# 18. Distribution Concepts

## 18.1 OMS/Distribution Overview

Data distribution is accomplished at the Distributed Active Archive Centers (DAACs).

The Order Manager subsystem (OMS) manages all orders arriving via the following paths shown below: Data Distribution orders are submitted to the Order Manager Server. In Release 7.20, all distribution orders are processed by the OMS.

- Data Management subsystem's (DMS) V0 Gateway (V0 GTWAY), (i.e., submitted by EDG and ECHO users).
- data orders submitted by the Spatial Subscription Server (SSS).
- data orders from Machine to Machine Gateway (MTMGW).
- orders from the EPD Server (i.e., external subsetter request and S4PM) and
- orders from the Data Pool_ (including HEG orders).

Once a request comes into the OMS subsystem, the server validates the request. Upon successful validation, the server stages the order in Data Pool storage area.

Ftp/Scp Pull requests, links are created from the staged files to the directory in the Data Pool storage while for Ftp/SCP Push requests, the OMS Ftp Push driver directly distributes the data.

Physical media requests are created on the physical media by the Production Module Device. Upon successful shipment, OMS sends a Distribution Notice to the end user.

An order is considered shipped as soon as the request status is updated to "Shipped" in the MSS Database;

- FtpPull orders - The request status is updated to "Shipped" after the order is staged and file links are made in the Data Pool storage.
- FtpPush orders – The request status is "Shipped" after Order Manager Server finishes pushing all the data associated to the order to its destination.
- Physical media orders - The order is shipped when the Operator updates the request status to "Shipped" through the OMS GUI).

Special orders: HEG and External Subsetter orders require further processing by the HEG Server or the External Subsetter.

- HEG orders - The Order Manager creates HEG requests per granule based on the processing instructions in the original HEG order. The requests are submitted to the HEG Server through the HEG API. HEG server. It processes the HEG requests and returns the

final output to the Order Manager Server which then distributes the final output to the end user.

- External Subsetter Orders - The External Subsetter creates output granules which are associated then, associated with the Order by the EPD Server. These output granules are later distributed by the Order Manager Server.

The Order Manager Subsystem also includes a database that stores all order information as soon as an order is received by ECS and before its receipt is acknowledged. This allows operators to resubmit an order if it encounters errors downstream, and allows the Order Management Service to perform some up front checks on the order and alert the operators if their intervention is needed.

The OMS performs validation of the orders it receives and dispatches each validated request to the appropriate order-fulfillment service. The OMS manages distribution of data from the Data Pool (DPL) by Ftp/SCPPush, FtpPull, or the following types of physical media:

- Digital Linear Tape (DLT).
- DVD (Digital video disk)
- Compact disk (CD).

## 18.2 Changes to OMS/Distribution since Release 7.20

**The Data Distribution Subsystem (DDIST) is decommissioned**

- SDSRV and STMGT (DDIST) are removed from distribution.
- V0 Gateway registers external processing orders with OMS.
- EPD registers external processing outputs with OMS.
- OMS distributes external processing outputs like any other data (e.g., HEG processing outputs).

**Operator Impacts**

- OMS displays external processing orders - DAAC can associate labels.
- DAAC can configure separate DN preamble, FTP Pull expiration.
- Operator actions disabled until OMS has control; No resubmits.
- Operator can stop/resume acceptance of orders for external processor.

**Distribution via Secure Copy**

- Scp distribution handled inside OMS (no more S3).
- Scp queues handled like ftp queues.
- Scp destinations handled like ftp destinations (additional configuration parameters).
- OMS GUI does not allow operators to change distribution from other media to scp.

**Support for Bulk Browse Orders**

- Bulk Browse orders are handled like orders for any other data type.
- Primary browse archive granules assumed to be on disk.
- Browse granules copied to a hidden temporary area in the Data Pool.
    - Does not use Data Pool insert.
- Distribution of ODL (.met) Instead of XML Metadata Files in Distribution.
    - V0 Gateway requests browse granule from the integrated browse service (DPL CI).
    - Primary browse archive assumed to be on disk.
    - Browse granule can be copied to temporary Data Pool location.
    - Browse granule is returned to the V0 Gateway.

The context diagram (Figure 18.2-1) shows a generalized (high-level) view of the system. The Order Manager Subsystem (OMS) architecture diagram (Figure 18.2-2) illustrates the relationship of the Order Manager with the various subsystems on both the input (order-receiving) and output (order-dispatching) sides of order management.

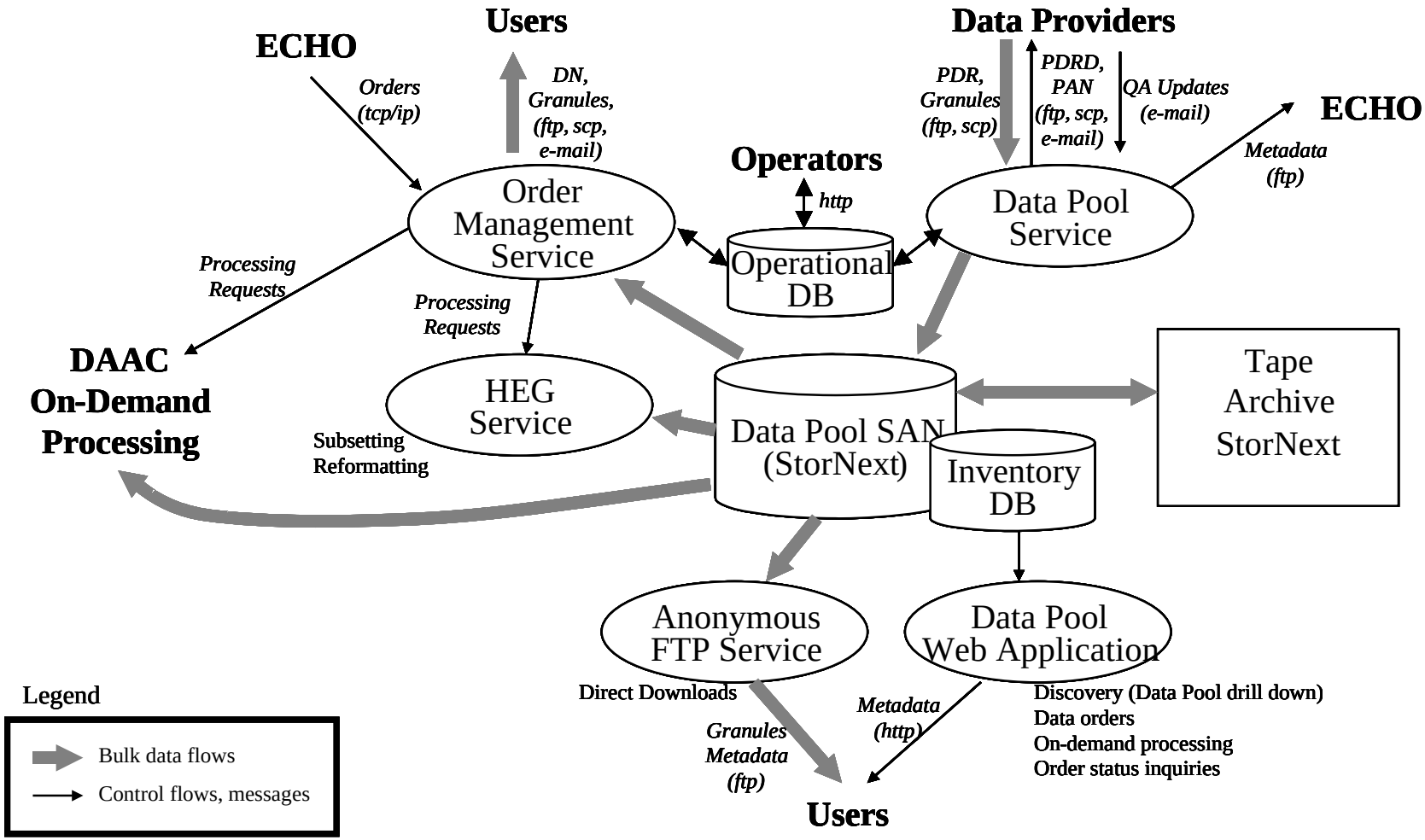


***Figure 18.2-1. System Context Diagram***

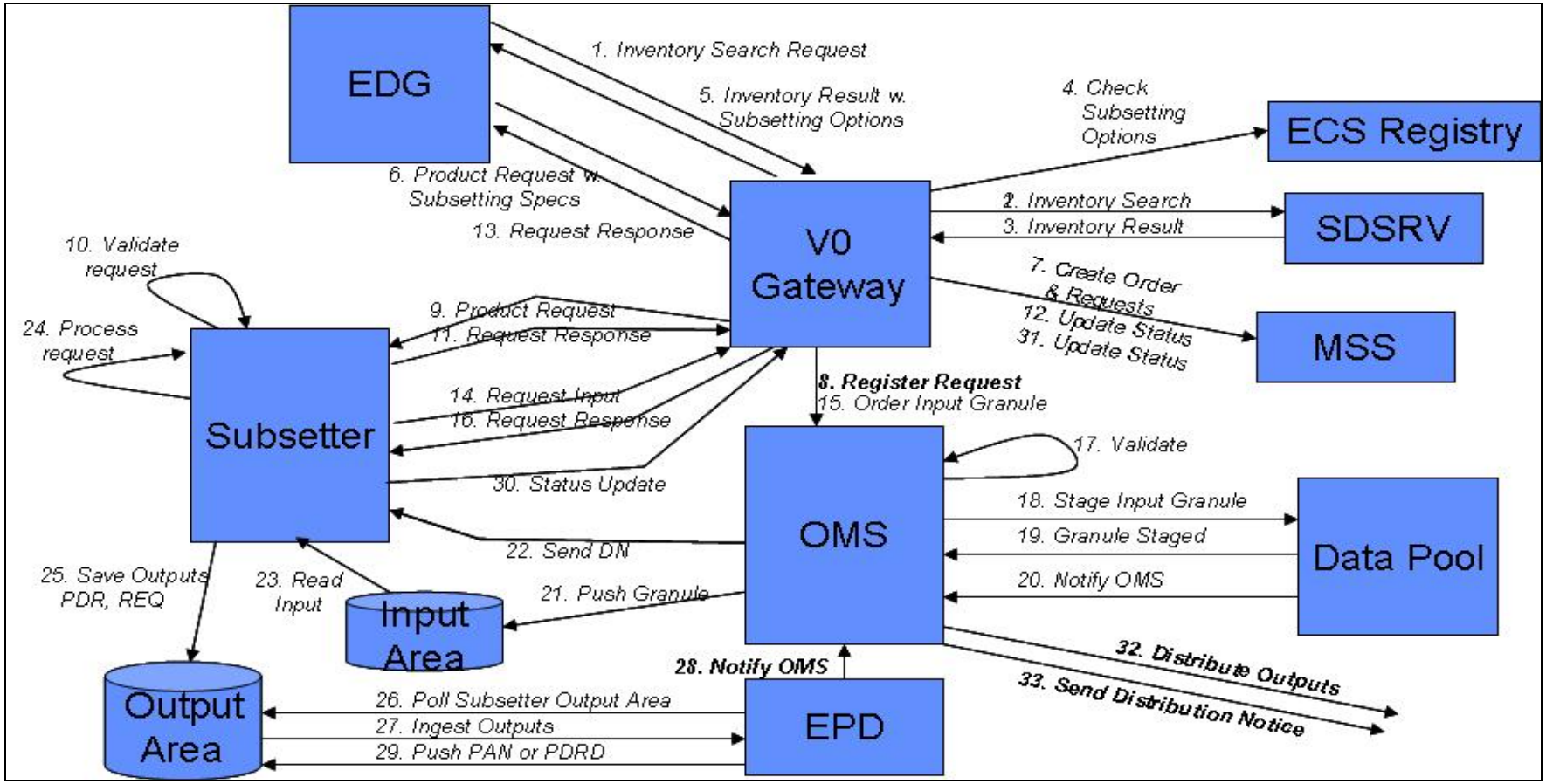


***Figure 18.2-2. Order Manager Subsystem (OMS) Contect Diagram***

## 18.3 Order Manager Subsystem (OMS)

The Order Manager Subsystem (OMS) performs the following functions:

- Manages all the orders arriving via either the V0 Gateway (GTWAY), the Machine-to-Machine Gateway, the Data Pool Ingest [including hard-media orders and HDF-EOS to GeoTIFF Conversion Tool (HEG) orders], the Spatial Subscription Server (NBSRV), or the SCLI.
- Performs validation of the orders it receives before submitting the applicable requests to the order-fulfilling services.
- Queues HEG requests and dispatches individual line items to HEG services, which subset the individual line items.
- Media type or Earth Science Data Types (ESDTs) of a request must be configured for Synergy IV processing in 7.20. The order manager server should be configured for Synergy IV mode and dispatches each validated request to SDSRV.
    - The implementation of the Release 7.11 bulk browse removed the need for Synergy III processing by ESDT.
    - Until OMS distribution via scp has been completely implemented, any DAAC supporting scp distribution requires a media type exception for scp requests.
    - OMS stages each order to Data Pool storage (and creates links from staged files to the FtpPull directory in the Data Pool storage if the distribution type is FtpPull), distributes the order to the appropriate service depending on whether distribution type is media or Ftp/ScpPush, then sends a Distribution Notice to the end user when the order is considered shipped.
    - If the distribution type is FtpPull, OMS stages each order to Data Pool storage and creates links from staged files to the FtpPull directory in the Data Pool storage.
    - Then OMS executes the OMS Bulk Browse Utility, which extracts the browse cross-reference and copies into the Data Pool Storage Area Network (SAN) any relevant browse granule files that don’t reside there already.
    - The utility updates the file list for the granule in OMS to include the new files. Then OMS performs the remainder of the distribution as usual. To OMS the granule looks no different than any other multi-file granule. The orders that arrive via the V0 Gateway are those that have been submitted by EDG, EOSDIS ClearingHOuse (ECHO), or ASTER Ground Data System (GDS) users.
        1. V0 Gateway registers external processing orders with OMS.
        2. EPD registers external processing outputs with OMS.
        3. OMS distributes external processing outputs like any other data.

4. OMS displays external processing orders

Order Manager Server has four major components:

1. Sybase ASE Server.
   - COTS software application that handles order management-related interactions (including insertion and retrieval of data) with the Order Management database.
2. Order Manager (OM) GUI.
   - GUI that allows operators to view and modify requests that the Order Manager Server has placed on hold because they require operator intervention.
   - In addition, the GUI allows operators to suspend, resume, cancel, resubmit, or change the priority of requests.
3. Physical Media Device - Luminex).
   - Transfers digital products to any of the following types of physical media:
     - CD-ROM.
     - DVD-ROM.
   - Prints labels and inserts for physical media distribution:
     - Tape labels.
     - CD-ROM and DVD-ROM labels (printed on the disks).
4. OMS Bulk Browse Utility.
   - Extracts the browse cross-reference (after DPL has staged the ECSBBR cross-reference file in the Data Pool hidden directory structure) and copies into the Data Pool (SAN) any browse granule files that are not there already.
     - Browse granule files are copied in the original Browse format (i.e., HDF not jpeg).
   - Updates the file list for the granule in OMS to include the files copied to the Data Pool.

Distribution personnel start the OMS Configuration Command Line Interface (OMS Configuration CI) using following start-up script that is available in the /usr/ecs/*MODE*/CUSTOM/utilities directory on the Linux host:

- EcOmConfig.pl

Distribution personnel start the Order Manager Command Line Utility using the following start-up script that is available in the /usr/ecs/*MODE*/CUSTOM/utilities directory on the Linux host.

- EcOmSrCliDriverStart

## 18.4 Logging in to System

Logging in to system hosts is accomplished from a UNIX command line prompt.Logging in to system hosts starts with the assumption that the applicable hosts are operational and the Operator has logged in to a workstation.

***Table 18.4-1. ESDT Descriptor - Activity Checklist***

| Order | Role | Task | Section | Complete? |
|---|---|---|---|---|
| 1 | Distribution Technician | Logging into ECS | (P) 18.4.1 | |

### 18.4.1 Logging into ECS

**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** In the terminal window (at the command line prompt) log-in to the appropriate host by entering:

**ssh <host name>**

- 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 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 4.
- 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 4.

**4** If a prompt for **<user@remotehost>'s password:** appears, enter:

**<password>**

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## 18.5 Launching the Order Manager GUI

- Release 7.20 Order Manager (OM) GUI provides operators with access to the Order Manager database. It has the same basic functionality of the Synergy V version, but with many enhanced and additional features.
- The GUI is based on web standards. It performs most of its functions by accessing the database directly, in contrast to most current ECS operator GUIs that interface with a server.
- The GUI allows operators to view and modify requests that have been placed on hold by the Order Manager Server because they require operator intervention, and resubmit requests or portions of a request that have failed.
- The GUI incorporates processing of physical media requests and management of HEG orders.
- For Release 7.20, the OM GUI allows operators to configure ODL metadata users, external subsetter and scp policy.
- The System Management Subsystem (MSS) Order tracking GUI will still be independent of the OM GUI.

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, some buttons and links have been disabled so it is not possible to perform certain actions or access certain pages.

The **OM GUI** provides both full-capability and limited-capability operators with the ability to perform the following functions:

- Monitor for operator interventions and physical media distribution (PMD) interventions.
- View completed operator actions and interventions.
- View lists of all distribution requests, ftp push distribution requests, staging distribution requests, or historical distribution requests.

- Filter distribution requests by combinations of order id, request id, status, destination, media type, user id, first name, last name, e-mail address, or creation time.

View detailed distribution request information.

- View the profile of a user associated with an ECS order.
- View suspended FTP Push/SCP Destinations.
- View details for suspended FTP Push/SCP Destinations including ftp push operations that caused the suspension and ftp push requests that are not in a terminal state.
- View bundling order information (link to the Spatial Subscription Server GUI).
- Monitor for interventions associated with HDF-EOS to GeoTIFF Conversion Tool (HEG) processing.
- View pending HEG granules.
- Check HEG order status.
- Monitor for operator alerts caused by ftp push operations, data pool file system errors, archive server errors, or archive tape errors.
- Monitor processing queue states.
- Monitor staging states.
- Monitor the current staging status by media type or FTP Push/SCP Destination.
- View OM server, OM database, and HEG parameters.
- View settings for each media type.
- View PMD device, printer, and production module configurations.
- Get general and context-based help for all **OM GUI** functions.

In addition to the preceding actions, full-capability operators can perform the following actions:

- Modify request parameter values associated with operator interventions and PMD interventions.
- Perform the following actions with respect to distribution requests (as appropriate):
  - Resubmit.
  - Suspend.
  - Resume.
  - Cancel.
  - Stop.
- Resume suspended FTP Push/SCP Destinations.

- Suspend/resume processing queue states.
- Suspend/resume staging states.
- Respond to open HEG interventions.
- Modify HEG order status.
- Configure OM server, OM database, and HEG parameters.
- Configure the aging parameters for each ECS priority level.
- Configure settings for each media type.
- Define and configure FTP Push/SCP Destinations, as well as the "policies" for those destinations.
- Configure PMD devices, printers, and production modules.
- Perform the following actions with respect to PMD requests (as appropriate):
  - Activate.
  - Fail.
  - Annotate.
  - Confirm mount media.
  - Fail mount media.
  - Confirm media collection complete.
  - Fail media collection.
  - Activate QC
  - Mark shipped.
  - Confirm media dismounted.
  - Confirming package assembled.
  - Mark package not assembled.
  - Print outputs.

***Table 18.5-1. ESDT Descriptor - Activity Checklist***

| Order | Role | Task | Section | Complete? |
|---|---|---|---|---|
| 1 | Distribution Technician | Launch Order Manager GUI | (P) 18.5.1 | |

### 18.5.1 Launch the Order Manager GUI

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OM GUI is certified for use with any browser supporting the Mozilla 5 standard. Other browsers that can be used , include Netscape 7+, Firefox, and others. The OMS GUI was not designed to work with MS Internet Explorer or older versions of Netscape. JavaScript is an integral part of the OM GUI, and as such it must be enabled in the client browser

**1** Access a terminal window logged in to a host that has access to an availble web site. For Release 7.20, the OM GUI is certified for use with any browser supporting Firefox.

**2** Type your browser.

**-** press **Return/Enter**.

**3** From your web browser type the URL for the OM GUI web page with the format:

`http://server:port`

Example: `http://f0dps01f4dp101.hitc.com:22401`

There is no need to specify a cgi-bin directory or a specific HTML page. The GUI will open itself in a new window and will close the parent window. If run on a Windows or Linux platform, the parent window may not close

.

**4** type **http://*host*:*port*** in the browser's **Location (Go To)** field then press **Return/Enter**.

- The security login **Prompt** (Figure 18.5-1) is displayed.

**5** Type the appropriate user name in the **User Name** box of the **Security Login Prompt**.

**6** Type the appropriate password in the **Password** box of the security login **Prompt**.

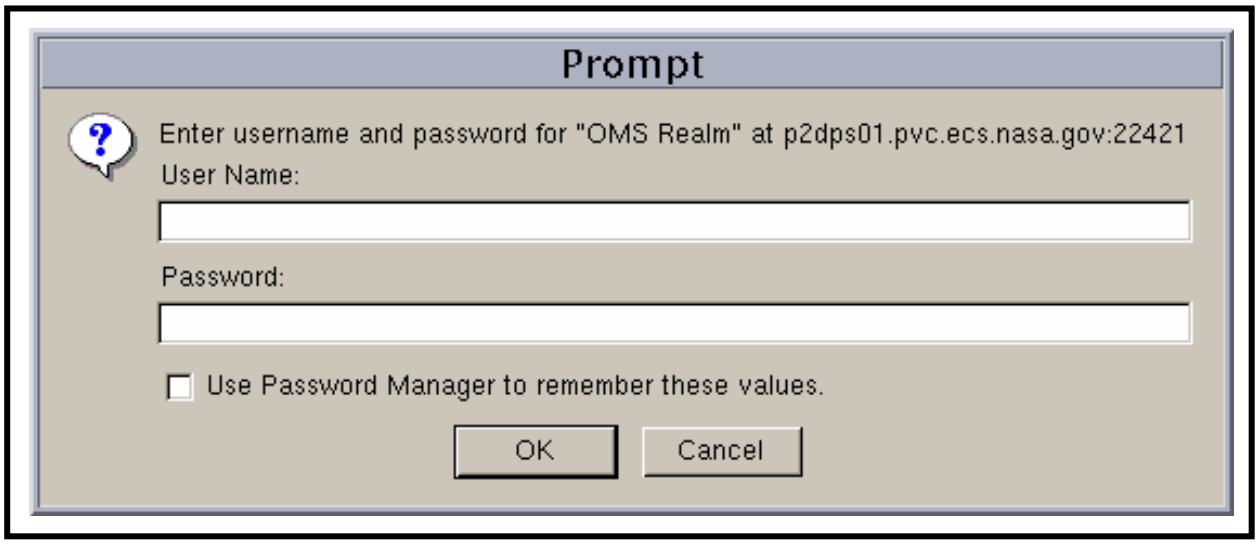


***Figure 18.5-1. Security Login Prompt***

**7** 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**] (Figure 18.5-2) is displayed.
- **Cancel** - to dismiss the dialogue box without logging in.
  - The dialogue box is dismissed.

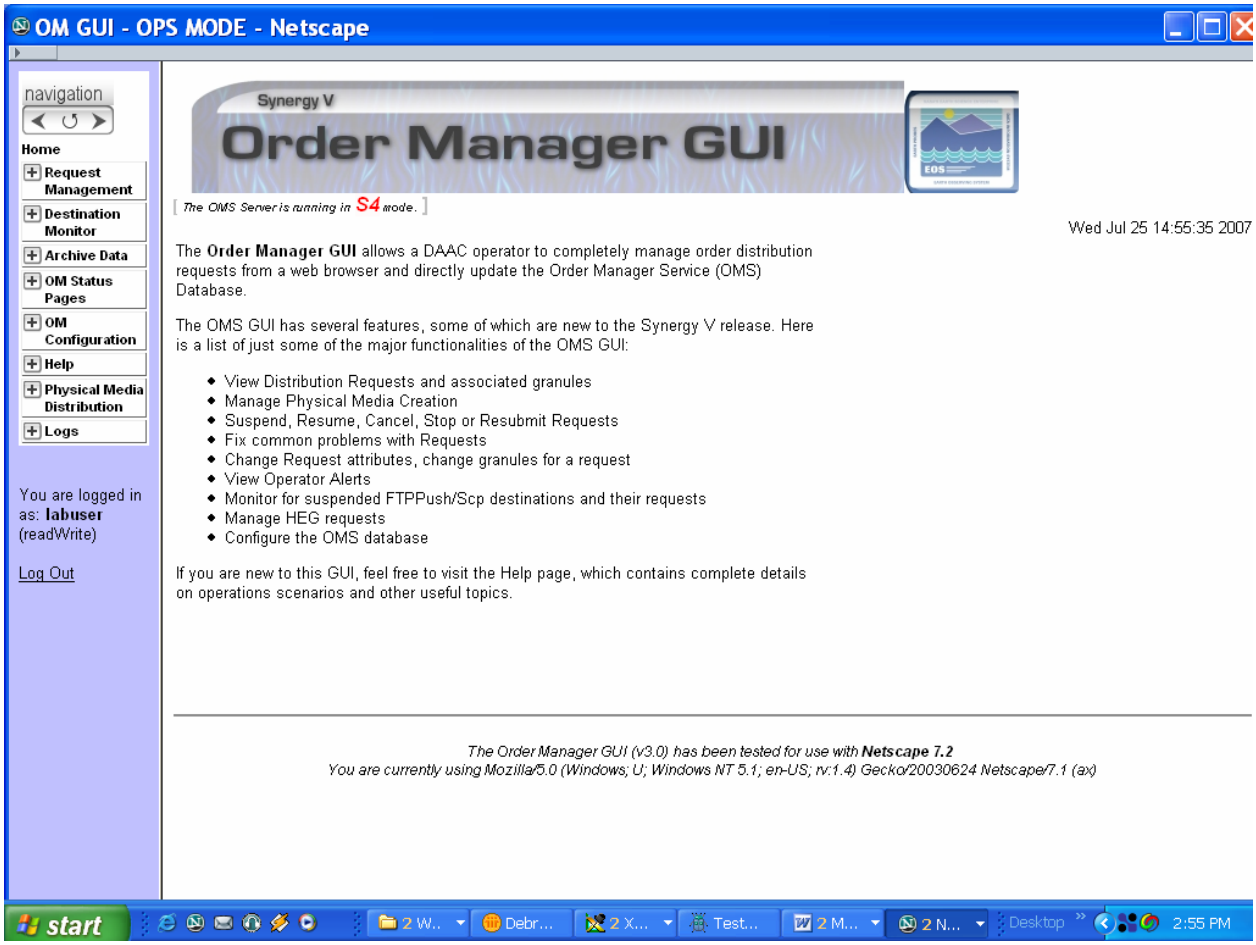


***Figure 18.5-2. Order Manager Page***

## 18.6 Monitoring/Controlling Order Manager Operations

Most of the Order Manager activities which the Operator is involved are performed using the **OM GUI**.

**OM GUI Services for 7.20 Navigation Menu are as follows:**

- **Request Management**
  - **Open Interventions**
  - **HEG Interventions**
  - **Completed Actions & Interventions**
  - **Distribution Requests**

## 18.7 Viewing Open Intervention Information on the OM GUI

The **Open Interventions** page (Figure 18.7-1) 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.)

### 18.7.1 Viewing Open Intervention Information on the OM GUI

The procedure for viewing open intervention information on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

***Table 18.7-1. Open Interventions - Activity Checklist***

| Order | Role | Task | Section | Complete? |
|---|---|---|---|---|
| 1 | Distribution Technician | How to View Open Intervetion Information on OM GUI | (P) 18.7.1 | |
| 2 | Distribution Technician | How to Set Refresh Options | (P) 18.7.2.1 | |
| 3 | Distribution Technician | Response to an Open Intervention | (P) 18.7.3.1 | |

#### 18.7.1.1 How to View Open Intervention Information on the OM GUI

**1** Click on the **Request Management** link in the navigation frame of the **OM GUI**.

- The **Request Management** menu is expanded.

**2** Click on the **Open Interventions** link in the navigation frame of the **OM GUI**.

- The **Open Interventions** page (Figure 18.7-1) is displayed.
  - The **Listing** table has the following columns:
  - **Order Id.**
  - **Request Id.**
  - **Media Type**
  - Request Size(MB)
  - **Status.**
  - **Worked by.**

- **Created.**
- **Acknowledged.**
- **Explanation(s)**
- IntervType

**3** 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.

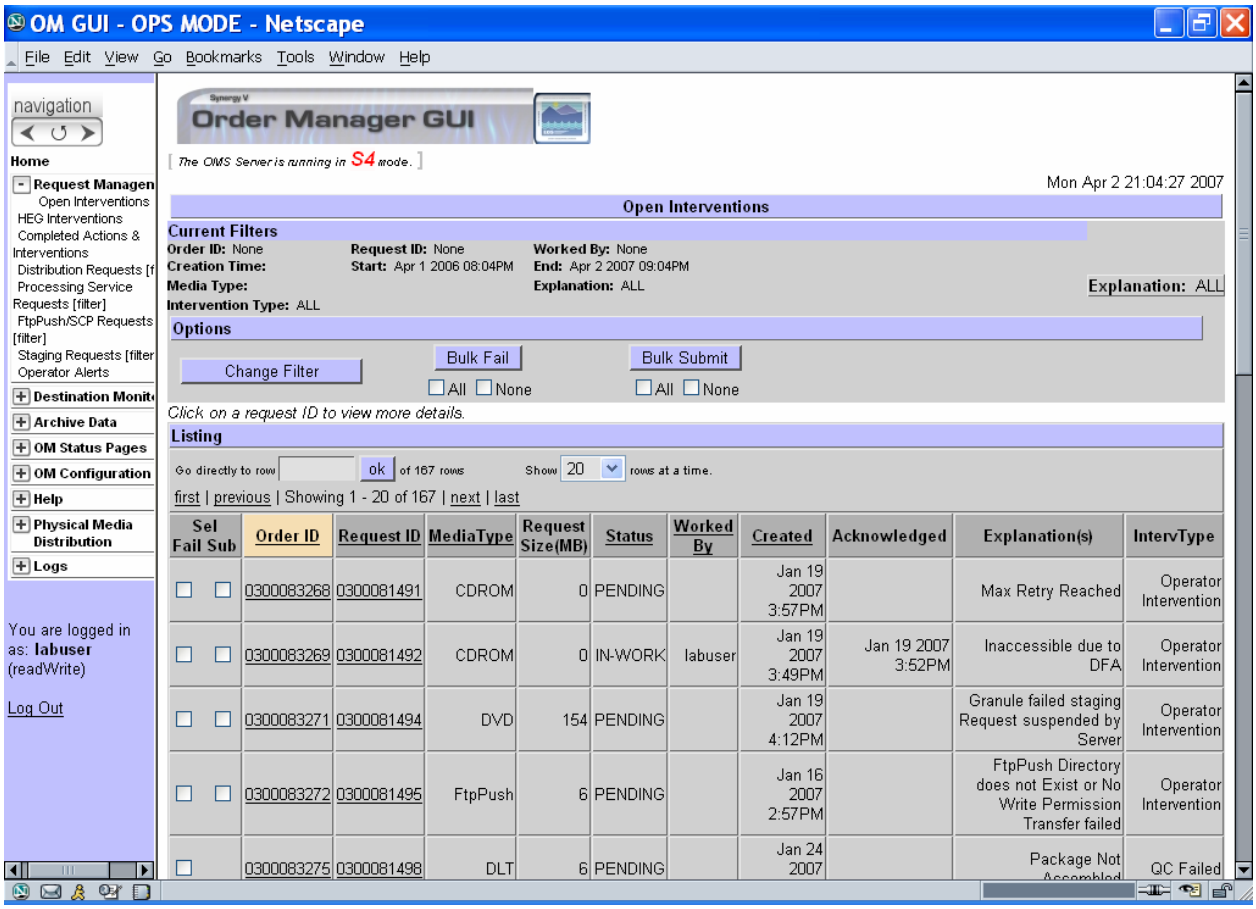


***Figure 18.7-1. Open Interventions Page***

- 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.

- Clicking on a specific Order ID brings up a screen containing more detailed data concerning that particular order.
- The **ECS Order** page (Figure 18.7-2) 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**.
  - Clicking on the ← icon in the **OM GUI** navigation frame causes the **Open Interventions** page to be redisplayed.

- 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
- 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 procedure for **Setting Refresh Options on OM GUI Pages** (subsequent section of this lesson).
- To manually update (refresh) the data on the screen, click on the ↺ icon in the **OM GUI** navigation frame.

- The 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.

