change or add e-mail notification data by either typing the appropriate data or clicking on the appropriate choice from the option list in the relevant fields of the **E-Mail Notification Information** block:
- **Action Address.**
 - **User String** [if applicable (to distinguish the subscription from others)].
 - **Metadata.**
- 24 If **Data Pool** was selected in Step 21, change or add Data Pool insertion data either by typing the appropriate data or clicking on the appropriate choice from the option list in the relevant fields of the **Data Pool Information** block:
- **Retention Period (in days).**
 - **Retention Priority (valid range 1 thru 255).**
 - **Science Granules and/or Metadata.**
 - **Click here to add theme:** [click in the box if the granules to be added to the Data Pool as a result of the subscription are to be associated with a theme].
 - **Enter first few characters of name** [optional - if associating the granules from the subscription with a theme].
- 25 Click on the **Update Subscription** button.
- If the **Click here to add theme:** box was checked, a **Select Theme for Data Pool Action** page is displayed.
 - If the **Click here to add theme:** box was not checked, a message is displayed confirming that “Subscription *x* was updated” to the database and buttons permit **Update another subscription** or **Return to Home Page**.
- 26 To select a theme for Data Pool action (if applicable) first click on the appropriate choice from the **Select Theme for Data Pool Action** option list.
- 27 To make the theme association retroactive (if applicable) first click in the **To make theme association retroactive check here:** box.
- 28 To implement the theme association (if applicable) click on the **Apply** button on the **Select Theme for Data Pool Action** page.
- A message is displayed confirming that “Subscription *x* was updated/added” to the database and buttons permit **Add another subscription** or **Return to Home Page**.
- 29 Click on the appropriate link from the following selections:
- **Add... another subscription.**
 - The **Manage Subscriptions** page is displayed.
 - **Update another subscription.**
 - The **Manage Subscriptions** page is displayed.
 - **Return to Home Page.**
 - The **Home Page** is displayed.

Table 19.4-7. Use the Spatial Subscription Server GUI to Update a Subscription in the NBSRV Database (1 of 2)

Step	What to Do	Action to Take
1	Launch the Spatial Subscription Server GUI	Use procedure in Section 19.4.1
2	Manage Subscriptions link	single-click
3	Add Subscriptions link	single-click
4	Update radio button (in the Choose Subscription Action column for the subscription to be updated)	single-click
5	Apply button (in the Choose Subscription Action column for the subscription)	single-click
6	UserId (in the User Id text entry field) (if applicable)	enter text
7	Status option (i.e., Active or Inactive from the Status option list) (if applicable)	single-click
8	mm/dd/yyyy hh:mm (in the Start Date (mm/dd/yyyy hh:mm) text entry box) (if applicable)	enter text
9	mm/dd/yyyy hh:mm (in the Expiration Date (mm/dd/yyyy hh:mm) text entry box) (if applicable)	enter text
10	Logical Basis option (from the option list) (if applicable)	single-click
11	Attribute Name/Type option (from the Integer/Float/Date Attribute Name/Type option list) (if applicable)	single-click
12	value (in the Integer/Float/Date Min Value text entry box) (if applicable)	enter text
13	value (in the Integer/Float/Date Max Value text entry box) (if applicable)	enter text
14	Repeat Steps 11 through 13 as necessary	
15	Attribute Name/Type option (from the String Attribute Name/Type option list) (if applicable)	single-click
16	value (in the String Value text entry box) (if applicable)	enter text
17	Repeat Steps 15 and 16 (as necessary)	
18	coordinate (in North Latitude text entry box) (if applicable)	enter text
19	coordinate (in West Longitude text entry box) (if applicable)	enter text
20	coordinate (in East Longitude text entry box) (if applicable)	enter text
21	coordinate (in South Latitude text entry box) (if applicable)	enter text
22	Bundling Order box (to associate the subscription with a bundling order) (if applicable)	single-click
23	Bundling Order option (from the Bundling Order Selection option list) (if applicable)	single-click
24	action options (Acquire, E-Mail Notification, and/or Data Pool box(es)) (as applicable)	single-click

Table 19.4-7. Use the Spatial Subscription Server GUI to Update a Subscription in the NBSRV Database (2 of 2)

Step	What to Do	Action to Take
25	acquire options (in the relevant fields of the Acquire Information block) (if applicable)	enter text/single-click
26	notification options (in the relevant fields of the E-Mail Notification Information block) (if applicable)	enter text/single-click
27	datapool options (in the relevant fields of the Data Pool Information block) (if applicable)	enter text/single-click
28	Update Subscription button.	single-click
29	Theme option (from the Select Theme for Data Pool Action option list) (if applicable)	single-click
30	To make theme association retroactive check here: box (if applicable)	single-click
31	Apply button (on the Select Theme for Data Pool Action page) (if applicable)	single-click

19.4.7 Use the Spatial Subscription Server GUI to Delete (Cancel) a Subscription in the NBSRV Database

If it is necessary to delete (cancel) a subscription, the **Spatial Subscription Server GUI** provides the means. Suppose Dr. L. Abuser contacts User Services with a request to cancel the subscription for ASTER expedited data. A full-capability operator (only) can use the following procedure to respond to such a request.

Table 19.4-8 presents the steps required to use the Spatial Subscription Server GUI to delete (cancel) a subscription in the NBSRV database. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the Spatial Subscription Server GUI (refer to Section 19.4.1, **Launch the Spatial Subscription Server GUI**).
 - The **Home Page** is the default display, offering links for access to Spatial Subscription Server function pages (i.e., **List Events**, **Manage Subscriptions**, **Manage Bundling Orders**, **Monitor Queues**, **Help**, and **End Session**).
- 2 Click on the **Manage Subscriptions** link.
 - The **Manage Subscriptions** page is displayed, providing a table of subscription information showing 11 columns: **Subscription Id**, **User**, **Collection**, **Version**, **Event Type**, **Status**, **Data Pool**, **Start Date**, **Expiration Date**, **Time Last Updated**, and **Choose Subscription Action** (containing radio buttons for selecting an action to take and **Apply** buttons for implementing the selected actions).

- 3 Observe information displayed on the **Manage Subscriptions** page.
 - The table on the **Manage Subscriptions** page has columns containing the following types of subscription information:
 - **Subscription Id.**
 - **User.**
 - **Collection.**
 - **Version.**
 - **Event Type.**
 - **Status.**
 - **Data Pool.**
 - **Start Date.**
 - **Expiration Date.**
 - **Time Last Updated.**
 - **Choose Subscription Action.**
 - The column headers in the table, except for **Version**, **Event Type**, **Start Date**, and **Choose Subscription Action** are links for sorting the list.
 - The **Choose Subscription Action** column has radio buttons for taking the following actions with respect to the corresponding subscription:
 - **View.**
 - **Update.**
 - **Cancel.**
 - There are option lists for filtering the table data by **User**, **Collection**, **Status**, and/or **Data Pool**.
 - There is a “**Change Collection Display to**“ option button for switching the display between **TextEntry** and **SelectableList**.
- 4 To filter the list to display certain types of subscriptions only, click on the appropriate option button and then click to select the desired option from the option list.
 - The selected choice is displayed in the option field.
- 5 Repeat Step 4 to select an additional filter, if applicable.
- 6 Click on the **Filter** button to implement the selected filter.
 - A list is displayed showing subscriptions that meet the filter criteria only.
- 7 Click on the **Cancel** radio button in the **Choose Subscription Action** column for the subscription to be canceled (deleted).
 - The button is filled to indicate selection of the option.
- 8 Click on the **Apply** button in the **Choose Subscription Action** column for the subscription to be canceled (deleted).
 - A confirmation page is displayed with the message “Are you sure that you want to cancel subscription *x*?”

- 9 Click on the appropriate link from the following selections:
 - **Yes-** to confirm the deletion.
 - A “Subscription x was canceled” message is displayed.
 - **No-** to abort the deletion.

- 10 Click on the appropriate link from the following selections:
 - **Cancel another subscription.**
 - The **Manage Subscriptions** page is displayed.
 - **Return to Home Page.**
 - The **Home Page** is displayed.

Table 19.4-8. Use the Spatial Subscription Server GUI to Delete (Cancel) a Subscription in the NBSRV Database

Step	What to Do	Action to Take
1	Launch the Spatial Subscription Server GUI	Use procedure in Section 19.4.1
2	Manage Subscriptions link	single-click
3	Observe information displayed on the Manage Subscriptions page	read text
4	Subscription filter option (from the appropriate option list) (if applicable)	click option
5	Repeat Step 4 (if applicable)	single-click
6	Filter button (to implement the selected filter(s)) (if applicable)	single-click
7	Cancel radio button (in the Choose Subscription Action column for the subscription)	single-click
8	Apply button (in the Choose Subscription Action column for the subscription) (to implement the selected action)	single-click
9	Yes link	single-click

19.4.8 Use the Spatial Subscription Server GUI to List Subscriptions Associated with a Theme

Both full-capability and limited-capability operators can use the procedure that follows to list subscriptions associated with a theme.

Table 19.4-9 presents the steps required to use the Spatial Subscription Server GUI to list subscriptions associated with a theme. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the Spatial Subscription Server GUI (refer to Section 19.4.1, **Launch the Spatial Subscription Server GUI**).
 - The **Home Page** is the default display, offering links for access to Spatial Subscription Server function pages (i.e., **List Events**, **Manage Subscriptions**, **Manage Bundling Orders**, **Monitor Queues**, **Help**, and **End Session**).
- 2 Click on the **Manage Subscriptions** link.
 - The **Manage Subscriptions** page is displayed with a table listing all subscriptions in the NBSRV database.
- 3 Click on the **List Themes** link.
 - The **List Themes Request** page is displayed.
 - An “Enter first few characters of theme name (or leave blank to view all):” message is displayed on the **List Themes Request** page.
- 4 To display all themes, click on the **Apply** button (without entering anything in the text box).
 - The **Theme List** page is displayed with columns containing the following types of theme information:
 - **Theme Name.**
 - **Choose Theme Action.**
 - All themes are displayed on the **Theme List** page.
 - Go to Step 7.
- 5 To begin the process of displaying a particular theme, type the first few letters of the theme name in the text box on the **List Themes Request** page.
- 6 To continue the process of displaying a particular theme, click on the **Apply** button on the **List Themes Request** page.
 - The **Theme List** page is displayed with columns containing the following types of theme information:
 - **Theme Name.**
 - **Choose Theme Action.**
 - The relevant theme(s) is (are) displayed on the **Theme List** page.
- 7 To begin the process of viewing the list of subscriptions associated with a particular theme, click in the corresponding check box (in the **Choose Theme Action** column) on the **Theme List** page.
- 8 To view a list of the subscriptions associated with the specified theme, click on the corresponding **Apply** button (in the **Choose Theme Action** column) on the **Theme List** page.
 - The **List Subscriptions for Theme** page is displayed.
 - The subscription(s) associated with the specified theme is (are) displayed.

- Buttons are available for viewing, updating, or canceling each subscription being displayed or suspending, resuming, or canceling all subscriptions. (Refer to the applicable procedure for instructions on performing any of those actions.)
- 9** Observe information displayed on the **List Subscriptions for Theme** page.
- The table on the **List Subscriptions for Theme** page has columns containing the following types of subscription information:
 - **ID.**
 - **User.**
 - **Status.**
 - **Expiration Date.**
 - **ESDT ShortName/Version/EventType.**
 - **Choose Subscription Action.**
 - The **Choose Subscription Action** column has radio buttons for taking the following actions with respect to the corresponding subscription:
 - **View.**
 - **Update.**
 - **Cancel.**
 - At the bottom of the table there are radio buttons for selecting the following actions with respect to all listed subscriptions:
 - **Suspend All.**
 - **Resume All.**
 - **Cancel All.**
- 10** To take action with respect to a particular subscription first click on the appropriate radio button (i.e., **View**, **Update**, or **Cancel**) in the **Choose Subscription Action** column for the subscription.
- The button is filled to indicate selection of the option.
- 11** To implement a selected action with respect to a particular subscription click on the **Apply** button in the **Choose Subscription Action** column for the subscription.
- If **View** was the selected action, a **View Subscriptions** page is displayed.
 - Click on the **View another subscription** link or the **Return to Home Page** link (as appropriate) when finished viewing the subscription data on the **View Subscriptions** page.
 - If **Update** was the selected action, an **Update Subscriptions** page is displayed.
 - Go to the **Use the Spatial Subscription Server GUI to Update a Subscription in the NBSRV Database** procedure (Section 19.4.6).
 - If **Cancel** was the selected action, a confirmation page is displayed with the message “Are you sure that you want to cancel subscription *x*?”
 - Click on the **Yes** link to confirm the deletion.
 - Click on the **No** link to abort the deletion.

- 12** To take action with respect to all subscriptions associated with the theme first click on the appropriate radio button (i.e., **Suspend All**, **Resume All**, or **Cancel All**) at the bottom of the table on the **List Subscriptions for Theme** page.
- The button is filled to indicate selection of the option.
- 13** To implement a selected action with respect to all subscriptions associated with the theme click on the **Apply** button at the bottom of the table on the **List Subscriptions for Theme** page.
- If **Suspend All** was the selected action, an “All associated subscriptions have been suspended” message is displayed.
 - If **Resume All** was the selected action, an “All associated subscriptions have been resumed” message is displayed.
 - If **Cancel All** was the selected action, a confirmation page is displayed with the message “Are you sure that you want to cancel subscription *x*?”
 - Click on the **Yes** link to confirm the deletion.
 - Click on the **No** link to abort the deletion.
- 14** Click on the **View refreshed subscription list** link (if applicable).
- The **List Subscriptions for Theme** page is displayed.