**4** 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  brings up an **Open Intervention Detail** page

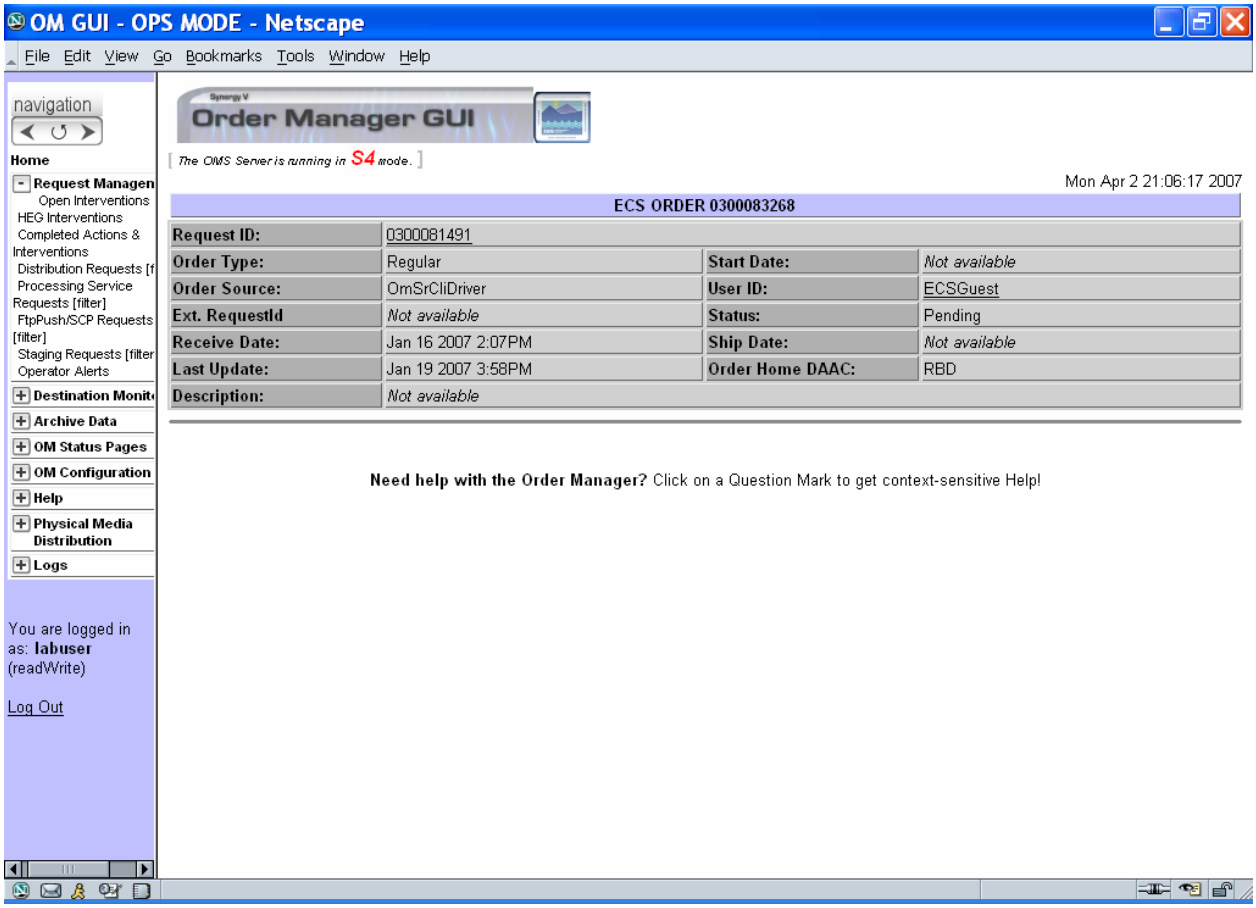


***Figure 18.7-2. ECS Order Page***

**5** Observe information displayed on the **Open Intervention Detail** page (Figure 18.7-1).

- 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).**

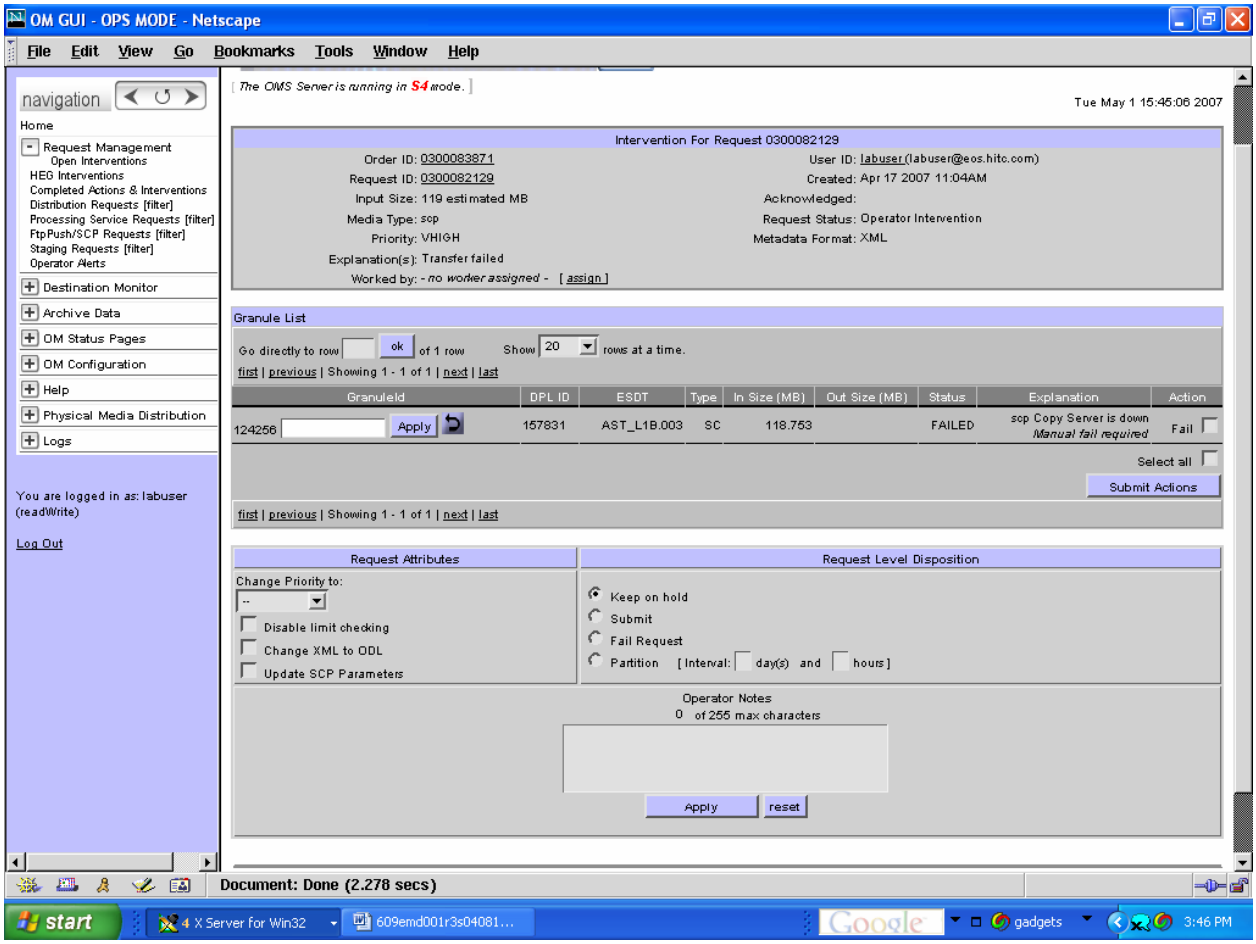


***Figure 18.7-3. Open Intervention for Request Page***

- **Worked by.**
- **Created.**
- **Acknowledged.**
- **Status.**

- **User String:**
- **Worked by:**
- **assign** link or **change** link.

- **Granule List.**
  - **DBID**, text box (for entering new DBID), and **Apply** button (if applicable).
  - **ESDT *Type*.**
  - **Size (MB).**
  - **Status.**
  - **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/scp Parameters** box (if applicable; i.e., if the current distribution medium is FTP push/SCP).
- **Request Level Disposition.**
  - **Keep on hold.**
  - **Submit.**
  - **Fail Request.**
  - **Partition**
  - (Partition) **Interval: *d* days *h* hours** boxes.
- **OPERATOR NOTES**.
  - Text box (for entering comments).
- **Apply** button.
- **Reset** button.

- Clicking on the ← icon in the **OM GUI** navigation frame causes the **Open Interventions** page to be redisplayed.

**6** To work on the intervention being displayed on the **Open Intervention Detail** page, perform the procedure for **Responding to an Open Intervention** .

**7** To view the details of another open intervention first click on the ← icon in the **OM GUI** navigation frame then return to Step 2.

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

**8** To start the process of logging out (if applicable) 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) 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.

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### 18.7.2 Setting 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.

The procedure for setting refresh options starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched.
- One of the following **OM GUI** pages is being displayed:
  - **Open Intervention.**
  - **Distribution Requests.**
  - **FTP push/SCP Distribution Requests.**
  - **Staging Distribution Requests.**
  - **Operator Alerts.**

- **OM Queue Status.**
- **Staging Status by Media Type.**
- **Staging Status by FTP Push/SCP Destination.**

### 18.7.2.1 How to Set Refresh Options on OM GUI Pages

**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, 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.**
    - 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.
  - **off.**
    - 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**), click on the **Refresh screen every *x* minutes** option button to display a menu of numbers of minutes then 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.

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### 18.7.3 Responding to an Open Intervention

The **Open Intervention Detail** page (Figure 18.7-1) 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.

The procedure for responding to an open intervention starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].
- The **Open Intervention Detail** pageis being displayed on the **OM GUI**.
  - If the **Open Intervention Detail** page is not being displayed on the **OM GUI**, go to the procedure for **Viewing Open Intervention Information on the OM GUI** (preceding section of this lesson).

#### 18.7.3.1 Response to an Open Intervention

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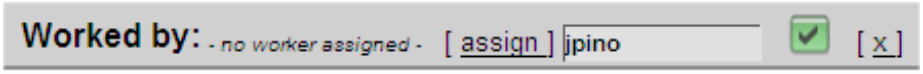
**1** Observe the information displayed in the **Worked by** column of the **Open Intervention Detail** page (Figure 18.7-1).

- If the **Open Intervention Detail** page (Figure 18.7-3) is not being displayed on the **OM GUI**, go to the procedure for **Viewing Open Intervention Information on the OM GUI** (preceding section of this lesson).

- 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 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.
- 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, type the appropriate user ID in the text box displayed beside the **assign** or **change** link in the **Worked by:** field.

**4** To continue the process of assigning oneself to work on the intervention, 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**), first type the Database ID (DBID) of the replacement granule in the **DBID** text box.

- 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, 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, 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**), 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, 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 (Figure 18.7.1-1) 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, 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, ftp pull, or scp).
- The **Disable limit checking** option can be used to bypass the request size checks if the request was either too small or too large.

**13** If the distribution medium should be changed, click on the option button associated with the **Change Media to:** box to display a menu of media then click on the desired selection.

- The following choices are available:
  - **FtpPull.**
  - **FtpPush.**

- **CDROM.**
- **DLT.**
- **DVD.**
- **scp.**

- Selected medium is displayed in the **Change Media to:** box.

**14** If the priority of the request should be changed, click on the option button associated with the **Change Priority to:** box to display a menu of priorities then 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, 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** **This option will only appear if the media type was originally SCP. When this option is checked, the operator will be prompted to change the existing SCP parameters on the next page**

**17** If the values assigned change to XML to ODL click on the box

- **The operator will receive metadata in ODL format**

**18** If the values assigned change to ODL TO XML click on the box

- The operator will receive metadata in XML format which is the default metadata format.

**19** To select the disposition for the request 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.

**20** If the **Partition** button was selected in the preceding step and distribution of the granules should be spread over a period of time, type the appropriate values in the **day(s)** and/or **hours** text box(es) to specify the time period.

**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.

**21** Click on the **Apply** button.

- A **Close Confirmation for intervention** page (Figure 18.7-4) 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 for intervention** page (as shown in Figure 18.7-4):
  - **Address 1**.
  - **Address 2**.

- **Address 3**.
- **City**.
- **State/Province**.
- **Country**.
- **Zip/Postal Code**.

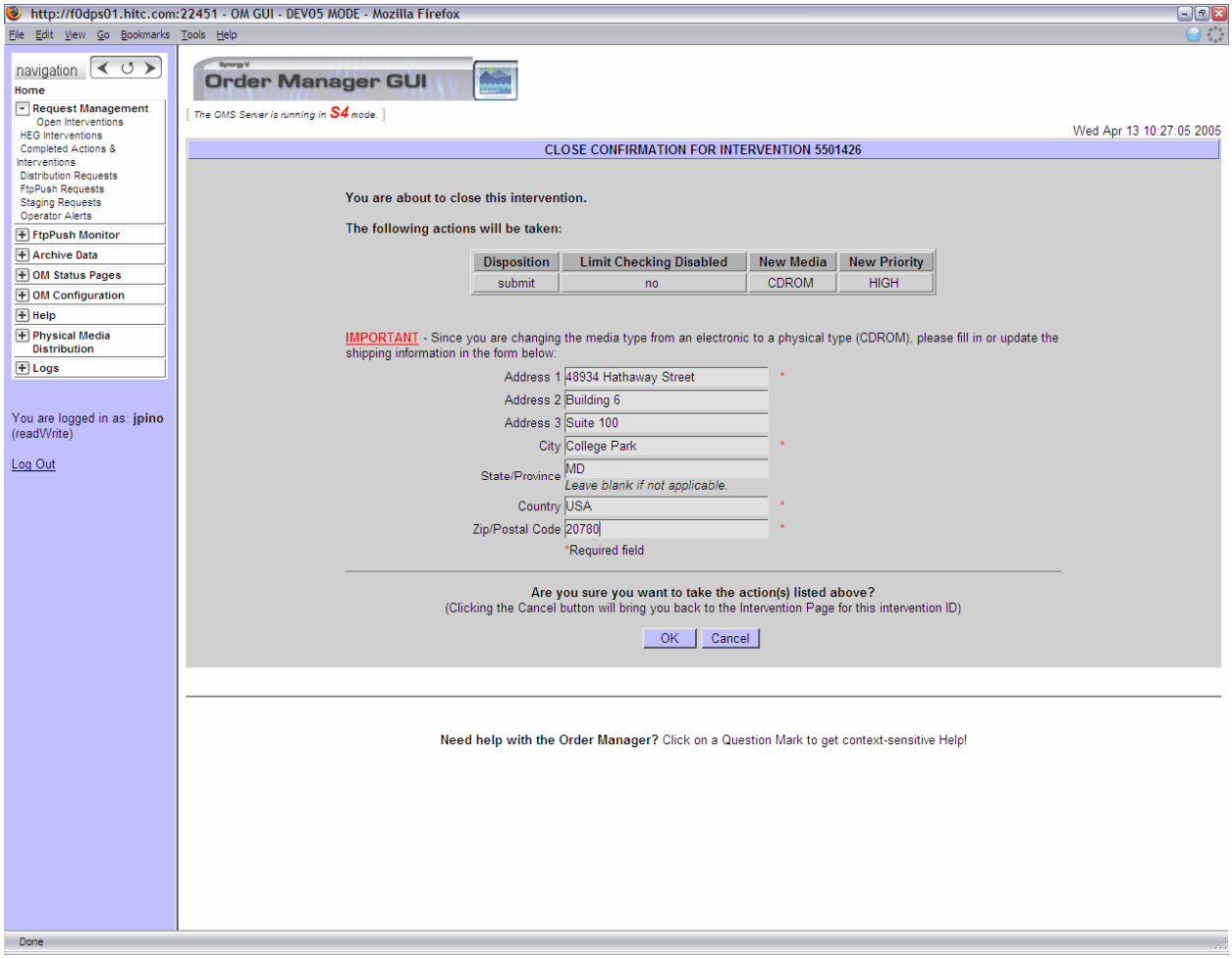



***Figure 18.7-4. Close Confirmation for intervention (FTP/SCP Push)***

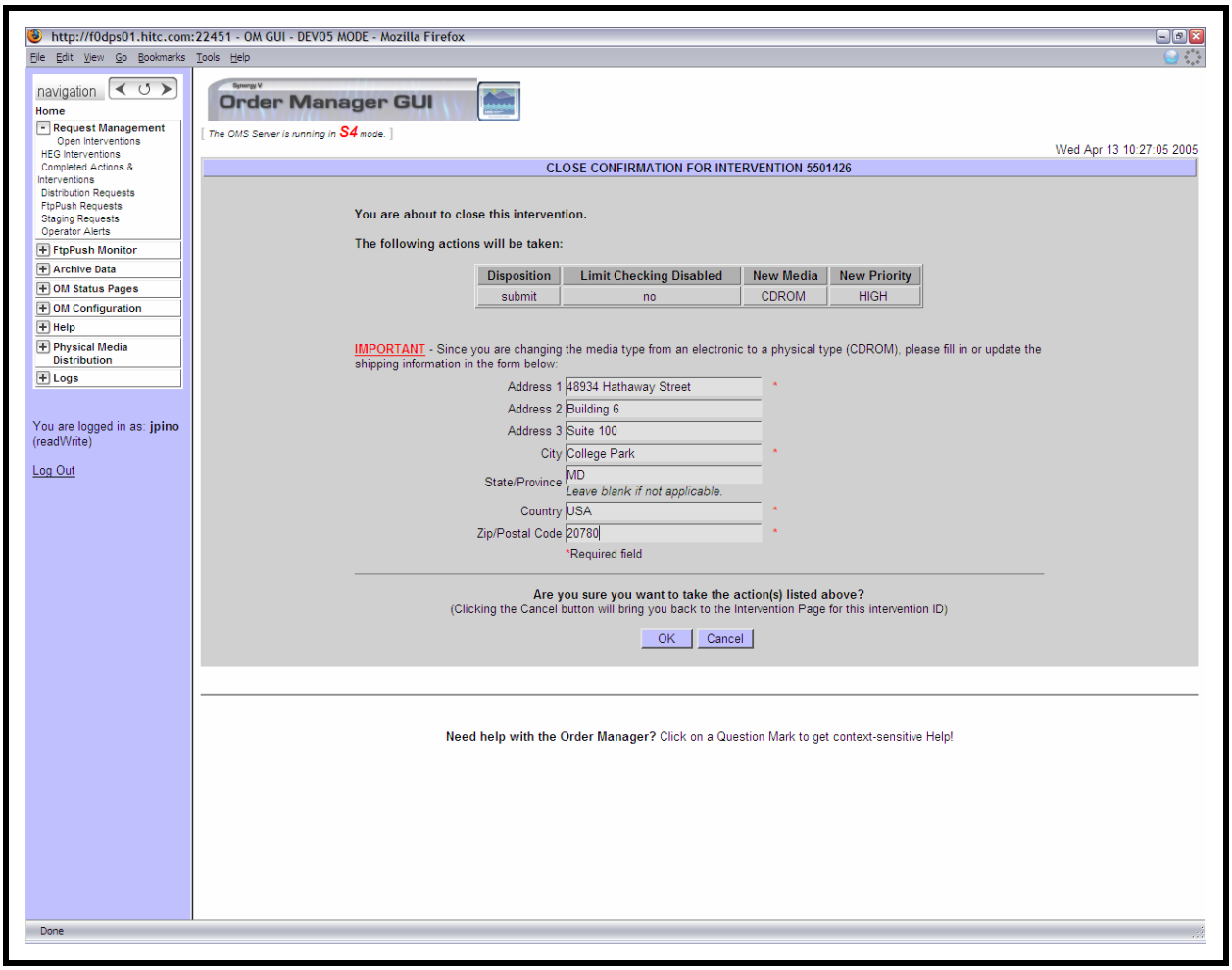



***Figure 18.7-5. Close Confirmation (PMD)***

– If the intervention involved changing the medium to FTP push/SCP or updating the values assigned to FTP push/SCP parameters, text boxes for the following FTP push/SCP parameters are displayed on the **Close Confirmation** page:

  · **Ftp or SCP 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, partition a request, or modify the granules in 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 (as shown in Figure (18.7-6).

  · A **Don't send e-mail** box to suppress the sending of an e-mail message is displayed on the **Close Confirmation** page.

**22** If the intervention involved changing the medium from an electronic medium to a physical medium, type appropriate values in the following text boxes:

- **Address 1.**
- **Address 2.**
- **Address 3.**
- **City.**
- **State/Province.**
- **Country.**
- **Zip/Postal Code.**

**23** If the intervention involved changing the medium to FTP push/SCP or updating the values assigned to FTP push/SCP parameters, perform the procedure for **Editing Values Assigned to FtpPush Parameters** (subsequent section of this lesson).

**24** 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, type the appropriate text in the **Additional e-mail text** text box on the **Close Confirmation** page.

**25** 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, 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.

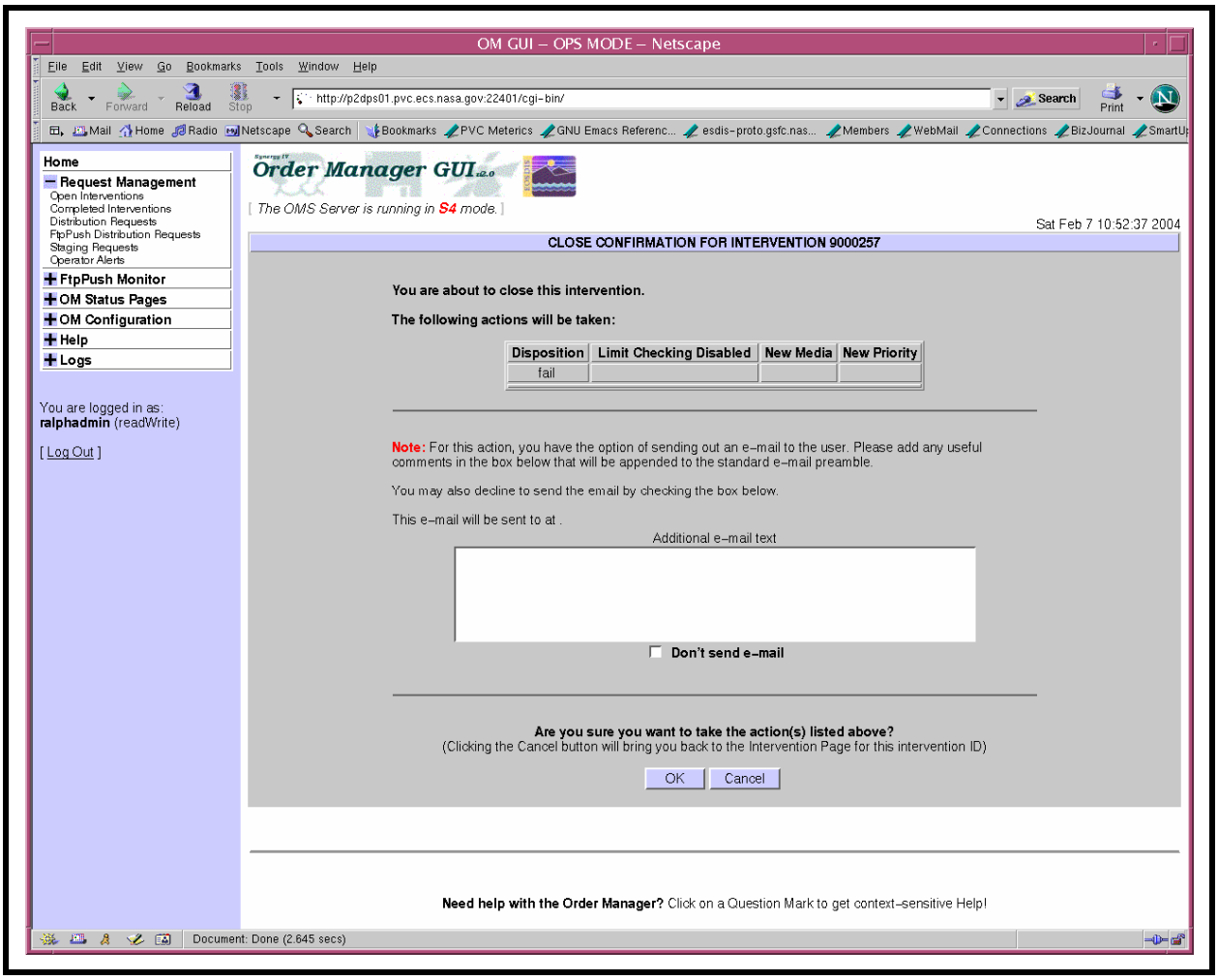



***Figure 18.7-6. Close Confirmation Page Showing Additional E-Mail Text Box***

**26** 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 (Figure 18.7-7) 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?”

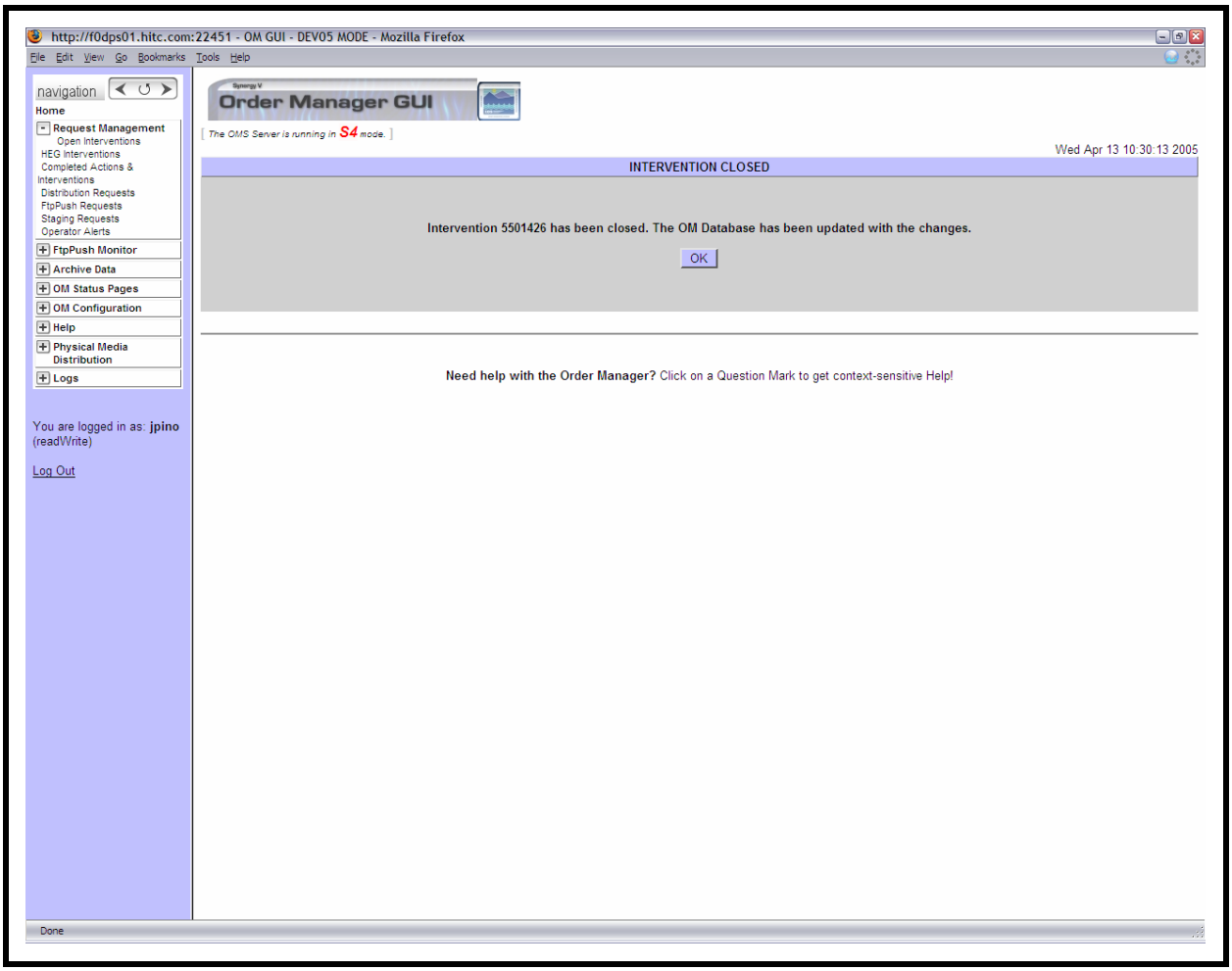



***Figure 18.7-7. Intervention Disposition Page***

**27** 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?” 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.

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

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

**29** To start the process of logging out (if applicable) 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.

**30** To complete the process of logging out (when applicable) 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 e browser is dismissed.
- **Cancel** - to dismiss the dialogue box without logging out.
  - The dialogue box is dismissed.
  - The **OM GUI** is displayed.

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## 18.8 Monitoring/Controlling Distribution Request Information on the OM GUI

The following three **OM GUI** pages (see Figures 18.8-1, 18.8-2, and 18.8-3) 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:

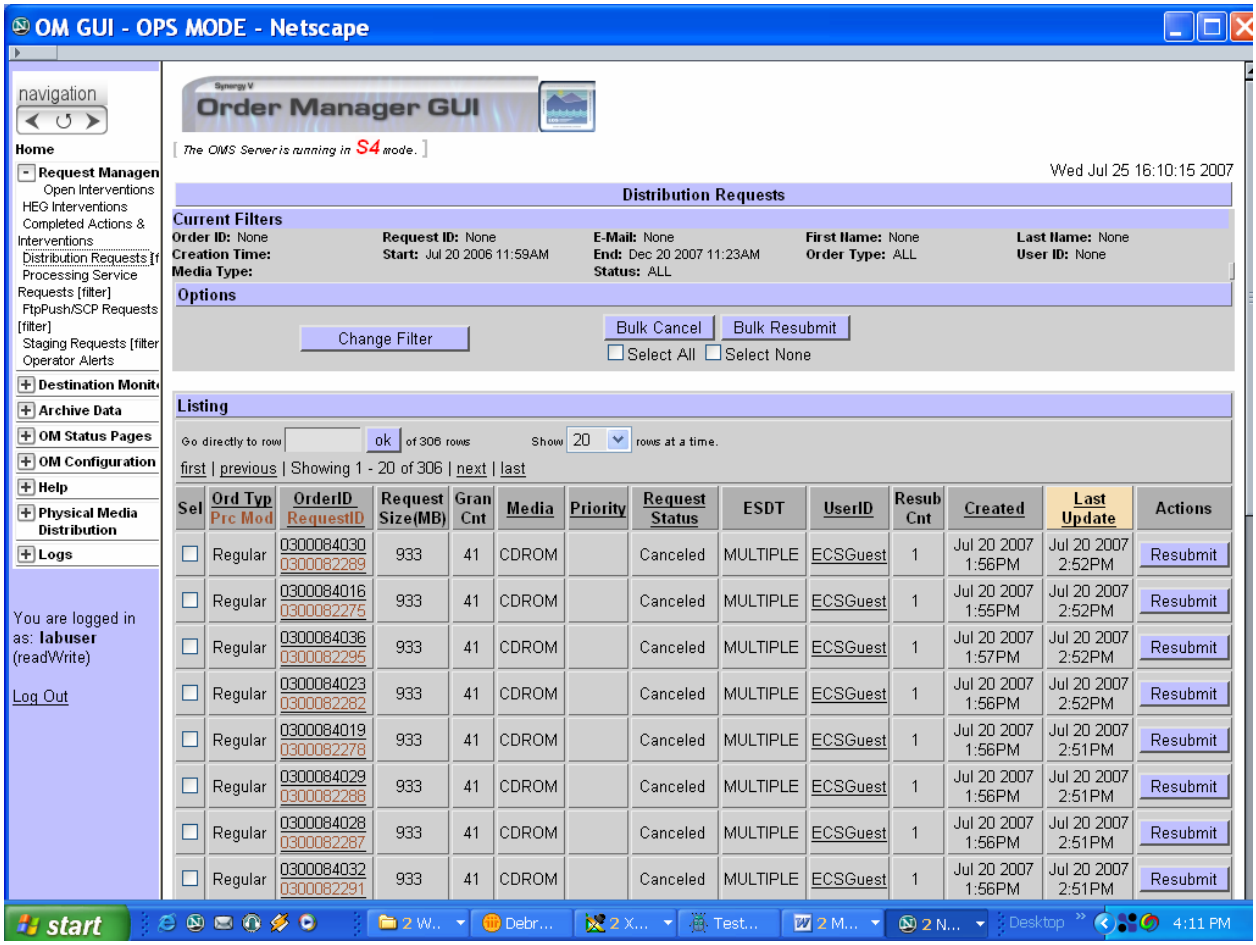


***Figure 18.8-1. Distribution Requests Page***

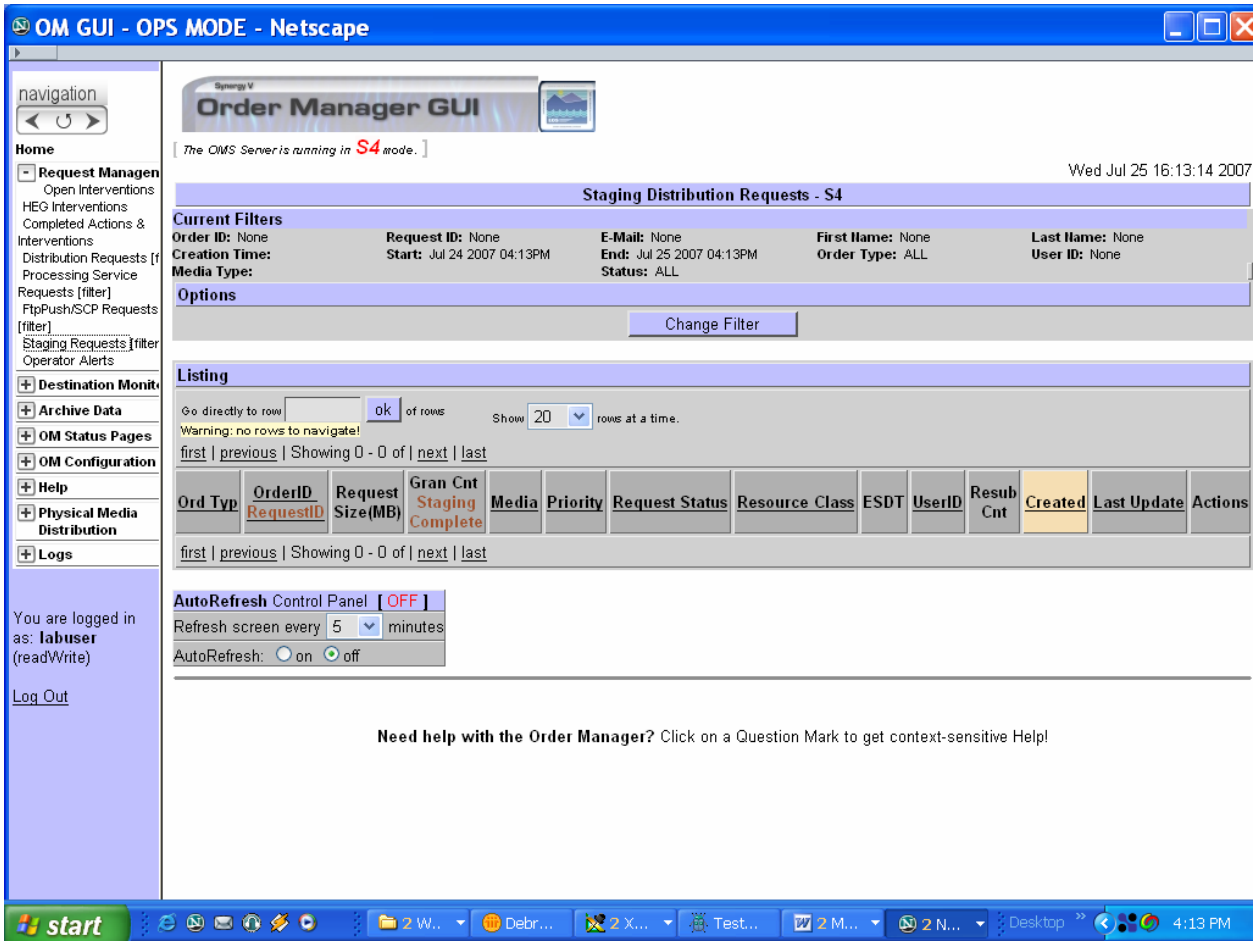


***Figure 18.8-2. Staging Distribution Requests Page***

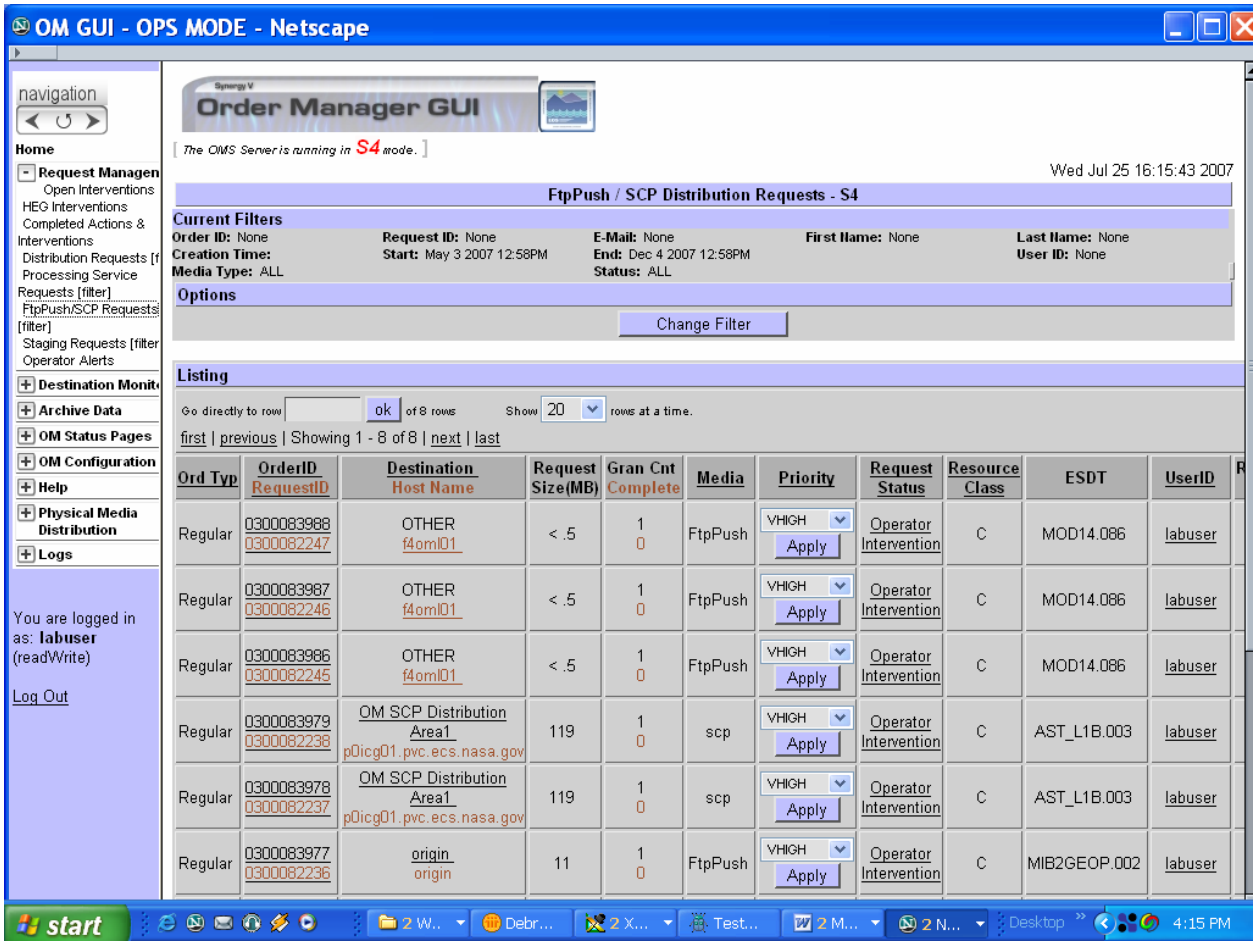


***Figure 18.8-3. FtpScpPush Distribution Requests Page***

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.