Table 19.4-9. Use the Spatial Subscription Server GUI to List Subscriptions Associated with a Theme

Step	What to Do	Action to Take
1	Launch the Spatial Subscription Server GUI	Use procedure in Section 19.4.1
2	Manage Subscriptions link	single-click
3	List Themes link	single-click
4	Apply button	single-click
5	List Subscriptions box (in the Choose Theme Action column for the theme)	single-click
6	Apply button	single-click
7	Observe information displayed on the List Subscriptions for Theme page	read text
8	action radio button (i.e., View , Update , or Cancel) (in the Choose Subscription Action column for the subscription) (if applicable)	single-click
9	Apply button (if applicable)	single-click
10	action radio button (i.e., Suspend All , Resume All , or Cancel All) (at the bottom of the table on the List Subscriptions for Theme page) (if applicable)	single-click
11	Apply button (if applicable)	single-click
12	View refreshed subscription list link (if applicable)	single-click

19.4.9 Use the Spatial Subscription Server GUI to Obtain a List of Bundling Orders and View a Bundling Order

The Spatial Subscription Server GUI is used to list, view, create, update, cancel, and list associated subscriptions for bundling orders. These functions are accessible through the **Manage Bundling Orders** link. The limited-capability operator may view bundling orders and the subscriptions associated with them. The full-capability operator can perform those same functions and create, update, or cancel bundling orders as well.

Table 19.4-10 presents the steps required to use the Spatial Subscription Server GUI to obtain a list of bundling orders and view a bundling order. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the Spatial Subscription Server GUI (refer to Section 19.4.1, **Launch the Spatial Subscription Server GUI**).
 - The **Home Page** is the default display, offering links for access to Spatial Subscription Server function pages (i.e., **List Events**, **Manage Subscriptions**, **Manage Bundling Orders**, **Monitor Queues**, **Help**, and **End Session**).

NOTE: At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when the warning is displayed.

- 2 Click on the **Manage Bundling Orders** link.
 - The **Manage Bundling Orders** page is displayed.
- 3 Observe information displayed on the **Manage Bundling Orders** page.
 - The table on the **Manage Bundling Orders** page has columns containing the following types of bundling order information:
 - **Bundling Order.**
 - **User.**
 - **Creation Date.**
 - **Expiration Date.**
 - **Media Type.**
 - **Status.**
 - **Choose Bundling Order Action.**
 - The column headers in the table, except for **Choose Bundling Order Action** are links for sorting the list.
 - The **Choose Bundling Order Action** column has radio buttons for taking the following actions with respect to the corresponding bundling order:
 - **View.**
 - **Update.**
 - **Cancel.**

- **List Subs** [list associated subscriptions].
 - There are option lists for filtering the table data by **User**, **Media Type**, and/or **Status**.
 - There are links on the page to **Add Bundling Order** and **Configure Defaults**.
- 4** To filter the list to display certain types of bundling orders only, click on the appropriate option button (i.e., **User**, **Media Type**, or **Status**) and then click to select the desired option from the option list.
- The selected choice is displayed in the option field.
- 5** Repeat Step 4 to select an additional filter, if applicable.
- 6** Click on the **Filter** button to implement the selected filter.
- A list is displayed showing subscriptions that meet the filter criteria only.
- 7** To view a particular bundling order first click on the **View** radio button in the **Choose Bundling Order Action** column for the bundling order.
- The button is filled to indicate selection of the option.
- 8** To implement the selected action click on the **Apply** button in the **Choose Bundling Order Action** column for the bundling order.
- A **View Bundling Order** page is displayed.
- 9** Observe information displayed on the **View Bundling Order** page.
- The **View Bundling Order** page displays the following types of bundling order information:
 - **Bundling Order ID.**
 - **User Name.**
 - **Creation Date.**
 - **Expiration Date.**
 - **Media Type.**
 - **Current Status.**
 - **User String.**
 - **Email Address.**
 - **Distribution Priority.**
 - **scp distribution information: User** (if applicable).
 - **scp distribution information: Host** (if applicable).
 - **scp distribution information: Directory** (if applicable).
 - **Completion criteria: Minimum Bundle Size.**
 - **Completion criteria: Minimum Granule Count.**
 - **Completion criteria: Maximum Bundle Age.**
 - There is a **Return to bundling order list** link.
- 10** Click on the **Return to bundling order list** link when finished viewing the bundling order data on the **View Bundling Order** page.

- 11 To view subscriptions associated with a particular bundling order first click on the **List Subs** radio button in the **Choose Bundling Order Action** column for the bundling order.
 - The button is filled to indicate selection of the option.
- 12 To implement the selected action click on the **Apply** button in the **Choose Bundling Order Action** column for the subscription.
 - A **Bundling Order Subscriptions (Subscriptions for bundling order x)** page is displayed.
- 13 Observe information displayed on the **Bundling Order Subscriptions (Subscriptions for bundling order x)** page.
 - The **Bundling Order Subscriptions (Subscriptions for bundling order x)** page displays the following types of subscription information:
 - **ID.**
 - **User.**
 - **Status.**
 - **Expiration Date.**
 - **ESDT ShortName/Version/EventType.**
 - **Choose Subscription Action.**
 - The **Choose Subscription Action** column has radio buttons for taking the following actions with respect to the corresponding subscription:
 - **View.**
 - **Update.**
 - **Cancel.**
- 14 To take action with respect to a particular subscription first click on the appropriate radio button (i.e., **View**, **Update**, or **Cancel**) in the **Choose Subscription Action** column for the subscription.
 - The button is filled to indicate selection of the option.
- 15 To implement a selected action with respect to a particular subscription click on the **Apply** button in the **Choose Subscription Action** column for the subscription.
 - If **View** was the selected action, a **View Subscriptions** page is displayed.
 - Click on the **View another subscription** link or the **Return to Home Page** link (as appropriate) when finished viewing the subscription data on the **View Subscriptions** page.
 - If **Update** was the selected action, an **Update Subscriptions** page is displayed.
 - Go to the **Use the Spatial Subscription Server GUI to Update a Subscription in the NBSRV Database** procedure (Section 19.4.6).
 - If **Cancel** was the selected action, a confirmation page is displayed with the message “Are you sure that you want to cancel subscription x ?”
 - Click on the **Yes** link to confirm the deletion.
 - Click on the **No** link to abort the deletion.

16 To return to the **View Bundling Order** page from the **Bundling Order Subscriptions (Subscriptions for bundling order x)** page click on the browser **Back** button.

17 Repeat Steps 3 through 16 as necessary to view additional bundling orders.

Table 19.4-10. Use the Spatial Subscription Server GUI to Obtain a List of Bundling Orders and View a Bundling Order

Step	What to Do	Action to Take
1	Launch the Spatial Subscription Server GUI	Use procedure in Section 19.4.1
2	Manage Bundling Orders link	single-click
3	Observe information displayed on the Manage Bundling Orders page	read text
4	Bundling order filter option (from the appropriate option list) (if applicable)	single-click
5	Repeat Step 4 (if applicable)	
6	Filter button (to implement the selected filter) (if applicable)	single-click
7	View radio button (in the Choose Bundling Order Action column for the bundling order)	single-click
8	Apply button (in the Choose Bundling Order Action column for the bundling order)	single-click
9	Observe information displayed on the View Bundling Order page	read text
10	Return to bundling order list link (when applicable)	single-click
11	List Subs radio button (in the Choose Bundling Order Action column for the bundling order)	single-click
12	Apply button (in the Choose Bundling Order Action column for the subscription)	single-click
13	Observe information displayed on the Bundling Order Subscriptions (Subscriptions for bundling order x) page	read text
14	action radio button (i.e., View, Update, or Cancel) (in the Choose Subscription Action column for the subscription) (if applicable)	single-click
15	Apply button (if applicable)	single-click

19.4.10 Use the Spatial Subscription Server GUI to Cancel a Bundling Order and Its Associated Subscriptions

To cancel a bundling order and its associated subscriptions a full-capability operator (only) can use the procedure that follows.

Table 19.4-11 presents the steps required to use the Spatial Subscription Server GUI to cancel a bundling order and its associated subscriptions. If you are already familiar with the procedure,

you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the Spatial Subscription Server GUI (refer to Section 19.4.1, **Launch the Spatial Subscription Server GUI**).
 - The **Home Page** is the default display, offering links for access to Spatial Subscription Server function pages (i.e., **List Events**, **Manage Subscriptions**, **Manage Bundling Orders**, **Monitor Queues**, **Help**, and **End Session**).

NOTE: At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when the warning is displayed.

- 2 Click on the **Manage Bundling Orders** link.
 - The **Manage Bundling Orders** page is displayed.
- 3 Observe information displayed on the **Manage Bundling Orders** page.
 - The **Manage Bundling Orders** page is displayed, providing a table of bundling order information showing seven columns: **Bundling Order**, **User**, **Creation Date**, **Expiration Date**, **Media Type**, **Status**, and **Choose Bundling Order Action** (containing radio buttons for selecting an action to take and **Apply** buttons for implementing the selected actions).
- 4 To filter the list to display certain types of bundling orders only, click on the appropriate option button (i.e., **User**, **Media Type**, or **Status**) and then click to select the desired option from the option list.
 - The selected choice is displayed in the option field.
- 5 Repeat Step 4 to select an additional filter, if applicable.
- 6 Click on the **Filter** button to implement the selected filter.
 - A list is displayed showing subscriptions that meet the filter criteria only.
- 7 To cancel a particular bundling order first click on the **Cancel** radio button in the **Choose Bundling Order Action** column at the end of the row for the bundling order.
 - The button is filled to indicate selection of the option.
- 8 To implement the selected action click on the **Apply** button in the **Choose Bundling Order Action** column for the bundling order.
 - A confirmation message displays: *Note: Any associated subscriptions will also be cancelled. Are you sure you wish to cancel bundling order <nnnnnn>?*

- 9 Click on the appropriate button from the following selections:
 - **Yes** - to confirm cancellation of the bundling order and associated subscriptions.
 - A confirmation message displays: **Bundling order x has been cancelled.**
 - **No** - to abort cancellation of the bundling order.
 - The **Manage Bundling Orders** page is displayed.
- 10 Click on the **Return to bundling order list** link (if applicable).
 - The **Manage Bundling Orders** page is displayed.
- 11 Repeat Steps 3 through 10 as necessary to cancel additional bundling orders.

Table 19.4-11. Use the Spatial Subscription Server GUI to Cancel a Bundling Order and Its Associated Subscriptions

Step	What to Do	Action to Take
1	Launch the Spatial Subscription Server GUI	Use procedure in Section 19.4.1
2	Manage Bundling Orders link	single-click
3	Observe information displayed on the Manage Bundling Orders page	single-click
4	Bundling order filter option (from the appropriate option list) (if applicable)	single-click
5	Repeat Step 4 (if applicable)	
6	Filter button (to implement the selected filter) (if applicable)	single-click
7	Cancel radio button (in the Choose Bundling Order Action column for the bundling order)	single-click
8	Apply button (in the Choose Bundling Order Action column for the bundling order)	single-click
9	Yes button	single-click
10	Return to bundling order list link (if applicable).	single-click
11	Repeat Steps 3 through 10 (as necessary)	

19.4.11 Use the Spatial Subscription Server GUI to Add a Bundling Order

To add a bundling order, a full-capability operator (only) can use the procedure that follows.

Table 19.4-12 presents the steps required to use the Spatial Subscription Server GUI to add a bundling order. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

1 Launch the Spatial Subscription Server GUI (refer to Section 19.4.1, **Launch the Spatial Subscription Server GUI**).

- The **Home Page** is the default display, offering links for access to Spatial Subscription Server function pages (i.e., **List Events**, **Manage Subscriptions**, **Manage Bundling Orders**, **Monitor Queues**, **Help**, and **End Session**).

NOTE: At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when the warning is displayed.

2 Click on the **Manage Bundling Orders** link.

- The **Manage Bundling Orders** page is displayed, providing a table of bundling order information showing seven columns: **Bundling Order**, **User**, **Creation Date**, **Expiration Date**, **Media Type**, **Status**, and **Choose Bundling Order Action** (containing radio buttons for selecting an action to take and **Apply** buttons for implementing the selected actions).
- There are links on the page to **Add Bundling Order** and **Configure Defaults**.

3 Click on the **Add Bundling Order** link.

- The **Add Bundling Order** page is displayed.

4 Type the appropriate user ID in the **User ID** text entry box.

- The typed entry is displayed in the **User ID** field.

5 If the expiration date for the bundling order is different from the default (one year from the current date) type the appropriate date in the **Expiration Date** text entry box.

- The date should be entered in *mm/dd/yyyy* format

6 To select a **Media Type** option click on the appropriate choice (e.g., **scp**) from the option list.

7 Click on the **continue** button.

- A confirmation dialog box asks **Your present values have been entered. Continue?**

8 Click on the appropriate button from the following selections:

- **OK** - to confirm that the bundling order is to be added.
 - The GUI displays an **Add Bundling Order Detail** page that is appropriate for the selected **Media Type**.
- **Cancel**- to abort the process of adding a bundling order.
 - The **Add Bundling Order** page is displayed.
 - Return to Step 4.

- 9 Either type the appropriate data or click on the appropriate choice from the option list in the relevant fields (depending on the distribution medium selected) of the **Add Bundling Order Detail** page:
- **Email Address.**
 - **User String.**
 - **Distribution Priority.**
 - **Shipping Information: Street1.**
 - **Shipping Information: Street2.**
 - **Shipping Information: Street3.**
 - **Shipping Information: City.**
 - **Shipping Information: State.**
 - **Shipping Information: Country.**
 - **Shipping Information: Zip Code.**
 - **Shipping Information: Phone Number.**
 - **Shipping Information: FAX Number.**
 - **FTP Push Parameters: FTP Node.**
 - **FTP Push Parameters: FTP Address.**
 - **FTP Push Parameters: Password.**
 - **FTP Push Parameters: Confirm Password.**
 - **FTP Push Parameters: User String.**
 - **FTP Push Parameters: Destination Directory.**
 - **scp Distribution Information: User.**
 - **scp Distribution Information: Host.**
 - **scp Distribution Information: Password.**
 - **scp Distribution Information: Retype Password.**
 - **scp Distribution Information: Directory.**
 - **Completion Criteria: Minimum Bundle Size.**
 - **Completion Criteria: Minimum Granule Count.**
 - **Completion Criteria: Maximum Bundle Age.**

NOTE: Required fields are identified by an asterisk on the **Add Bundling Order Detail** page.

- 10 Click on the **Add Bundling Order** button.
- A “Remember Values” Confirmation dialogue box is displayed.
- 11 If a “**Remember Values**” **Confirmation** dialogue box is displayed, click on the appropriate button from the following selections:
- **Yes.**
 - **Never for this site.**
 - **No.**

- 12 On the add bundling order confirmation page click on the appropriate button from the following selections:
 - **OK** - to confirm that the bundling order is to be added.
 - A message is displayed confirming that “Bundling Order *x* was created” and there are links to **Create another Bundling Order** or **Return to Home Page**.
 - **Cancel**- to abort the process of adding a bundling order.
 - The **Add Bundling Order** page is displayed.
 - Return to Step 4.
- 13 Click on the **Create another Bundling Order** link (if applicable).
 - The **Add Bundling Order** page is displayed.
- 14 Repeat Steps 4 through 13 as necessary to add another bundling order.

Table 19.4-12. Use the Spatial Subscription Server GUI to Add a Bundling Order

Step	What to Do	Action to Take
1	Launch the Spatial Subscription Server GUI	Use procedure in Section 19.4.1
2	Manage Bundling Orders link	single-click
3	Add Bundling Order link	single-click
4	<i>userID</i> (in the User ID text entry box)	enter text
5	<i>mm/dd/yyyy</i> (in the Expiration Date text entry box) (if applicable)	enter text
6	Media Type option (from the Media Type option list)	single-click
7	continue button	single-click
8	OK button	single-click
9	<i>order</i> options (in the relevant fields of the Add Bundling Order Detail page) (if applicable)	enter text/single-click
10	Add Bundling Order button	single-click
11	Yes, Never for this site , or No (as applicable) (in the “ Remember Values ” Confirmation dialogue box)	single-click
12	OK button	single-click
13	Create another Bundling Order link (if applicable).	single-click
14	Repeat Steps 4 through 13 as necessary	

19.4.12 Use the Spatial Subscription Server GUI to Update a Bundling Order

A full-capability operator (only) can use the procedure that follows to update a bundling order

Table 19.4-13 presents the steps required to use the Spatial Subscription Server GUI to update a bundling order. If you are already familiar with the procedure, you may prefer to use this quick-

step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the Spatial Subscription Server GUI (refer to Section 19.4.1, **Launch the Spatial Subscription Server GUI**).
 - The **Home Page** is the default display, offering links for access to Spatial Subscription Server function pages (i.e., **List Events**, **Manage Subscriptions**, **Manage Bundling Orders**, **Monitor Queues**, **Help**, and **End Session**).

NOTE: At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when the warning is displayed.

- 2 Click on the **Manage Bundling Orders** link.
 - The **Manage Bundling Orders** page is displayed.
- 3 Observe information displayed on the **Manage Bundling Orders** page.
 - The **Manage Bundling Orders** page is displayed, providing a table of bundling order information showing seven columns: **Bundling Order**, **User**, **Creation Date**, **Expiration Date**, **Media Type**, **Status**, and **Choose Bundling Order Action** (containing radio buttons for selecting an action to take and **Apply** buttons for implementing the selected actions).
- 4 To filter the list to display certain types of bundling orders only, click on the appropriate option button (i.e., **User**, **Media Type**, or **Status**) and then click to select the desired option from the option list.
 - The selected choice is displayed in the option field.
- 5 Repeat Step 4 to select an additional filter, if applicable.
- 6 Click on the **Filter** button to implement the selected filter.
 - A list is displayed showing subscriptions that meet the filter criteria only.
- 7 To update a particular bundling order first click on the **Update** radio button in the **Choose Bundling Order Action** column at the end of the row for the bundling order.
 - The button is filled to indicate selection of the option.
- 8 To implement the selected action click on the **Apply** button in the **Choose Bundling Order Action** column for the bundling order.
 - An **Update Bundling Order x** page is displayed.
- 9 To change the User ID (if applicable) type the User ID for the requesting user in the **User ID** text entry field.
 - The typed entry is displayed in the **User Id** field.

- 10 To change the expiration date for the bundling order (if applicable) type the appropriate date in the **Expiration Date** text entry box.
 - The date should be entered in *mm/dd/yyyy* format
- 11 To select a different **Media Type** option click on the appropriate choice (e.g., **CDROM**) from the option list.
- 12 Click on the **Update Bundling Order** button.
 - A confirmation dialog box asks **Your present values have been entered. Continue?**
- 13 Click on the appropriate button from the following selections:
 - **OK** - to confirm that the bundling order is to be updated.
 - The GUI displays an **Update Bundling Order x Detail** page that is appropriate for the selected **Media Type**.
 - **Cancel**- to abort the process of updating the bundling order.
 - The **Update Bundling Order x** page is displayed.
 - Return to Step 9.
- 14 To change, add or delete bundling order data either type the appropriate data or click on the appropriate choice from the option list in the relevant fields (depending on the distribution medium selected) of the **Update Bundling Order x Detail** page:
 - **Email Address.**
 - **User String.**
 - **Distribution Priority.**
 - **Shipping Information: Street1.**
 - **Shipping Information: Street2.**
 - **Shipping Information: Street3.**
 - **Shipping Information: City.**
 - **Shipping Information: State.**
 - **Shipping Information: Country.**
 - **Shipping Information: Zip Code.**
 - **Shipping Information: Phone Number.**
 - **Shipping Information: FAX Number.**
 - **FTP Push Parameters: FTP Node.**
 - **FTP Push Parameters: FTP Address.**
 - **FTP Push Parameters: Password.**
 - **FTP Push Parameters: Confirm Password.**
 - **FTP Push Parameters: User String.**
 - **FTP Push Parameters: Destination Directory.**
 - **scp Distribution Information: User.**
 - **scp Distribution Information: Host.**
 - **scp Distribution Information: Password.**

- **scp Distribution Information: Retype Password.**
- **scp Distribution Information: Directory.**
- **Completion Criteria: Minimum Bundle Size.**
- **Completion Criteria: Minimum Granule Count.**
- **Completion Criteria: Maximum Bundle Age.**

NOTE: Required fields are identified by an asterisk on the **Update Bundling Order x Detail** page.

- 15 Click on the **Update Bundling Order** button.
 - A confirmation page is displayed.
- 16 On the update bundling order confirmation page click on the appropriate button from the following selections:
 - **OK** - to confirm that the bundling order is to be updated.
 - A message is displayed confirming that “Bundling Order *x* was updated” and there are links to **Update another Bundling Order** or **Return to Home Page**.
 - **Cancel**- to abort the process of adding a bundling order.
 - The **Manage Bundling Orders** page is displayed.
 - Return to Step 3.
- 17 Click on the **Update another Bundling Order** link (if applicable).
 - The **Manage Bundling Orders** page is displayed.
- 18 Repeat Steps 3 through 17 as necessary to update another bundling order.

Table 19.4-13. Use the Spatial Subscription Server GUI to Update a Bundling Order (1 of 2)

Step	What to Do	Action to Take
1	Launch the Spatial Subscription Server GUI	Use procedure in Section 19.4.1
2	Manage Bundling Orders link	single-click
3	Observe information displayed on the Manage Bundling Orders page	read text
4	Bundling order filter option (from the appropriate option list) (if applicable)	single-click
5	Repeat Step 4 (if applicable)	
6	Filter button (to implement the selected filter) (if applicable)	single-click
7	Update radio button (in the Choose Bundling Order Action column at the end of the row for the bundling order)	single-click

Table 19.4-13. Use the Spatial Subscription Server GUI to Update a Bundling Order (2 of 2)

Step	What to Do	Action to Take
8	Apply button (in the Choose Bundling Order Action column at the end of the row for the bundling order)	single-click
9	<i>userID</i> (in the User ID text entry box) (if applicable)	enter text
10	<i>mm/dd/yyyy</i> (in the Expiration Date text entry box) (if applicable)	enter text
11	Media Type option (from the Media Type option list) (if applicable)	single-click
12	Update Bundling Order button	single-click
13	OK button	single-click
14	<i>order</i> options (in the relevant fields of the Update Bundling Order x Detail page) (if applicable)	enter text/single-click
15	Update Bundling Order button	single-click
16	OK button	single-click
17	Update another Bundling Order link (if applicable)	single-click
18	Repeat Steps 3 through 17 (as necessary)	

19.4.13 Use the Spatial Subscription Server GUI to Configure Bundling Order Completion Criteria Default Values

The **Configure Completion Criteria Default Values** page on the **Spatial Subscription Server GUI** allows a full-capability operator to set or change values assigned to bundling order completion criteria. Limited-capability operators have read-only access to the page.

The following parameters are examples of the types of bundling order completion criteria parameters that the full-capability operator can modify:

- **Minimum Granule Count.**
- **Maximum Bundle Age (days).**
- **Bundle Expiration Period (days).**
- **Minimum Bundle Size (GB)** [for each type of distribution medium].

Table 19.4-14 presents the steps required to use the Spatial Subscription Server GUI to configure bundling order completion criteria default values. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the Spatial Subscription Server GUI (refer to Section 19.4.1, **Launch the Spatial Subscription Server GUI**).
 - The **Home Page** is the default display, offering links for access to Spatial Subscription Server function pages (i.e., **List Events**, **Manage Subscriptions**, **Manage Bundling Orders**, **Monitor Queues**, **Help**, and **End Session**).

NOTE: At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when the warning is displayed.

- 2 Click on the **Manage Bundling Orders** link.
 - The **Manage Bundling Orders** page is displayed, providing a table of bundling order information showing seven columns: **Bundling Order**, **User**, **Creation Date**, **Expiration Date**, **Media Type**, **Status**, and **Choose Bundling Order Action** (containing radio buttons for selecting an action to take and **Apply** buttons for implementing the selected actions).
 - There are links on the page to **Add Bundling Order** and **Configure Defaults**.
- 3 Click on the **Configure Defaults** link.
 - The **Configure Completion Criteria Default Values** page is displayed.
- 4 Observe information displayed on the **Configure Completion Criteria Default Values** page.
 - The **Configure Completion Criteria Default Values** page has columns containing the following types of information:
 - **Parameter.**
 - **Current Value.**
 - **Change to...** (containing text entry boxes for entering new values).
 - The rows on the page indicate the current values of the following types of parameters:
 - **Minimum Granule Count.**
 - **Maximum Bundle Age (days).**
 - **Bundle Expiration Period (days).**
 - **8MM Minimum Bundle Size (GB).**
 - **CDROM Minimum Bundle Size (GB).**
 - **DLT Minimum Bundle Size (GB).**
 - **DVD Minimum Bundle Size (GB).**
 - **FtpPull Minimum Bundle Size (GB).**
 - **FtpPush Minimum Bundle Size (GB).**
 - **scp Minimum Bundle Size (GB).**
- 5 To change the value assigned to a parameter first type the new value in the **Change to...** text entry box at the end of the line for the appropriate parameter.
 - The typed entry is displayed in the field.
- 6 Repeat Step 5 as necessary to change any additional parameters.

- 7 Click on the **Change Bundling Criteria** button.
 - A confirmation page is displayed with the message “Please Confirm The Following Bundling Criteria Change” and the parameter(s) for which changes were entered with the entered value(s).

- 8 On the change bundling criteria confirmation page click on the appropriate button from the following selections:
 - **OK** - to confirm that the bundling criteria are to be changed.
 - The confirmation page is closed and the **Current Value** column on the **Configure Completion Criteria Default Values** page reflects the change(s).
 - **Cancel**- to abort the process of changing bundling criteria.
 - The confirmation page is closed and the entries in the **Current Value** column on the **Configure Completion Criteria Default Values** page are restored to their original values.

Table 19.4-14. Use the Spatial Subscription Server GUI to Configure Bundling Order Completion Criteria Default Values

Step	What to Do	Action to Take
1	Launch the Spatial Subscription Server GUI	Use procedure in Section 19.4.1
2	Manage Bundling Orders link	single-click
3	Configure Defaults link	single-click
4	Observe information displayed on the Configure Completion Criteria Default Values page	read text
5	<i>value</i> (in the Change to... text entry box at the end of the line for the appropriate parameter)	enter text
6	Repeat Step 5 (as necessary)	
7	Change Bundling Criteria button	single-click
8	OK button	single-click

19.4.14 Use the Spatial Subscription Server GUI to View the Acquire and Notification Actions Being Processed

The **Spatial Subscription Server GUI** provides pages that can be used to keep track of current actions as the NBSRV processes Acquires and Notifications, and to track NBSRV performance. These capabilities are accessible through links on the **Spatial Subscription Server GUI Home Page**.

The **List Action Queue** link is used to view Acquire and Notification actions being processed by the NBSRV. The procedure that follows is applicable to both full-capability and limited-capability operators.

Table 19.4-15 presents the steps required to use the Spatial Subscription Server GUI to view the acquire and notification actions being processed. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the Spatial Subscription Server GUI (refer to Section 19.4.1, **Launch the Spatial Subscription Server GUI**).
 - The **Home Page** is the default display, offering links for access to Spatial Subscription Server function pages (i.e., **List Events**, **Manage Subscriptions**, **Manage Bundling Orders**, **Monitor Queues**, **Help**, and **End Session**).
- 2 Click on the **Monitor Queues** link.
- 3 Click on the **List Action Queue** link.
 - The **List Action Queue** page is displayed with a table listing acquire and notification actions that are being processed.
- 4 Observe information displayed on the **List Action Queue** page.
 - The table on the **List Action Queue** page has columns containing the following types of information:
 - **Action Type**.
 - **Subscription Id**.
 - **User**.
 - **Collection**.
 - **Version**.
 - **Enqueue Time**.
 - **Dequeue Time**.
 - **Status**.
 - The **Action Type** and **Subscription Id** column headers are links for sorting the list.
 - There are option lists for filtering the table data by **Action Type**, **Subscription**, and/or **Status**.
- 5 To filter the list to display certain types of actions only, click on the appropriate option button and then click to select the desired option from the option list.
 - The selected choice is displayed in the option field.
- 6 Repeat Step 5 to select an additional filter, if applicable.
- 7 Click on the **Filter** button to implement the selected filter.
 - A list is displayed showing items that meet the filter criteria only.
- 8 Return to Step 4.