***Table 18.8-1. Monitoring/Conrolling Distribution Requests - Activity Checklist***

| Order | Role | Task | Section | Complete? |
|---|---|---|---|---|
| 1 | Distribution Technician | Monitoring/Controlling Distribution Reuqest | (P) 18.8.1.1 | |
| 2 | Distribution Technician | Filtering Data Displayed on Distribution Requests Pages | (P) 18.8.2.1 | |
| 3. | Distribution Technician | Changing Priority of a Distribution Request | (P) 18.8.3.1 | |
| 4 | Distribution Technician | Suspend, Resume, Cancel, Resubmit, or Stop a Distribution Request | (P) 18.8.4.1 | |
| 5 | Distribution Technician | View Processing Services Requests on the OM GUI | (P) 18.8.5.1 | |
| 6 | Distribution Technician | Editing Values Assigned to FtpPush Parameters | (P) 18.8.6.1 | |
| 7 | Distribution Technician | Annotating a Physical Media Distribution Request | (P) 18.8.7.1 | |
| 8 | Distribution Technician | Viewing Open HRG Intervention Information | (P) 18.8.8.1 | |
| 9 | Distribution Technician | Respond to Open HEG Intervention | (P) 18.8.9.1 | |
| 10 | Distribution Technician | View Pending HEG Granules | (P) 18.8.10.1 | |
| 11 | Distribution Technician | View Operator Alerts | (P) 18.8.11.1 | |
| 12 | Distribution Technician | View Completed Operator Actions and InterventionsPage | (P) 18.8.12.1 | |
| 13 | Distribution Technician | Filtering Data Displayed on Completed Operator Actions and Intervetions Page | (P) 18.8.13.1 | |

## 18.8.1 Monitoring/Controlling Distribution Request Information on the OM GUI

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.

The procedure for monitoring/controlling distribution request information on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

### 18.9.1.1 Monitoring/Controlling Distribution Request Information on the OM GUI

**1** Click on the **Request Management** link in the navigation frame of the **OM GUI**.

- The **Request Management** menu is expanded.

**2** Click on the **Distribution Requests** link in the navigation frame of the **OM GUI**.

- The **Distribution Requests** 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 procedure for **Filtering Data Displayed on the Distribution Requests Pages** (subsequent section of this lesson).
- The **Options** area of the **Distribution Requests** page has the following buttons and selection boxes:
  - **Change Filter** button [refer to the procedure for **Filtering Data Displayed on the Distribution Requests Pages** (subsequent section of this lesson)].
  - **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” (HDF-EOS to GeoTIFF Conversion 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.].

**3** 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.
- 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.
- 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**.

– 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 **_____** brings up a **Distribution Request Detail** page (i.e., **DISTRIBUTION REQUEST**) (Figures 18.8-4 and 18.8-5) that displays the following types of data (as applicable) concerning the request:

- **UserID.**
- **E-mail.**
- **Request Size (MB).**
- **# Granules.**
- **# Granules Staged.**
- **# Granules FTP push/SCPed.**

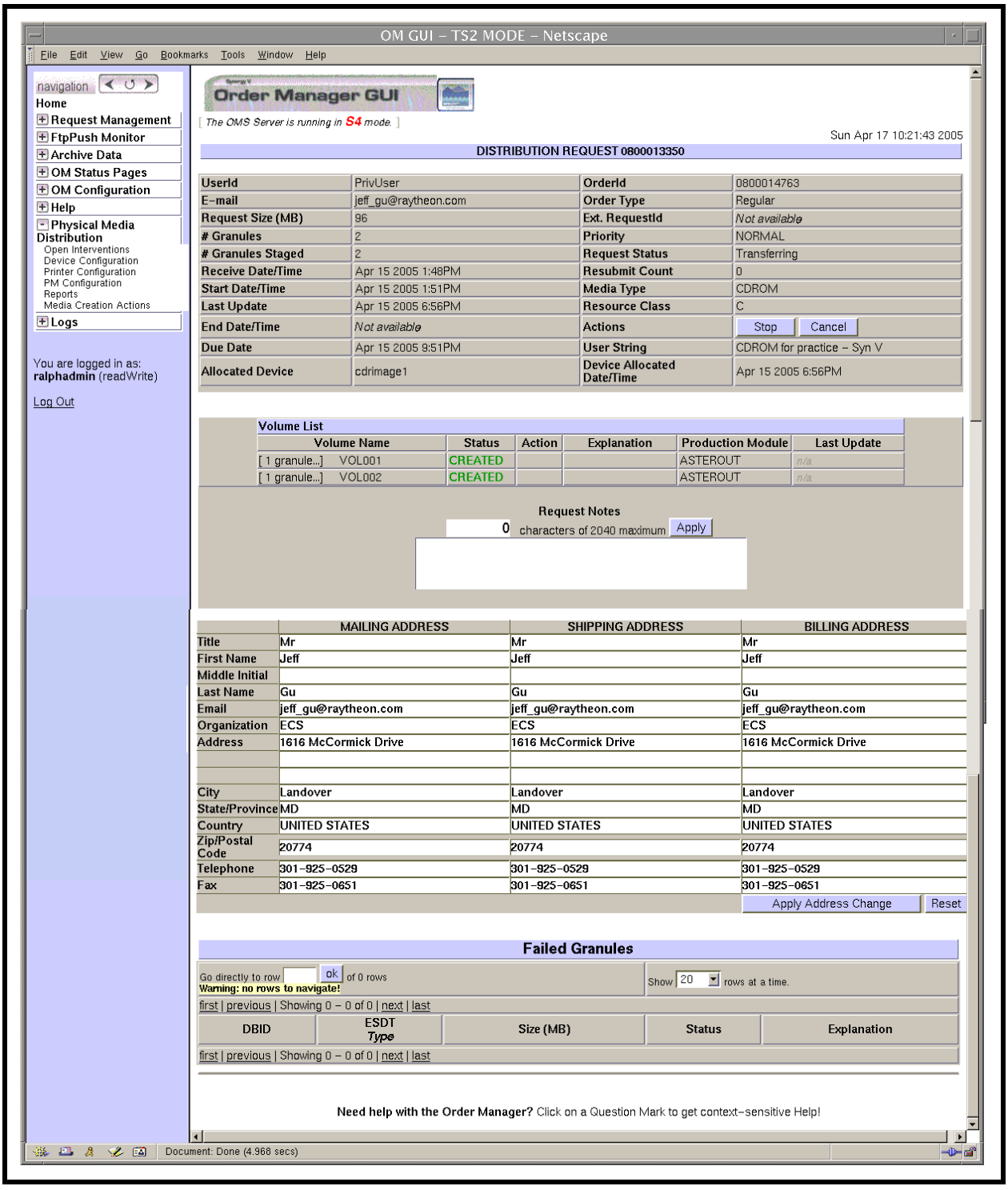


***Figure 18.8-4. Distribution Request Detail (DISTRIBUTION REQUEST X) Page (Physical Media)***

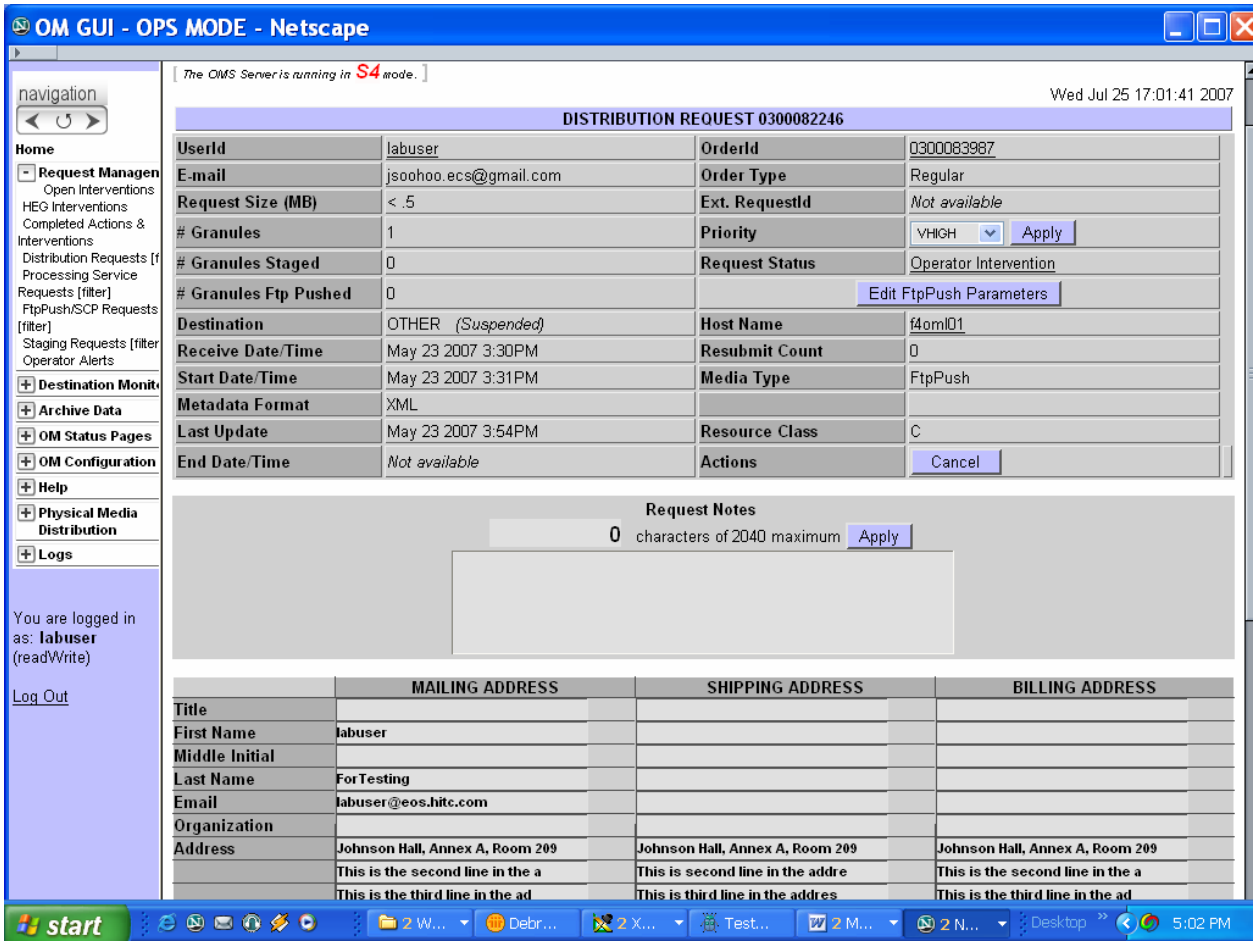


***Figure 18.8-5. Distribution Request Detail (DISTRIBUTION REQUEST X) Page (Non-Physical Media)***

- **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 FtpPushScp 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).**

- 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 procedure for **Setting Refresh Options on OM GUI Pages** (preceding section of this lesson).
- To manually update (refresh) the data on the screen, click on the ↻ icon in the **OM GUI** navigation frame.
- The 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.

**4** 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), perform the procedure for **Filtering Data Displayed on the Distribution Requests Pages** (subsequent section of this lesson).

**5** Observe information displayed in the **Listing** table of the **Distribution Requests** page.

**6** To change the priority of a distribution request (when applicable), perform the procedure for **Changing the Priority of a Distribution Request Using the OM GUI** (subsequent section of this lesson).

**7** To either suspend a distribution request or resume processing of a suspended request (when applicable), perform the procedure for **Suspending, Resuming, Canceling, Resubmitting, or Stopping a Distribution Request Using the OM GUI** (subsequent section of this lesson).

**8** To cancel a distribution request (when applicable), perform the procedure for **Suspending, Resuming, Canceling, Resubmitting, or Stopping a Distribution Request Using the OM GUI** (subsequent section of this lesson).

**9** To review and/or respond to an open intervention for a particular distribution request first 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 for **Viewing Open Intervention Information on the OM GUI** (preceding section of this lesson).

**11** To reprocess a distribution request that has failed, been cancelled, or been shipped (when applicable), perform the procedure for **Suspending, Resuming, Canceling, Resubmitting, or Stopping a Distribution Request Using the OM GUI** (subsequent section of this lesson).

**12** To stop the processing of a Physical Media Distribution (PMD) request that is transferring or has at least one volume being verified, perform the procedure for **Suspending, Resuming, Canceling, Resubmitting, or Stopping a Distribution Request Using the OM GUI** (subsequent section of this lesson).

**13** To edit the values assigned to FTP push/SCP parameters for a particular distribution request (when applicable), perform the procedure for **Editing Values Assigned to FtpPush/Scp Parameters** (subsequent section of this lesson).

**14** To add a comment to a particular distribution request (when applicable), perform the procedure for **Annotating a Physical Media Distribution (PMD) Request from the Distribution Request Details Page** (subsequent section of this lesson).

**15** To view operator alerts, perform the procedure for **Viewing Operator Alerts on the OM GUI** (subsequent section of this lesson).

**16** To view the **Staging Distribution Requests** page, first (if it has not been expanded already) click on the **Destination Monitor** link in the navigation frame of the **OM GUI**.

- The **Destination Monitor** menu is expanded (as applicable).

**17** To view the **Staging Distribution Requests** page 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.

**18** To view the **Ftp/ScpPush Distribution Requests** page, first (if it has not been expanded already) click on either **Request Management** or the **Destination Monitor** link in the navigation frame of the **OM GUI**.

- The **Request Management** or **Destination Monitor** menu is expanded (as applicable).

**19** To view the **Ftp/ScpPush Distribution Requests** page click on the **Ftp/ScpPush Distribution Requests** link in the navigation frame of the **OM GUI**.

- The **Ftp/ScpPush Distribution Requests** page is displayed.
- The **Ftp/ScpPush 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 a **Media** column (requests can be – FTP push/SCP).

– 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/SCP.

– 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 **Ftp/ScpPush Distribution Requests** page perform the procedure for **Filtering Data Displayed on the Distribution Requests Pages** (subsequent section of this lesson).

**20** Repeat Steps 3 through 19 as necessary to monitor distribution requests.

### 18.8.2 Filtering 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 **Ftp/ScpPush Distribution Requests** page] provide the Distribution Technician (whether full-capability or limited capability operator) with a means of filtering data displayed on the screen.

The procedure for filtering data displayed on the **Distribution Requests** pages starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched.
- The **Distribution Requests** page **Staging Distribution Requests** page), or the **Ftp/ScpPush Distribution Requests** page being displayed.

#### 18.8.2.1 Filtering Data Displayed on the Distribution Requests Pages

**1** Click on the Change Filter button in the Options area of the Distribution Requests page, Staging Distribution Requests page, or the Ftp/ScpPush Distribution Requests page.

- A **Distribution Requests Filters** pop-up window (Figure 18.8-6) is displayed.
- The **Distribution Requests Filters** pop-up window contains fields for changing various filters.
  - The **Distribution Requests Filters**, **Staging Distribution Requests Filters**, and **Ftp/ScpPush Distribution Requests Filters** pop-up windows are similar.
    **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, 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.

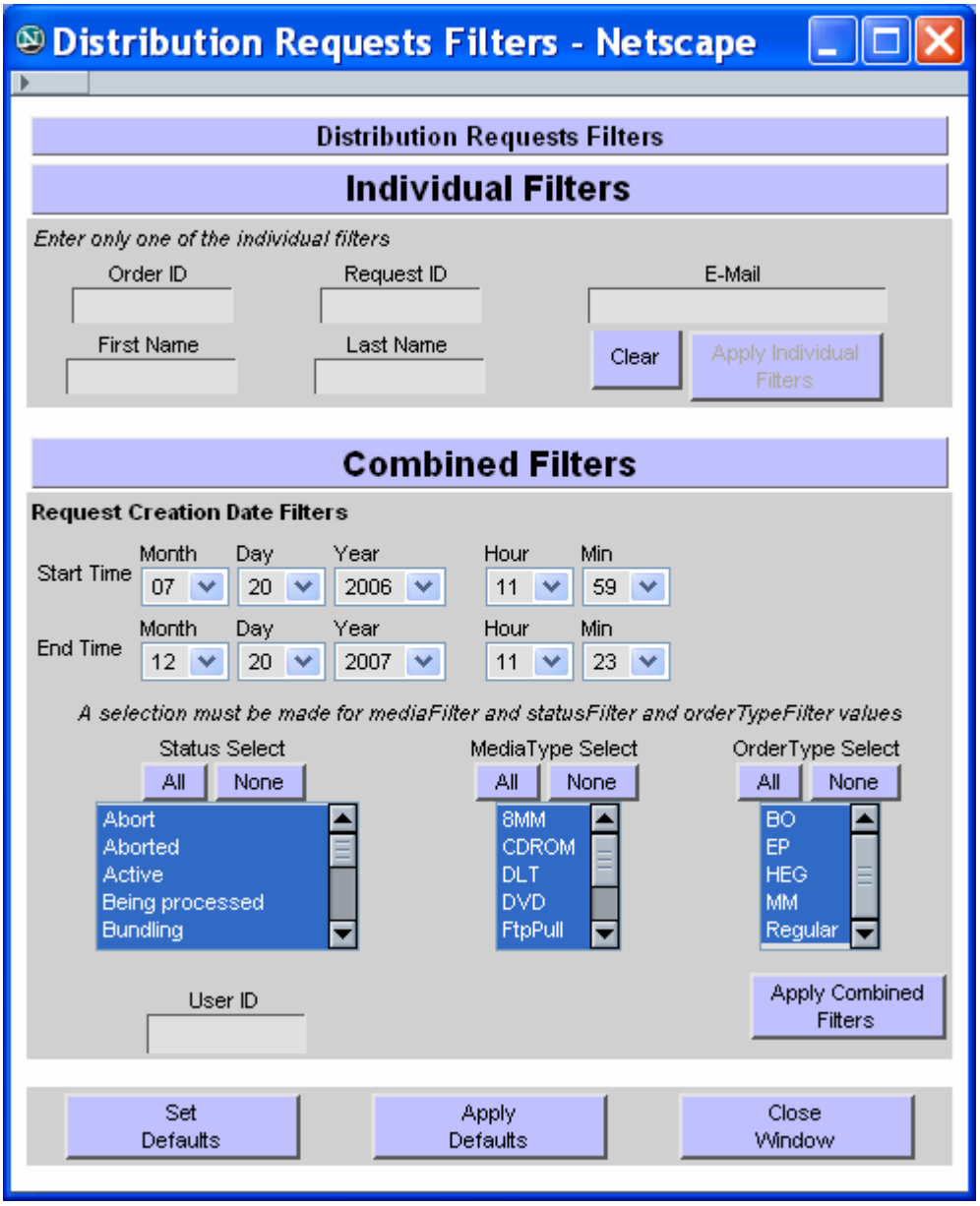


***Figure18.8-6. Distribution Requests Filters Pop-Up Window***

**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 **Ftp/ScpPush Distribution Requests** page, type the ***value*** of the Order ID, Request ID, E-Mail, First Name, or Last Name in the appropriate text box.

- 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 click on the **Clear** button.

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

- The **Distribution Requests** page, **Staging Distribution Requests** page, or the **Ftp/ScpPush 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.

**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 click on each date/time option button to display a drop-down list of month, day, year, hour, or minute options then 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 **Ftp/ScpPush Distribution Requests** page, 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, click on the **Status Select – None** button (clears all selections so individual statuses can be selected).
- To quickly select all statuses, 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.
- 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, 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, click on the **Media Type Select – None** button (clears all selections so individual media can be selected).
- To quickly select all media, click on the **Media Type Select – All** button (all items are highlighted).

- The following Media Type choices are available:
  - **FtpPull.**
  - **FtpPush.**
  - **CDROM.**
  - **DLT.**
  - **DVD.**
  - **DLT.**
  - **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
- 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, 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, click on the **Order Type Select – None** button (clears all selections so individual media can be selected).
- To quickly select all media, 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** [HDF-EOS to GeoTIFF Conversion 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.
- 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 **Ftp/ScpPush Distribution Requests** page, type the ***UserID*** in the **User ID** text box.

**9** If value(s) was (were) specified for any of the filters in Steps 4 through 8, click on the **Apply Combined Filters** button.

- The **Distribution Requests** page, **Staging Distribution Requests** page, or the **Ftp/ScpPush 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), 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.

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### 18.8.3 Changing the Priority of a Distribution Request Using the OM GUI

The procedure for **Changing the Priority of a Distribution Request Using the OM GUI** is performed as part of the procedure for **Monitoring/Controlling Distribution Request Information on the OM GUI** (preceding section of this lesson). The priority of a 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 **Ftp/ScpPush 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.

The procedure for changing the priority of a distribution request starts with the following assumptions:

- All applicable servers are currently running.
- The **Distribution Requests** page, **Staging Distribution Requests** page, the **Ftp/ScpPush Distribution Requests** page, or the **Destination Details** page is being displayed on the **OM GUI**.

### 18.8.3.1 Changing the Priority of a Distribution Request Using the OM GUI

**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, perform the procedure for **Filtering Data Displayed on the Distribution Requests Pages** (preceding section of this lesson).

**2** Click on the option button in the **Priority** column of the row associated with the request to display a menu of priorities then 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), click on the option button on the **Priority** line to display a menu of priorities, then click on the desired selection (Figure 18.8-7).

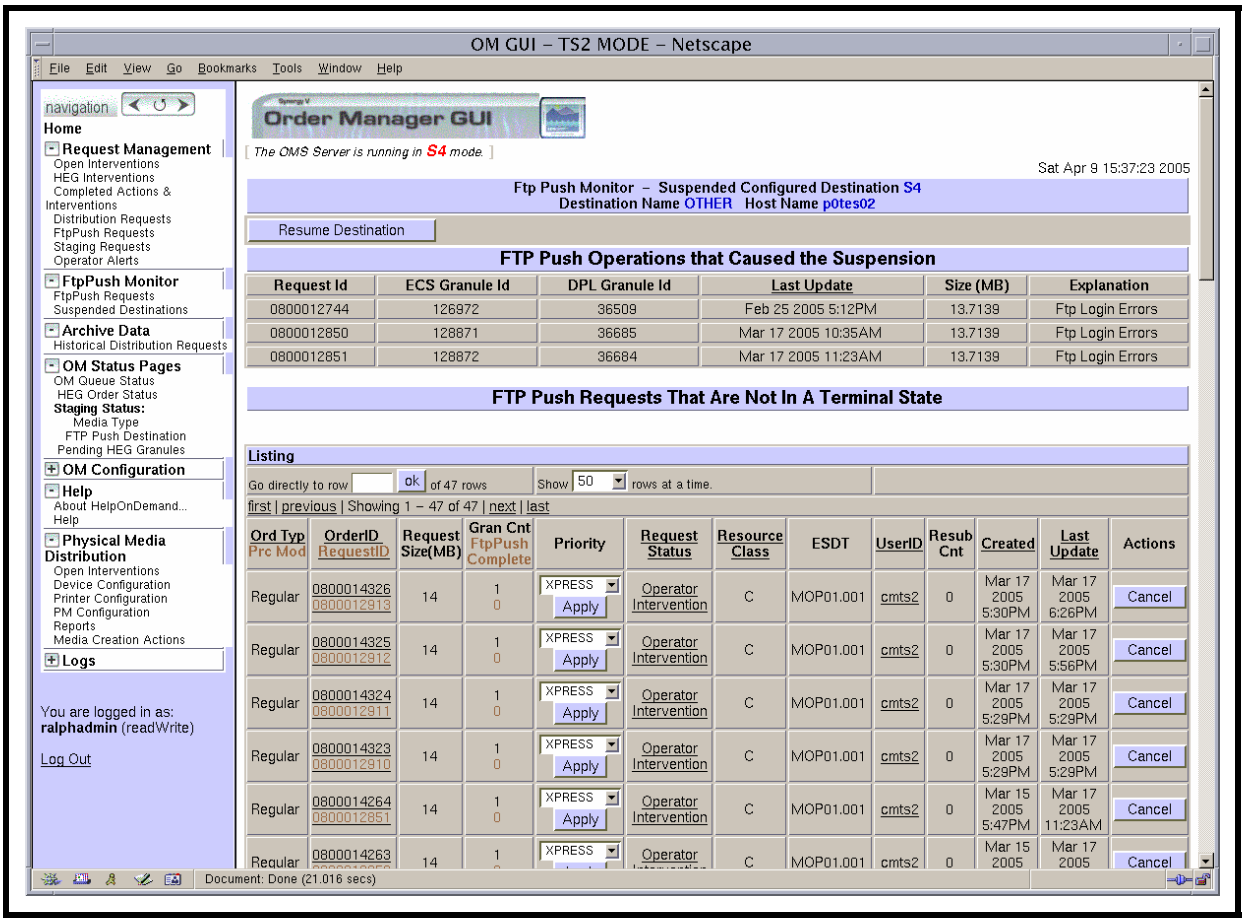


***Figure 18.8-7. Destination Details Page (Ftp Push Monitor – Suspended Destination Name OTHER)***

**3** To implement the priority change 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 procedure for **Monitoring/Controlling Distribution Request Information on the OM GUI**.

### 18.8.4 Suspending, Resuming, Canceling, Resubmitting, or Stopping 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 **Ftp/ScpPush 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.

The procedure for **Suspending, Resuming, Canceling, Resubmitting, or Stopping a Distribution Request Using the OM GUI** is performed as part of the procedure for **Monitoring/Controlling Distribution Request Information on the OM GUI** (preceding section of this lesson). The procedure starts with the following assumptions:

- All applicable servers are currently running.
- One of the following pages is being displayed on the **OM GUI**:
  - **Distribution Requests** page.
  - **Staging Distribution Requests** page.
  - **Ftp/ScpPush Distribution Requests** page.
  - **Distribution Request Details** page.
  - **Destination Details** page.

#### 18.8.4.1 Suspending, Resuming, Canceling, Resubmitting, or Stopping a Distribution Request Using the OM GUI

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**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, perform the

procedure for **Filtering Data Displayed on the Distribution Requests Pages** (preceding section of this lesson).

**2** To suspend, resume, cancel, resubmit, or stop a distribution request, 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 (Figure 18.8-8) is displayed.

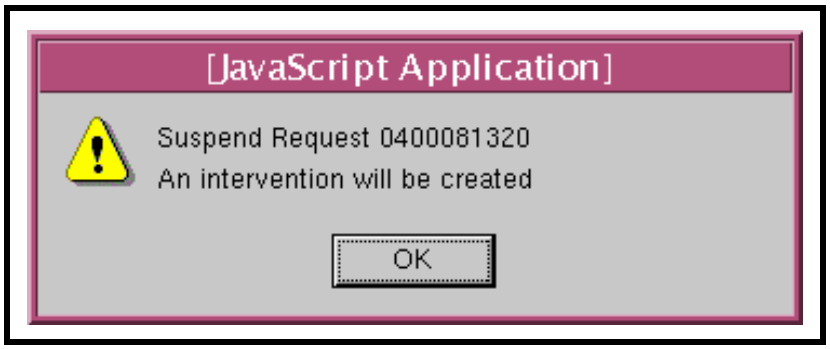


***Figure 18.8-8. Suspend Request Dialogue Box***

  - **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 (Figure 18.8-9) 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 (Figure 18.8-10) is displayed.
  - **Resubmit** [request in a terminal state (e.g., aborted, cancelled, terminated, or shipped)].
    - A **Resubmit Request Confirmation** dialogue box (Figure 18.8-11) 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 click on the appropriate button.

**3** If a **Suspend Request** dialogue box is displayed, click on the **OK** button:

- The dialogue box is dismissed.
- "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, 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 (Figure 18.8-9), **Cancel Request Confirmation** dialogue box, or **Stop Request Confirmation** dialogue box is displayed, type ***userID*** in the **Worker** text box.

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

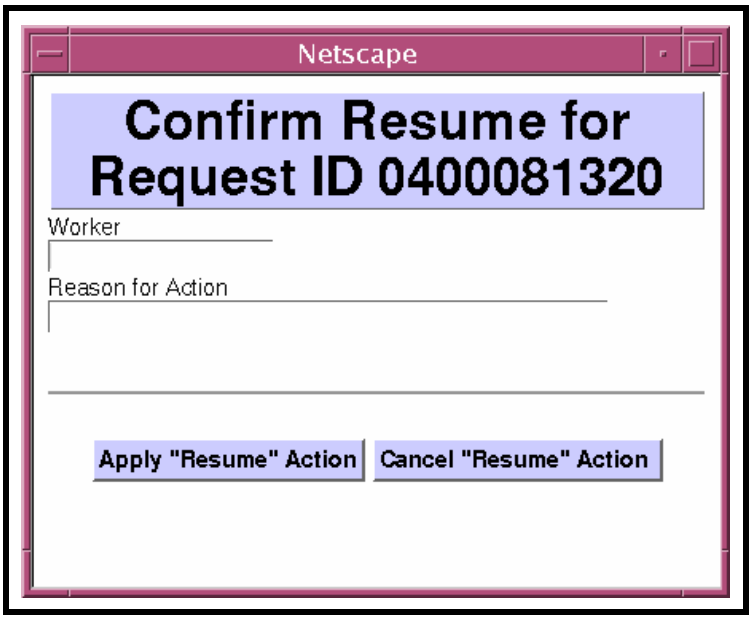


***Figure 18.18-9. Resume Request Confirmation Dialogue Box***

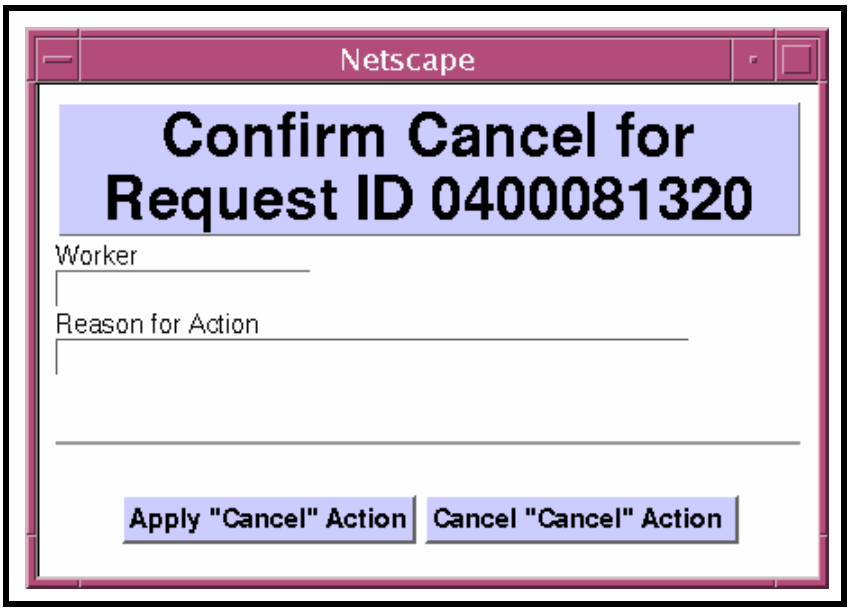


***Figure 18.8-10. Cancel Request Confirmation Dialogue Box***

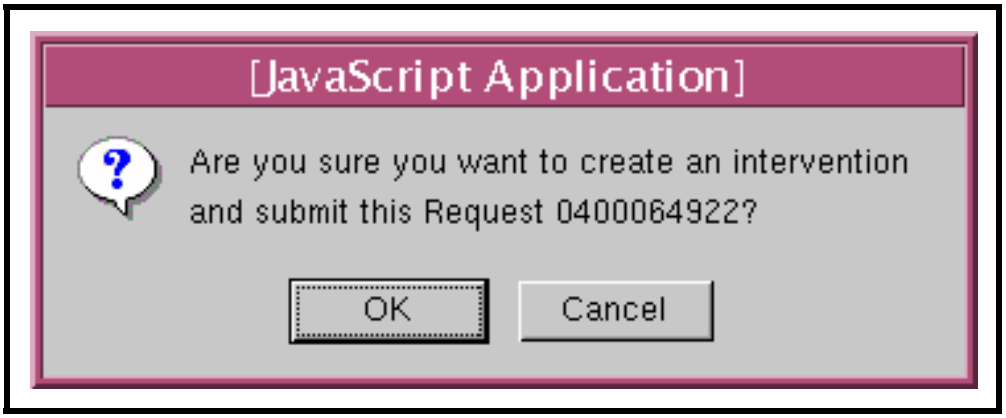


***Figure 18.8-11. Resubmit Request Confirmation Dialogue Box***

**5** If a **Resume Request Confirmation** dialogue box **Cancel Request Confirmation** dialogue box (or **Stop Request Confirmation** dialogue box is displayed, type ***reason*** in the **Reason for Action** text box.

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

**6** If a **Resume Request Confirmation** dialogue box, **Cancel Request Confirmation** (Figure 18.8-10) dialogue box , or **Stop Request Confirmation** dialogue box is displayed, 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 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.

**7** If a **Resubmit Request Confirmation** dialogue box (Figure 18.8-11) is displayed, first 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.

**8** If a **Resubmit Request Confirmation** dialogue box was displayed and **OK** was clicked in response to the **Resubmit Request Confirmation** dialogue box, perform the procedure for **Responding to an Open Intervention** (preceding section of this lesson).

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

**10** Return to the procedure for **Monitoring/Controlling Distribution Request Information on the OM GUI**.

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### 18.8.5 Viewing Processing Services Requests

The Processing Service Requests page below (the old FtpPush Distribution Processing Services Requests page) includes HEG and all external subsetter requests and "Processor" column is going to indicate the processor name.

It does not have a filter for media type and order type. It will have processing service filter instead.

All the external processing requests do not have any actions (cancel or suspend) while they are under the control of the external system.

The Processing Services Request Filter (Figure 18.8-13) shows how the OMS GUI allows an operator to cancel or suspend the external processing requests while those requests are under OMS control.

1. To cancel or suspend an external processing request.

   - Click the change filtersbutton, the Processing Servies Filter will be displayed.

2. Enter only one of the individual filters under Individual Filters.

   -Click the Apply Individual Filters button.

3. Under the Combined Filters section.

   -Type in your Request Creation Filter dates.

4. Select All or None from the Status Select , Media Select and Process Select boxes.

   - Click the Apply Combined filters button.

A Processing service request page will come up reflecting the criteria chosen.

**Note:** The Processing Services Filter shows the operator can filter any selected external processing service or HEG.

### 18.8.5.1 Viewing Processing Service Request on the OM GUI

The Processing Service Request page is a new name for the old FtpPush Processing Services Request page.

Generally, the Processing Service Request page reflects the same information as shown on most of filters under the Distribution Requests pages.

The page now displays the external processing and HEG in the “Processor” column nder the listing section of the GUI. The new Processing Service Request page no longer includes the filter for media type and order type; It has a processing filter instead. The “Actions “ column in the Listing section of the page now displays an InActive button.

**Note:** All the external processing requests do not have any actions (like cancel and suspend) while under the control of the external system.

**To view the Processing Service Request Page**:

**1** Click on the **Request Management** link in the navigation frame of the **OM GUI**.

- The **Request Management** menu is expanded.

**2** Click on the **Processing Service Request (filter).** .

- The **Processing Service Request Page** page (Figure 18.8-12) is displayed.
  - The **Listing** table has the following columns:
  - **Order Id.**
  - **Request Id.**
  - **Media Type**
  - **Processor**
  - Request Size(MB)
  - Gran Cnt
  - **Priority**
  - **Request Status**
  - **ESDT**
  - **User ID**
  - **Resubmit**
  - **Created**
  - **Last update**
  - **Actions ( InActive)**

**3** Observe information displayed in the **Listing** table of the **Processing Service Request Page**.

- The Processing Service Requests page will display the current listings as filtered.
- The **Show _## of rows at a time** window provides a means of selecting the maximum number of rows of data to be displayed at a time.
- When opening the page it is important to check the filter settings because changes to the filter settings tend to persist from one session to another. Sometimes there are no requests displayed

**To check the Filter settings** see the Filtering Data on the Processing Service Request Filters Page procedure (subsequent section.)

**4** Click the Change Filter button in the Options section of the the Processing Service Requests page

- The Processing Service Requests Filters page will display. There the operator can review or change the requests listings.

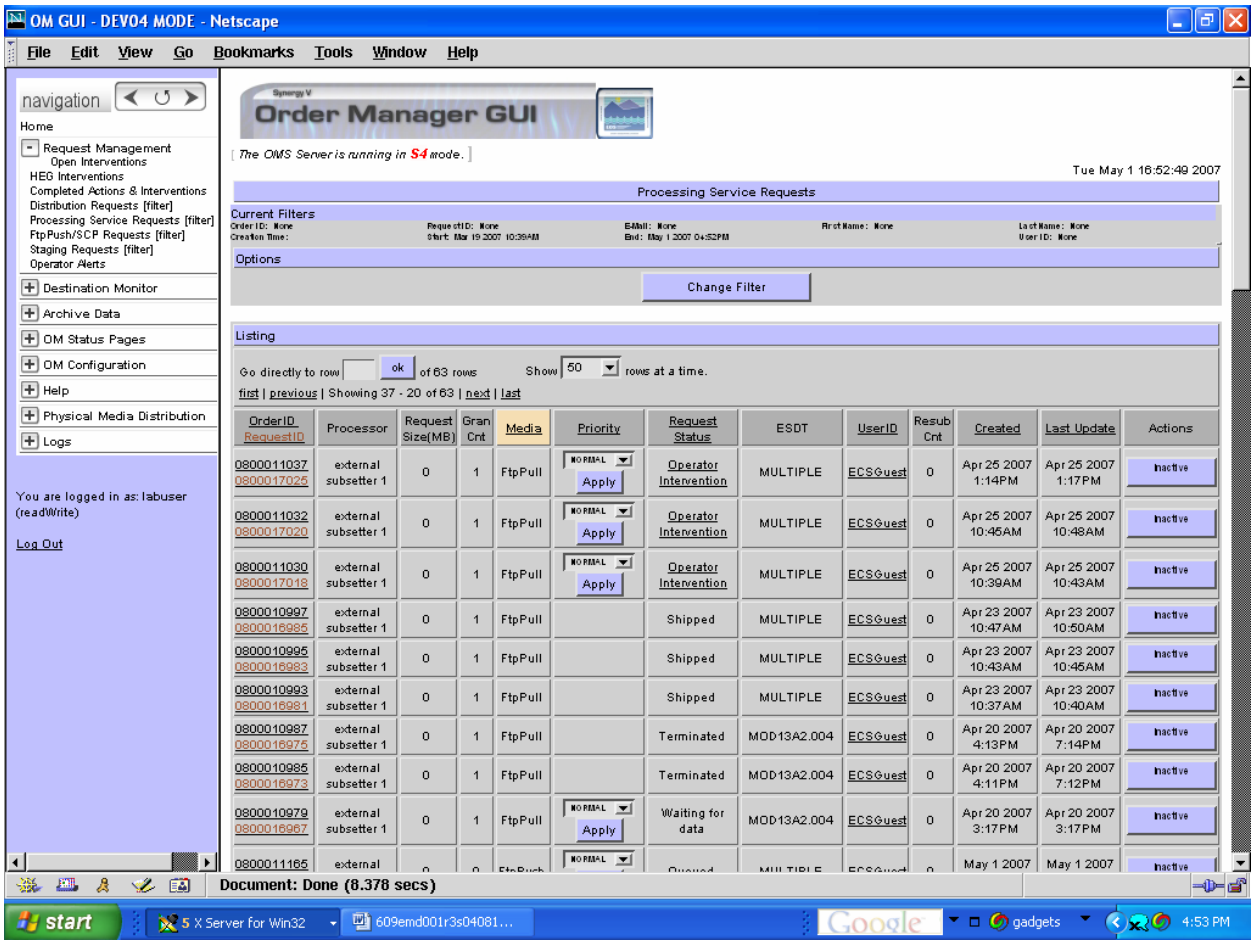


***Figure 18.8-12. Processing Services Requests***

**To Filtering Data on the Processing Service Request Page:**

The Processing Services Filter page now reflects options allowing the operator to filter on external processing service or HEG in addition to the offered selections.

The operator can filter any selected external processing service or HEG

**1** Click the Change Filter button in the Options section of the Processing Service Requests page

- The Processing Service Requests Filters page will display. There the operator can review or filter the requests listings
- The page also allows an operator to cancel or suspend the external processing requests while those requests are under OMS control.

**To cancel or suspend an external processing request":**

**1** Click the change filters button, the Processing Services Filter will be displayed

**2** Enter only one of the individual filters under Individual Filters

-Click the Apply Individual Filters button

**3** Under the Combined Filters section

-Type in your Request Creation Filter dates

**4** Select All or None from the Status Select, Media Select and Process Select boxes

-Click the Apply Combined filters button.

A Processing service request page will come up reflecting the criteria chosen for the requests.

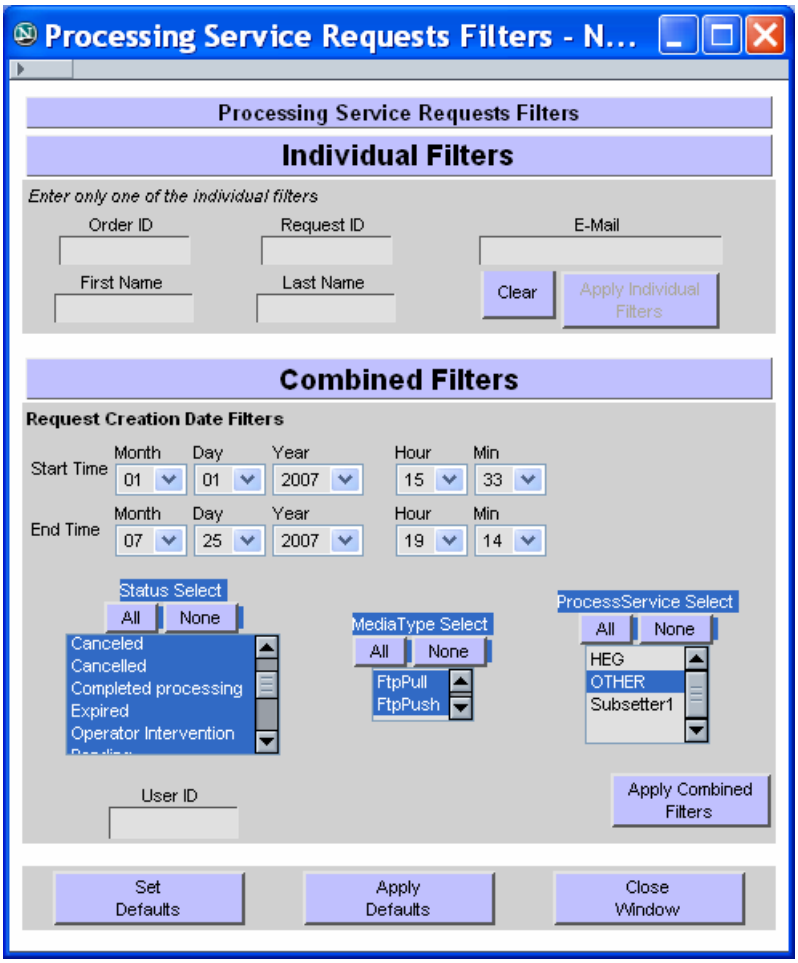


***Figure 18.8-13. Processing Services Requests Filter***

### 18.8.6 Editing Values Assigned to FtpPush Parameters

The procedure for **Editing Values Assigned to FtpPush Parameters** is performed as part of other procedures (e.g., **Responding to an Open Intervention** or **Monitoring/Controlling Distribution Request Information on the OM GUI**).

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

The procedure for editing the values assigned to the FtpPush parameters of a distribution request starts with the following assumptions:

- All applicable servers are currently running.

#### 18.8.6.1 Editing Values Assigned to FtpPush Parameters

**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, perform the procedure for **Filtering Data Displayed on the Distribution Requests Pages** (preceding section of this lesson).

**2** If the **Edit FtpPush Parameters** page is not already open, 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, click on the **Edit FtpPush Parameters** button on the **Distribution Request Detail** page.

- The **Edit FtpPush Parameters** page (Figure 18.8-14) is displayed.

**4** Type appropriate values in the following text boxes (as necessary):

- **Ftp node** [Destination host name].
- **Ftp Address** [FTP user name].
- **Password**.

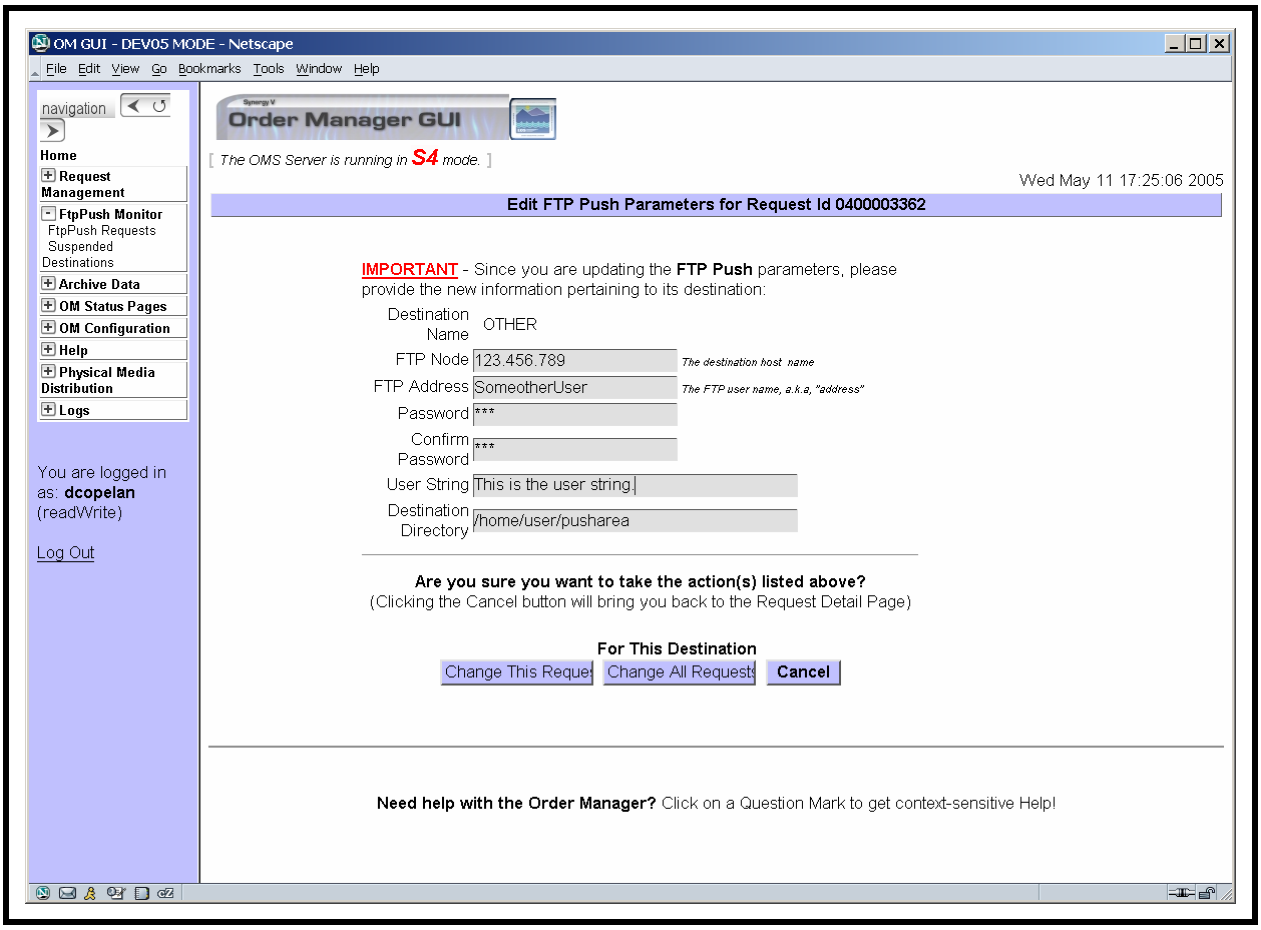


***Figure 18.8-14. Edit FtpPush Parameters Page***

- **Confirm Password**.
- **User String** [message to be sent to the user].
- **Destination Directory** [full path].

**5** 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 parameter values and dismiss the **Edit FtpPush Parameters** page.
    - The **Edit FtpPush Parameters** page is dismissed.

**6** Return to the procedure that recommended editing the FtpPush parameter values.

---

### 18.8.7 Annotating a Physical Media Distribution (PMD) Request from the Distribution Request Details Page

The procedure for **Annotating a Physical Media Distribution (PMD) Request from the Distribution Request Details Page** is performed as part of other procedures (e.g., **Monitoring/Controlling Distribution Request Information on the OM GUI**).

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**.

The procedure for annotating a PMD request starts with the following assumptions:

- All applicable servers are currently running.
- The **Distribution Requests** page is being displayed on the **OM GUI**.

#### 18.8.7.1 Annotating a Physical Media Distribution (PMD) Request from the Distribution Request Details Page

---

**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, perform the procedure for **Filtering Data Displayed on the Distribution Requests Pages** (preceding section of this lesson).

**2** If the **Distribution Request Detail** page is not already open, click on the applicable Request ID in the **Distribution Requests** table.

- The corresponding **Distribution Request Detail** page (Figure 31 or Figure 32) is displayed.

**3** Type appropriate text in the **Request Notes** text box.

**4** 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.

---

### 18.8.8 Viewing Open HEG Intervention Information on the OM GUI

The **OM GUI** displays Operator Interventions involving HEG orders. Several new features have been added for HEG processing and HEG Interventions dispositions are different than 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 (Figure 40) provides the Operator (whether full-capability or limited capability operator) with a means of viewing HEG interventions. The page is hard-coded to display HEG interventions only.

The procedure for viewing open HEG interventions on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched.

#### 18.8.8.1 Viewing Open HEG Intervention Information on the OM GUI

**1** Click on the **Request Management** link in the navigation frame of the **OM GUI**.

- The **Request Management** menu is expanded.

**2** Click on the **HEG Interventions** link in the navigation frame of the **OM GUI**.

- The **Open HEG Interventions** page (Figure 18.8-15) 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 procedure for **Filtering Data Displayed on the Distribution Requests Pages** (preceding section of this lesson).
- The **Options** area of the **Open HEG Interventions** page has the following buttons and selection boxes:
  - **Change Filter** button [refer to the procedure for **Filtering Data Displayed on the Distribution Requests Pages** (preceding section of this lesson)].
  - **Bulk Submit** button [for submitting selected intervention(s)].

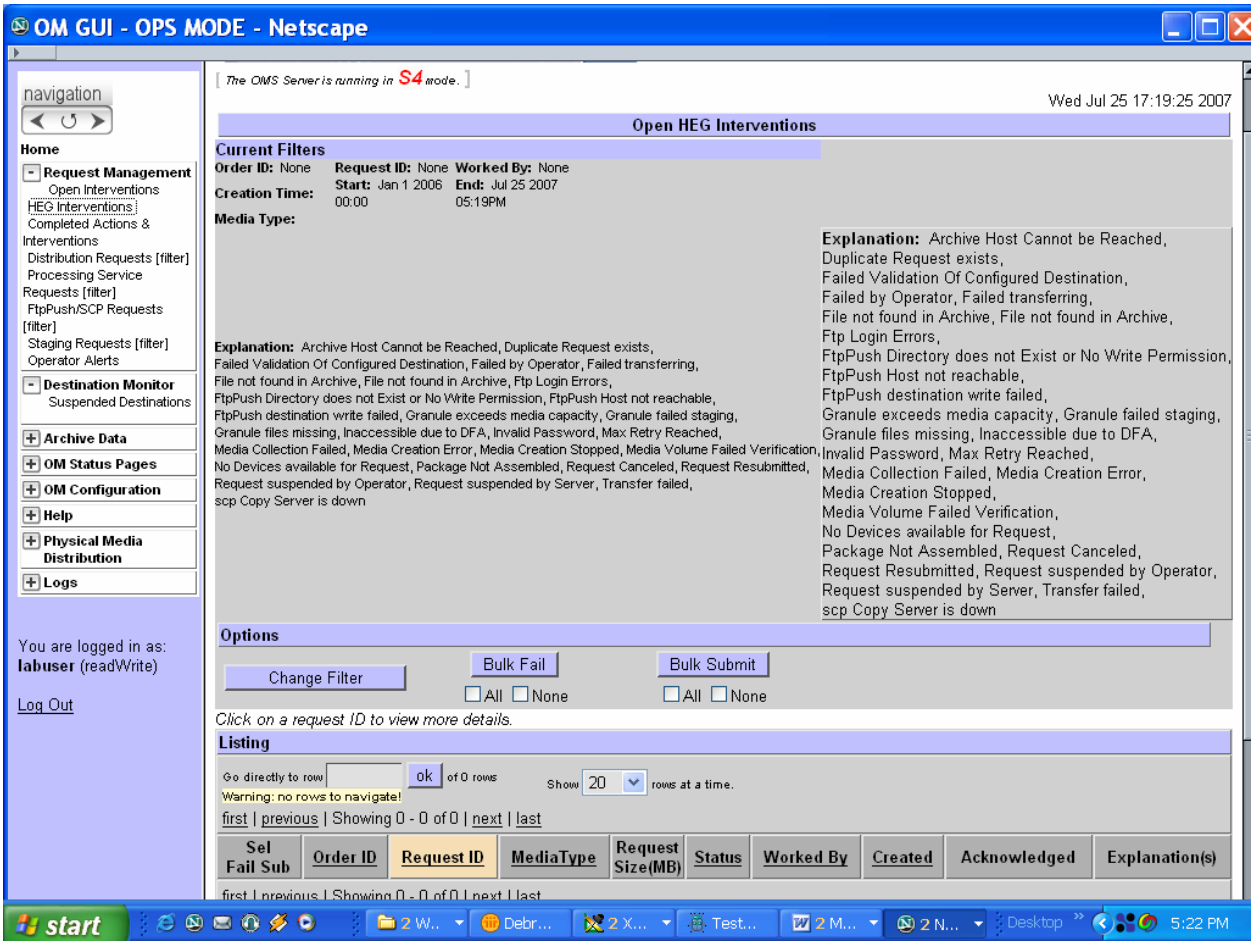


***Figure 18.8-15. Open HEG Interventions Page***

  - **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).**

**3** 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.
- 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.
- 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 3 and 4).
- 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 procedure for **Setting Refresh Options on OM GUI Pages** (preceding section of this lesson).
- 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.

**4** 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  brings up an **Open HEG Intervention Detail** page (i.e., **Intervention for Request**

**5** Observe information displayed on the **Open HEG Intervention Detail** page (Figure 18.8-16).

- The following items are displayed on the **Open HEG Intervention Detail** .

– **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**

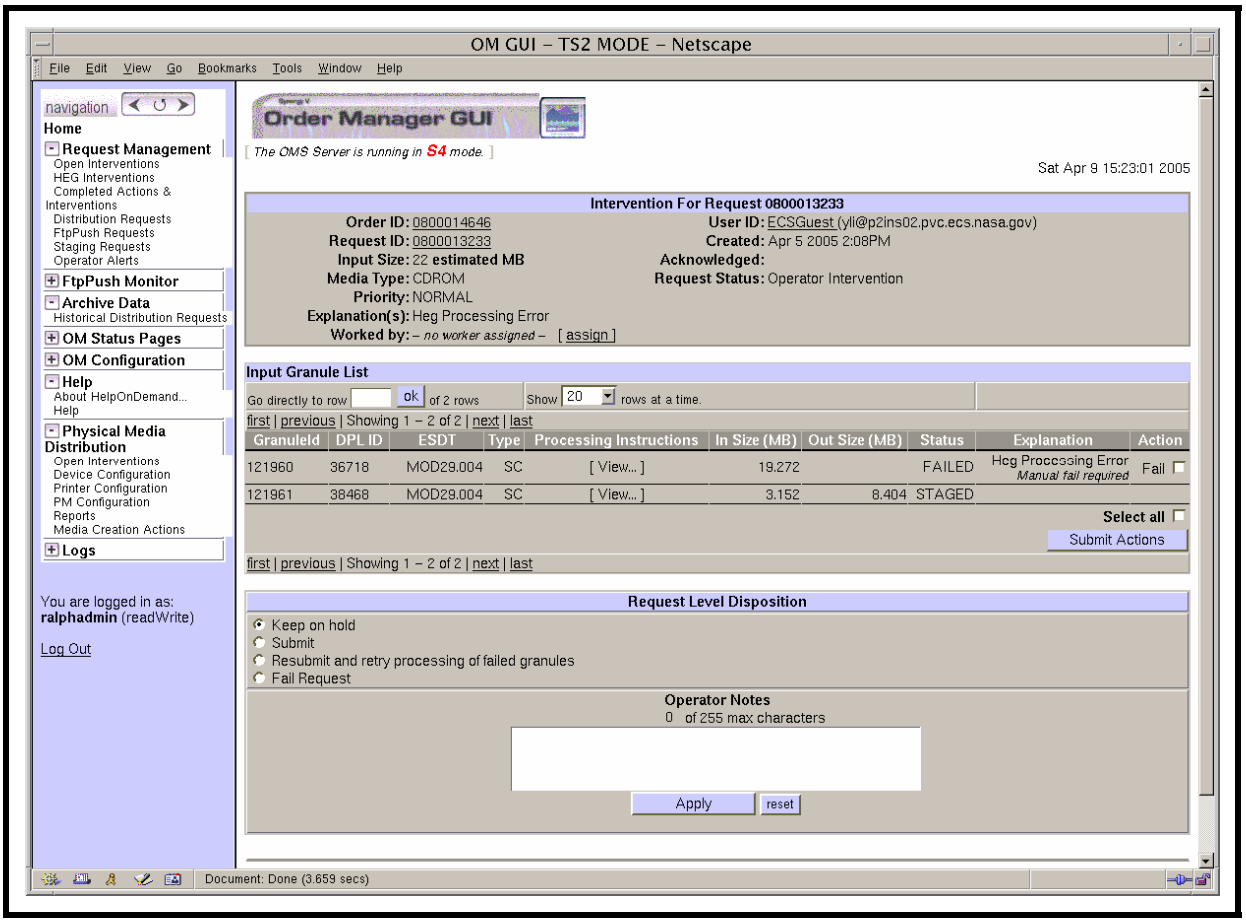


***Figure 18.8.16. Open HEG Intervention Detail (Intervention for Request X) Page***

- **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**.

- Text box (for entering comments).

– **Apply** button.

– **reset** button.

- Clicking on the 🡄 icon in the **OM GUI** navigation frame causes the **Open HEG Interventions** page to be redisplayed.

**6** To bring up a screen containing detailed data concerning the processing instructions for a particular granule ID 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 **_____** brings up a window containing the **Processing Instructions for Request ID _____::ECS Granule ID _____::DPL Granule ID _____**(Figure 18.8-17).

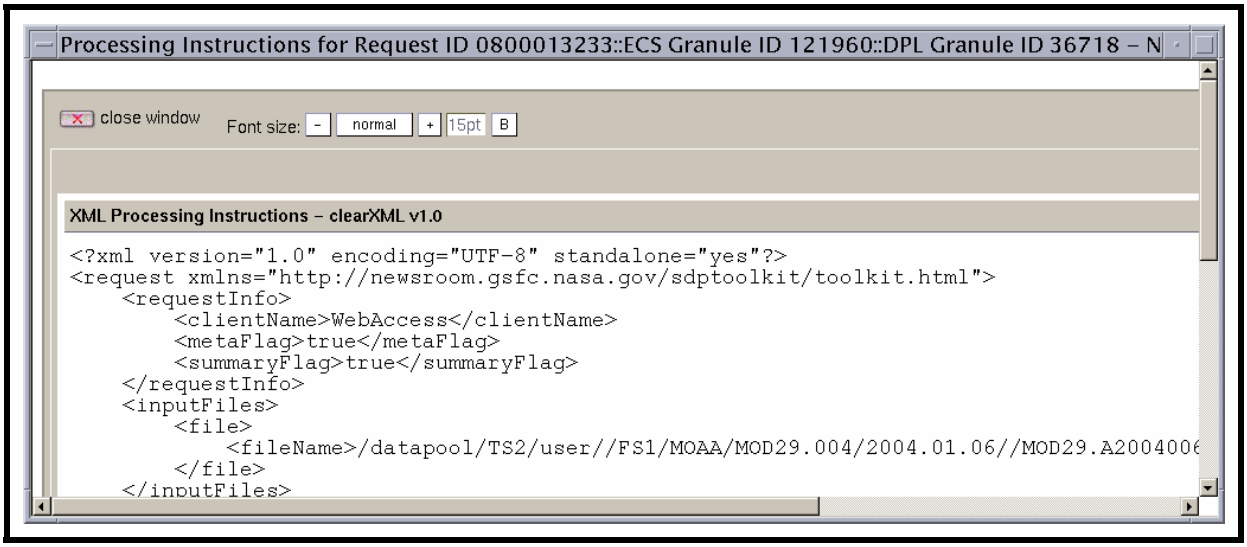


***Figure 18.8-17. Processing Instructions* Window**

- To close the **Processing Instructions for Request ID …** window, click on the **Close Window** button.

**7** To work on the intervention being displayed on the **Open HEG Intervention Detail** page, perform the procedure for **Responding to an Open HEG Intervention** (subsequent section of this lesson).

**8** To view the details of another open intervention first click on the 🡄 icon in the **OM GUI** navigation frame then return to Step 2.

- The **Open HEG Intervention Detail** page is dismissed.
- The **Open HEG Interventions** page is displayed.

**9** To fail intervention(s) first 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.

**10** To complete the process of failing intervention(s) click on the **Bulk Fail** button in the **Options** area of the **Open HEG Interventions** page.

- The selected intervention(s) is/are failed.

**11** To submit intervention(s) first 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.

**12** To complete the process of submitting intervention(s) click on the **Bulk Submit** button in the **Options** area of the **Open HEG Interventions** page.

- The selected intervention(s) is/are submitted.

**13** To start the process of logging out (when applicable) 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.

. .

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### 18.8.9 Responding to an Open HEG Intervention

The **Open HEG Intervention Detail** page (Figure 18.8-16) 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.

The procedure for responding to an open HEG intervention starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].
- The **Open HEG Intervention Detail** page is being displayed on the **OM GUI**.

– If the **Open HEG Intervention Detail** page (Figure 41) is not being displayed on the **OM GUI**, go to the procedure for **Viewing Open HEG Intervention Information on the OM GUI** (preceding section of this lesson).

### 18.8.9.1 Responding to an Open HEG Intervention

**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 procedure for **Viewing Open HEG Intervention Information on the OM GUI** (preceding section of this lesson).
- If someone is already working on the intervention, that person is identified in the **Worked by:** field of the **Open HEG Intervention Detail** page.

**2** To assign oneself to work on the intervention, first 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.
- 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, type the appropriate user ID in the text box displayed beside the **assign** or **change** link in the **Worked by:** field.

**4** To continue the process of assigning oneself to work on the intervention, click on the green button with the checkmark next to the text box in the **Worked by:** field.

**5** If no action is to be taken with respect to any individual granules in the request or if the entire request is 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 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, 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 (e.g., the reason for making a particular type of intervention), type the applicable text in the **OPERATOR NOTES** text box.

**9** To select the disposition for the request 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** Click on the **Apply** button.

- A **Close Confirmation** page (Figure 18.8-18) 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, type the appropriate text in the **Additional e-mail text** text box on the **Close Confirmation** page.

**12** If the intervention involved failing a request or granule(s) within a request, and no e-mail message is to be sent, 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.

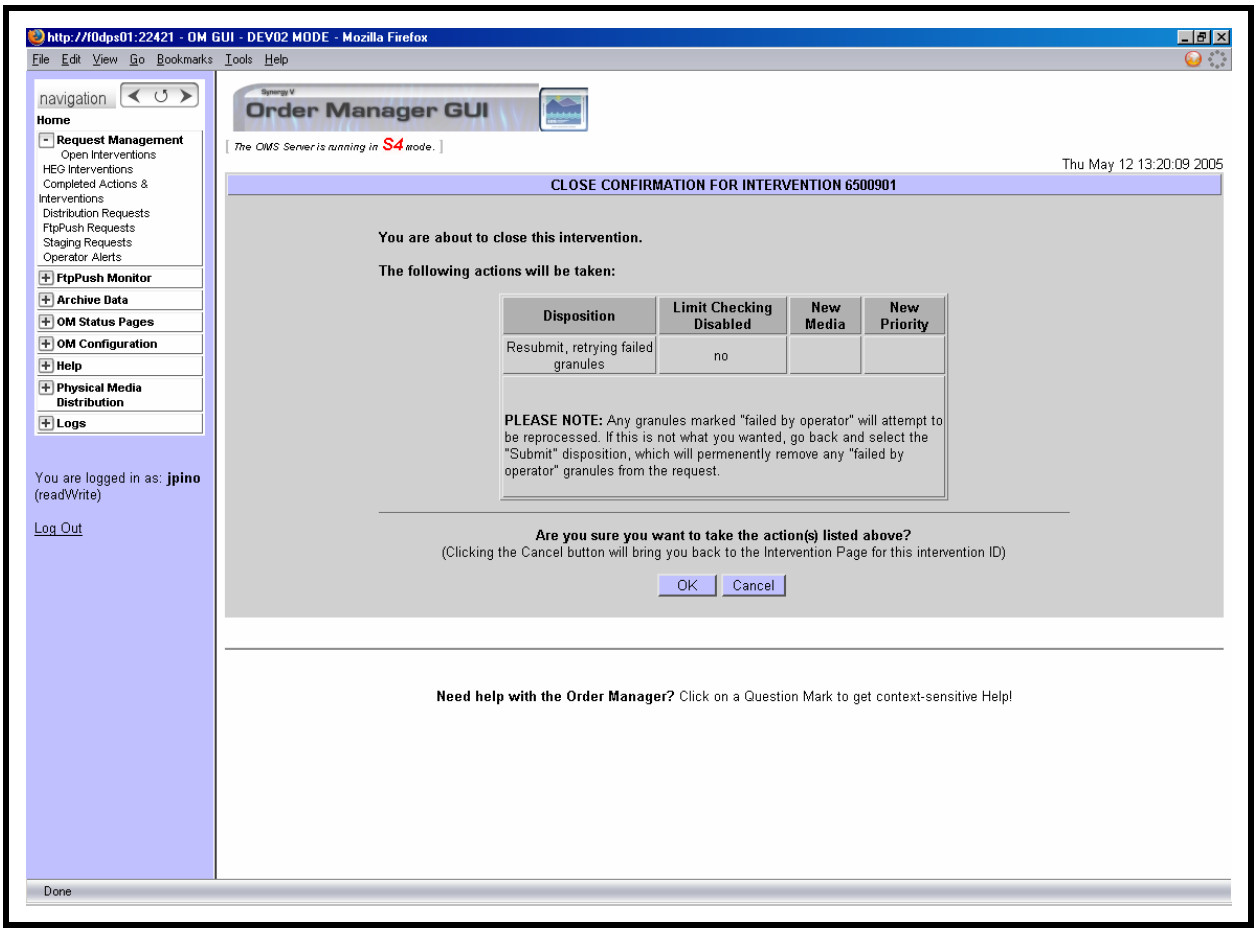


***Figure 18.8-18. Close Confirmation Page for HEG Intervention***

**13** 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?" 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) 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) 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.

---

### 18.8.10 Viewing Pending HEG Granules

The **OM GUI** displays pending HEG granules. The **Pending HEG Granules** (Figure 18.8-19) page provides the Distribution Technician (whether full-capability or limited capability operator) with a means of viewing pending HEG granules.

The procedure for viewing pending HEG granules on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched.

### 18.8.10.1 Viewing Pending HEG Granules

**1** Click on the **OM Status Pages** link in the navigation frame of the **OM GUI**.

- The **OM Status Pages** menu is expanded.