Table 19.4-15. Use the Spatial Subscription Server GUI to View the Acquire and Notification Actions Being Processed

Step	What to Do	Action to Take
1	Launch the Spatial Subscription Server GUI	Use procedure in Section 19.4.1
2	Monitor Queues link	single-click
3	List Action Queue link	single-click
4	Observe information displayed on the List Action Queue page	read text
5	Action queue filter option (from the appropriate option list) (if applicable)	single-click
6	Repeat Step 5 (if applicable)	
7	Filter button (to implement the selected filter) (if applicable)	single-click
8	Return to Step 4	

19.4.15 Use the Spatial Subscription Server GUI to View and Remove Failed Actions

The **List Failed Action** link is used to view and remove failed actions processed by the NBSRV. The full-capability operator can both view and remove failed actions. The limited-capability operator has read-only access to the **List Failed Action** page.

Table 19.4-16 presents the steps required to use the Spatial Subscription Server GUI to view and remove failed actions. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the Spatial Subscription Server GUI (refer to Section 19.4.1, **Launch the Spatial Subscription Server GUI**).
 - The **Home Page** is the default display, offering links for access to Spatial Subscription Server function pages (i.e., **List Events**, **Manage Subscriptions**, **Manage Bundling Orders**, **Monitor Queues**, **Help**, and **End Session**).
- 2 Click on the **Monitor Queues** link.
- 3 Click on the **List Failed Action** link.
 - The **List Failed Action** page is displayed with a table listing acquire and notification actions that are being processed.
- 4 Observe information displayed on the **List Failed Action** page.
 - The table on the **List Failed Action** page has columns containing the following types of information:
 - **Priority**.

- **ActionId.**
 - **ActionQueueId.**
 - **SubscriptionId.**
 - **granUR.**
 - **Enqueue Time.**
 - **Remove Action.**
- The **Remove Action** column contains **Remove Action** buttons for removing failed actions.
- 5 To remove a failed action click on the **Remove Action** button at the end of the row for the action.
- A confirmation page is displayed.
- 6 Click on the appropriate link from the following choices:
- **Remove Action for another Action ID** – to return to the **List Failed Action** page.
 - **Return to Home Page** – to return to the Home page without taking action on any other failed actions.
- 7 If **Remove Action for another Action ID** was selected in the previous step, return to Step 4.

Table 19.4-16. Use the Spatial Subscription Server GUI to View and Remove Failed Actions

Step	What to Do	Action to Take
1	Launch the Spatial Subscription Server GUI	Use procedure in Section 19.4.1
2	Monitor Queues link	single-click
3	List Failed Action link	single-click
4	Observe information displayed on the List Failed Action page	read text
5	Remove Action button (at the end of the row for the action) (if applicable)	single-click
6	Remove Action for another Action ID link (if applicable)	single-click
7	Return to Step 4 (as applicable)	

19.4.16 Use the Spatial Subscription Server GUI to View Statistics on Processing of Events and Actions by the NBSRV

The **List Statistics** link is used to review summary information concerning the processing of events and subscriptions. The procedure that follows is applicable to both full-capability and limited-capability operators.

Table 19.4-17 presents the steps required to use the Spatial Subscription Server GUI to view statistics on processing of events and actions by the NBSRV. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the Spatial Subscription Server GUI (refer to Section 19.4.1, **Launch the Spatial Subscription Server GUI**).
 - The **Home Page** is the default display, offering links for access to Spatial Subscription Server function pages (i.e., **List Events**, **Manage Subscriptions**, **Manage Bundling Orders**, **Monitor Queues**, **Help**, and **End Session**).
- 2 Click on the **Monitor Queues** link.
- 3 Click on the **List Statistics** link.
 - The **List Statistics** page is displayed.
- 4 Observe information displayed on the **List Statistics** page.
 - The **List Statistics** page has a summary showing the number of **Subscribed Events Left to Dequeue**.
 - The **List Statistics** page has a summary showing the number of **Matched Subscriptions Left to Dequeue**.
 - The **List Statistics** page has a **Summary of the Processing Time for Subscriptions Evaluated against Events in the Event Queue** table that has columns containing the following types of information:
 - **ESDT Count**.
 - **ESDT Short Name**.
 - **ESDT VersionID**.
 - **ESDT Event Type**.
 - **MaxMetadataTime (ms)**.
 - **AverageMetadataTime (ms)**.
 - **MaxSubEvalTime (ms)**.
 - **AverageSubEvalTime (ms)**.
 - The **List Statistics** page has a **Summary of the Processing Time for E-Mail Notification Actions in Action Queue** table that has columns containing the following types of information:
 - **Notification Count**.
 - **MaxNotifyTime (ms)**.
 - **AverageNotifyTime (ms)**.
 - The **List Statistics** page has a **Summary of the Processing Time for Distribution Actions in Action Queue** table that has columns containing the following types of information:
 - **Acquire Count**.
 - **MaxAcquireTime (ms)**.

- AverageAcquireTime (ms).

Table 19.4-17. Use the Spatial Subscription Server GUI to View Statistics on Processing of Events and Actions by the NBSRV

Step	What to Do	Action to Take
1	Launch the Spatial Subscription Server GUI	Use procedure in Section 19.4.1
2	Monitor Queues link	single-click
3	List Statistics link	single-click
4	Observe information displayed on the List Statistics page	read text

19.4.17 Prepare Input Files for Use with the SSS CLI

The Spatial Subscription Server (SSS) Command Line Interface (CLI) utility is intended for full-capability operators only. Because it is a UNIX utility, the SSS CLI depends on standard UNIX permissions to restrict execution of the script to authorized users.

The full-capability operator can perform the following tasks using the Spatial Subscription Server (SSS) Command Line Interface (CLI):

- Viewing a subscription.
- Adding a new subscription.
- Updating a subscription.
- Deleting a subscription.

However, before updating a subscription or adding a new subscription, it is necessary to prepare an input file that is specified as an argument when using the SSS CLI.

When the operator uses the SSS CLI to view a subscription, the CLI creates a text file that the operator subsequently opens to view the subscription information. It is recommended that before updating a subscription using the SSS CLI the operator view the subscription first, which results in the creation of a text file that can be edited for use as input to the command for updating the subscription using the SSS CLI. In the same vein, before adding a new subscription, it would be useful to view a subscription that is similar to the one to be added, edit the resulting text file, and specify the edited file as an input to the command for adding the subscription.

As previously mentioned, before updating a subscription or adding a new subscription, it is necessary to prepare an input file that is specified as an argument when using the SSS CLI. Although it is possible to create the needed file from scratch, it is generally much easier to use the SSS CLI to view a similar subscription, edit the resulting text file, and specify the edited file as an input to either the Add or Update command (as applicable).

Physical media distributions for subscriptions are supported through the use of bundling orders. The simplest way to do this is to create a bundling order via the GUI and then “bundle” the

subscription by specifying the bundling order ID. Alternatively, if a bundling order ID is not specified for a physical media distribution, a bundling order will automatically be created for the subscription; however, in this case, all of the required information for the bundling order (such as shipping information) must be specified in the input file for the subscription.

If an operator updates a bundled subscription without altering the bundling order ID, the bundling order will be updated along with the subscription.

Table 19.4-18 presents the steps required to prepare input files for use with the SSS CLI. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Access a terminal window logged in to the APC Server host.
 - Examples of APC Server host names include **e0acg11**, **g0acg01**, **l0acg02**, and **n0acg01**.
 - For detailed instructions refer to Steps 1 through 5 of the **Launch Account Management Applications Using UNIX Commands** procedure (Section 19.1.1).

- 2 Type **cd *path*** then press **Return/Enter**.
 - ***path*** is the directory path for the file to be created or edited (e.g., /home/cmops/subscriptions).
 - The **MODE** will most likely be one of the following operating modes:
 - OPS (for normal operation).
 - TS1 (for SSI&T).
 - TS2 (new version checkout).
 - Note that the separate subdirectories under /usr/ecs apply to different operating modes.

- 3 Type **vi *filename*** then press **Return/Enter**.
 - ***filename*** is the name of a file to be opened.
 - It may be either the name of an existing file (e.g., a subscription file ordered using the SSS CLI View command) or the name of a new file.
 - For example:

```
x0pls01{cmops}[10]->vi sub.109.txt
```



```
SUBSCRIPTION=109
USERNAME=mauser
STATUS=Active

[...]
```

```
"sub.109.txt" [New file]
```

 - Many lines have been deleted from the example.

- The file will specify the subscription information to be sent to the NBSRV database.
- Although this procedure has been written for the **vi** editor, any UNIX editor can be used to create the file.

4 Using vi editor commands create a file that specifies the relevant values to be sent to the NBSRV database.

- The text file consists of several lines of attribute-value pairs, with one attribute-value pair per line.
- Comments can be included in the file as long as each comment line starts with the **#** character.
- When preparing a file for updating a subscription, the number of the subscription to be updated must appear in the file [e.g., on the SUBSCRIPTION line of the file, as shown in the previous example].
 - The number of the subscription is irrelevant when adding a subscription. (The CLI ignores any subscription number in the file and assigns a new subscription number.)
- The following vi editor commands are useful:
 - **h** (move cursor left).
 - **j** (move cursor down).
 - **k** (move cursor up).
 - **l** (move cursor right).
 - **a** (append text).
 - **i** (insert text).
 - **r** (replace single character).
 - **x** (delete a character).
 - **dw** (delete a word).
 - **dd** (delete a line).
 - **n dd** (delete *n* lines).
 - **u** (undo previous change).
 - **Esc** (switch to command mode).

5 Press the **Esc** key.

6 Type **ZZ**.

- **vi** exits and the new or edited file is saved.
 - To exit **vi** without saving the new entries in the file type **:q!** then press **Return/Enter**.
- UNIX prompt is displayed.

Table 19.4-18. Prepare Input Files for Use with the SSS CLI

Step	What to Do	Action to Take
1	UNIX window (APC Server)	single-click or use procedure in Section 19.1.1
2	cd path	enter text; press Return/Enter
3	vi filename	enter text; press Return/Enter
4	Create a file that specifies the relevant values to be sent to the NBSRV database	enter text
5	Esc key	press
6	ZZ	enter text

19.4.18 View a Subscription Using the SSS CLI

When the operator uses the SSS CLI to view a subscription, the CLI creates a text file that the operator subsequently opens (typically using a UNIX text editor or viewer) to view the subscription information. The file created using the SSS CLI View command can be used as a template for preparing an input file to be used with either the SSS CLI Update command or Add command.

Table 19.4-19 presents the steps required to view a subscription using the SSS CLI. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Access a terminal window logged in to the APC Server host.
 - Examples of APC Server host names include **e0acg11**, **g0acg01**, **l0acg02**, and **n0acg01**.
 - For detailed instructions refer to Steps 1 through 5 of the **Launch Account Management Applications Using UNIX Commands** procedure (Section 19.1.1).
- 2 Type **cd /usr/ecs/MODE/CUSTOM/utilities** then press **Return/Enter**.
 - Change directory to the directory containing the **SSS CLI** start-up script (i.e., **EcNbSubscriptionCLIStart**).
 - The **MODE** will most likely be one of the following operating modes:
 - OPS (for normal operation).
 - TS1 (for SSI&T).
 - TS2 (new version checkout).
 - Note that the separate subdirectories under **/usr/ecs** apply to different operating modes.
- 3 Type **EcNbSubscriptionCLIStart MODE View number** then press **Return/Enter**.
 - **number** is the subscription number to be viewed.

- For example:
EcNbSubscriptionCLIStart OPS View 115
- The CLI creates an output file named *sub.number.txt* (where *number* is the subscription number) in the current directory.
 - For example:
sub.115.txt
 - If the command did not appear to succeed (e.g., a message is displayed indicating that there is no subscription with the specified number), check the log file (i.e., *EcNbSubscriptionCLI.log* in the logs directory for the mode) to determine what went wrong.

4 Type **vi filename** then press **Return/Enter**.

- *filename* is the name of a file to be viewed.
- For example:

```
x0pls01{cmops}[10]->vi sub.115.txt
```

```
SUBSCRIPTION=115
USERNAME=resuam
STATUS=Active
```

```
[...]
```

```
"sub.115.txt"
```

- Many lines have been deleted from the example.
- Although this procedure has been written for the **vi** editor, any UNIX editor can be used to create the file.

5 Using vi editor commands observe the contents of the file.

- The file consists of several lines of attribute-value pairs, with one attribute-value pair per line.
- Comments in the file are identified by the **#** character at the beginning of each comment line.
- The following vi editor commands are useful:
 - **h** (move cursor left).
 - **j** (move cursor down).
 - **k** (move cursor up).
 - **l** (move cursor right).
 - **a** (append text).
 - **i** (insert text).
 - **r** (replace single character).
 - **x** (delete a character).
 - **dw** (delete a word).

- **dd** (delete a line).
 - **n**dd (delete *n* lines).
 - **u** (undo previous change).
 - **Esc** (switch to command mode).
- 6 Press the **Esc** key.
 - 7 Type **:q!** then press **Return/Enter**
 - **vi** exits without saving any changes to the file.
 - UNIX prompt is displayed.