**2** Click on the **Pending HEG Granules** link in the navigation frame of the **OM GUI**.

- The **Pending HEG Granules** page (Figure 18.8-19) 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).**

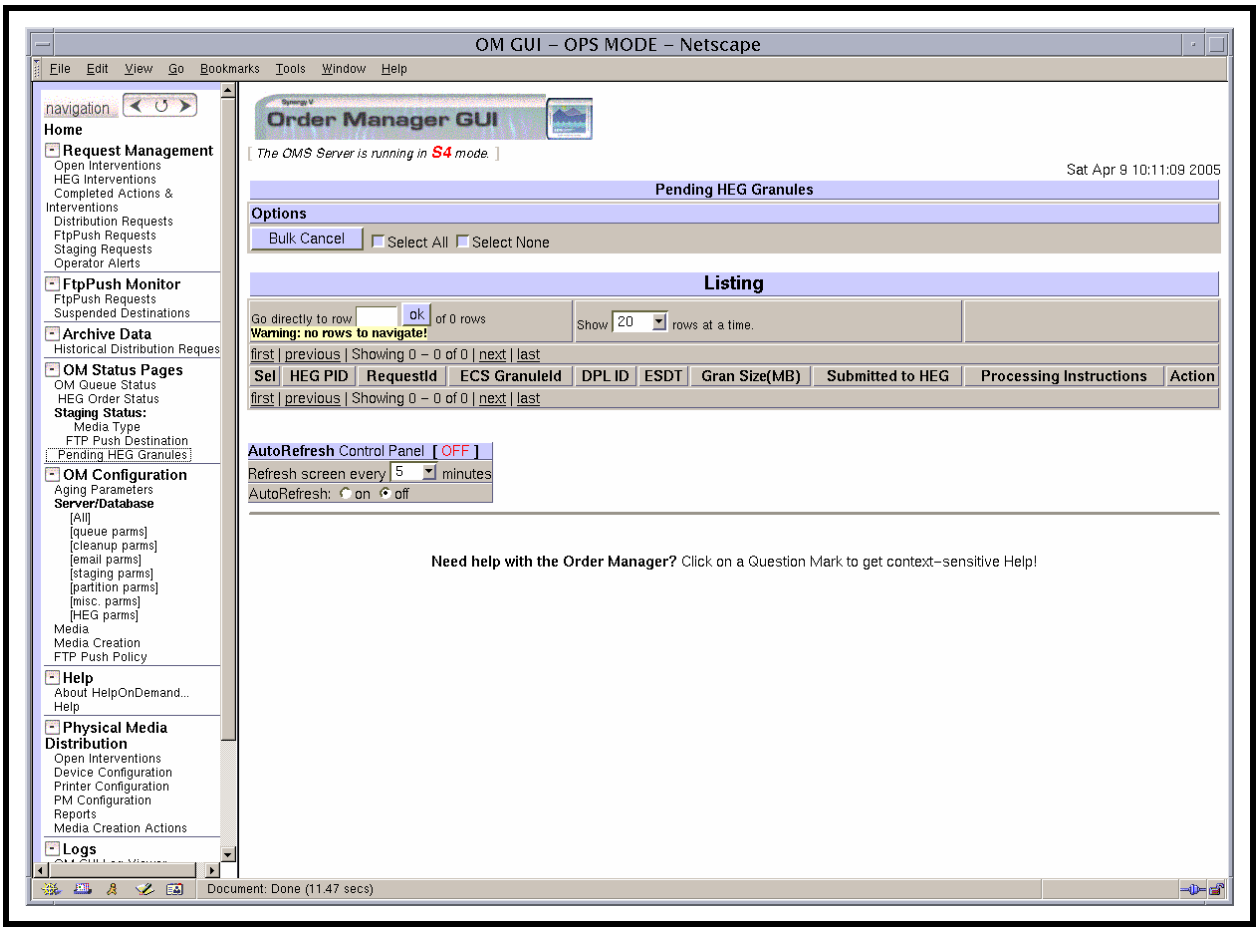


***Figure 18.8-19. Pending HEG Granules Page***

- **Submitted to HEG** [date/time].
- **Processing Instructions.**
- **Action**.

**3** 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 procedure for **Setting Refresh Options on OM GUI Pages** (preceding section of this lesson).
  - 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.

**4** 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.

**5** To view the processing instructions for a particular granule 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.

**6** To cancel pending HEG granule(s) first 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.

**7** To complete the process of canceling pending HEG granule(s) click on the **Bulk Cancel** button in the **Options** area of the **Pending HEG Granules** page.

- The specified pending HEG granules are failed.

**8** Repeat Steps 3 through 7 as necessary to view pending HEG granules.

**9** To start the process of logging out (if applicable) 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) 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.

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### 18.8.11 Viewing 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/SCP Destination.

The **Operator Alerts** page (Figure 18.8-20) 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/SCP 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/SCP 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.

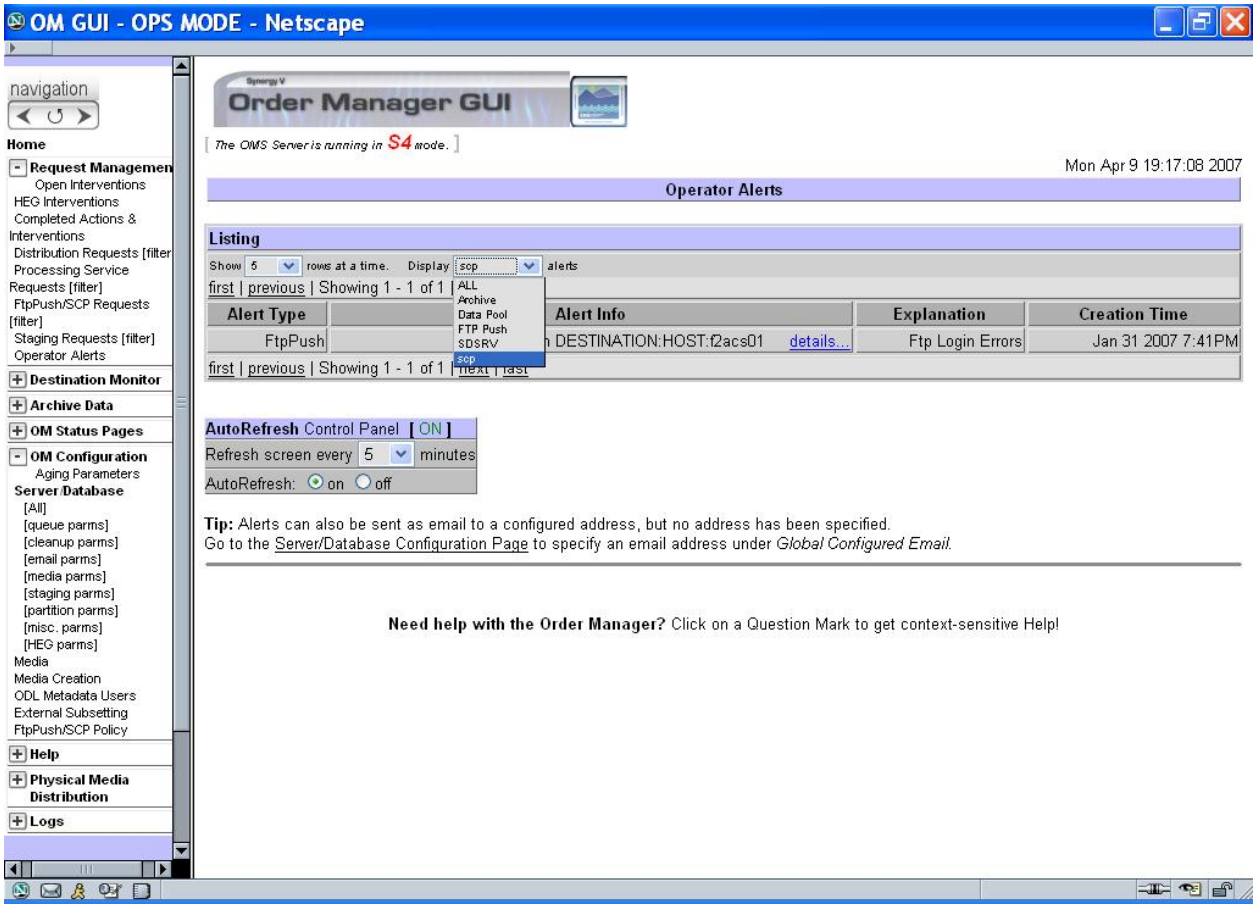


***Figure 18.8-20. Operator Alerts Page***

- 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 SNSM 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 errors).
  - An alert is generated when the Order Manager Server detects that the SDSRV is down.
  - The alert is automatically cleared when the OMS Server detects that SDSRV is running again.

The procedure for viewing operator alerts on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched.

### 18.8.11.1 Viewing Operator Alerts on the OM GUI

**1** Click on the **Request Management** link in the navigation frame of the **OM GUI**.

- The **Request Management** menu is expanded.

**2** Click on the **Operator Alerts** link in the navigation frame of the **OM GUI**.

- The **Operator Alerts** page (Figure 18.8-20) is displayed.
- The **Listing** table has the following columns:
  - **Alert Info**.
  - **Explanation.**
  - **Creation Time**.

**3** 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/SCP 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 OMS resource 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, click on the option button associated with the **Display _____ alerts** box then click on the desired selection.
  - The following choices are available:
    - **ALL.**
    - **Archive.**
    - **Data Pool.**
    - **FTP Push.**
    - **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 procedure for **Setting Refresh Options on OM GUI Pages** (preceding section of this lesson).
- 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 (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, click on the **Change** link adjacent to the message and change the value of the **Global Configured Email** parameter (for details refer to the procedure for **Checking/Modifying Values Assigned to OMS Server or Database Parameters**).

**4** To view detailed information concerning the cause and/or requests affected by the alert, click on the corresponding **details** link in the **Alert Info** column.

- A page describing the alert (e.g., Figure 18.8-20) 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.

**5** Repeat Steps 3 and 4 as necessary to view operator alerts.

**6** Return to the procedure for **Monitoring/Controlling Distribution Request Information on the OM GUI** (if applicable).

**7** To start the process of logging out (if applicable) 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) 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 browser is dismissed.
- **Cancel** - to dismiss the dialogue box without logging out.
  - The dialogue box is dismissed.
  - The **OM GUI** is displayed.

---

### 18.8.12 Viewing 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.

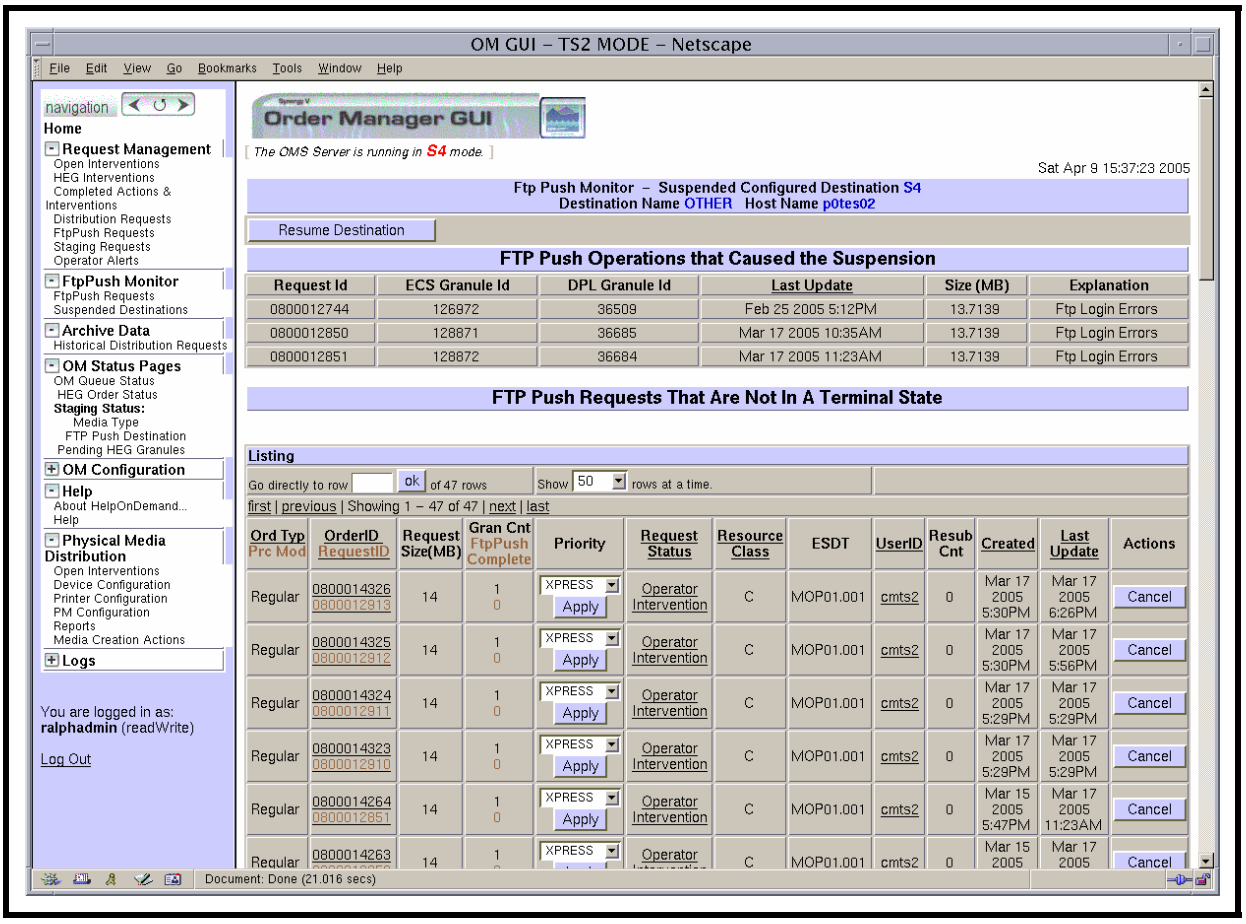


***Figure 18.8-21. Suspended Host Detail Page***

The procedure for viewing completed action/intervention information on the OM GUI starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

### 18.8.12.1 Viewing Completed Operator Actions and Interventions on the OM GUI

**1** Click on the **Request Management** link in the navigation frame of the **OM GUI**.

- The **Request Management** menu is expanded.

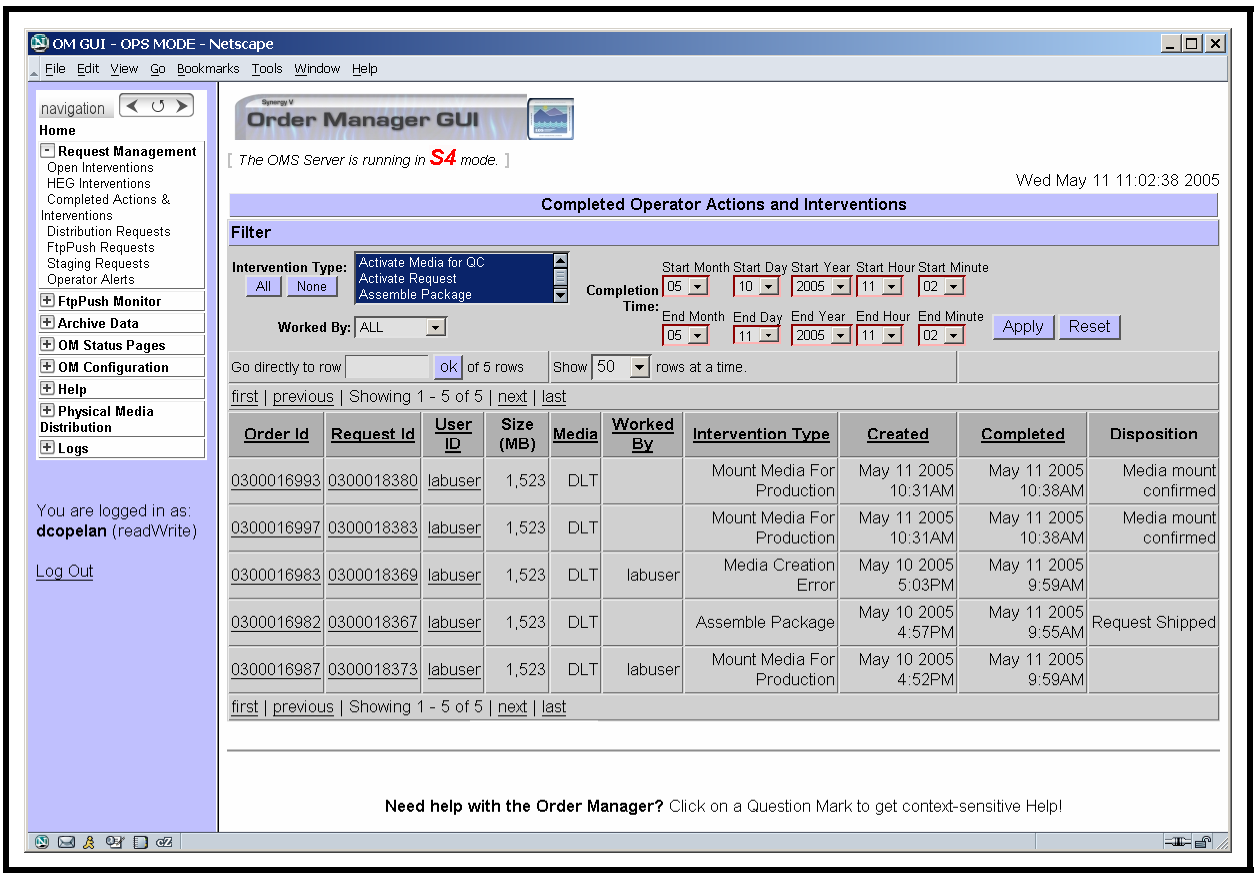


***Figure 18.8-22. Completed Operator Actions and Interventions Page***

**2** Click on the **Completed Operator Actions & Interventions** link in the navigation frame of the **OM GUI**.

- The **Completed Operator Actions and Interventions** page (Figure 18.8-22) is displayed.
- The **Listing** table has the following columns:
  - **Order Id.**
  - **Request Id.**
  - **User ID.**
  - **Size (MB).**
  - **Media.**
  - **Worked by.**

- **Created.**
- **Completed.**
- **Disposition.**

**3** 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 procedure for **Filtering Data Displayed on the Completed Operator Actions and Interventions Page** (subsequent section of this lesson).
- 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.
- 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, 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.

**4** If the desired request with completed intervention is not listed in the table of the **Completed Operator Actions and Interventions** page, perform the procedure for **Filtering Data Displayed on the Completed Operator Actions and Interventions Page** (subsequent section of this lesson).

**5** If request filtering was necessary, return to Step 3.

**6** 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 **0300004174** brings up a **Completed Intervention/Action Detail** (i.e., **Completed Operator Action for Request 0300004174**) page (Figure 18.8-23).

**7** 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.**
- Click on the ← icon in the **OM GUI** navigation frame to redisplay the **Completed Operator Actions and Interventions** page.

**8** Return to Step 3 to view information concerning another completed intervention (if applicable).

**9** To start the process of logging out (when applicable) 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.

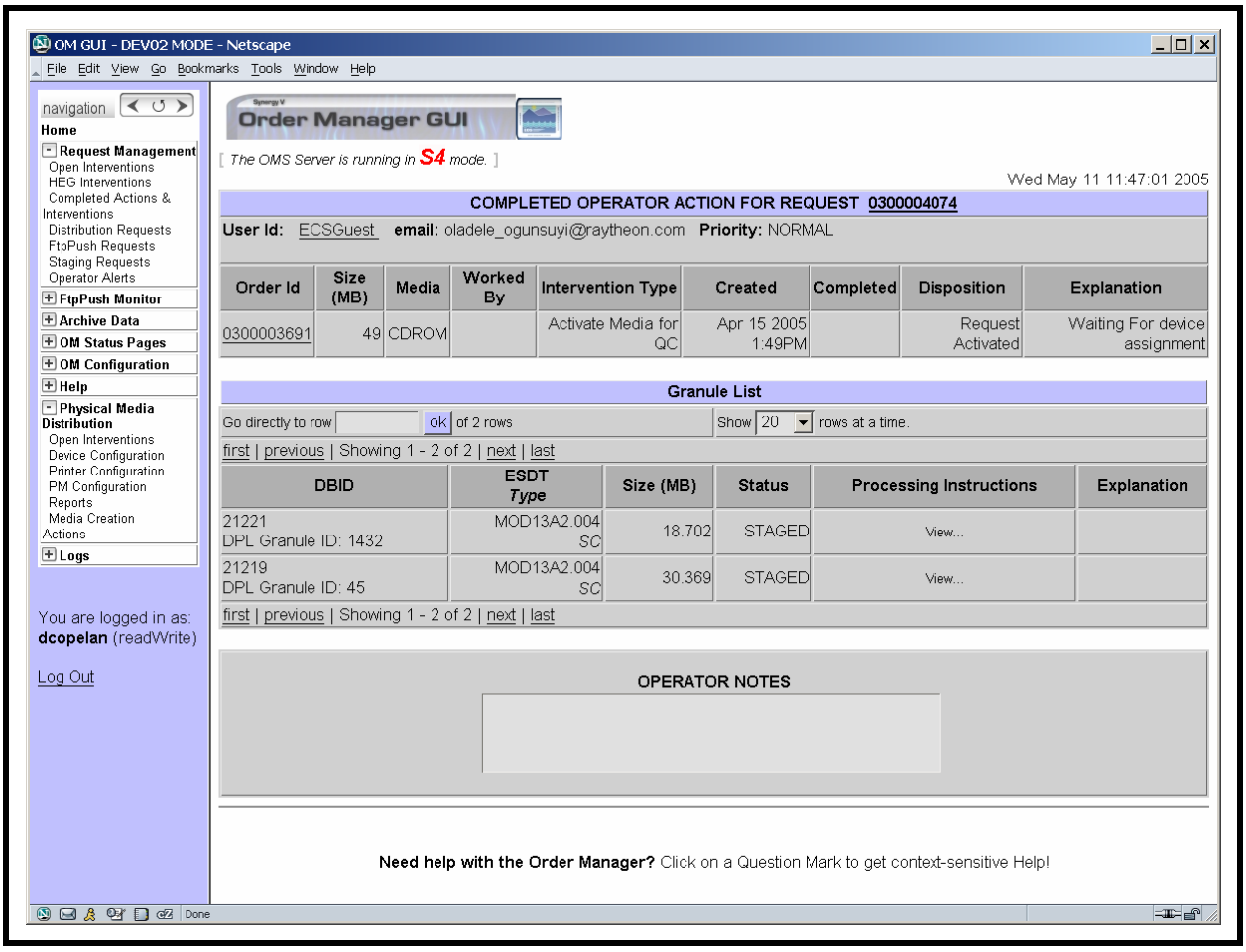


***Figure 18.8-23. Completed Intervention/Action Detail (Completed Operator Intervention/Action for Request X) Page***

## 18.8.13 Filtering 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.

**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.

The procedure for filtering data displayed on the **Completed Operator Actions and Interventions** page starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].
- The **Completed Operator Actions and Interventions** page is being displayed.

### 18.8.13.1 Filtering Data Displayed on the Completed Operator Actions and Interventions Page

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**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 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 Values Assigned to OM Configuration Parameters**.)

**1** If interventions of particular type(s) only should be displayed on the **Completed Operator Actions and Interventions** page, 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.**

- 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, click on the **Worked by:** option button to display a menu of individuals then 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 click on each date/time option button to display a drop-down list of month, day, year, hour, or minute options then 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), 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 procedure for **Viewing Completed Intervention Information on the OM GUI**.

## 18.9 Historical Distribution Requests on the OM GUI

### 18.9.1 Viewing Historical Distribution Requests on the OM GUI

The **Historical Distribution Requests** page (Figure 18.9-1) provides the Distribution Technician (whether full-capability or limited capability operator) with a means of viewing historical distribution request information on the OM GUI.

The procedure for viewing completed intervention information on the OM GUI starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

***Table 18.9-1. Historical Distribution Requests - Activity Checklist***

| Order | Role | Task | Section | Complete? |
|---|---|---|---|---|
| 1 | Distribution Technician | Viewing Historical Distribution Requests | (P) 18.9.1.1 | |
| 2 | Distribution Technician | Viewing Historical Processing Requests | (P) 18.9.1.2 | |

#### 18.9.1.1 Viewing Historical Distribution Requests on the OM GUI

**1** Click on the **Archive Data** link in the navigation frame of the **OM GUI**.

- The **Archive Data** menu is expanded.

**2** 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.**

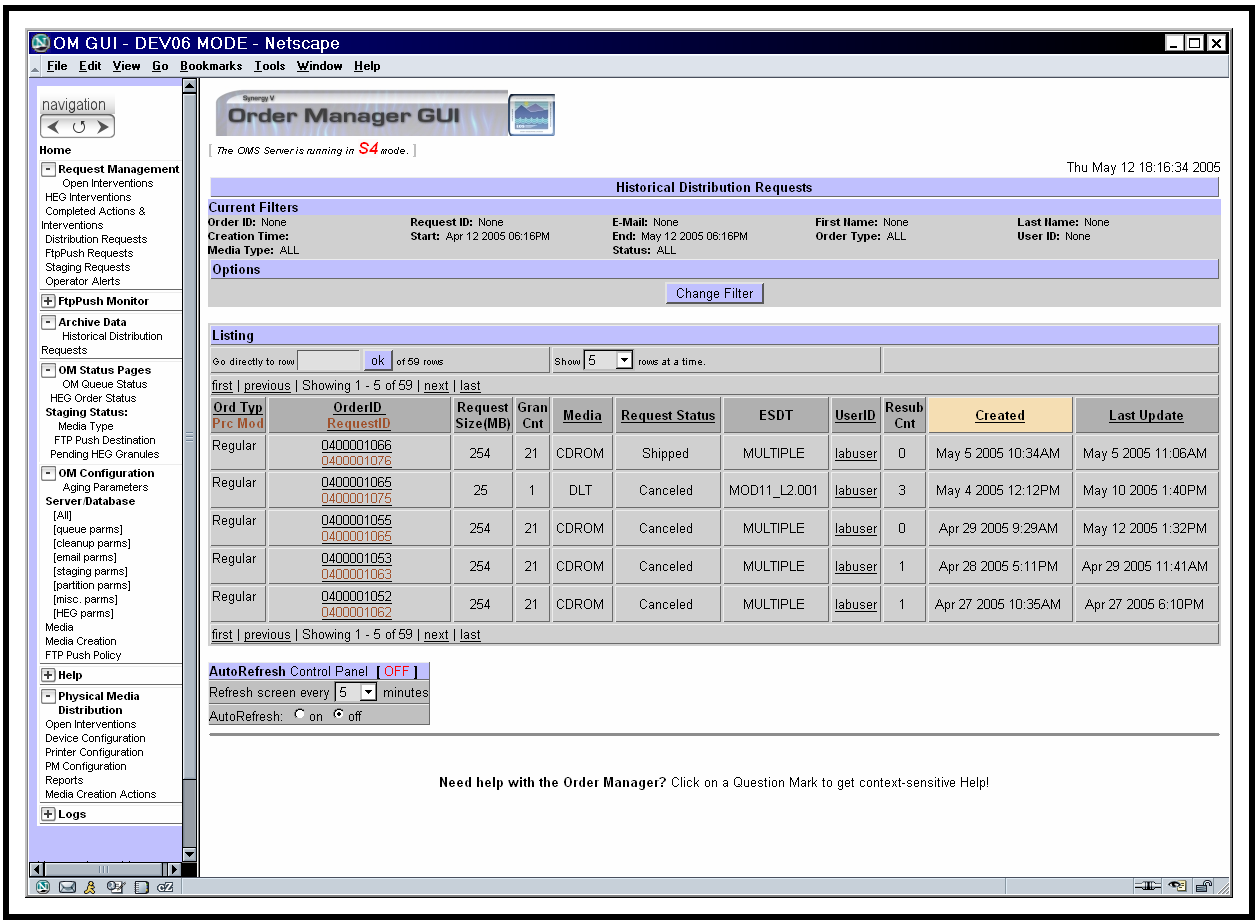


***Figure 18.9-1. Historical Distribution Requests Page***

- **OrderId/RequestId.**
- **Request Size (MB).**
- **Gran Cnt.**
- **Media.**
- **Request Status.**
- **ESDT.**
- **UserID.**
- **Resub Cnt.**
- **Created.**
- **Last Update.**

**3** Observe information displayed in the **Listing** table of the **Historical Distribution Requests** page.

- By default, data concerning up to 50 historical requests (and "last update" 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 procedure for **Filtering Data Displayed on the Distribution Requests Pages** (preceding section of this lesson).
- 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.
- 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, 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.

**4** If the desired request(s) is (are) not listed in the **Listing** table of the **Historical Distribution Requests** page, perform the procedure for **Filtering Data Displayed on the Distribution Requests Pages** (preceding section of this lesson).

## 18.21.2 Viewing Historical Processing Requests on the OM GUI

**1** Click on the **Archive Data** link in the navigation frame of the **OM GUI**.

- The **Archive Data** menu is expanded.

**2** Click on the **Historical Processing Requests** link in the navigation frame of the **OM GUI**.

- The **Historical Processing Requests** page is displayed (Figure 18.9-2).

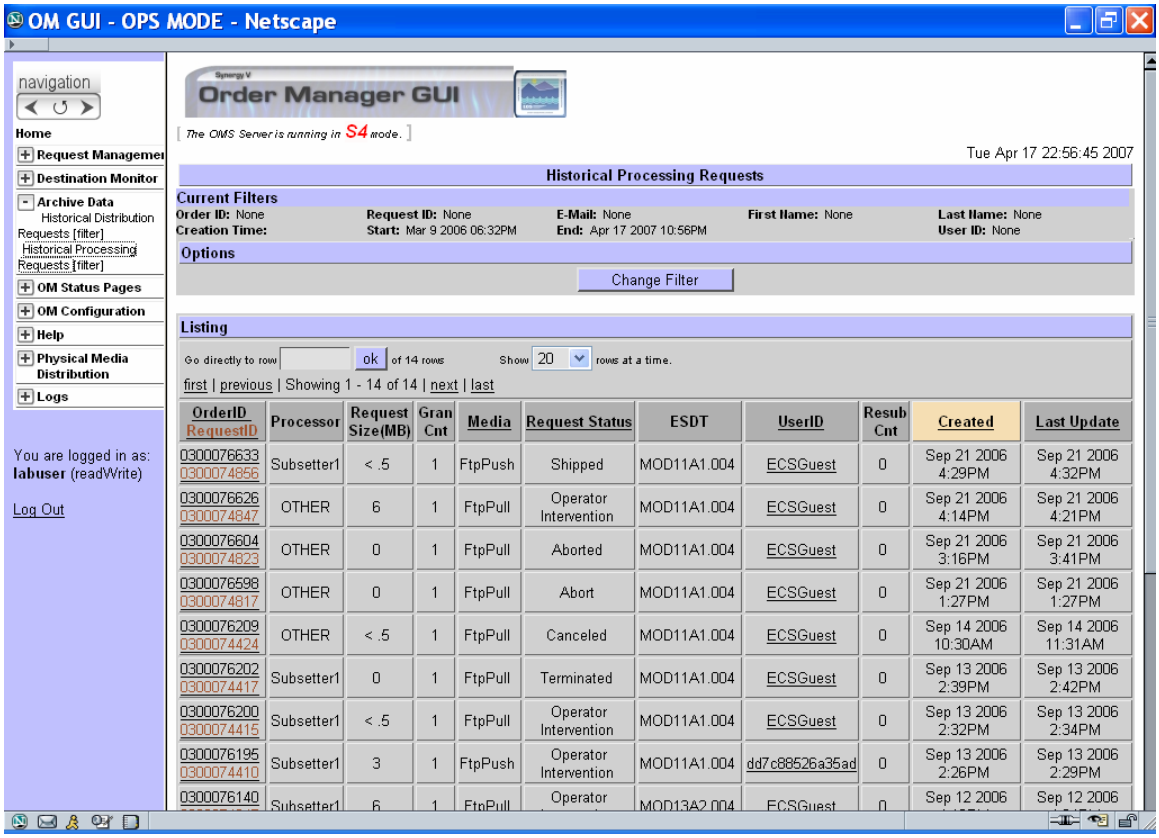


***Figure 18.9-2. Historical Processing Requests***

The Historical Processing Requests page show the operator can identify the archived external processing requests through the historical processing request page

**3** If the operator wants to filter a request

**Click on the Change filter button.**

The Historical Processing Requests page show the operator can filter any specific external processing services or HEG through the historical processing services request filter (Figure 18.9-3).

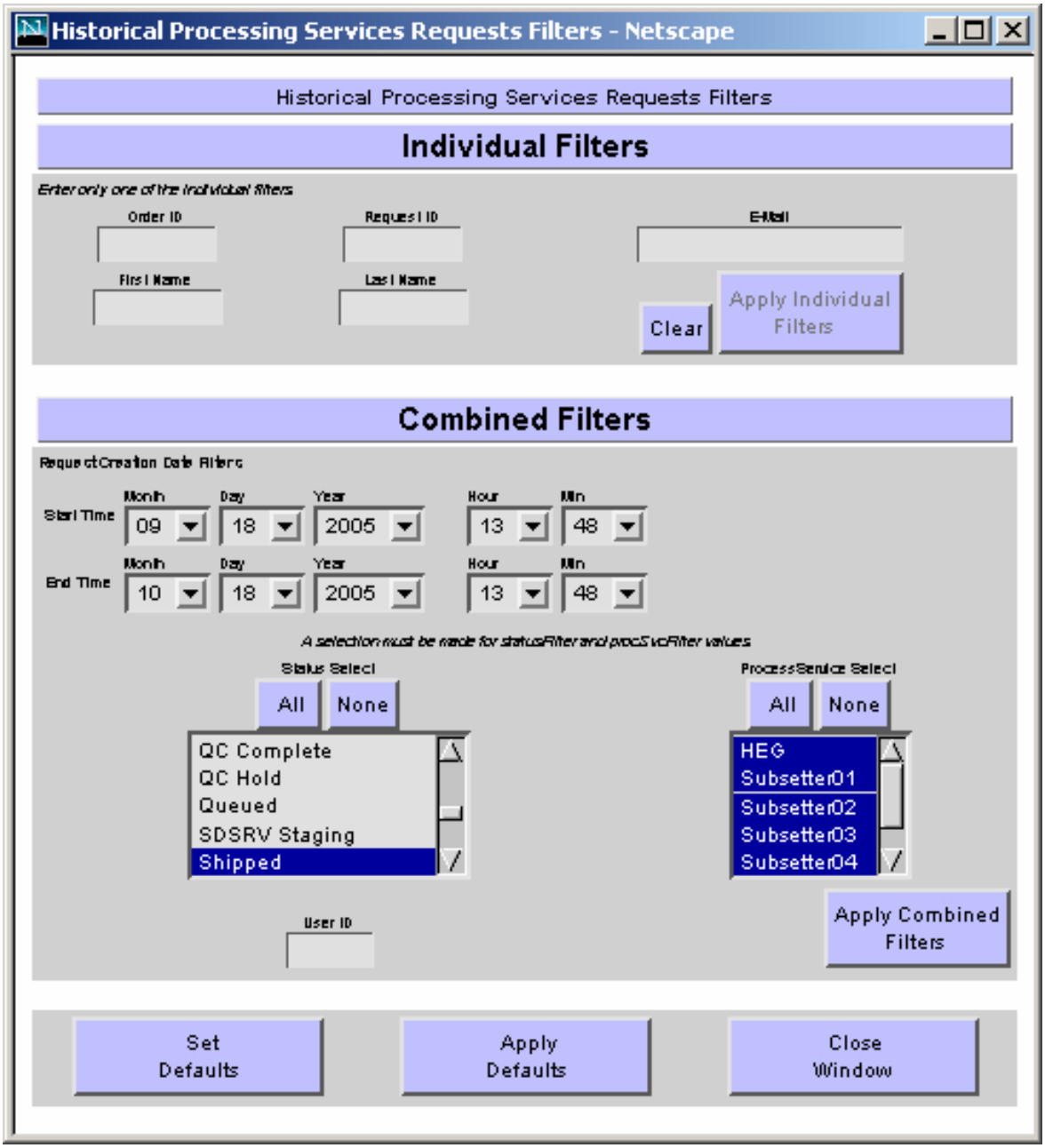


***Figure 18.9-3. Historical Processing Requests Filter***

**4** Return to Step 3 to view information concerning another order or request (if applicable).

**5** To start the process of logging out (if applicable) 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

**6** To complete the process of logging out (when applicable) 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.

---

## 18.10 Viewing and Responding to Suspended FTP/SCP Push Distribution Destinations

### 18.10.1 Suspended Destinations

The **Suspended Destinations** page (Figure 18.10-1) provides the full-capability operator with a means of viewing suspended FTP Push/SCP Destinations and a means of taking the following kinds of actions with respect to suspended FTP Push/SCP Destinations:

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

The procedure for viewing and responding to suspended FTP push distribution destinations on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched.

Table 18.9-1 contains the Activity Checklies for Suspended FTP/SCP Push Distribution Destinations

***Table 18.9-1. Suspended FTP/SCP Push Distribution Destinations - Activity Checklist***

| Order | Role | Task | Section | Complete? |
|---|---|---|---|---|
| 1 | Distribution Technician | Viewing and Responding to Suspended FTP Push Distribution Destinations | (P) 18.10.1.1 | |
| 2 | Distribution Technician | Viewing and Responding to Destination Details | (P) 18.10.2.1 | |

### 18.10.1.1 Viewing and Responding to Suspended FTP Push Distribution Destinations

1 Click on the **Destination Monitor** link in the navigation frame of the **OM GUI**.

- The **Destination Monitor** menu is expanded.