Table 19.4-19. View a Subscription Using the SSS CLI

Step	What to Do	Action to Take
1	UNIX window (APC Server)	single-click or use procedure in Section 19.1.1
2	cd /usr/ecs/MODE/CUSTOM/utilities	enter text; press Return/Enter
3	EcNbSubscriptionCLIStart <i>MODE</i> View <i>number</i>	enter text; press Return/Enter
4	vi <i>filename</i>	enter text; press Return/Enter
5	observe the contents of the file	read text
6	Esc key	press
7	:q!	enter text; press Return/Enter

19.4.19 Add a New Subscription Using the SSS CLI

If a new subscription is to be added using the SSS CLI, the appropriate input file must have been prepared first so the file can be included in arguments that are specified when the SSS CLI is started. The SSS CLI script takes a file name as one of the arguments specified when entering the command to add or update a subscription.

If the operator were to view a similar subscription (using the SSS CLI View command), the CLI would create a text file to be viewed. That file could be edited to adapt it to the requirements of the new subscription. Then the operator could specify the edited file as an input to the SSS CLI Add command.

Table 19.4-20 presents the steps required to add a new subscription using the SSS CLI. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Access a terminal window logged in to the APC Server host.
 - Examples of APC Server host names include **e0acg11**, **g0acg01**, **l0acg02**, and **n0acg01**.

- For detailed instructions refer to Steps 1 through 5 of the **Launch Account Management Applications Using UNIX Commands** procedure (Section 19.1.1).
- 2 Type **cd /usr/ecs/*MODE*/CUSTOM/utilities** then press **Return/Enter**.
- Change directory to the directory containing the SSS CLI start-up script (i.e., `EcNbSubscriptionCLIStart`).
 - The *MODE* will most likely be one of the following operating modes:
 - OPS (for normal operation).
 - TS1 (for SSI&T).
 - TS2 (new version checkout).
 - Note that the separate subdirectories under /usr/ecs apply to different operating modes.
- 3 Type **EcNbSubscriptionCLIStart *MODE* Add *path/filename*** then press **Return/Enter**.
- *path/filename* is the name of a file containing data describing the new subscription.
 - For example:
EcNbSubscriptionCLIStart OPS Add /home/cmops/subscriptions/sub.109.txt
 - The subscription number for the new subscription is displayed.
 - If the command did not appear to succeed, check the log file (i.e., `EcNbSubscriptionCLI.log` in the logs directory for the mode) to determine what went wrong.

Table 19.4-20. Add a New Subscription Using the SSS CLI

Step	What to Do	Action to Take
1	UNIX window (APC Server)	single-click or use procedure in Section 19.1.1
2	cd /usr/ecs/<i>MODE</i>/CUSTOM/utilities	enter text; press Return/Enter
3	EcNbSubscriptionCLIStart <i>MODE</i> Add <i>path/filename</i>	enter text; press Return/Enter

19.4.20 Update a Subscription Using the SSS CLI

If a subscription is to be updated using the SSS CLI, the appropriate input file must have been prepared first so the file can be included in arguments that are specified when the SSS CLI is started. The SSS CLI script takes a file name as one of the arguments specified when entering the command to update a subscription.

It is recommended that before updating a subscription using the SSS CLI the operator view the subscription (using the SSS CLI View command), which results in the creation of a text file that can be edited for use as input to the command for updating the subscription using the SSS CLI.

Then the operator would edit the text file to include the desired updates. The operator would specify the edited file as an input to the SSS CLI Update command.

Table 19.4-21 presents the steps required to update a subscription using the SSS CLI. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Access a terminal window logged in to the APC Server host.
 - Examples of APC Server host names include **e0acg11**, **g0acg01**, **l0acg02**, and **n0acg01**.
 - For detailed instructions refer to Steps 1 through 5 of the **Launch Account Management Applications Using UNIX Commands** procedure (Section 19.1.1).

- 2 Type **cd /usr/ecs/MODE/CUSTOM/utilities** then press **Return/Enter**.
 - Change directory to the directory containing the SSS CLI start-up script (i.e., EcNbSubscriptionCLIStart).
 - The **MODE** will most likely be one of the following operating modes:
 - OPS (for normal operation).
 - TS1 (for SSI&T).
 - TS2 (new version checkout).
 - Note that the separate subdirectories under /usr/ecs apply to different operating modes.

- 3 Type **EcNbSubscriptionCLIStart MODE Update path/filename** then press **Return/Enter**.
 - **path/filename** is the name of a file containing data describing the updated subscription.
 - For example:


```
EcNbSubscriptionCLIStart OPS Update  
/home/cmops/subscriptions/sub.109.txt
```
 - The subscription is updated.
 - If the command did not appear to succeed, check the log file (i.e., EcNbSubscriptionCLI.log in the logs directory for the mode) to determine what went wrong.

Table 19.4-21. Update a Subscription Using the SSS CLI

Step	What to Do	Action to Take
1	UNIX window (APC Server)	single-click or use procedure in Section 19.1.1
2	cd /usr/ecs/MODE/CUSTOM/utilities	enter text; press Return/Enter
3	EcNbSubscriptionCLIStart MODE Update path/filename	enter text; press Return/Enter

19.4.21 Delete a Subscription Using the SSS CLI

When using the SSS CLI to delete a subscription, the operator must specify which subscription (number) is to be deleted.

Table 19.4-22 presents the steps required to delete a subscription using the SSS CLI. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Access a terminal window logged in to the APC Server host.
 - Examples of APC Server host names include **e0acg11**, **g0acg01**, **l0acg02**, and **n0acg01**.
 - For detailed instructions refer to Steps 1 through 5 of the **Launch Account Management Applications Using UNIX Commands** procedure (Section 19.1.1).

- 2 Type **cd /usr/ecs/MODE/CUSTOM/utilities** then press **Return/Enter**.
 - Change directory to the directory containing the SSS CLI start-up script (i.e., `EcNbSubscriptionCLIStart`).
 - The **MODE** will most likely be one of the following operating modes:
 - OPS (for normal operation).
 - TS1 (for SSI&T).
 - TS2 (new version checkout).
 - Note that the separate subdirectories under `/usr/ecs` apply to different operating modes.

- 3 Type **EcNbSubscriptionCLIStart MODE Delete number** then press **Return/Enter**.
 - **number** is the subscription number to be deleted.
 - For example:
EcNbSubscriptionCLIStart OPS Delete 325
 - The CLI requests confirmation of the deletion.
 - If the command did not appear to succeed (e.g., no confirmation is requested), check the log file (i.e., `EcNbSubscriptionCLI.log` in the logs directory for the mode) to determine what went wrong.

- 4 Respond to the deletion confirmation message.

Table 19.4-22. Delete a Subscription Using the SSS CLI

Step	What to Do	Action to Take
1	UNIX window (APC Server)	single-click or use procedure in Section 19.1.1
2	cd /usr/ecs/MODE/CUSTOM/utilities	enter text; press Return/Enter
3	EcNbSubscriptionCLIStart MODE Delete number	enter text; press Return/Enter
4	Respond to the deletion confirmation message	enter text; press Return/Enter

19.5 Using the ECS Order Tracking Tool

The ECS Order Tracking GUI provides a convenient tool to locate an order, either because a user wants to cancel it or for some other reason (e.g., a user wants to check on an order that has not been received, or it is necessary to delete one or more requests from an order). Table 19.5-1 provides an activity checklist for tasks using the ECS Order Tracking Tool.

Table 19.5-1. Use the ECS Order Tracking Tool - Activity Checklist

Order	Role	Task	Section	Complete?
1	User Services	Launch the ECS Order Tracking GUI	(P) 19.5.1	
2	User Services	Use the ECS Order Tracking GUI to Find and Review a User's Order and Request Information	(P) 19.5.2	
3	User Services	Use the ECS Order Tracking GUI to Cancel an Order or Request	(P) 19.5.3	
4	User Services	Troubleshooting: Check Log Files for ECS Order Tracking	(P) 19.5.4	

19.5.1 Launch the ECS Order Tracking GUI

Table 19.5-2 presents the steps required to launch the NBSRV GUI. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- At the UNIX command shell prompt, type **setenv DISPLAY *clientname*:0.0** and then press the **Return/Enter** key.
 - For *clientname*, use either the local terminal/workstation IP address or its machine name.
- Start the log-in to the MSS client server by typing **/tools/bin/ssh *hostname*** (e.g., g0mss21, l0mss21, e0mss21, n0mss21) at the UNIX command shell prompt, and then press the **Return/Enter** key.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type **yes** ("y" alone does not work).

- If you have previously set up a secure shell passphrase and executed **sshremote**, a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears; continue with Step 3.
 - If you have not previously set up a secure shell passphrase, go to Step 4.
- 3 If a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears, type your *Passphrase* and then press the **Return/Enter** key. Go to Step 5.
 - 4 At the *<user@remotehost>*'s **password:** prompt, type your *Password* and then press the **Return/Enter** key.
 - 5 To change to the directory containing the utility scripts to start Account Management GUIs, type **cd /usr/ecs/MODE/CUSTOM/utilities**, where *MODE* will likely be **TS1**, **TS2**, or **OPS**, and then press the **Return/Enter** key.
 - The working directory is changed to */usr/ecs/MODE/CUSTOM/utilities*.
 - 6 Type **EcMsAcOrderGUIStart MODE**, where *MODE* is **TS1**, **TS2**, or **OPS** (or other) as selected in Step 5, and then press the **Return/Enter** key.
 - The **ECS Order Tracking** window is displayed.

Table 19.5-2. Launch the ECS Order Tracking GUI

Step	What to Do	Action to Take
1	setenv DISPLAY clientname:0.0	enter text; press Return/Enter
2	/tools/bin/ssh hostname	enter text; press Return/Enter
3	<i>Passphrase</i> (or Step 4)	enter text; press Return/Enter
4	<i>Password</i>	enter text; press Return/Enter
5	cd /usr/ecs/MODE/CUSTOM/utilities	enter text; press Return/Enter
6	EcMsAcOrderGUIStart MODE	enter text; press Return/Enter

19.5.2 Use the ECS Order Tracking GUI to Find and Review a User's Order and Request Information

Table 19.5-3 presents the steps required to use the ECS Order Tracking GUI to find and review a user's order and request information. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the ECS Order Tracking GUI (refer to Procedure 19.5.1 Launch ECS Order Tracking GUI).

- 2 Click the selection button to the left of one of the **Query by:** options.
 - The options are **User Name: Order ID: Request ID: MTMGW Request:** and **Order Type:**.
 - The button appearance changes to depressed to indicate its selection, and the cursor moves to the first entry field associated with the selection. *Note:* For the **Order Type:** option, the cursor moves to highlight a pull-down arrow at the end of the entry field.
- 3 Type a search criterion appropriate to the selected **Query by:** option (e.g., user's last name, order or request ID, Machine-to-Machine Gateway External Request ID), or, for the **Order Type:** option click on the pull-down arrow and click on the desired option.
 - The typed or selected entry appears in the entry field.
 - *Note:* The search is case-sensitive.
- 4 If a selected **Query by:** option has a second entry field and it is desirable to enter information there to narrow the search further (i.e., a user's first name or a Machine-to-Machine Gateway User ID), click in that second field.
 - The cursor moves to the clicked field.
- 5 To enter information in the selected second entry field, type a search criterion appropriate to the selected **Query by:** option (e.g., user's first name, Machine-to-Machine Gateway User ID).
 - The typed entry appears in the entry field.
 - *Note:* The search is case-sensitive.
- 6 In the **Filter by Status:** area, click to select status options for the filter.
 - Selection buttons for selected options indicate selection by the appearance of being depressed.
 - *Note:* All status options are selected by default. A click on the selection button for an option deselects it. A click on the **Deselect All** button deselects all options to permit selection of one or a few by clicks on the appropriate selection button(s). If all or some options are deselected, a click on the **Select All** button selects all options.
- 7 Press the **Return/Enter** key or click on the **Query Order** button.
 - The order is displayed in the **Order List** box in the **ECS Data Order Tracking** screen.
 - The **Order ID, Home DAAC, Order Date, Order Type, Order Source, Status, Description,** and **Start Date** are displayed.
- 8 If there are multiple requests, click on the order to highlight it in the **Order List** box, then click on the **Query Request** button.
 - Every request number relating to the highlighted Order is displayed.
 - The **Order ID, Request ID, Processing DAAC, Request Type, # Files, Size, Media, Format, Status, Ship Date,** and **Description** are displayed.

- 9 Click on the **Shipping Information** button.
 - A **Shipping Information** window pops up to display information about the order, including the name of the user, order ID, shipping address, phone and fax numbers, and email address.
- 10 To close the **Shipping Information** window, click on the **Close** button.
 - The **Shipping Information** window is closed.

Table 19.5-3. Use the ECS Order Tracking GUI to Find and Review a User's Order and Request Information

Step	What to Do	Action to Take
1	Launch the ECS Order Tracking GUI	Use procedure in Section 19.5.1
2	Select Query by: option	single-click
3	Type or select search criterion	enter text or click option
4	Optional: Move cursor to second entry field	single-click
5	Optional: Type or select search criterion	enter text
6	Select status options for Filter by Status:	click(s)
7	Activate Query Order button (or press Return/Enter)	single-click (or press key)
8	Highlight order and list requests	click-select and single-click
9	Activate the Shipping Information button	single-click
10	Activate the Close button	single-click

19.5.3 Use the ECS Order Tracking GUI to Cancel an Order or Request

Table 19.5-4 presents the steps required to use the ECS Order Tracking GUI to cancel an order. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Find and review the order or request to be canceled (refer to Procedure 19.5.2 **Use the ECS Order Tracking GUI to Find and Review a User's Order and Request Information**).
- 2 If necessary, click on the order or the specific request to be canceled to highlight it.
 - The selected item is highlighted.
- 3 To cancel a highlighted request, click on the **Delete Request** button.
 - The request is deleted from the system.
- 4 To cancel a highlighted order, first click on the **Update Order** button.
 - The Update dialog box is displayed.

- 5 In the **Update** dialog box, make sure the **Status** checkbox has a check in it (click in the checkbox if necessary).
 - The **Status** checkbox displays a check mark.
- 6 Click on the pull-down arrow to the right of the **Status New Values** text field, hold the left mouse button and dragging to select the value "Canceled."
 - The **Status New Values** text field displays **Canceled**.
- 7 Click on the **Update** button.
 - The order status is changed to **Canceled**.

Table 19.5-4. Use the ECS Order Tracking GUI to Cancel an Order or Request

Step	What to Do	Action to Take
1	Find and review the order or request to be canceled	Use procedure in Section 19.5.2
2	Highlight the order or request to be deleted	single-click
3	To cancel highlighted request, activate the Delete Request button	single-click
4	To cancel a highlighted order, activate the Update Order button	single-click
5	In the Update dialog box, select Status	single-click
6	In the Status New Values field, select Canceled	click and drag
7	Activate Update button	single-click

19.5.4 Troubleshooting: Check Log Files for ECS Order Tracking

The ECS Order Tracking tool is part of the ECS System Management Support Subsystem (MSS), and uses database functions in that subsystem. If the tool cannot be launched, or does not function (e.g., cannot retrieve orders), you will need to ask the System Administrator to ensure that the Order Tracking Server is functioning properly. It may be necessary to have the Database Administrator check to ensure that there are no problems with the database.

It is also possible to receive error messages when using the GUI while it is apparently functioning normally. Error messages associated with the ECS Order Tracking tool are listed in Appendix A of 609-EMD-001, *Release 7.11 Operations Tools Manual for the EMD Project*.

Log files can often provide information that will identify possible sources of disruption in Order Tracking server function or communications, suggesting additional checks or actions that may help resolve the problem. Table 19.5-5 presents the steps required to check log files for ECS order tracking. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 To log in to the host for the server and log(s) to be examined, type `/tools/bin/ssh <hostname>` and then press the **Return/Enter** key.
 - For `<hostname>`, use `<x>0mss21`, where `<x>` = **e** for LP DAAC, **g** for GSFC, **l** for LaRC, or **n** for NSIDC.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type **yes** (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed `sshremote`, a prompt to **Enter passphrase for RSA key '`<user@localhost>`'** appears; continue with Step 2.
 - If you have not previously set up a secure shell passphrase, go to Step 3.
- 2 If a prompt to **Enter passphrase for RSA key '`<user@localhost>`'** appears, type your *Passphrase* and then press the **Return/Enter** key. Go to Step 4.
 - The prompt reflects the login to the selected host.
- 3 At the `<user@remotehost>`'s **password:** prompt, type your *Password* and then press the **Return/Enter** key.
 - The prompt reflects the login to the selected host.
- 4 Type `cd /usr/ecs/<MODE>/CUSTOM/logs` and then press the **Return/Enter** key.
 - The prompt reflects the change to directory `/usr/ecs/<MODE>/CUSTOM/logs`.
- 5 To view a server log, type `pg filename` and then press the **Return/Enter** key.
 - *filename* refers to the account management log file to be reviewed (e.g., **EcMsAcOrderSrvr.ALOG**, **EcMsAcOrderSrvrDebug.log**).
 - The first page of the log file is displayed; additional sequential pages can be displayed by pressing the **Return/Enter** key at the `:` prompt.
 - Although this procedure has been written for the `pg` command, any UNIX editor or visualizing command (e.g., **vi**, **more**, **tail**) can be used to review the log file.
 - Typically, the `<server>Debug.log` captures more detailed information than the `<server>.ALOG`. However, for some servers (e.g., **SDSRV**), there may be significant detail in the `<server>.ALOG`. It is also important to note that the **DebugLevel** setting in the `<server>.CFG` file determines the level of detail captured in the `<server>Debug.log` (**0** is off, a setting of **1** captures status and errors, a setting of **2** captures major events, and a setting of **3** is a full trace recording of all activity). If the **DebugLevel** has been set to one of the lower levels during operations, the System Administrator may set it to **3** during troubleshooting.
- 6 Review the log file(s) to determine if there are any indications of connection problems or errors at start up.
 - The **EcMsAcOrderSrvrDebug.log** file for the User Profile/User Registration server may contain an error message concerning **PF Init** error or problem (notify the System Administrator).

- The **EcMsAcOrderSrvr.ALOG** file may contain evidence of a Sybase error (e.g., **SybaseErrorCode1 =92014;SybaseErrorMessage1 ="x0mss21_srvr"** or **SybaseErrorCode2 =16;SybaseErrorMessage2 =""**) (notify the Database Administrator).

7 To exit the **pg** review of the log file, type **q** at the **:** prompt and then press the **Return/Enter** key.

Table 19.5-5. Check Log Files for ECS Order Tracking

Step	What to Do	Action to Take
1	/tools/bin/ssh hostname	enter text; press Return/Enter
2	passphrase (or Step 3)	enter text; press Return/Enter
3	password	enter text; press Return/Enter
4	cd /usr/ecs/MODE/CUSTOM/logs	enter text; press Return/Enter
5	pg filename	enter text; press Return/Enter
6	Review log file	read text
7	To exit, type q at the : prompt	enter text; press Return/Enter

19.6 Using the Data Dictionary Maintenance Tool

Requests for ECS services may come from the EOS Data Gateway (EDG) Web Client of Version 0 (V0). For example, users, including those from the ASTER Ground Data System (GDS), will submit requests for data searches and product orders using the EDG Search and Order Tool. Requests for ECS products or services (e.g., Directory Search requests, Inventory Search requests, Browse requests, Product requests) are sent to the ECS V0 Gateway. To accommodate mapping of terminology between the ECS and the V0 system, the ECS V0 Gateway reads the ECS Data Dictionary containing the terminology mapping information, ensuring that the request can be directed to the appropriate science data server. A Data Dictionary Administrator builds the ECS Data Dictionary V0 System search parameters, ECS schema, and metadata. The V0 client must have ECS Valid terminology for searchable attributes (e.g., source, sensor, geophysical parameter, data set name, data center ID, campaign, processing level, geographical coordinates, and temporal intervals) in order to search ECS holdings.

Accordingly, upon establishment of a new ECS data set, valids for the data set must be made available to V0. EOSDIS V0 IMS has a two-week valids update cycle:

- Data centers (sites) submit their new valids, definitions, and/or package Object Description Language (ODL) file(s). An ODL file is a formatted ASCII text file that contains the keyword descriptions for the data sets.
- Valids ODL files are transferred to the V0 IMS using anonymous FTP.
- The IMS team acknowledges receipt of the new valids submission and runs a syntax checker on the files.
- The files are processed and the valids are tested.

More detailed information on the cycle and the update process may be obtained at the following URL:

http://www-v0ims.gsfc.nasa.gov/v0ims/DOCUMENTATION/GUIDE-VALID/VALIDS/valids_gensubpro.html

There is two-way interoperability with the ASTER GDS for product search and orders. This means that ASTER GDS users can search, browse, and order ECS products, and ECS users can search, browse, and order products available at GDS. Information is also exchanged concerning price estimates and order status. ASTER GDS access to ECS products and services is through the LP DAAC. Therefore, all ECS collection information must be available at the LP DAAC. Furthermore, ECS must be able to use ASTER GDS dataset valids.

The Data Dictionary Maintenance Tool (DDMT) is an ECS tool to support management of ECS valids and mapping of ECS metadata to V0 attributes and values, as well as to ASTER GDS attributes and values. It supports import of ASTER GDS dataset valids, and it supports export of ECS dataset valids. Table 19.6-1 provides an activity checklist for tasks using the DDMT.

Table 19.6-1. Use the Data Dictionary Maintenance Tool - Activity Checklist

Order	Role	Task	Section	Complete?
1	User Services/ Science Data Specialist	Launch the Data Dictionary Maintenance Tool GUI	(P) 19.6.1	
2	User Services/ Science Data Specialist	Use the DDMT GUI to Export Valids	(P) 19.6.2	
3	User Services/ Science Data Specialist	Use the DDMT GUI to Import Valids	(P) 19.6.3	
4	User Services/ Science Data Specialist	Troubleshooting: Check Data Dictionary Server Log Files	(P) 19.6.4	

19.6.1 Launch the Data Dictionary Maintenance Tool GUI

Table 19.6-2 presents the steps required to launch the Data Dictionary Maintenance Tool GUI. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 At the UNIX command shell prompt, type **setenv DISPLAY *clientname*:0.0** and then press the **Return/Enter** key.
 - For *clientname*, use either the local terminal/workstation IP address or its machine name.

- 2 Start the log-in to the interface server by typing `/tools/bin/ssh hostname` (e.g., e0ins02, g0ins02, l0ins02, n0ins02) at the UNIX command shell prompt, and then press the **Return/Enter** key.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type **yes** (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed `sshremote`, a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears; continue with Step 3.
 - If you have not previously set up a secure shell passphrase, go to Step 4.
- 3 If a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears, type your *Passphrase* and then press the **Return/Enter** key. Go to Step 5.
- 4 At the `<user@remotehost>`'s **password:** prompt, type your *Password* and then press the **Return/Enter** key.
- 5 To change to the directory containing the utility scripts to start Account Management GUIs, type `cd /usr/ecs/MODE/CUSTOM/utilities`, where *MODE* will likely be **TS1**, **TS2**, or **OPS**, and then press the **Return/Enter** key.
 - The working directory is changed to `/usr/ecs/MODE/CUSTOM/utilities`.
- 6 Type `EcDmDdMaintenanceToolStart MODE`, where *MODE* is **TS1**, **TS2**, or **OPS** (or other) as selected in Step 5, and then press the **Return/Enter** key.
 - The **Data Dictionary Maintenance Tool** window is displayed.

Table 19.6-2. Launch the Data Dictionary Maintenance Tool GUI

Step	What to Do	Action to Take
1	<code>setenv DISPLAY clientname:0.0</code>	enter text; press Return/Enter
2	<code>/tools/bin/ssh hostname</code>	enter text; press Return/Enter
3	<i>passphrase</i> (or Step 4)	enter text; press Return/Enter
4	<i>password</i>	enter text; press Return/Enter
5	<code>cd /usr/ecs/MODE/CUSTOM/utilities</code>	enter text; press Return/Enter
6	<code>EcDmDdMaintenanceToolStart MODE</code>	enter text; press Return/Enter

19.6.2 Use the DDMT GUI to Export Valid

Periodically, and as new products/ESDTs are added to ECS, information about the valid attributes and values for them must be made available to the V0 IMS and to ASTER GDS, so that the information can be used to search and order ECS data, including those new products/ESDTs. Table 19.6-3 presents the steps required to use the DDMT GUI to export valids. If you are already familiar with the procedure, you may prefer to use this quick-step

table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1** Launch the **DDMT GUI** (refer to Procedure 19.6.1 **Launch the Data Dictionary Maintenance Tool GUI**).
- 2** Click on the **Export Valids File** tab.
 - The **Export Valids File** screen is displayed.
- 3** Click on the **Selection Criteria . . .** button in the **1. Get list of collections** area.
 - A **Database List (Export Collections)** dialog box is displayed
- 4** In the **Database List (Export Collections)** dialog box click on the pull-down arrow to the right of the **Characteristic Type:** field.
 - Criteria displayed in a drop-down list include: **Export Collection, Attribute, Instrument, Keyword, Platform, Sensor, and Information Manager.**
- 5** Click on **Export Collection** in the drop-down list.
 - The selected item appears in the **Characteristic Type:** field.
- 6** In the **Database List (Export Collections)** dialog box click on the pull-down arrow to the right of the **Characteristic Name:** field.
 - A drop-down list of names is displayed.
- 7** Click on **Archive Center** in the drop-down list.
 - The selected item appears in the **Characteristic Name:** field.
- 8** Click on the **Predicate:** option button and select **Is Equal To**.
 - The selected option is displayed on the button.
- 9** Click in the **Value:** field.
 - The cursor is displayed in the **Value:** field.
- 10** Type **<Center>**, where **<Center>** is the designation for your site (e.g., **GSFC, EDC, LARC, NSIDC**).
 - The typed entry appears in the field.
- 11** Click on the **OK** button.
 - The **Database List (Export Collections)** dialog box is closed and a list of **Collections** is displayed in the **2. Select collections to export** area of the **Export Valids File** screen.

- 12 Double-click on one of the collections for which valids are to be exported.
 - The selected collection is highlighted and **Export** is displayed in the **Status** column next to the highlighted selection.
 - Note: Multiple collections may be selected by use of the **Shift** and/or **Control** keys. Contiguous items in the list may be selected by holding down the **Shift** key while double-clicking on additional items. Non-contiguous items in the list may be selected by holding down the **Control** key while double-clicking on an additional item.
- 13 Click in the **File name for export:** field in the **3. Export collections to file** area.
 - The cursor moves to the **File name for export:** field.
- 14 Type the path to specify a directory and name for the export file to be saved.
 - The typed entry is displayed in the **File name for export:** field.
- 15 Click on the **Save** button.
 - An "error" dialog box is displayed with the message **The Query Succeeded for all the collections**, indicating that the export file was saved.