2 If the **Suspended Destinations** page is not already being displayed, click on the **Suspended Destinations** link in the navigation frame of the **OM GUI**.

- The **Suspended Destinations** page is displayed (Figure 18.10-1).

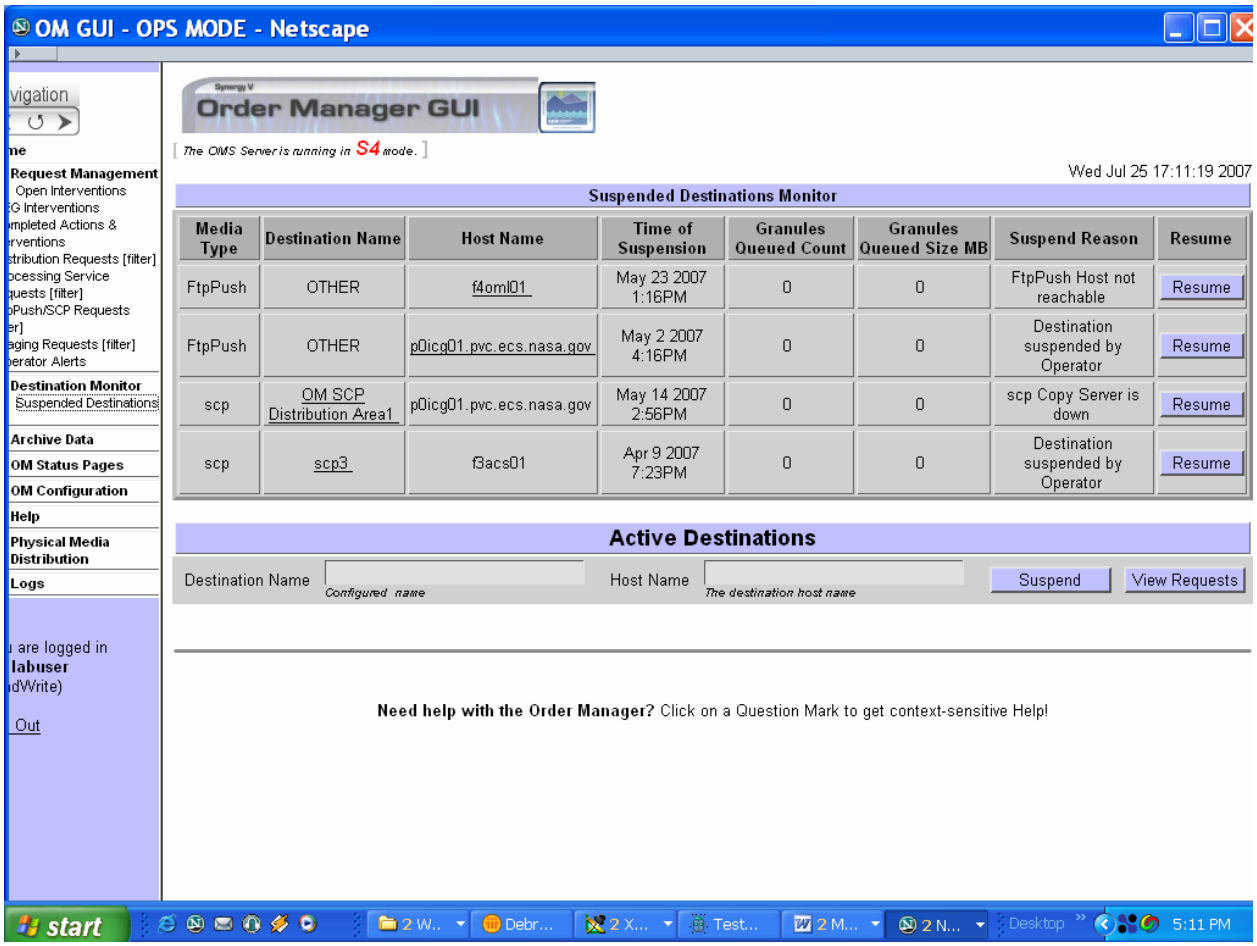


***Figure 18.10-1. Suspended Destinations Monitor***

**3** 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, 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.

**4** To resume a suspended destination, 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.

**5** To start the process of either suspending an active destination or viewing destination details (for an active or suspended destination), first type either the ***name*** in the **Destination Name** text field or the destination ***hostname*** in the **FTP Node** text field.

**6** To suspend an active destination (after making the appropriate entry in either the **Destination Name** text field or the **FTP Node** text field), 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 7.

**7** To view ftp push requests associated with 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), 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 procedure for **Viewing and Responding to Destination Details on the OM GUI**.

**8** Repeat Steps 3 through 7 as necessary to view and respond to information concerning suspended Ftp/ScpPush Distribution destinations on the **OM GUI**.

**9** To start the process of logging out (if applicable) 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) 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.

---

### 18.10.2 Viewing and Responding 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 procedure for viewing and responding to destination details on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched.
- The **Destination Details** page (Figure 34) is being displayed.

### 18.10.2.1 Viewing and Responding to Destination Details on the OM GUI

**1** If the **Destination Details** page is not already being displayed, perform the procedure for **Viewing and Responding to Suspended FTP Push Distribution Destinations** (previous section of this lesson) to display the page.

- The **Destination Details** page is displayed.

**2** 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.**

- 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.
- Clicking on a specific Order ID or Request ID brings up a screen containing more detailed data concerning that particular order or request.
- 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 **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 procedure for **Setting Refresh Options on OM GUI Pages** (preceding section of this lesson).
- 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.
- 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.

**3** To suspend an active destination (if applicable) click on the **Suspend Destination** button.

- The destination is suspended.
- The **Suspend Destination** button becomes a **Resume Destination** button.

**4** To resume a suspended destination, click on the **Resume Destination** button.

- The destination is resumed.

- The **Resume Destination** button becomes a **Suspend Destination** button.

**5** To change the priority of a particular distribution request (when applicable) perform the procedure for **Changing the Priority of a Distribution Request Using the OM GUI** (preceding section of this lesson).

**6** To either suspend a particular distribution request or resume processing of a suspended request (when applicable) perform the procedure for **Suspending, Resuming, Canceling, Resubmitting, or Stopping a Distribution Request Using the OM GUI** (preceding section of this lesson).

**7** To cancel a particular distribution request (when applicable) perform the procedure for **Suspending, Resuming, Canceling, Resubmitting, or Stopping a Distribution Request Using the OM GUI** (preceding section of this lesson).

**8** To review and/or respond to an open intervention for a particular distribution request first click on the **Open Intervention** link in the **Request Status** column for the request in the **Listing** table.

**9** To review and/or respond to an open intervention go to the procedure for **Viewing Open Intervention Information on the OM GUI** (preceding section of this lesson).

**10** Repeat Steps 2 through 9 as necessary to view and respond to destination details.

**11** To start the process of logging out (if applicable) 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.

**12** To complete the process of logging out (when applicable) 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.

---

## 18.11 Checking/Modifying OM Queue Status

### 18.11.1 Checking/Modifying OM Queue Status

The **OM Queue Status** page (Figure 18.11-1) 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 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.

The procedure for checking/modifying OM queue status starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

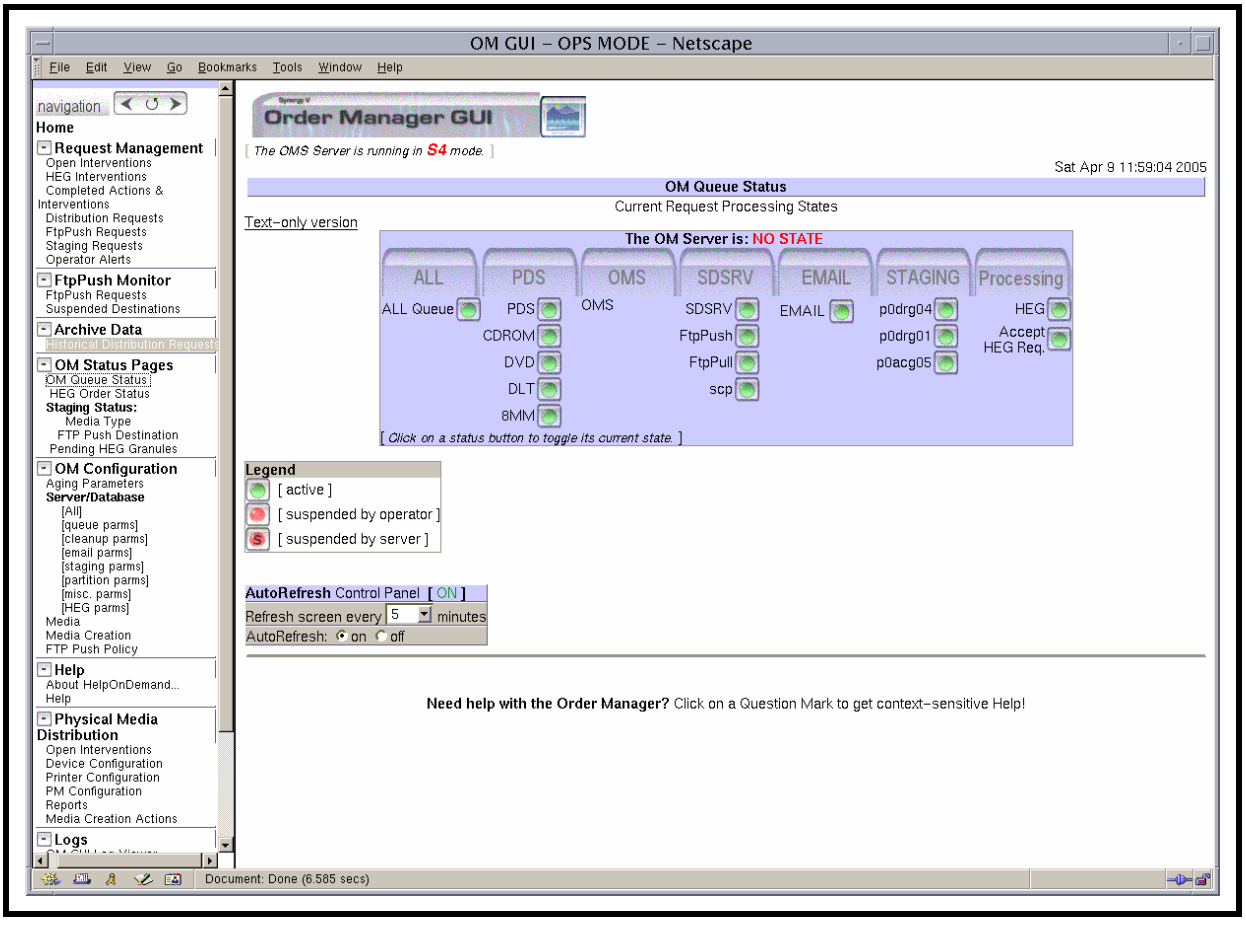


***Figure 18.11-1. OM Queue Status Page***

***Table 18.11-1. Checking/Modifying OM Queue Status - Activity Checklist***

| Order | Role | Task | Section | Complete? |
|---|---|---|---|---|
| 1 | Distribution Technician | Checking/Modifying OM Queue Status | (P) 18.11.1.1 | |
| 2 | Distribution Technician | Checking/Modifying HEG Order Status | (P) 18.11.2.1 | |
| 3 | Distribution Technician | Checking Staging Status | (P) 18.11.3.1 | |

## 18.11.1.1 Checking/Modifying OM Queue Status

**1** Click on the **OM Status Pages** link in the navigation frame of the **OM GUI**.

- The **OM Status Pages** menu is expanded.

**2** If the **OM Queue Status** page (Figure 18.11-1) is not already being displayed, 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].
  - **OMS.**
  - **SDSRV.**
  - **EMAIL.**
  - **STAGING.**
  - **Processing (HEG).**

**3** 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 (Figure 18.11-2) 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).

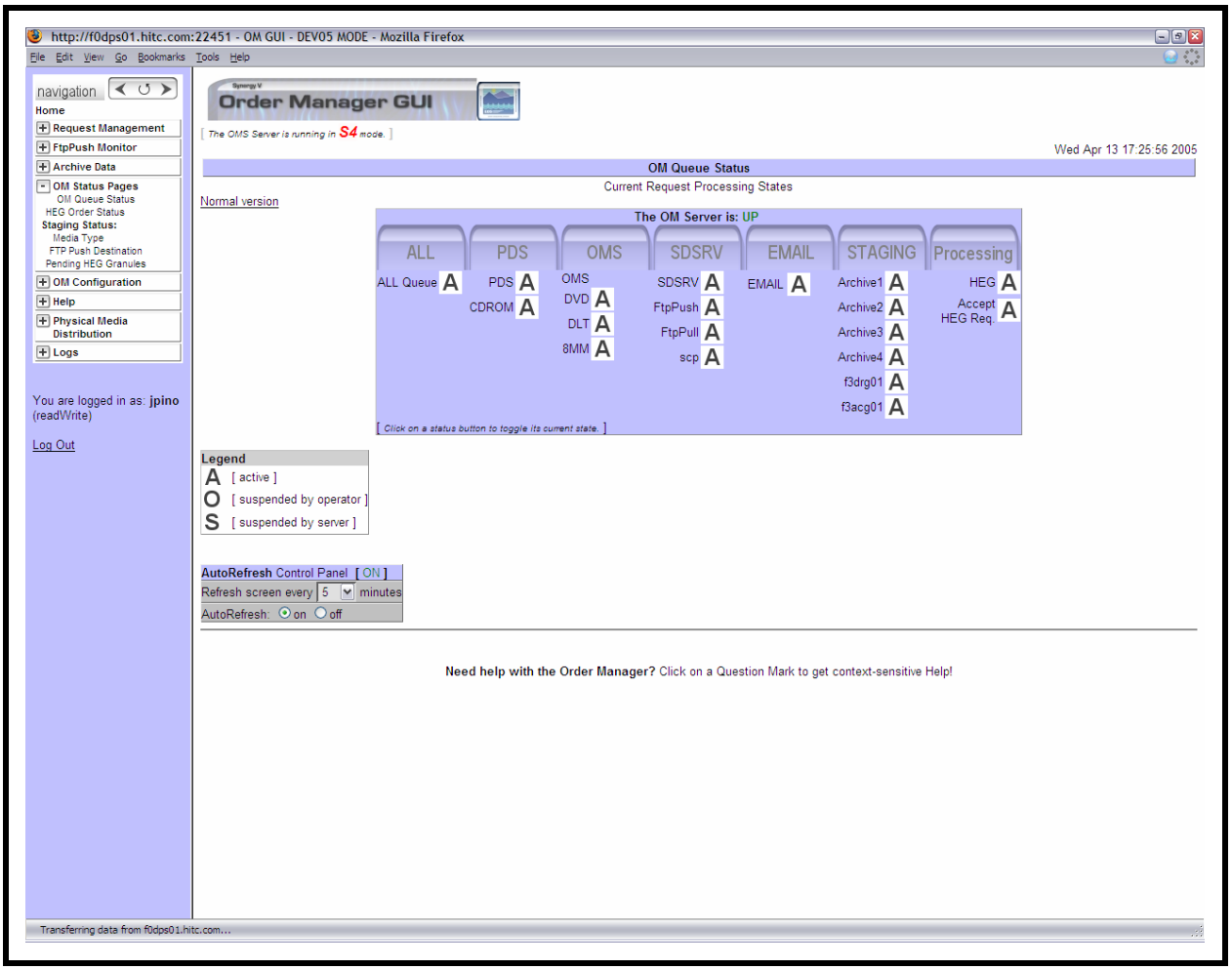


***Figure 18.11-2. OM Queue Status Page - Text-Only Version***

- 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 procedure for **Setting Refresh Options on OM GUI Pages** (preceding section of this lesson).
- 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.

**4** If it is necessary to either activate or suspend a request queue (and there is authorization to do so), 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.

**5** To complete the process of toggling the state of a queue (if applicable) 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.

**6** Repeat Steps 4 and 5 as necessary to change the state of additional request queues.

**7** To start the process of logging out (if applicable) 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) 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.

### 18.11.2 Checking/Modifying 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).

The procedure for checking/modifying HEG order status starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

#### 18.11.2.1 Checking/Modifying HEG Order Status

**1** Click on the **OM Status Pages** link in the navigation frame of the **OM GUI**.

- The **OM Status Pages** menu is expanded.

**2** If the **HEG Order Status** page (Figure 18.11-3) is not already being displayed, click on the **HEG Order Status** link in the navigation frame of the **OM GUI**.

- The **HEG Order Status** page is displayed.

**3** 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 procedure for **Setting Refresh Options on OM GUI Pages** (preceding section of this lesson).
- To manually update (refresh) the data on the screen, click on the ↻ icon in the **OM GUI** navigation frame.

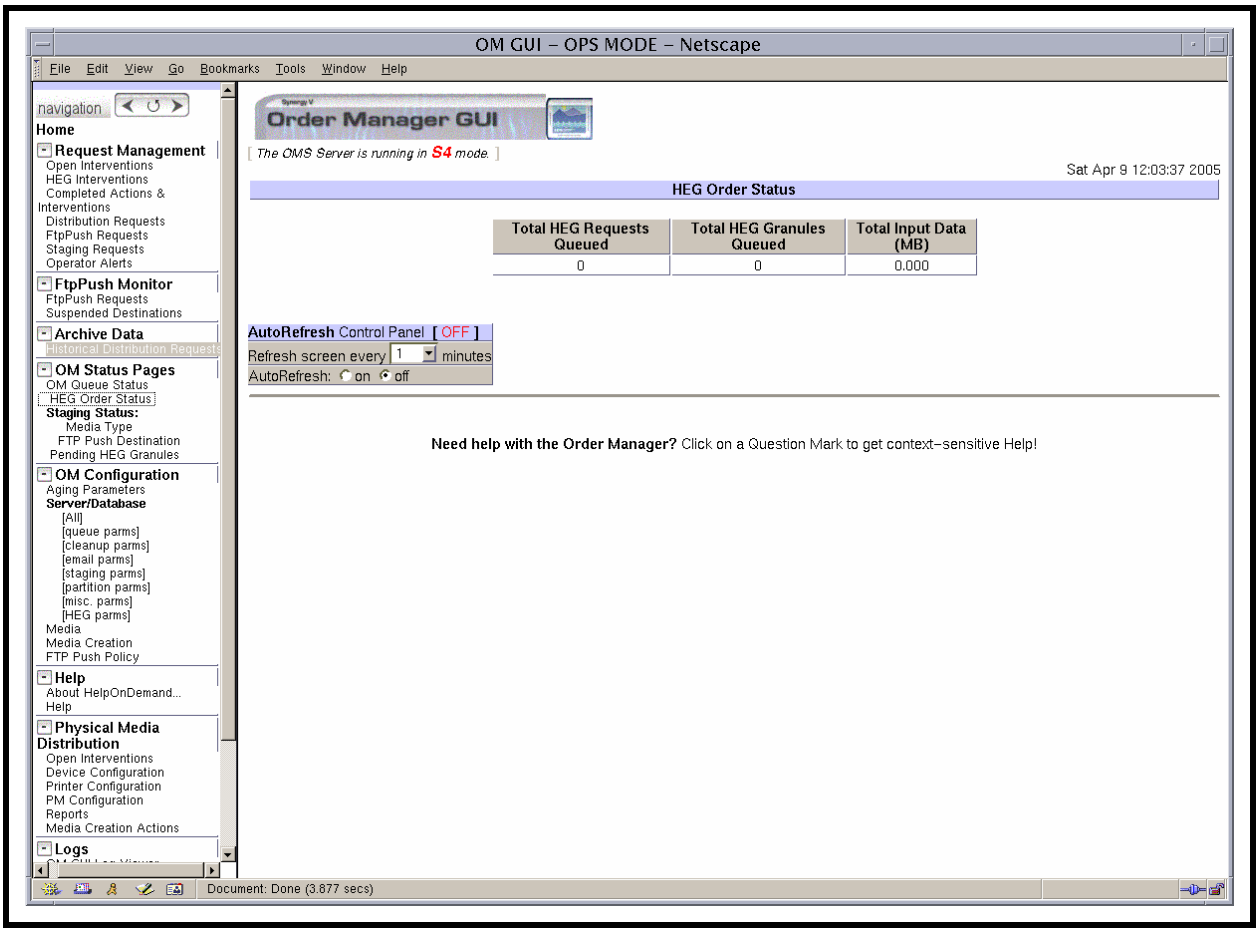


***Figure 18.11-3. HEG Order Status Page***

- 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.

**4** To check or modify HEG queue status go to the procedure for **Checking/Modifying OM Queue Status** (preceding section of this lesson).

**5** To start the process of logging out (if applicable) 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.

**6** To complete the process of logging out (when applicable) 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.

---

### 18.11.3 Checking Staging Status

The two **Staging Status** (Figures 18.11-1 and 18.11-2) 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….

1. **Media Type.**
2. **FTP Push/SCP 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.

The procedure for checking staging status starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

### 18.11.3.1 Checking Staging Status

**1** Click on the **OM Status Pages** link in the navigation frame of the **OM GUI**.

- The **OM Status Pages** menu is expanded.

**2** To display staging status by media type, click on the **Media Type** link in the navigation frame of the **OM GUI**.

- The **Staging Status by Media Type** page (Figure 18.11-4) is displayed.

**3** To display staging status by FtpPush destination, click on the **FTP Push/SCP Destination** link in the navigation frame of the **OM GUI**.

- The **Staging Status by FTP Push/SCP Destination** page (Figure 18.11-5) is displayed.

**4** Observe information displayed in the table on the **Staging Status** page.

- Each **Staging Status** page (i.e., **by Media Type** or **by FTP Push/SCP 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].

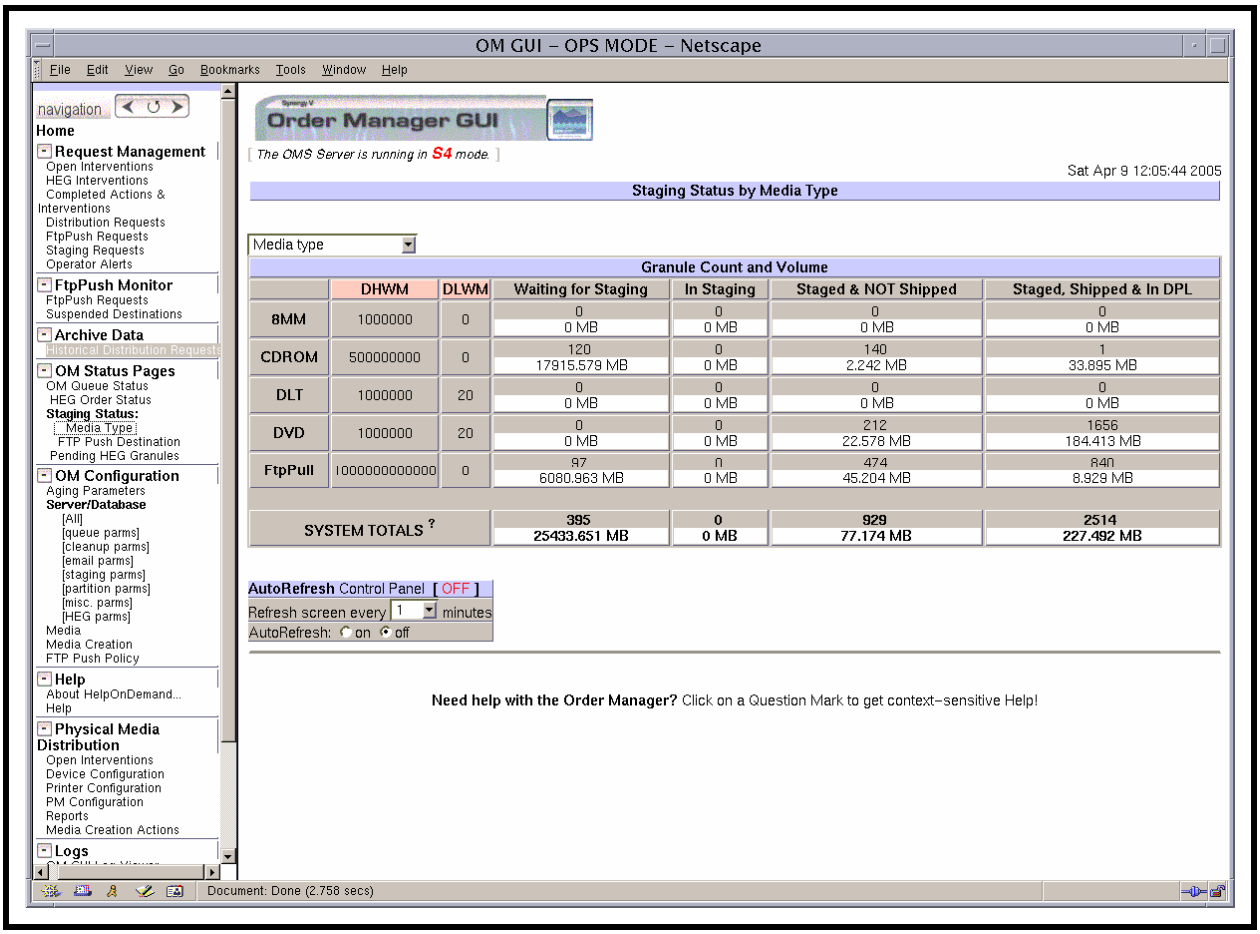


***Figure 18.11-4. Staging Status by Media Type Page***

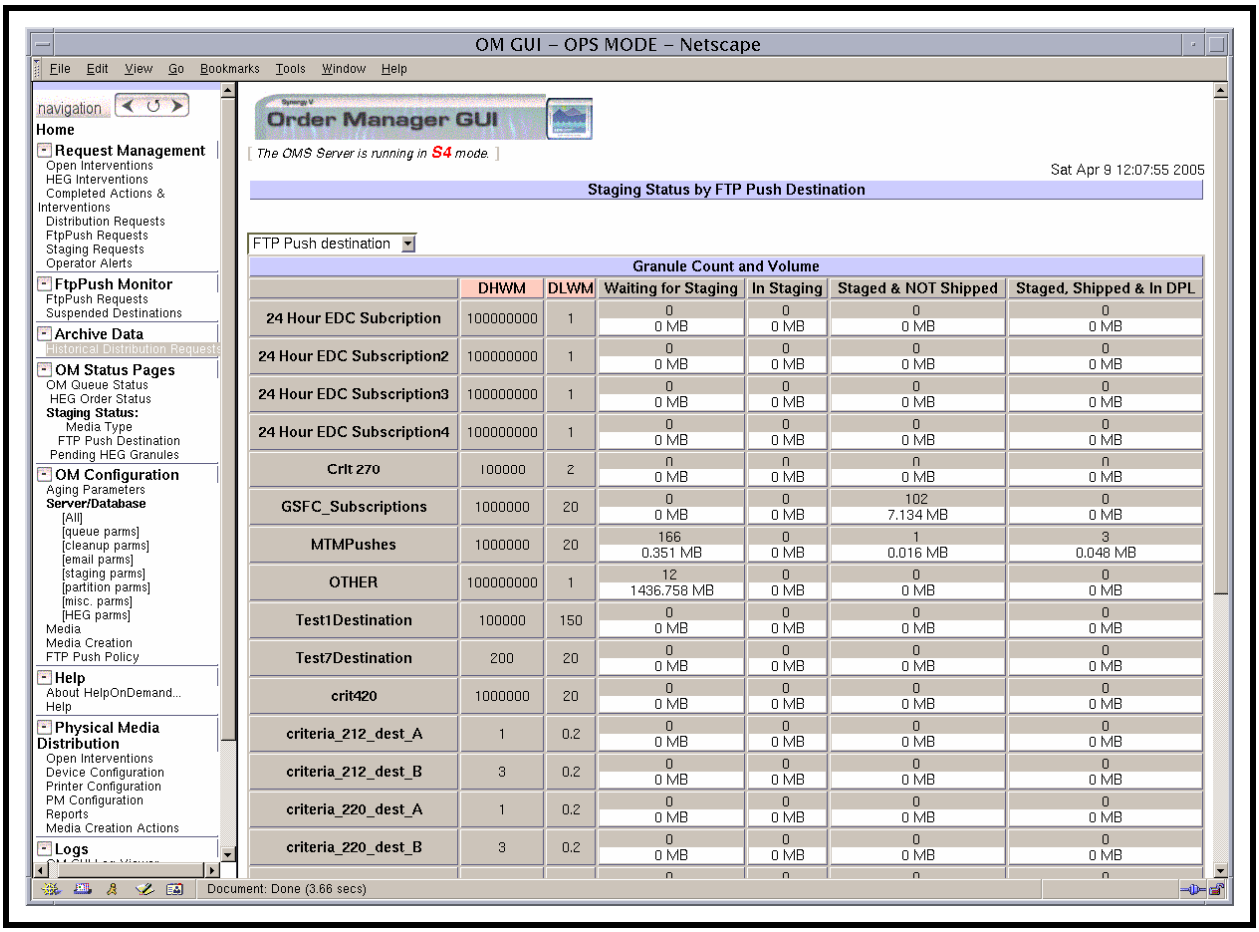


***Figure 18.11-5. Staging Status by FTP Push/SCP Destination Page***

- 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/SCP 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 procedure for **Setting Refresh Options on OM GUI Pages** (preceding section of this lesson).

- To manually update (refresh) the data on the screen, click on the ↻ icon in the **OM GUI** navigation frame.
- Your browser **Edit → Find in Page** menu provides a means of performing a keyword search of the data currently being displayed on the screen.

**5** Repeat Steps 2 through 4 as necessary to view staging status.

**6** To check or modify OM queue status return to the procedure for **Checking/Modifying OM Queue Status** (preceding section of this lesson).

**7** To start the process of logging out (if applicable) 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) 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.

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## 18.12 Checking/Modifying Values Assigned to OM Configuration Parameters

This section contains a description of how to check and modify OM configuration parameter values. In the **Tuning Order Manager Subsystem Parameters** section (subsequent section of this lesson) there is a description of the goals and effects of modifying OM configuration parameter values in tuning the OMS.

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.**

- **ODL metadata Users**
- **External Subsetting**
- **FTP Push Policy/SCP 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 parameter values.

### 18.12.1 Checking/Modifying Values Assigned to Aging Parameters

The **Aging Parameters** page (Figure 18.12-1) 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 0-255, 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].

The procedure for checking/modifying aging parameter values starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

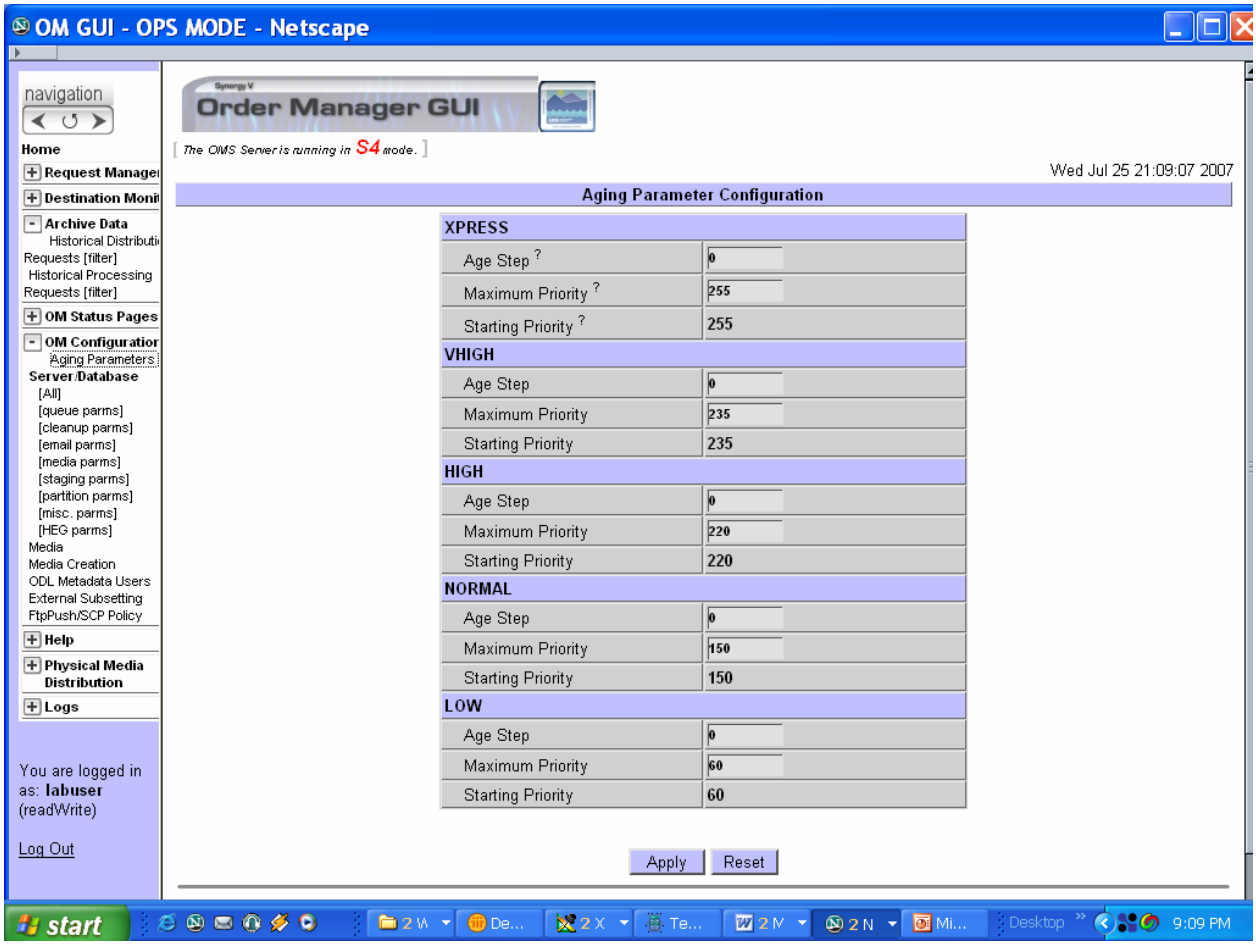


***Figure 18.12-1. Aging Parameters Page***

***Table 18.12-1. Checking/Modifying Values Assigned to OM Configuration Paramaters - Activity Checklist (1 of 2)***

| Order | Role | Task | Section | Complete? |
|---|---|---|---|---|
| 1 | Distribution Technician | Checking/Modifying Values Assigned to Aging Parameters | (P) 18.12.1.1 | |
| 2 | Distribution Technician | Checking/Modifying Values Assigned to OMS Server or Database Parameters | (P) 18.12.2.1 | |
| 3 | Distribution Technician | Checking/ModifyingValues Assigned to Media Parameters | (P) 18.12.3.1 | |
| 4 | Distribution Technician | Checking/Modifying Values Assigned to Media Creation Parameters | (P) 18.12.4.1 | |
| 5 | Distribution Technician | Adding a User Email Address for the ODL Metadata File | (P) 18.12.5.1 | |

***Table 18.12-1. Checking/Modifying Values Assigned to OM Configuration Paramaters - Activity Checklist (2 of 2)***

| Order | Role | Task | Section | Complete? |
|---|---|---|---|---|
| 6 | Distribution Technician | Deletig User Emaill Address(es) | (P) 18.12.5.2 | |
| 7 | Distribution Technician | Checking/Modifying External Subsetting Configurations | (P) 18.12.6.1 | |
| 8 | Distribution Technician | Checking/Modifying FTP Push/SCP Policy Configurations | (P) 18.12.7.1 | |
| 9 | Distribution Technician | Adding destinations to the Frequently Used Destinations List | (P) 18.12.8.1 | |
| 10 | Distribution Technician | Modifying Values Assigned to Parameters of Frequently Used Destinations | (P) 18.12.8.2 | |

### 18.12.1.1 Checking/Modifying Values Assigned to Aging Parameters

**1** Click on the **OM Configuration** link in the navigation frame of the **OM GUI**.

- The **OM Configuration** menu is expanded.