Table 19.6-3. Use the DDMT to Export Valids

Step	What to Do	Action to Take
1	Launch the Data Dictionary Maintenance Tool GUI	Use procedure in Section 19.6.1
2	Select the Export Valids File tab	single-click
3	Activate the Selection Criteria . . . Get list of collections area	single-click
4	In the Database List (Export Collections) dialog box, use the pull-down arrow to display the Characteristic Type: list	single-click
5	From the drop-down list, select the desired characteristic type	single-click
6	In the Database List (Export Collections) dialog box, use the pull-down arrow to display the Characteristic Name: list	single-click
7	From the drop-down list, select Archive Center	single-click
8	Use the Predicate: option button to select Is Equal To	click option
9	Move the cursor to the Value: field	single-click
10	Type the designation for your site	enter text
11	Activate the OK button	single-click
12	Select collection(s) for which valids are to be exported	double-click(s)
13	Move cursor to the File name for export: field in the 3. Export collections to file area	single-click
14	Specify path for the export file to be saved	enter text
15	Activate Save button	single-click

19.6.3 Use the DDMT GUI to Import Valid

The **Import Valid File** tab of the DDMT GUI is used for import of ASTER dataset valids. Table 19.6-4 presents the steps required to use the DDMT GUI to import valids. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the **DDMT GUI** (refer to Procedure 19.6.1, **Launch the Data Dictionary Maintenance Tool GUI**).
- 2 Click on the **Import Valid File** tab.
 - The **Import Valid File** screen is displayed.
- 3 Under **Load Valid File** click in the **File Name:** field.
 - The cursor is displayed in the **File Name:** field.
- 4 Type *<validsfilename>*.
 - *<validsfilename>* is the full path for the file to be imported. It is possible to click on the **Browse . . .** button and click to select the file.
 - The typed or selected entry is displayed in the **File Name:** field.
- 5 Click on the **Check** button.
 - The system checks the syntax of the valids file and generates any collection messages.
- 6 Under **Save Syntax Error File** click in the **File Name:** field.
 - The cursor is displayed in the **File Name:** field.
- 7 Type *<errorfilename>*.
 - *<errorfilename>* is the full path for the file to be saved. It is possible to click on the **Browse . . .** button and click to select a file.
- 8 To save the statistics or warnings to the named statistics/warning file, click on the **Save** button.
 - The file is saved.
- 9 To submit the collection to the Data Dictionary, click on the **Update** button.
 - The collection is inserted.
- 10 Click on the **Map Attributes/Keywords** tab.
 - The **Map Attributes/Keywords** screen is displayed.

- 11 Click on the **Update All Collections** button.
 - The ECS collections are updated with the new mappings. (*Note:* This update may take several minutes.)

Table 19.6-4. Use the DDMT to Import Validis

Step	What to Do	Action to Take
1	Launch the Data Dictionary Maintenance Tool GUI	Use procedure in Section 19.6.1
2	Select the Import Validis File tab	single-click
3	Move cursor to File Name: field under Load Validis File.	single-click
4	Type the full path for the file to be imported (or select file using Browse . . . button).	enter text (or click select)
5	Activate the Check button	single-click
6	Move cursor to File Name: field under Save Syntax Error File.	single-click
7	Type the full path for the file to be saved (or select file using Browse . . . button).	enter text (or click select)
8	Activate the Save button	single-click
9	Activate the Update button	single-click
10	Select the Map Attributes/Keywords tab	single-click
11	Activate the Update All Collections button	single-click

19.6.4 Troubleshooting: Check Data Dictionary Server Log Files

The Data Dictionary Maintenance Tool (DDMT) is part of the Data Management Subsystem (DMS), and uses database functions in that subsystem. If the tool cannot be launched, or does not function (e.g., cannot retrieve orders), you will need to ask the System Administrator to ensure that the Data Dictionary (DDICT) Server is functioning properly. It may be necessary to have the Database Administrator check to ensure that there are no problems with the database.

It is also possible to receive error messages when using the GUI while it is apparently functioning normally. Error messages associated with the DDMT are listed in Appendix A of 609-EMD-001, *Release 7.11 Operations Tools Manual for the EMD Project*.

Log files can often provide information that will identify possible sources of disruption in Data Dictionary server function or communications, suggesting additional checks or actions that may help resolve the problem. The procedure for checking a log file starts with the assumption that the operator has logged in to the system. Table 19.6-5 presents the steps required to launch the Data Dictionary Maintenance Tool GUI. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 To log in to the host for the server and log(s) to be examined, type `/tools/bin/ssh <hostname>` and then press the **Return/Enter** key.
 - For `<hostname>`, use **e0ins02** at the LP DAAC, **g0ins02** at GSFC, **l0ins02** at LaRC, and **n0ins02** at NSIDC.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type **yes** (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed **sshremote**, a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears; continue with Step 2.
 - If you have not previously set up a secure shell passphrase, go to Step 3.
- 2 If a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears, type your *Passphrase* and then press the **Return/Enter** key. Go to Step 4.
 - The prompt reflects the login to the selected host.
- 3 At the `<user@remotehost>`'s **password:** prompt, type your *Password* and then press the **Return/Enter** key.
 - The prompt reflects the login to the selected host.
- 4 Type `cd /usr/ecs/<MODE>/CUSTOM/logs` and then press the **Return/Enter** key.
 - The prompt reflects the change to directory `/usr/ecs/<MODE>/CUSTOM/logs`.
- 5 To view a server log, type `pg filename` and then press the **Return/Enter** key.
 - *filename* refers to the account management log file to be reviewed (e.g., **EcDmDictServer.ALOG**, **EcDmDictServerDebug.log**).
 - The first page of the log file is displayed; additional sequential pages can be displayed by pressing the **Return/Enter** key at the `:` prompt.
 - Although this procedure has been written for the **pg** command, any UNIX editor or visualizing command (e.g., **vi**, **more**, **tail**) can be used to review the log file.
 - Typically, the `<server>Debug.log` captures more detailed information than the `<server>.ALOG`. However, for some servers (e.g., **SDSRV**), there may be significant detail in the `<server>.ALOG`. It is also important to note that the **DebugLevel** setting in the `<server>.CFG` file determines the level of detail captured in the `<server>Debug.log` (**0** is off, a setting of **1** captures status and errors, a setting of **2** captures major events, and a setting of **3** is a full trace recording of all activity). If the **DebugLevel** has been set to one of the lower levels during operations, the System Administrator may set it to **3** during troubleshooting.
- 6 Review the log file(s) to determine if there are any indications of connection problems or errors at start up.
 - The **EcDmDictServerDebug.log** file for the User Profile/User Registration server may contain an error message concerning **PF Init** or some other error or problem (notify the System Administrator).

- The **EcDmDictServer.ALOG** file may contain evidence of a Sybase error (e.g., **SybaseErrorCode1 =92014;SybaseErrorMessage1 ="x0ins01_svr"** or **SybaseErrorCode2 =16;SybaseErrorMessage2 =""**) (notify the Database Administrator).

7 To exit the **pg** review of the log file, type **q** at the **:** prompt and then press the **Return/Enter** key.

Table 19.6-5. Check Data Dictionary Server Log Files

Step	What to Do	Action to Take
1	/tools/bin/ssh hostname	enter text; press Return/Enter
2	Passphrase (or Step 3)	enter text; press Return/Enter
3	Password	enter text; press Return/Enter
4	cd /usr/ecs/MODE/CUSTOM/logs	enter text; press Return/Enter
5	pg filename	enter text; press Return/Enter
6	Review log file	read text
7	To exit, type q at the : prompt	enter text; press Return/Enter

19.7 (LP DAAC Only) Creating and Managing ASTER Data Acquisition Requests

At the LP DAAC, User Services may receive requests from users for assistance with the ASTER Data Acquisition Request (DAR) Tool or the On-Demand Form Request Manager, ECS client tools used in reference to ASTER data products and services. It is essential, therefore, that LP DAAC User Services representatives be familiar with the tools, and be able to perform the functions necessary to create and submit a DAR, to create and submit a query to the XAR database, and to create requests for on-demand production of ASTER products.

The ASTER DAR tool permits authorized users to submit DARs, or requests for scheduling data acquisitions by the Advanced Spaceborne Thermal Emissions and Reflection (ASTER) Radiometer. The requests are submitted through the ECS client to the ASTER Ground Data System (GDS), located in Japan. The ASTER GDS controls scheduling of the ASTER instrument and provides the collected data as level 1A and level 1B data to the LP DAAC. Table 19.7-1 provides an activity checklist for tasks using the ASTER DAR Tool.

Table 19.7-1. Use the ASTER DAR Tool - Activity Checklist

Order	Role	Task	Section	Complete?
1	User Services/ Science Data Specialist	Launch the ASTER DAR Tool	(P) 19.7.1	
2	User Services/ Science Data Specialist	Use the ASTER DAR Tool to Prepare and Submit an ASTER Data Acquisition Request	(P) 19.7.2	

19.7.1 Launch the ASTER DAR Tool

The ASTER DAR Tool is a web-based application. Table 19.7-2 presents the steps required to launch the ASTER DAR Tool. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 At the UNIX command shell prompt, type **setenv DISPLAY *clientname*:0.0** and then press the **Return/Enter** key.
 - For *clientname*, use either the local terminal/workstation IP address or its machine name.
- 2 Start the log-in to the client server by typing **/tools/bin/ssh *e0ins02*** at the UNIX command shell prompt, and press the **Return/Enter** key.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type **yes** (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed **sshremote**, a prompt to **Enter passphrase for RSA key '*user@localhost*'** appears; continue with Step 3.
 - If you have not previously set up a secure shell passphrase, go to Step 4.
- 3 If a prompt to **Enter passphrase for RSA key '*user@localhost*'** appears, type your **Passphrase** and then press the **Return/Enter** key. Go to Step 5.
- 4 At the **<user@remotehost>'s password:** prompt, type your **Password** and then press the **Return/Enter** key.
- 5 Type **netscape** and then press the **Return/Enter** key.
 - The **Netscape** browser window is displayed.
- 6 Click in the **Netsite:** field on the Netscape window.
 - The cursor is displayed in the **Netsite:** field and its contents are highlighted to indicate that typing will replace them.

- 7 Type the entry for the ASTER DAR Tool (ADT) Uniform Resource Locator (URL) (http://dartool.ecs.nasa.gov/jdt_applet.html) directly into the **Netsite:** field, and then press the **Return/Enter** key.
 - An ASTER DAR Tool - Netscape window is displayed with the ASTER DAR Tool Welcome page.
- 8 Click on the **Launch the ASTER DAR Tool** link at the bottom of the page.
 - A Java Console dialog box with scrolling information is displayed.
 - A dialog box is displayed with **Username:** and **Password:** fields.
 - **Note:** If you have not loaded the latest Java plugin for your browser, you will be prompted to do so. Download the plugin and follow the instructions. On UNIX, run `<(sh plugin_file_name.sh)>` on the plugin file and answer the questions. Once the plugin is installed, restart the browser.
- 9 Click on the **Username:** field in the log-in dialog box.
 - The cursor is displayed in the **Username:** field.
- 10 Type `<DAAC_login_name>`.
 - The typed entry is displayed in the **Username:** field.
 - **Note:** An ECS DAAC account username and password allowing submission of a DAR must be created prior to performing this procedure. As an alternative, it is possible to access the ASTER DAR tool as "ECSGuest" to explore how most of the screens work, but it will not be possible to submit a DAR or receive a DAR ID.
- 11 Click on the **Password:** field in the log-in dialog box.
 - The cursor is displayed in the **Password:** field.
- 12 Type `<DAAC_password>`.
 - Asterisks are displayed in the **Password:** field.
- 13 Click the **OK** button or press the **Return/Enter** key.
 - An ASTER DAR tool "Welcome to the Data Acquisition Tool" dialog is displayed, with introductory information to the user. If the login is as "ECSGuest," the information indicates that submission of a DAR is not authorized, and information is given on how to apply for authorization.
- 14 Click on the **OK** button in the "Welcome" dialog box.
 - The dialog box is removed.
 - A large new window, **The ASTER DAR Tool** window, is displayed, with the **Organizer** tab as the default, showing a list of folders and the names of any previously saved or submitted DARs.

Table 19.7-2. Launch the ASTER DAR Tool

Step	What to Do	Action to Take
1	setenv DISPLAY clientname:0.0	enter text; press Return/Enter
2	/tools/bin/ssh e0ins02	enter text; press Return/Enter
3	Passphrase (or Step 4)	enter text; press Return/Enter
4	Password	enter text; press Return/Enter
5	netscape	enter text; press Return/Enter
6	Move cursor to Netsite: field	single-click
7	http://dartool.ecs.nasa.gov/jdt_applet.html	enter text; press Return/Enter
8	Activate Launch the ASTER DAR Tool link	single-click
9	Move the cursor to the Username: field	single-click
10	Type <DAAC_login_name>	enter text
11	Move the cursor to the Password: field	single-click
12	Type <DAAC_password>	enter text
13	Activate the OK button (or press Return/Enter key)	single-click (or press key)
14	Activate the OK button in the "Welcome" dialog box	single-click

19.7.2 Use the ASTER DAR Tool to Prepare and Submit an ASTER Data Acquisition Request

Table 19.7-3 presents the steps required to use the ASTER DAR Tool to prepare and submit an ASTER Data Acquisition Request. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch the ASTER DAR Tool (refer to Procedure 19.7.1 **Launch the ASTER DAR Tool**).
- 2 Click on the **Create/Edit DAR** tab.
 - The **Create/Edit DAR** functions are displayed, with the **General** nested tab displayed as default and **Untitled DAR** showing as the default in the **DAR Title:** field.
- 3 Highlight the title **Untitled DAR** in the **DAR Title:** field and type a name for the DAR to be created (*Note:* It is a good idea to incorporate the current date in the name, e.g., **JDARC/O_<date>**).
 - The typed title appears in the **DAR Title:** field.
- 4 Click on the **Science Classification:** option button and click-select the classification appropriate for the DAR.
 - *Note:* The appropriate classification should be provided by the scientist for whom the DAR is being created.