**2** If the **Aging Parameters** page (Figure 18.12-1) is not already being displayed, click on the **Aging Parameters** link in the navigation frame of the **OM GUI**.

- The **Aging Parameters** page (Figure 18.12.1) is displayed.

**3** 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**), 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.

- 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.

**4** If aging parameter value(s) is (are) to be modified (and there is authorization to do so), first type the new value(s) in the text entry box(es) for the relevant parameter(s).

**5** If aging parameter value(s) is (are) to be modified, 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.

**6** To start the process of logging out (if applicable) 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) 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.

---

### 18.12.2 Checking/Modifying Values Assigned to OMS Server or Database Parameters

The **OMS Server and Database Configuration** page (Figure 18.12-2) provides the full-capability operator with a means of checking and modifying OMS server or database parameter values.

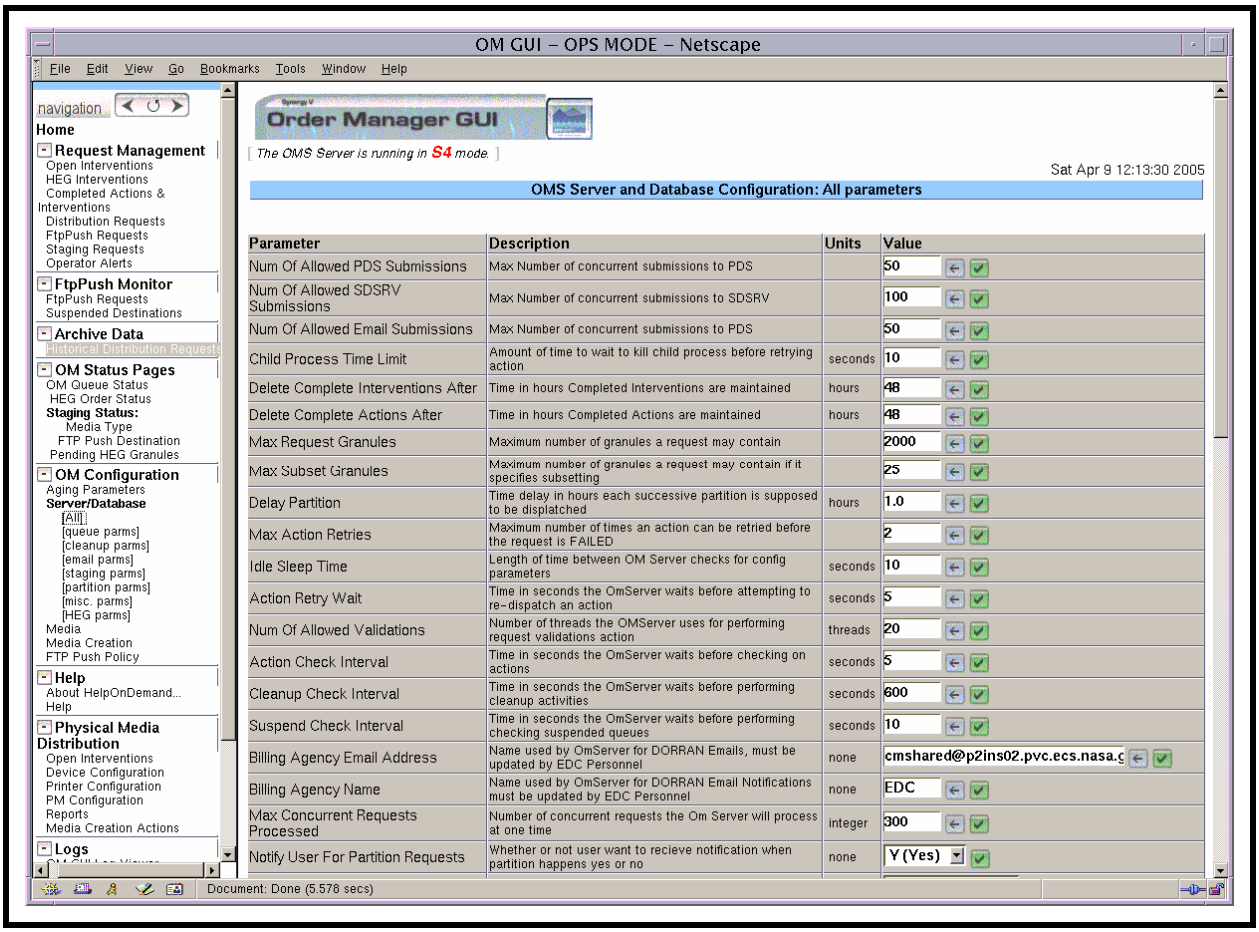


***Figure 18.12.-2. OMS Server and Database Configuration Page***

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.

The procedure for checking/modifying OMS server or database parameter values starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

### 18.12.2.1 Checking/Modifying Values Assigned to OMS Server or Database Parameters

**1** Click on the **OM Configuration** link in the navigation frame of the **OM GUI**.

- The **OM Configuration** menu is expanded.

**2** If the **OMS Server and Database Configuration** page (Figure 18.12-2) is not already being displayed, 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.**

**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.

**3** 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 p0061rameters:

  - **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.**
- **Luminex Order Pull Time.**

- 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.

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

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

**5** If server or database parameter value(s) is (are) to be modified, 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.

**6** To start the process of logging out (if applicable) 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) 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.

---

### 18.12.3 Checking/Modifying Values Assigned to Media Parameters

The **Media Configuration** (Figure 18.12-3) provides the full-capability operator with a means of checking and modifying media parameter values.

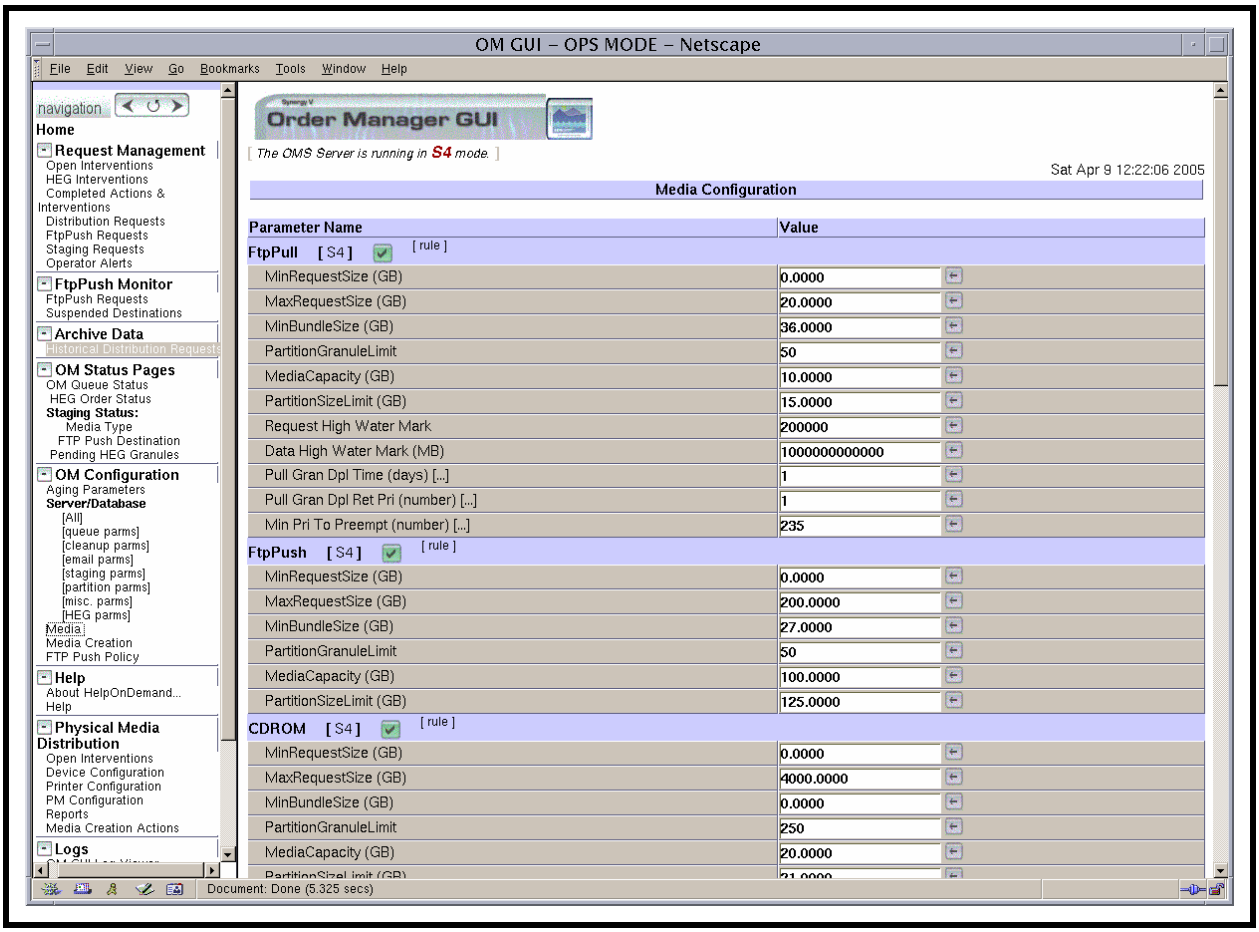


***Figure 18.12-3. Media Configuration Page***

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.

The procedure for checking/modifying media parameter values starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

### 18.12.3.1 Checking/Modifying Values Assigned to Media Parameters

**1** Click on the **OM Configuration** link in the navigation frame of the **OM GUI**.

- The **OM Configuration** menu is expanded.

**2** If the **Media Configuration** page (Figure 18.12-3) is not already being displayed, click on the **Media** link in the navigation frame of the **OM GUI**.

- The **Media Configuration** page (Figure 18.12-3) 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.

**3** 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 for each type of distribution medium:
  - **MediaCapacity (GB).**
  - **MinRequestSize (GB).**
  - **MaxRequestSize (GB).**
  - **PartitionSizeLimit (GB).**
  - **MinBundleSize (GB).**
  - **PartitionGranuleLimit.**
- Each of the preceding parameters applies to each of the following distribution media:
  - **FtpPull.**
  - **FtpPush.**
  - **CDROM.**
  - **DLT.**
  - **DVD.**

- **DLT.**
- **scp.**

- 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.

**4** If media parameter value(s) is (are) to be modified (and there is authorization to do so), first type the new value(s) in the text entry box(es) for the relevant parameter(s).

- **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.
- **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.
- **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.
- **PartitionSizeLimit (GB)** should be the size (in GB) at which point partitioning of a request can occur.
- **Request High Water Mark [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).
- **Data High Water Mark [DHWM] (MB)** – 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.
- **Pull Gran Dpl Time (days) [...] -** The pull granule Data Pool time is the number of days a granule for an FtpPull request would normally remain in the Data Pool.
- **Pull Gran Dpl Ret Pri (number) [...] -** The pull granule Data Pool retention priority is the normal retention priority for a granule for an FtpPull request.
- **Min Pri to Preempt (number) [...] -** The minimum priority to preempt applies to granules put in the Data Pool for an FtpPull request.

- **Request Low Water Mark [RLWM]** - The Request Low Water Mark is the desired minimum number of requests that may be in the Staging state or that completed staging but are not in a terminal state (e.g., Shipped).
- **Data Low Water Mark [DLWM] (MB)** – 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.

**5** If media parameter value(s) is (are) to be modified, 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 (Figure 18.12-4) 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.

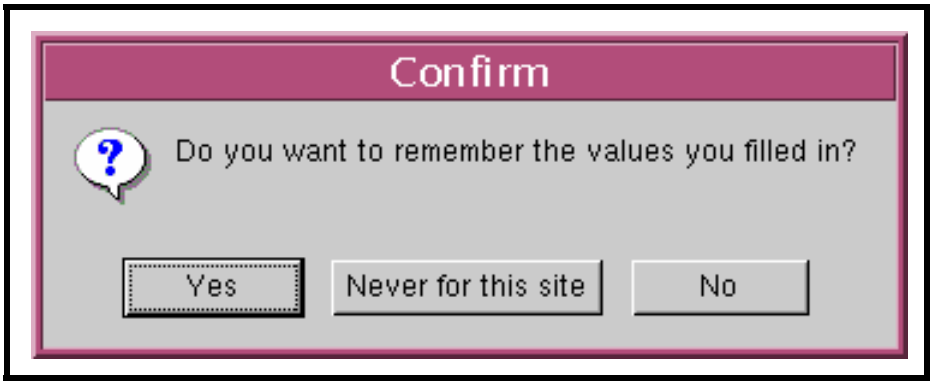


***Figure 18.12-4. "Remember Values" Confirmation Dialogue Box***

**6** If a **"Remember Values" Confirmation** dialogue box (Figure 18.12-4) is displayed, click on the appropriate button from the following selections:

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

**7** To start the process of logging out (if applicable) 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) 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.

---

### 18.12.4 Checking/Modifying Values Assigned to Media Creation Parameters

The **Media Creation Configuration** page (Figure 18.12-5) 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. 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.

The procedure for checking/modifying media creation configuration parameter values starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

#### 18.12.4.1 Checking/Modifying Values Assigned to Media Creation Parameters

---

**1** Click on the **OM Configuration** link in the navigation frame of the **OM GUI**.

- The **OM Configuration** menu is expanded.

2 If the **Media Creation Configuration** page (Figure 18.12-5) is not already being displayed, click on the **Media Creation** link in the navigation frame of the **OM GUI**.

- The **Media Creation Configuration** page is displayed.

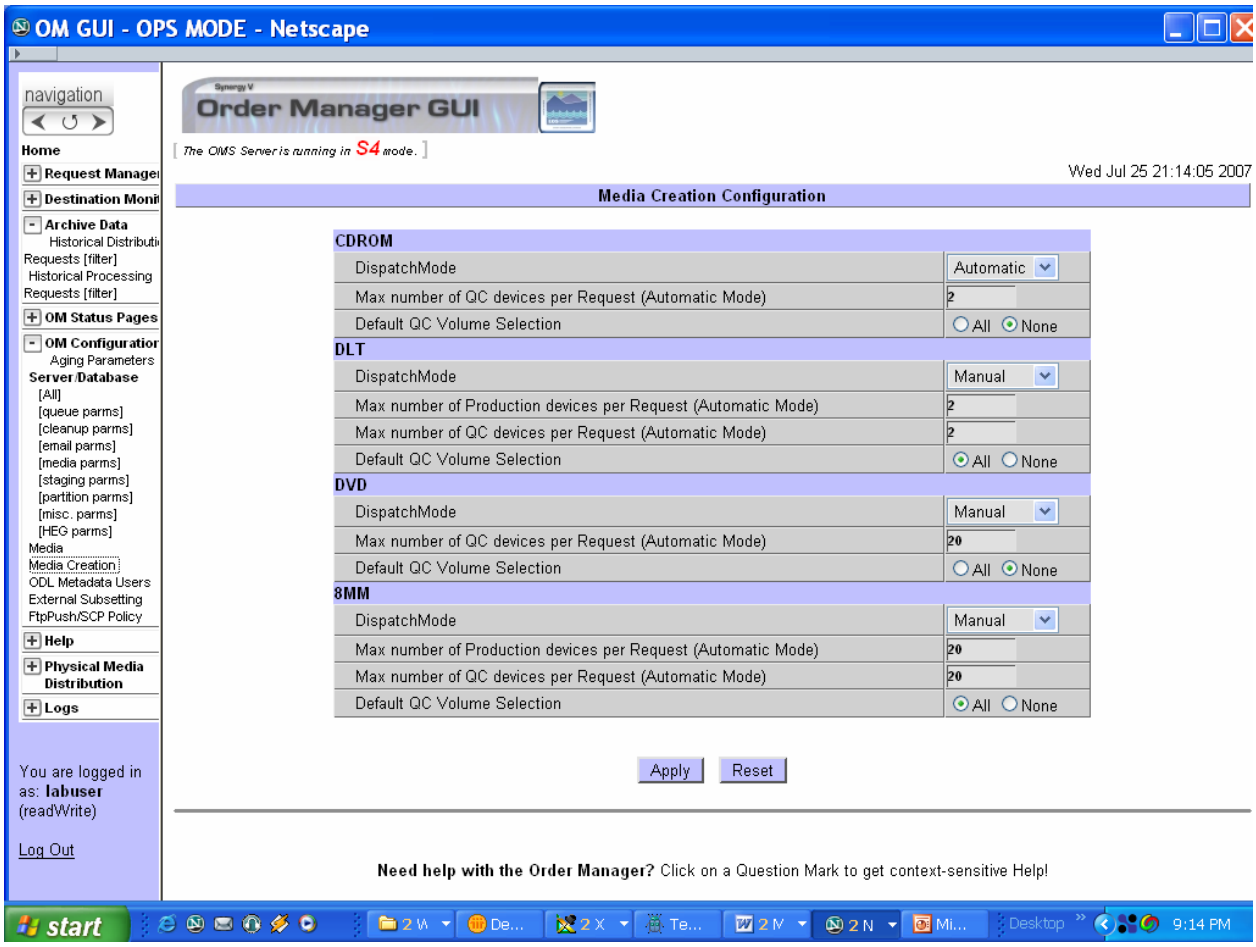


***Figure 18.12-5. Media Creation Configuration Page***

**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.

**3** 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.**
  - **DLT.**
- 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.

**4** If media creation 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** should be set to **OMS**.

**5** If media parameter value(s) is (are) to be modified, 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.

**6** If a **"Remember Values" Confirmation** dialogue box is displayed, click on the appropriate button from the following selections:

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

**7** To start the process of logging out (if applicable) 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.

---

### 18.12.5 Checking or Modifying ODL Metadata Users Configuration

Limited Capability operators are limited to viewing Metadata File Users configuration only. They cannot add, or delete email addresses.

The **ODL Metadata File Users Configuration** page (Figure 18.12-6) allows the full-capability operators to configure a list of Email addresses that signifies users that need to receive metadata in ODL .met file format:

Whenever the Email address for a Distribution Notice contains one of these addresses, the metadata will be distributed in ODL .met file format. The ODL .met file will be identical in format and contents to the .met file currently generated by the SDSRV CI. Note that if the list is changed, currently active requests' metadata format will not change.

For example, if a user's email address is deleted from the list, active requests issued for that user subsequent to the deletion will still distribute the metadata files in ODL format.

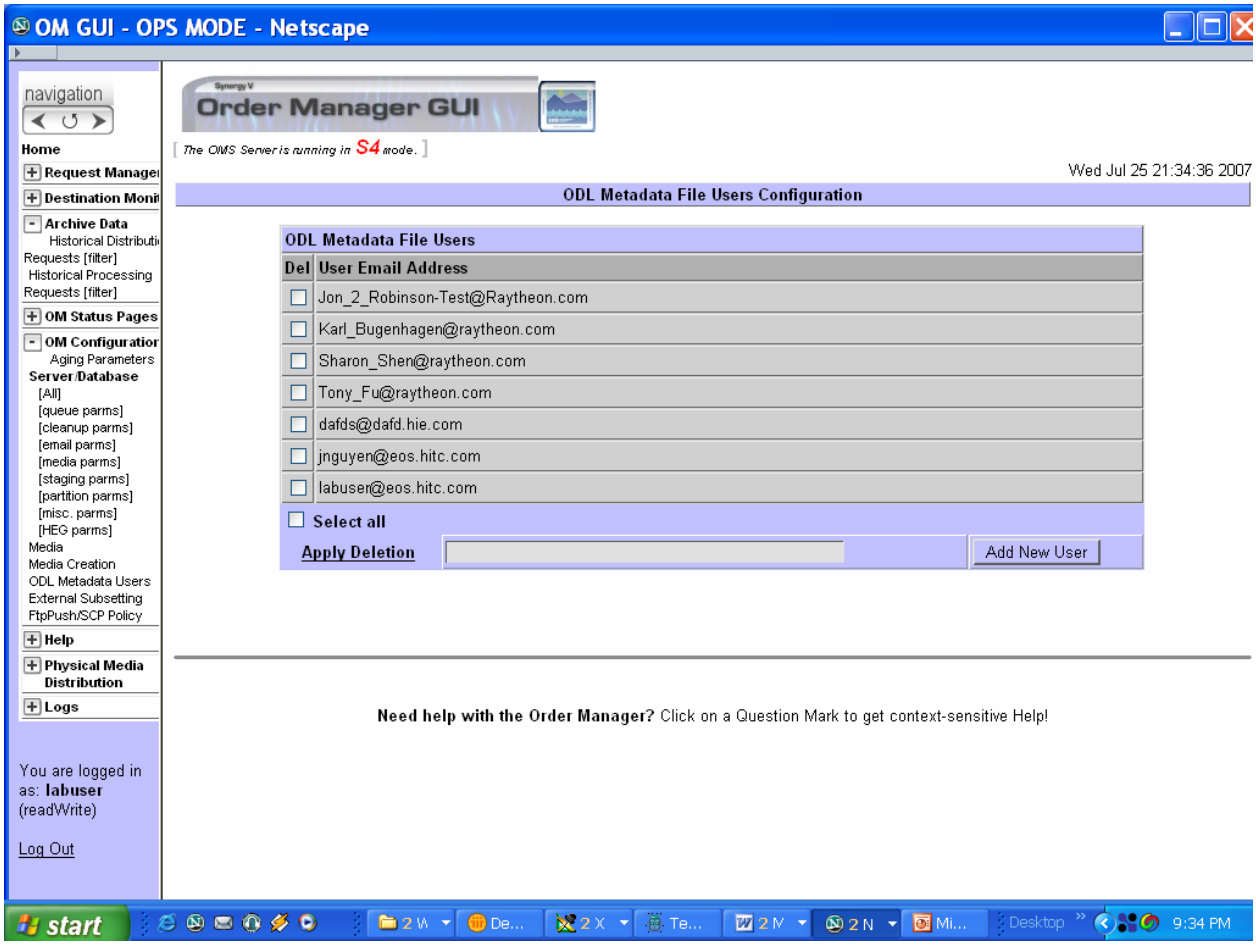


***Figure 18.12-6. ODL Metadata File Users Configuration***

### 18.12.5.1 Adding a User Email Address for the ODL Metadata File User

1. Enter the email address of the user
   - Click on the "Add New User" button (Figure 18.12-7)to submit changes to the database. A popup window will appear.
2. To confirm the addition,
   - click on "OK' button (Figure 18.12.7).

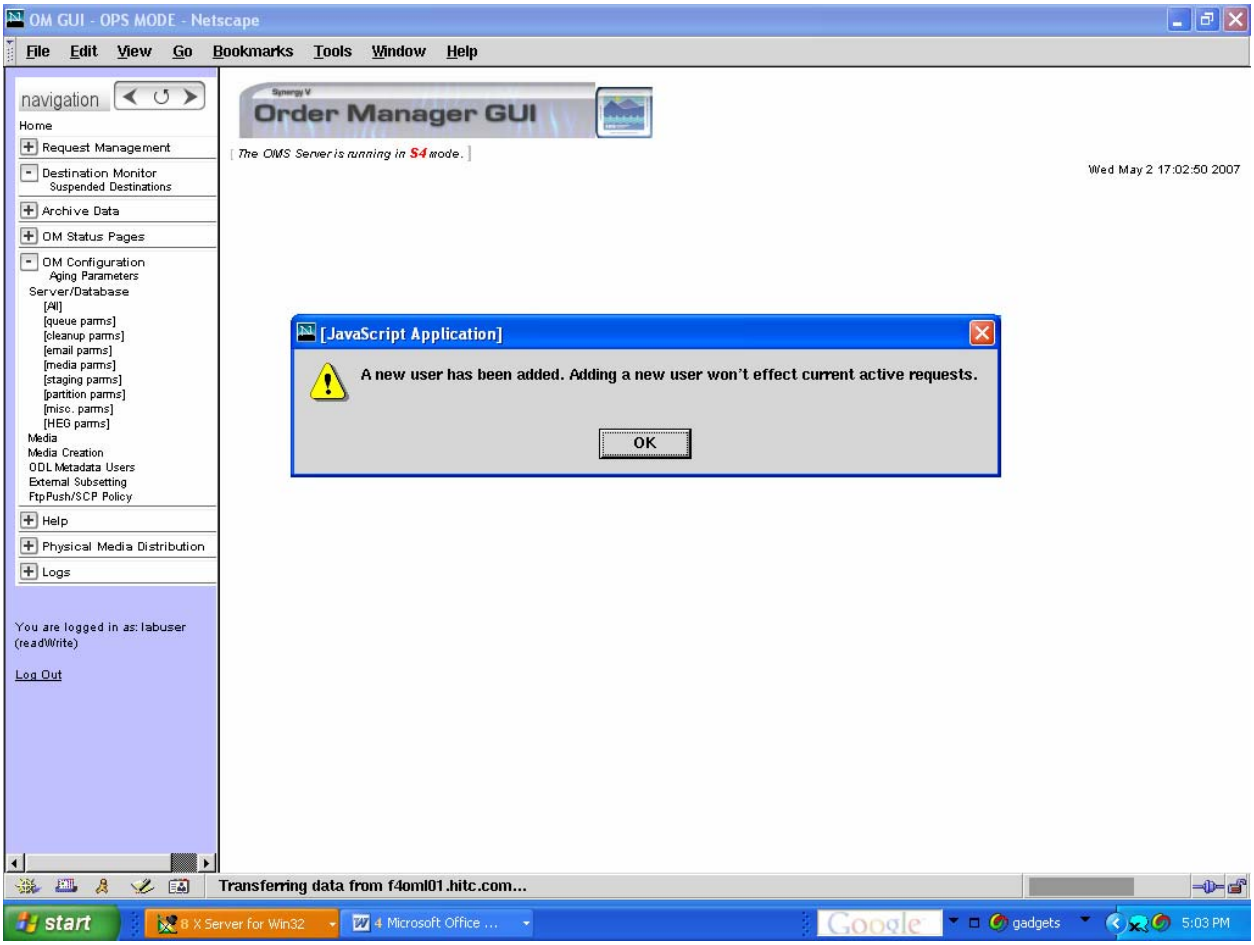


***Figure 18.12-7. Add a Metadata User***

### 18.12.5.2 Deleting User Email Address(es)

1 To DeleteUser Email Address(es) (Figure 18.12-8)

-Click "Select All" to check User email addresses. The operator can also select , s pecific users by clicking their checkboxes individually.

**2** Click "Apply Deletion" button to submit changes to the database..

- A popup window will appear.

**3** To confirm the deletion,

- click on "OK' button .

**4** To Cancel.

- click "Cancel" button.

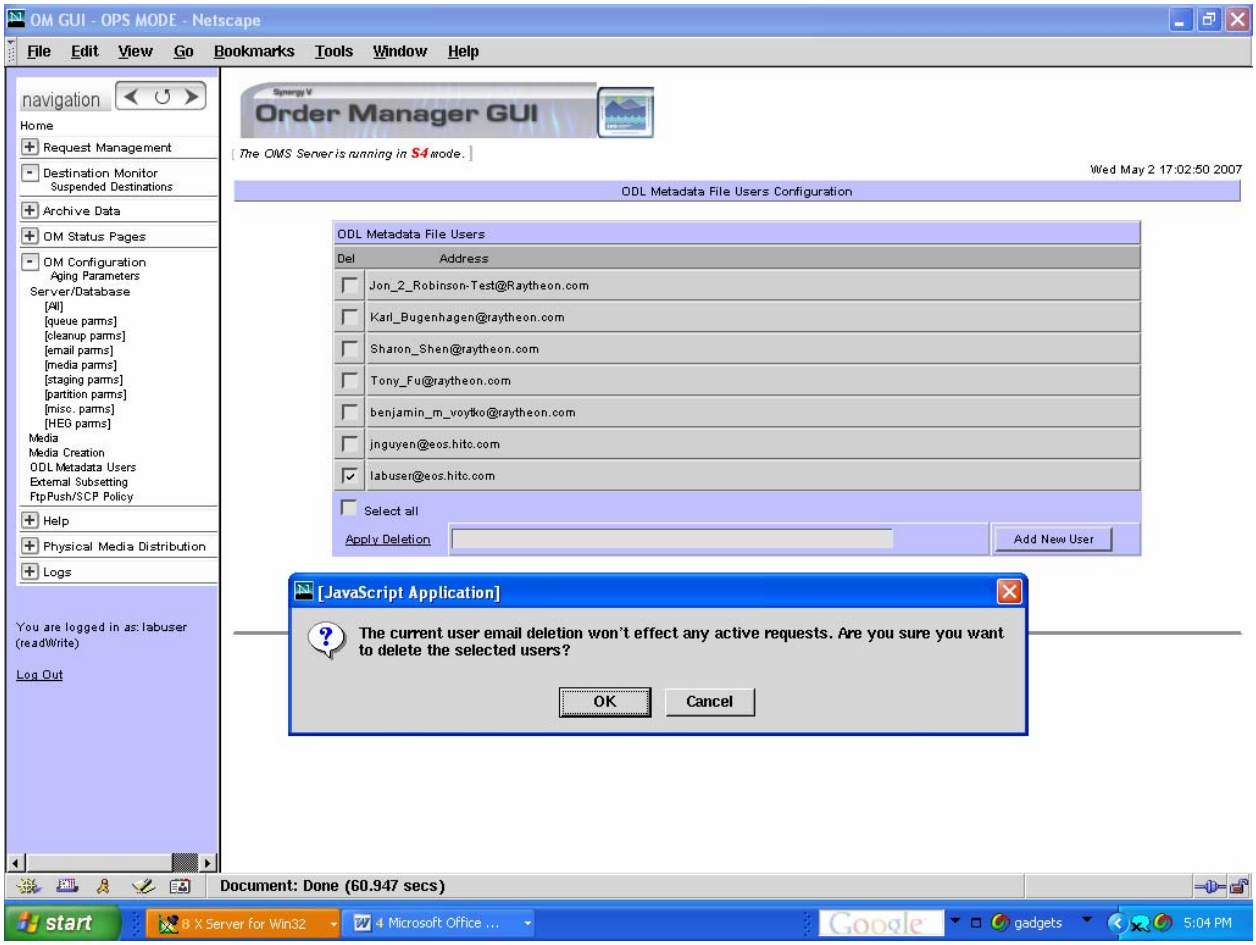


***Figure 18.12-8. Delete Metadata User***

## 18.12.6 External Subsetting Configuration

Limited Capability operators are limited to viewing External Subsetting configuration only. They cannot edit, add, or delete destinations. This page allows the full-capability operators to define and configure the parameters of an external subsetter

Special configuration parameters that control external subsetting requests are displayed in the **External Subsetting Configuration** (Figure 18.12-9).

***Table 18.12-2. External Processing Parameters***

| Parameter | Description |
|---|---|
| Processor name | A unique name for the external processing service |
| IP Address | Host IP address for external processing service as configured in the ECS registry |
| Port number | Port number for external processing service as configured in the ECS registry |
| DN email address | DN Email address used by the external processing service |
| Ftp pull expiration | Ftp pull expiration time (Not to exceed the normal FTP Pull order expiration time). The unit is hours. |
| Additional preamble file | Operator types the text directly in the text box which will be included as part of the preamble in any distribution notices sent to users after completing the distribution of the request for this subsetter |

### 18.12.6.1 Checking/Modifying External Subsetting Configurations

**1** To access External Subsetting Configuration

Click on the “External Subsetting”button.

External Subsetting Configuration allows an authorized operator to do the following actions.

- View a list of external processing services: Processor Name, IP Address, Port Number, DN Email Address, Total Requests Queued, Total Granules Queued, Request Acceptance Status
- Delete an external processing service if there is no pending request for this external processing service.
- Add a new processing service by clicking the button
- Edit existing processing service configuration

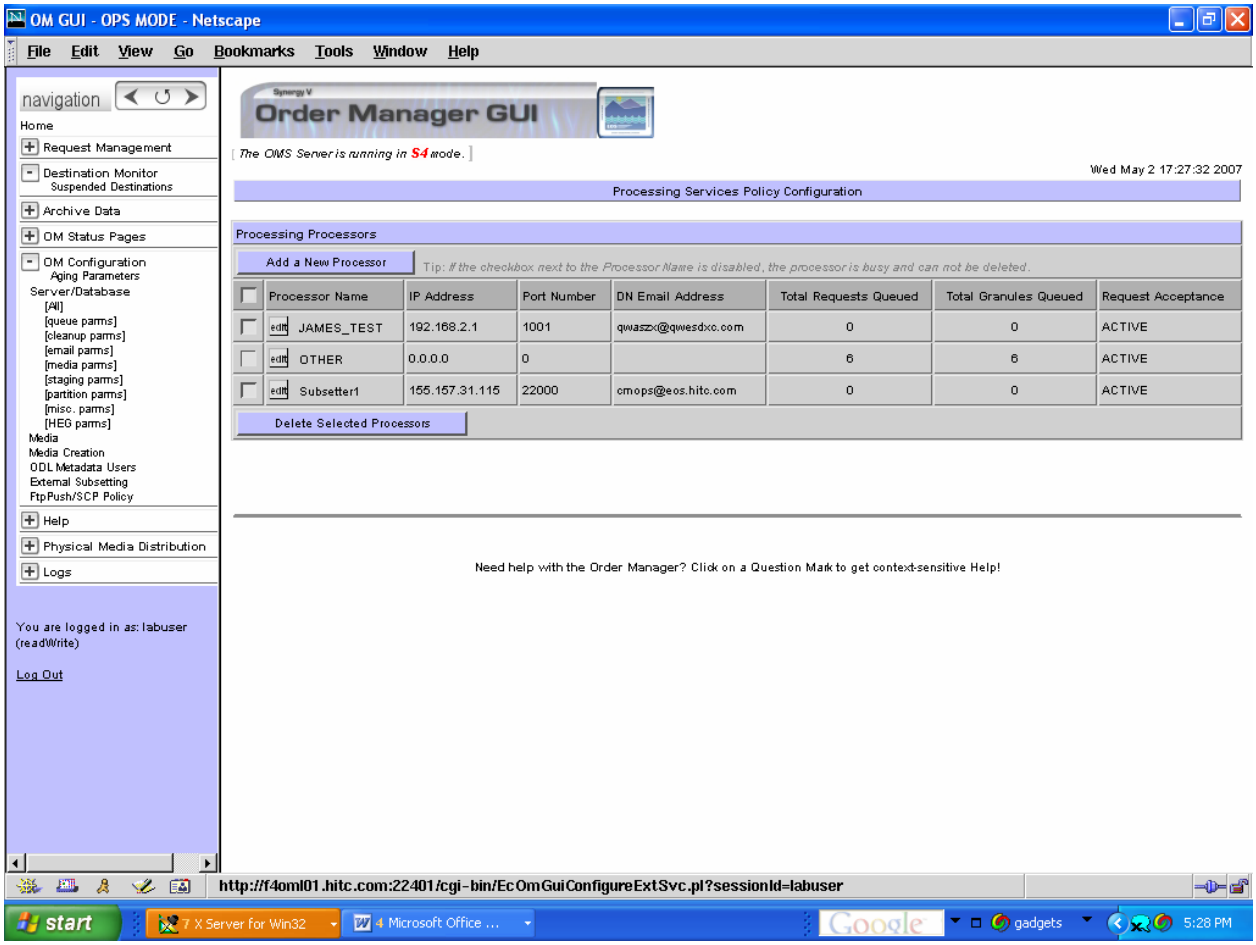


***Figure18.12-9. External Subsetting Configuration***

**2** Select the Add a New Processor button.

The Add External Subsetting Configuration page (Figure 18.12-10) is displayed.