- The selected option is displayed on the **Science Classification:** button.
- 5 Click in the **Science Objective:** field.
 - The cursor is displayed in the **Science Objective:** field.
 - 6 Type a science objective.
 - *Note:* Information to be entered in this field should be obtained from the scientist for whom the DAR is being created.
 - The typed information appears in the field.
 - 7 Click on the **Maximum Cloud Coverage (%):** option button and click-select the desired value.
 - The selected value (*Note:* obtained from the scientist for whom the DAR is being created) is displayed on the option button.
 - 8 Click on the option button for **Day/Night Settings:** and click-select the desired setting.
 - The selected setting (*Note:* obtained from the scientist for whom the DAR is being created) is displayed on the option button.
 - 9 Click on the **Yes** or **No** selection button to indicate the **Avoid Clouds Flag:** preference.
 - The selection (*Note:* obtained from the scientist for whom the DAR is being created) is indicated by the filled appearance of the selected button.
 - 10 Click on the option button for **Telescope Selection:** and click-select the desired mode.
 - The selection (*Note:* obtained from the scientist for whom the DAR is being created) is displayed on the option button.
 - 11 If desired (as specified by the scientist for whom the DAR is being created), click on the **Show Gain Settings** check box and use the revealed option buttons to change any specified gain settings for the **VNIR** and **SWIR** telescopes.
 - Option buttons are displayed for **VNIR** and **SWIR** telescopes and any selected options are displayed on the option buttons.
 - 12 Click on the **Update DAR >>>** button at the bottom of the window.
 - A dialog box is displayed with a field for naming the new DAR, and showing *<Name>* as the default name, where *<Name>* is the name specified for the **DAR Title:** in Step 3.
 - 13 Click on the **OK** button of the **New Name** dialog box.
 - *Note:* If desired, the name may be changed by editing the **New Name:** field before clicking on the **OK** button.
 - The **New Name** window is removed and the parameters are saved.
 - *Note:* The new values of parameters may be observed by clicking on the **Primary Attribute** toggle icon in the **DAR Summary** window on the right side of the form.

- 14 Click on the **Spatial** nested tab.
- The **Spatial** nested tab is displayed with a map showing no designated areas of interest (AOIs).
 - The **Pan the map** button is displayed in the depressed position. *Note:* A button name is displayed when the cursor is moved over the button; the **Pan the map** button is the one with the hand icon.
- 15 If desirable or necessary to pan the map, move the cursor to a spot on the map to be designated as the center point for the map and click the left mouse button.
- The map is updated to bring the designated point to the center. During the update, the **Stop update** button indicates map rotation, and may be clicked to stop the update and leave the current center point unmoved.
 - *Note:* This step may be repeated as necessary to center the map at a desired point.
- 16 Click on the **Select Area of Interest (AOI) coordinates using the map** button.
- *Note:* A button name is displayed when the cursor is moved over the button. The **Select Area of Interest (AOI) coordinates using the map** button is the one with the irregularly shaped polygon icon.
 - The button is displayed in the depressed position and the cursor changes to the crosshairs shape when moved into the map area.
- 17 Add points to the map by clicking sequentially on the map to form a polygon.
- The clicked points are displayed on the map, connected with red lines.
- 18 Click on the **Edit Area of Interest (AOI) coordinate table** button (just below the **Select Area of Interest (AOI) coordinates using the map** button).
- An **Area of Interest (AOI)** dialog box is displayed with lat/long coordinates entered for the points selected in Step 17.
 - *Note:* An AOI may be created with precise coordinates by entering the coordinates in the **Area of Interest (AOI)** box instead of clicking the points on the map.
- 19 Click on the **Update DAR >>>** button.
- The changed spatial parameters are updated in the DAR Summary display area under the **Spatial** heading.
- 20 Click on the **Temporal** nested tab
- The **Temporal** nested tab is displayed.
- 21 In the **DAR Lifetime:** area, highlight one of the numbers in the **Start:** field and use the arrow keys or type an entry to specify a desired number; then do the same for other numbers in the **Start:** field until the desired beginning date is identified.
- *Note:* The fields represent Month, Day, and Year.
 - The Start: date is displayed as entered.

- 22 In the **DAR Lifetime:** area, highlight one of the numbers in the **End:** field and use the arrow keys or type an entry to specify a desired number; then do the same for other numbers in the **End:** field until the desired ending date is identified.
- *Note:* The fields represent Month, Day, and Year.
 - The **End** date is displayed as entered.
- 23 Click on the first **Repeat Interval (Note 1)** field and use the arrow buttons or type an entry to change the number to the desired number of days for the repeat interval. If the field hours are to be changed (not normally used, as stated in Note 1 on the window), click in the second **Repeat Interval (Note 1)** field and use the arrow buttons or type an entry to change the number to the desired number of hours for the repeat interval.
- The **Repeat Interval (Note 1)** field displays the entered number(s).
- 24 Click on the first **Acquisition Window (Note 1)** field and use the arrow buttons or type an entry to indicate the desired number of days for the length of the window. If the field hours are to be changed (not normally used, as stated in Note 1 on the window), click in the second **Acquisition Window (Note 1)** field and use the arrow buttons or type an entry to indicate the desired number of hours for the length of the window.
- The **Acquisition Window (Note 1)** field displays the entered number(s).
- 25 Click on the **Update DAR >>>** button.
- The changed spatial parameters are updated in the DAR Summary display area under the **Temporal** heading.
- 26 If the scientist for whom the DAR is being created has specified coverage options, click on the **Coverage** nested tab.
- The **Coverage** nested tab is displayed.
- 27 Click on any selection button(s) necessary to indicate the scientist's preference(s) for coverage options.
- Any selection is indicated by the filled appearance of the selected button.
 - *Note:* It is necessary to specify the **Yes** selection for **Multi-Temporal Observations:** if the scientist wants complete coverage of the AOI for each acquisition window specified on the **Temporal** nested tab.
- 28 Click on the **Update DAR >>>** button.
- The changed spatial parameters are updated in the DAR Summary display area under the **Coverage** heading.
- 29 If the scientist specifies a telescope look angle or an acceptable sun elevation constraint for the DAR, click on the **Geometry** nested tab and enter the specified values.
- The **Geometry** nested tab displays the specified values.

- 30** Click on the **Update DAR >>>** button.
- The changed spatial parameters are updated in the DAR Summary display area under the **Geometry** heading.
- 31** If the scientist specifies any need and justification for special treatment for the DAR, click on the **Priority** nested tab and specify the treatment and justification.
- The **Priority** nested tab displays the specified information.
- 32** Click on the **Update DAR >>>** button.
- The changed spatial parameters are updated in the DAR Summary display area under the **Priority** heading.
- 33** On the **Create/Edit DAR** tab, click on the **Submit DAR >>>** button.
- A confirmation dialog box is displayed with the information that "The DAR is about to be submitted to GDS."
- 34** To confirm the DAR submit action, click on the **Yes** button in the warning box.
- The confirmation dialog box is removed.
 - The ASTER reply **DAR ID** dialog box is displayed.
- 35** Click on the **OK** button in the **DAR ID** dialog box.
- The **DAR ID** dialog box is removed and the **ASTER DAR Tool** window is displayed as the active window.
 - The user receives email confirming that the DAR was received and containing a subscription ID.
- 36** To exit from the **ASTER DAR Tool**, select the **Netscape** window; then follow menu path **File→Exit**.
- The **ASTER DAR Tool** windows and the browser window are removed.

Table 19.7-3. Use the ASTER DAR Tool to Prepare and Submit an ASTER Data Acquisition Request (1 of 3)

Step	What to Do	Action to Take
1	Launch the ASTER DAR Tool	Use procedure in Section 19.7.1
2	Select Create/Edit DAR tab	single-click
3	Replace Untitled DAR with a name for the DAR	drag cursor (highlight); enter text
4	Use Science Classification: option button to select appropriate classification	click option
5	Move the cursor to the Science Objective: field	single-click
6	Type a science objective	enter text

Table 19.7-3. Use the ASTER DAR Tool to Prepare and Submit an ASTER Data Acquisition Request (2 of 3)

Step	What to Do	Action to Take
7	Use the Maximum Cloud Coverage (%) : option button to select a value for maximum cloud coverage	click option
8	Use the Day/Night Settings : option button to select a Day/Night setting	click option
9	Select Yes or No for Avoid Clouds Flag :	single-click
10	Use the Telescope Selection : option button to select a telescope mode	click option
11	Optional: Show Gain Settings and select options	single-click; click options
12	Activate Update DAR >>> button	single-click
13	Activate OK button in New Name dialog box	single-click
14	Select Spatial nested tab	single-click
15	To pan the map, select new center point	single-click
16	Select Select Area of Interest (AOI) coordinates using the map mode	single-click
17	Add points to form a polygon on the map	sequential clicks
18	Optional: Select Edit Area of Interest (AOI) coordinate table mode	single-click
19	Activate Update DAR >>> button	single-click
20	Select Temporal nested tab	single-click
21	In the DAR Lifetime : area, replace number(s) in the Start : field with value(s) to designate the desired beginning date	drag cursor (highlight); enter text
22	In the DAR Lifetime : area, replace number(s) in the End : field with value(s) to designate the desired ending date	drag cursor (highlight); enter text
23	Type a value in the Repeat Interval (Note 1) field to designate the desired number of days for the repeat interval (or use the arrow buttons)	enter text
24	Type a value in the Acquisition Window (Note 1) field to indicate the desired number of days for the length of the window (or use the arrow buttons)	enter text
25	Activate Update DAR >>> button	single-click
26	Select Coverage nested tab	single-click
27	Use selection button(s) to indicate the scientist's preference(s) for coverage options.	click(s)
28	Activate Update DAR >>> button	single-click
29	Select Geometry nested tab and enter any specified data	single-click; enter values
30	Activate Update DAR >>> button	single-click
31	Select Priority nested tab and enter any specified data to indicate treatment and justification	single-click; enter text
32	Activate Update DAR >>> button	single-click

Table 19.7-3. Use the ASTER DAR Tool to Prepare and Submit an ASTER Data Acquisition Request (3 of 3)

33	On the Create/Edit DAR tab, activate the Submit DAR>>> button	single click
34	Activate the Yes button in the confirmation warning	single-click
35	Activate the OK button in the DAR ID dialog box	single-click
36	In the Netscape window, follow menu path File→Exit	clicks

19.8 On-Demand Product Requests

Users can use an HTML interface to submit requests for the creation of ASTER high-level products, including, if the user is authorized, Digital Elevation Models (DEMs), and non-standard Level 1B products. For those users who need the authorization, it is granted using the User Registration GUI as part of the user registration process. To provide these on-demand products, the EOS Data Gateway and the Planning, Data Processing, and System Management Subsystems of ECS at the LP DAAC include specific support capabilities.

- EOS Data Gateway (EDG), which is the data search and order tool, is configured to collect the user-specified parameters for the ASTER on-demand request.
- Planning (PLS) provides a server, the On-Demand Product Request Manager (ODPRM), for creating and queuing on-demand production requests.
- Data Processing (DPS) updates the status for high-level processing of on-demand requests.
- System Management Subsystem (MSS) includes on-demand requests in its Order Tracking Database and Data Order Tracking Tool.

User Services at the LP DAAC may be called upon to assist users in use of the EDG for submitting on-demand processing requests, and to use the Data Order Tracking Tool to provide the status of on-demand product requests or cancel them. Section 19.3.1 of this document addressed the use of the EDG tool in searching and ordering data. To create an on-demand processing request, a user uses the EDG to conduct a search for appropriate input data (e.g., AST_L1B granules); any appropriate granules for which on-demand processing is available will show the higher-level data products among the ordering options. On the results listing, the user selects one or more granules for which on-demand processing is desired to obtain a higher-level data product and adds the granule(s) to the “shopping cart.” When the user accesses ordering options, the listed options include higher-level products that may be produced from the initially located granule. Table 19.8-1 provides an activity checklist for the task of creating an on-demand product request.

Table 19.8-1. Creating On-Demand Product Requests - Activity Checklist

Order	Role	Task	Section	Complete?
1	User Services/ Science Data Specialist	Use the EDG for Submitting an ASTER On-Demand Request	(P) 19.8.1	

19.8.1 Use the EDG for Submitting an ASTER On-Demand Request

Table 19.8-2 presents the steps required to use the EDG for Submitting an ASTER On-Demand Request. If you are already familiar with the procedure, you may prefer to use this quick-step table. If you are new to the system, or have not performed this task recently, you should use the following detailed procedure:

- 1 Launch Netscape, access the EDG tool, and conduct a search for the desired input data to be processed to generate a higher-level data product (see procedure **Search and Order Data Using the EDG Search and Order Tool**, section 19.3.1, Steps 1 – 21).
- 2 When the results of the search provide one or more appropriate granules, click in the selection checkbox to the left of any desired granule.
 - The checkbox is filled to indicate its selection.
- 3 Click on the **Add selections to cart** button.
 - The **Data Quality Summary** window is displayed with a description of the data type for the selected granule.
- 4 Click on the **Continue to Shopping Cart** button.
 - The **Shopping Cart: Step 1: Choose Ordering Options** window is displayed.
- 5 Click on the **Choose Options** link in the **Order Options** column next to the desired granule.
 - A list of ordering options is displayed, including options for higher-level data products that may be produced from the selected granule.
- 6 Click on the desired option specifying the product and distribution media type.
 - The window displays a list of specific media for the higher-level data granule and related granules.
- 7 Click on the selection box(es) for any desired media type(s)
 - The checkbox is filled to indicate its selection.
- 8 Enter any mandatory information to specify required processing/ordering options.
 - The fields display entered information.
- 9 Click on the **Ok! Accept my choice & return to the shopping cart!** button.
 - The **Shopping Cart: Go to Step 2: Order Form** window is displayed.
- 10 Complete and submit the order using standard procedures (see procedure **Search and Order Data Using the EDG Search and Order Tool**, section 19.3.1, Steps 29 – 38).
 - The **order** is submitted and an **Order Submitted!** confirmation screen is displayed.

Table 19.8-2. Use the EDG for Submitting an ASTER On-Demand Request

Step	What to Do	Action to Take
1	Launch Netscape and the EDG; search for desired input data for higher-level product	Use Steps 1 – 21 of procedure in Section 19.3.1
2	In results listing, select desired granule	single-click
3	Activate Add selections to cart button	single-click
4	Activate Continue to Shopping Cart button	single-click
5	Select Choose Options link	single-click
6	Select product and distribution media type	single-click
7	Use checkboxes to indicate desired media type(s)	click(s)
8	Specify processing/ordering options	click; enter text
9	Activate Ok! Accept my choice & return to the shopping cart! Button	single-click
10	Complete and submit the order normally	Use Steps 29-38 of procedure in Section 19.3.1

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