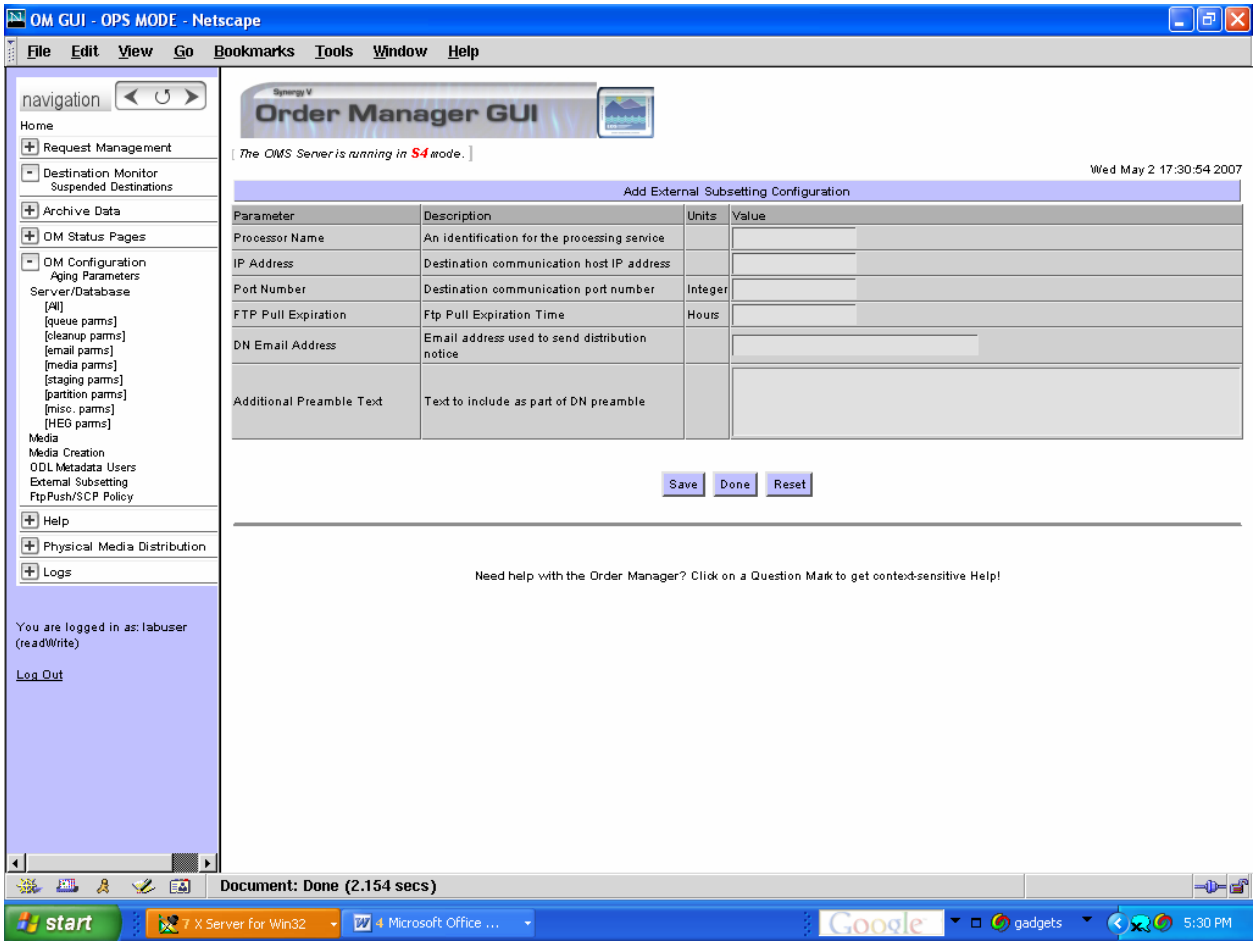


***Figure 18.27-10. Add External Subsetting Configuration***

**3** Edit the External Subsetting Configuration as desired.

---

## 18.12.7 Checking/Modifying FTP Push/SCP Policy Configuration

The **FTP Push/SCP Policy Configuration** page (Figure 18.12-11) 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/SCP 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.

The procedure for checking/modifying FtpPush policy configuration starts with the following assumptions:

- All applicable servers are currently running.

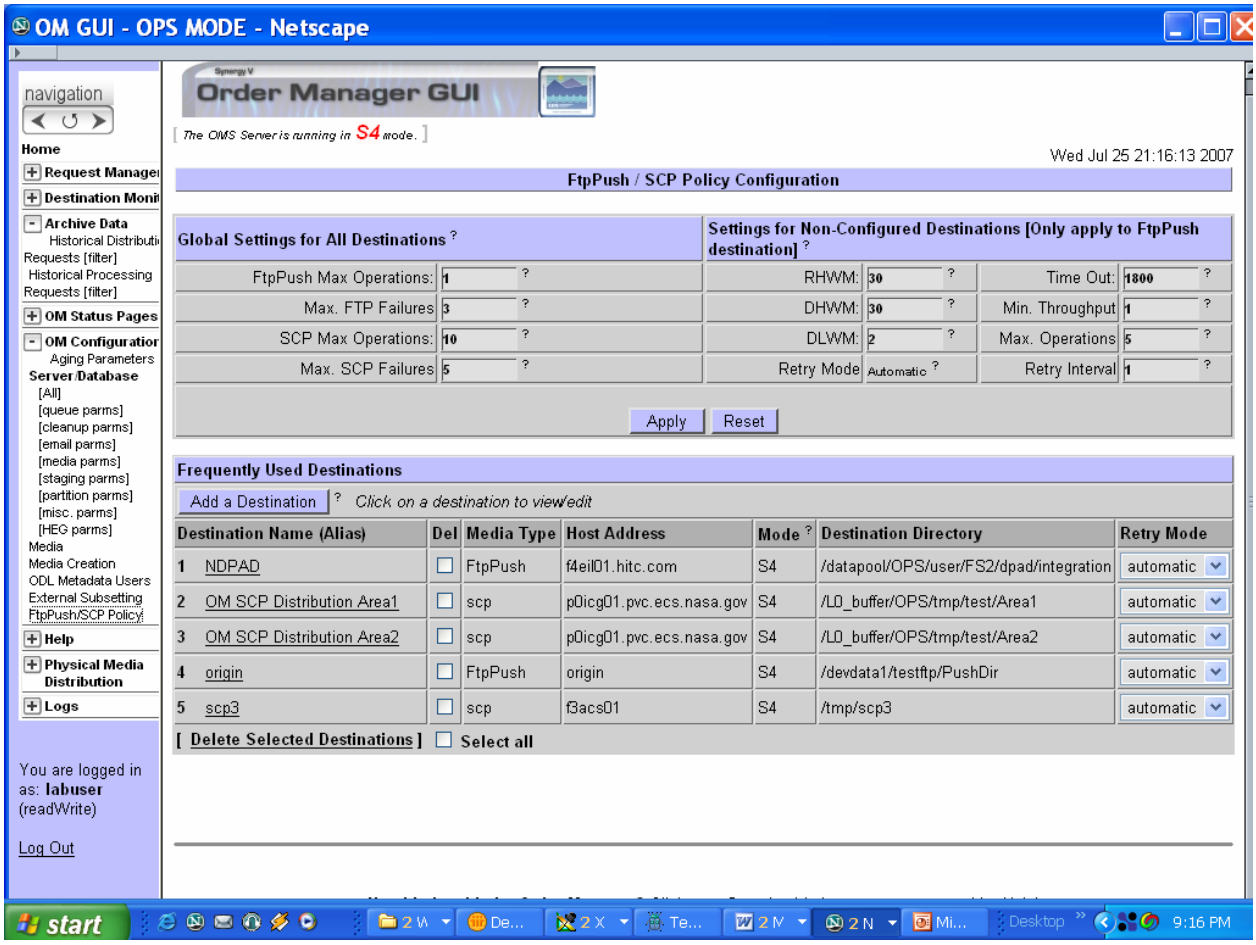


***Figure 18.12-11. FTP Push/SCP Policy Configuration Page***

### 18.12.7.1 Checking/Modifying FTP Push/SCP Policy Configuration

**1** Select the **OM Configuration** link in the navigation frame of the **OM GUI**.

- The **OM Configuration** menu is expanded.

**2** If the **FTP Push/SCP Policy Configuration** page is not already being displayed, click on the **FTP Push/SCP Policy** link in the navigation frame of the **OM GUI**.

- The **FTP Push/SCP Policy Configuration** page is displayed (Figure 18.12-11).

**3** Observe information displayed in the table on the **FTP Push/SCP Policy Configuration** page.

- Configuration parameters on the **FTP Push/SCP 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.**

- 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/SCP Destination Details** page (Figure 18.12-12) displays the following types of data concerning the destination in the **Destination Details** area:
    - **Name (Alias).**
    - **Target Directory.**
    - **Host/IP Address.**
    - **Media Type**
    - **Processing Mode.**
  - The **FTP Push/SCP Destination Details** page (Figure 18.12-12) displays the following types of data concerning the destination in the **Settings for this Destination** area:
    - **Max. Operations.**
    - **RHWM.**
    - **DHWM.**
    - **DLWM.**
    - **Time Out.**
    - **Min Throughput.**
    - **Retry Interval.**
    - **Retry Mode.**
    - **Notes.**
  - Clicking on the ← icon in the **OM GUI** navigation frame causes the **FTP Push/SCP Policy Configuration** page to be redisplayed.

- Whenever there is little question mark next to a button or text field (e.g., **Max Operations**), 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.
- To manually update (refresh) the data on the screen, click on the ↻ icon in the **OM GUI** navigation frame.

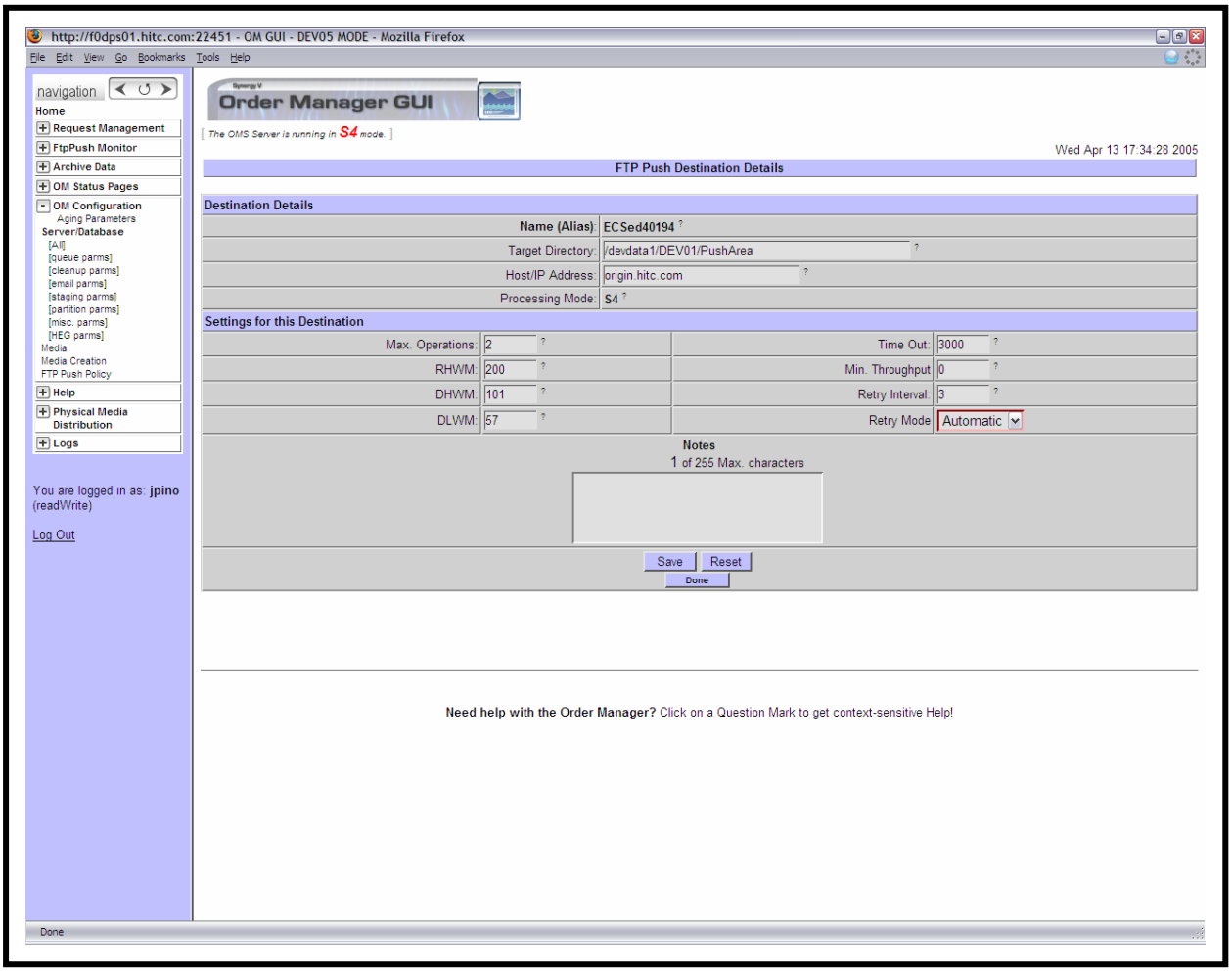


***Figure 18.12-12. FTP Push/SCP Destination Details Page***

- 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.

**4** 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), first type the new value(s) in the text entry box(es) for the relevant parameter(s).

**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, 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).

**6** If the retry mode for a destination in the **Frequently Used Destinations** area should be changed (and there is authorization to do so), click on the option button (in the **Retry Mode** column) associated with the destination to display a menu of retry modes then 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.

**7** To remove (delete) destination(s) from the **Frequently Used Destinations** area, first either click in the corresponding box(es) in the **Del** column or (if all destinations are to be removed) 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 parameter values.

**8** To continue the process of removing (deleting) destination(s) from the **Frequently Used Destinations** area, click on the **Remove Selected Destinations** link near the bottom of the **FTP Push/SCP Policy Configuration** page.

- A destination deletion confirmation dialogue box is displayed with the message "Are you sure you want to delete the selected destinations?"

**9** To complete the process of removing (deleting) destination(s) from the **Frequently Used Destinations** area, 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/SCP 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.

**10** To add a new destination to the **Frequently Used Destinations** area performs the procedure for **Adding Destinations to the Frequently Used Destinations Area** (subsequent section of this lesson).

- 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).

**11** 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 procedure for **Modifying Values Assigned to Parameters of Frequently Used Destinations** (subsequent section of this lesson).

**12** To start the process of logging out (if applicable) 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) 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.

### 18.12.8 Adding Destinations to the Frequently Used Destinations List

The **Add New Destination** page (Figure 18.12-13) provides the full-capability operator with a means of adding destinations to the **Frequently Used Destinations** list on the **FTP Push/SCP 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.

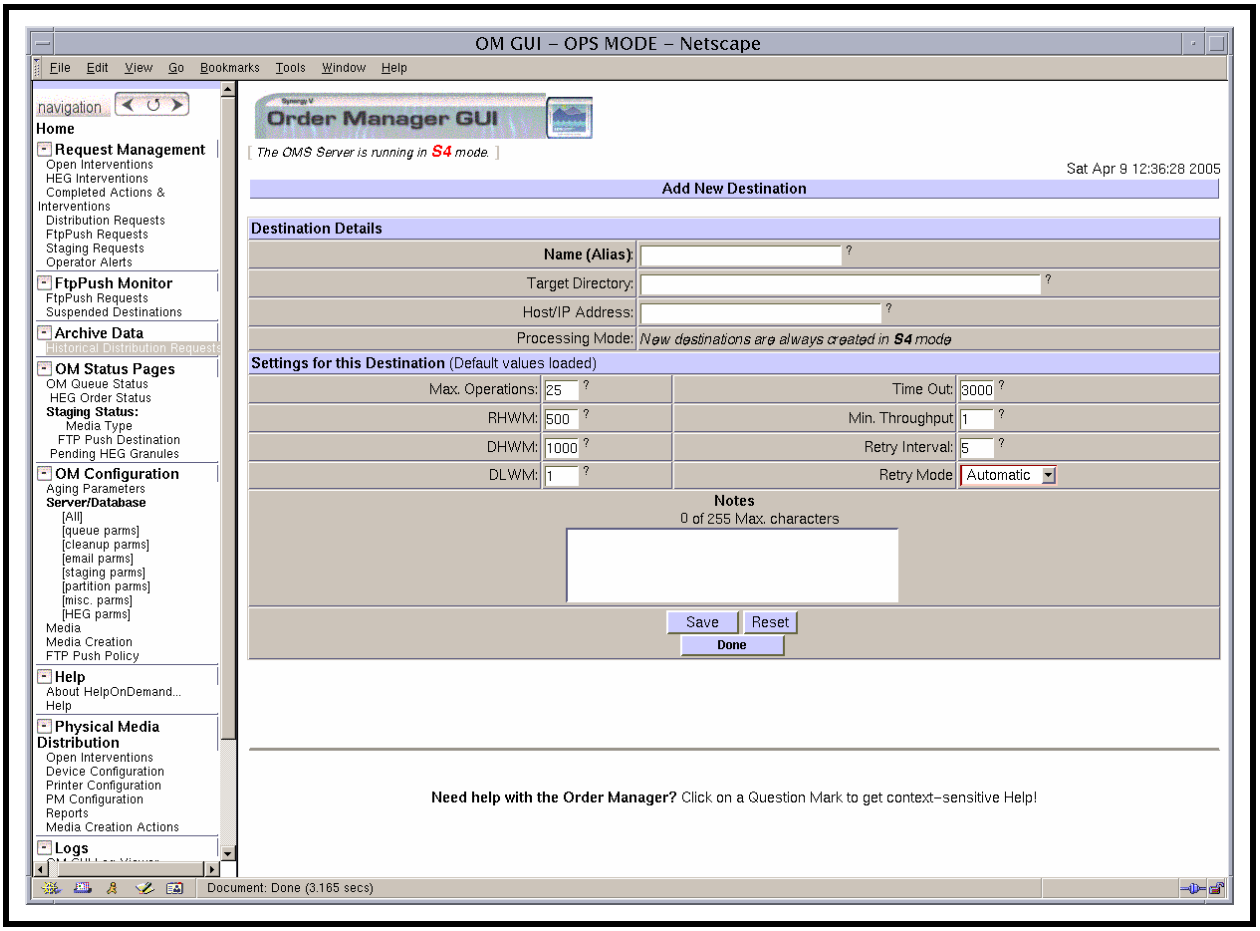


***Figure 18.12-13. Add New Destination Page***

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.

The procedure for adding destinations to the **Frequently Used Destinations** list starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].
- The destination to be added to the **Frequently Used Destinations** list must already exist (i.e., must be referenced in at least one current order).

### 18.12.8.1 Adding Destinations to the Frequently Used Destinations List

**1** Click on the **OM Configuration** link in the navigation frame of the **OM GUI**.

- The **OM Configuration** menu is expanded.

**2** If the **FTP Push/SCP Policy Configuration** page is not already being displayed, click on the **FTP Push/SCP Policy** link in the navigation frame of the **OM GUI**.

- The **FTP Push/SCP Policy Configuration** pageis displayed.

**3** Click on the **Add a Destination** button in the **Frequently Used Destinations** area of the **FTP Push/SCP Policy Configuration** page.

- The Add New Destination page is displayed.
  - In the Destination Details area of the Add New Destination page (Figure 63) 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), 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.

**4** Type ***alias*** in the Name (Alias) text box.

- ***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**

**5** Type ***path*** in the Target Directory text box.

- ***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**

**6** Type ***address*** in the Host/IP Address text box.

- ***address*** is the remote host machine name or IP address where data are to be pushed by ftp. For example:

  **dsc@nu.edu**

**7** Type ***#operations*** in the Max. Operations text box.

- ***#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**

**8** Type ***rhwm*** in the RHWM text box.

- ***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**

**9** Type ***dhwm*** in the DHWM text box.

- ***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**

**10** Type ***dlwm*** in the DLWM text box.

- ***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**

**11** Type ***min*** in the Time Out text box.

- ***min*** 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**

**12** Type ***MB*** in the Min. Throughput text box.

- ***MB*** is minimum data throughput (in MB/sec) for a particular destination. For example:

  **100**

**13** Type ***min*** in the Retry Interval text box.

- ***min*** is the waiting period (in minutes) before FtpPush operations for a suspended destination are automatically retried. For example:

  **60**

**14** Click on the **Retry Mode** option button to display a menu of retry modes then click on the desired selection.

- The following choices are available:
  - Automatic.
  - Manual.
- Selected mode is displayed in the **Retry Mode** column.

**15** If a note should be entered concerning the destination (e.g., the reason for adding the destination to the Frequently Used Destinations list), type the applicable text in the Notes text box.

**16** 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/SCP Policy Configuration page.
  - A "Done" Confirmation dialogue box (Figure 18.12-14) 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).


***Figure 18.12-14. "Done" Confirmation Dialogue Box***

**17** If a **"Remember Values"** Confirmation dialogue box is displayed, 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.

**18** If a **"Done"** Confirmation dialogue box is displayed, 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/SCP Policy Configuration page.
  - · The "Done" Confirmation dialogue box is dismissed.
  - · The Add New Destination page is dismissed.
  - · The FTP Push/SCP 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.

**19** If the **Add New Destination** page is still being displayed and no changes to the new destination are needed, click on the Done button.

- – A **"Done"** Confirmation dialogue box is displayed.

**20** If a **"Done"** Confirmation dialogue box is displayed, 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/SCP Policy Configuration page.
  - · The **"Done"** Confirmation dialogue box is dismissed.
  - · The Add New Destination page is dismissed.
  - · The FTP Push/SCP 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.**

**21** **If changes to the new frequently used destination are needed, repeat Steps 4 through 20 as necessary.**

**22** **Return to the procedure for Checking/Modifying FTP Push/SCP Policy Configuration (preceding section of this lesson).**

---

The FTP Push/SCP 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/SCP Policy Configuration page.

The procedure for modifying values assigned to parameters of frequently used destinations starts with the following assumptions:

- All applicable servers are currently running.
- The OM GUI has been launched [e.g., as described in the procedure for Launching the Order Manager GUI (preceding section of this lesson)].

### 18.12.8.2 Modifying Values Assigned to Parameters of Frequently Used Destinations

---

**1** Click on the **OM Configuration** link in the navigation frame of the OM GUI.

- The **OM Configuration** menu is expanded.

**2** If the **FTP Push/SCP Policy Configuration** page is not already being displayed, click on the **FTP Push/SCP Policy** link in the navigation frame of the OM GUI.

- The **FTP Push/SCP Policy Configuration** page is displayed.

**3** If the **FTP Push/SCP Destination Details** page for the relevant destination is not already being displayed, click on the specific Destination Name in the Frequently Used Destinations area.

- The **FTP Push/SCP Destination Details** page is displayed.

**4** Observe information displayed on the **FTP Push/SCP Destination Details** page.

- In the **Destination Details** area of the **FTP Push/SCP 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/SCP 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.

**5** Perform Steps 6 through 19 as necessary to modify values that need to be changed.

**6** Type ***alias*** in the Name (Alias) text box.

- ***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**

**7** Type ***path*** in the Target Directory text box.

- ***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**

**8** Type ***address*** in the Host/IP Address text box.

- ***address*** is the remote host machine name or IP address where data are to be pushed by ftp. For example:

  **dsc@nu.edu**

**9** Type ***#operations*** in the Max. Operations text box.

- ***#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**

**10** Type ***rhwm*** in the RHWM text box.

- ***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**

**11** Type ***dhwm*** in the DHWM text box.

- ***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**

**12** Type ***dlwm*** in the DLWM text box.

- ***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**

**13** Type ***min*** in the Time Out text box.

- ***min*** 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**

**14** Type ***MB*** in the Min. Throughput text box.

- ***MB*** is minimum data throughput (in MB/sec) for a particular destination. For example:

  **100**

**15** Type ***min*** in the Retry Interval text box.

- ***min*** is the waiting period (in minutes) before FtpPush operations for a suspended destination are automatically retried. For example:

  **60**

**16** Click on the **Retry Mode** option button to display a menu of retry modes then click on the desired selection.

- The following choices are available:
  - Automatic.
  - Manual.
- Selected mode is displayed in the **Retry Mode** column.

**17** If a note should be entered concerning the destination (e.g., the reason for modifying the parameter values), type the applicable text in the Notes text box.

**18** Click on the appropriate button from the following selections:

- **Save** - to save the frequently used destination and the values specified for its parameters.
  - A "Remember Values" Confirmation dialogue box is displayed.
- **Done** - to dismiss the FTP Push/SCP Destination Details page and display the FTP Push/SCP 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).

**19** If a **"Remember Values"** Confirmation dialogue box is displayed, click on the appropriate button from the following selections:

- Yes.
  - The **"Remember Values"** Confirmation dialogue box is dismissed.
  - The FTP Push/SCP Destination Details page is displayed.
- Never for this site.
  - The **"Remember Values" Confirmation** dialogue box is dismissed.
  - The **FTP Push/SCP Destination Details** page is displayed.
- No.
  - The **"Remember Values" Confirmation** dialogue box is dismissed.
  - The **FTP Push/SCP Destination Details** page is displayed.

**20** If a **"Done" Confirmation** dialogue box is displayed, click on the appropriate button from the following selections:

- **OK** - to dismiss the **"Done" Confirmation** dialogue box and the **FTP Push/SCP Destination Details** page and display the **FTP Push/SCP Policy Configuration** page.
  - The **"Done" Confirmation** dialogue box is dismissed.
  - The **FTP Push/SCP Destination Details** page is dismissed.
  - The **FTP Push/SCP Policy Configuration** page is displayed.

- **Cancel** - to dismiss the **"Done" Confirmation** dialogue box and return to the **FTP Push/SCP Destination Details** page.
    - The **"Done" Confirmation** dialogue box is dismissed.

**21** If the **FTP Push/SCP Destination Details** page is still being displayed and no changes to the new destination are needed, click on the **Done** button.

- A **"Done" Confirmation** dialogue boxis displayed.

**22** If a **"Done" Confirmation** dialogue box is displayed, click on the appropriate button from the following selections:

- **OK** - to dismiss the **"Done" Confirmation** dialogue box and the **FTP Push/SCP Destination Details** page and display the **FTP Push/SCP Policy Configuration** page.
    - The **"Done" Confirmation** dialogue boxis dismissed.
    - The **FTP Push/SCP Destination Details** page is dismissed.
    - The **FTP Push/SCP Policy Configuration** pageis displayed.
- **Cancel** - to dismiss the **"Done" Confirmation** dialogue box and return to the **FTP Push/SCP Destination Details** page.
    - The **"Done" Confirmation** dialogue box is dismissed.

**23** If changes to the frequently used destination are needed, repeat Steps 6 through 22 as necessary.

**24** Return to the procedure for **Checking/Modifying FTP Push/SCP Policy Configuration** (preceding section of this lesson).

---

## 18.13 Using OM GUI Help

There are several ways for the Distribution Technician to get access to help in using the **OM GUI**.

- Whenever there is little question mark next to a button or text field on an **OM GUI** page, 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.
    - Figure 18.13-1 provides an example of HelpOnDemand.


***Figure 18.13-1. Example of HelpOnDemand***

- For help on a particular topic the **Help** link in the navigation frame of the **OM GUI** causes the **Help** page (Figure 18.31-1) to be displayed.

## 18.14 Viewing the OM GUI Log

The **OM GUI Log Viewer** page (Figure 18.14-1) 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**.

The procedure for viewing the OM GUI log starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

### 18.14.1 Viewing the OM GUI Log

**1** Click on the **Logs** link in the navigation frame of the **OM GUI**.

- The **Logs** menu is expanded.

**2** If the **OM GUI Log Viewer** page is not already being displayed, click on the **OM GUI Log Viewer** link in the navigation frame of the **OM GUI**.

- The **OM GUI Log Viewer** page is displayed.

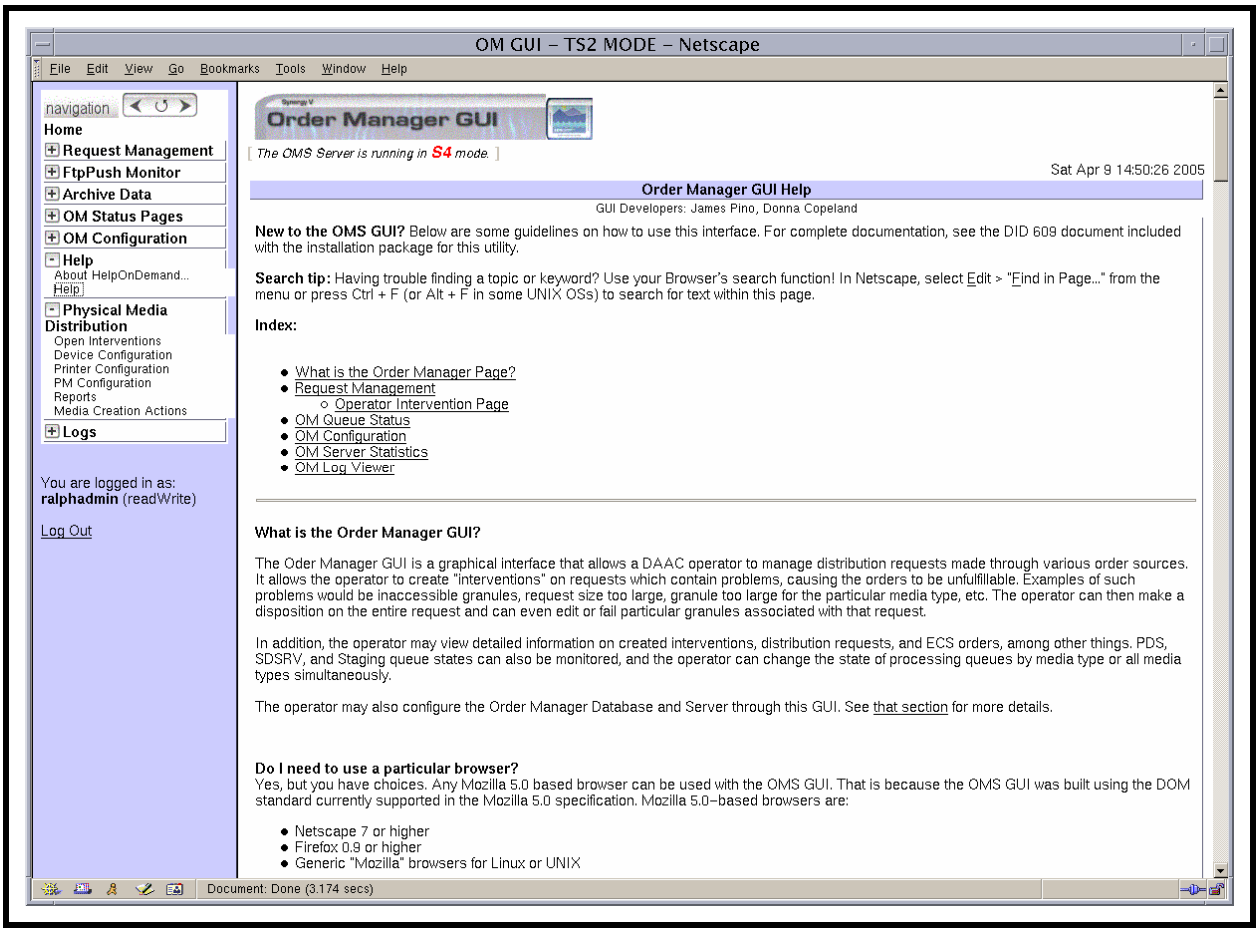


***Figure 18.14-1. OM GUI Help Page***

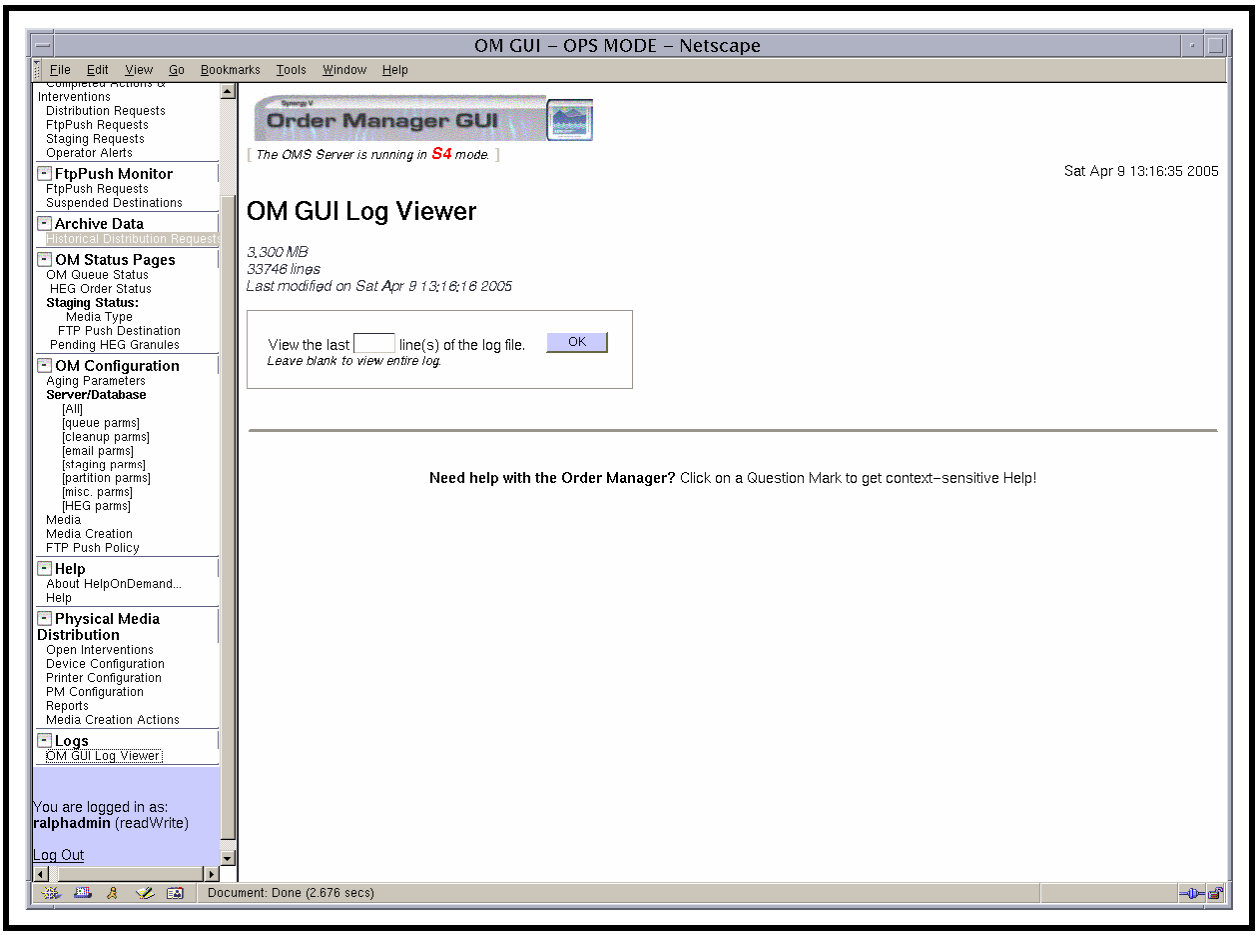


***Figure 18.14-2. OM GUI Log Viewer Page***

**3** 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).

**4** In the **View the last ___ line(s) of the log file** text box type the appropriate 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 (Figure 18.14-2).
  - 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.

**5** Click on the **OK** button.

- The specified lines from the log file are displayed as shown in the example, Figure 68.

**6** 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**).

**7** To start the process of logging out (if applicable) 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) 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.

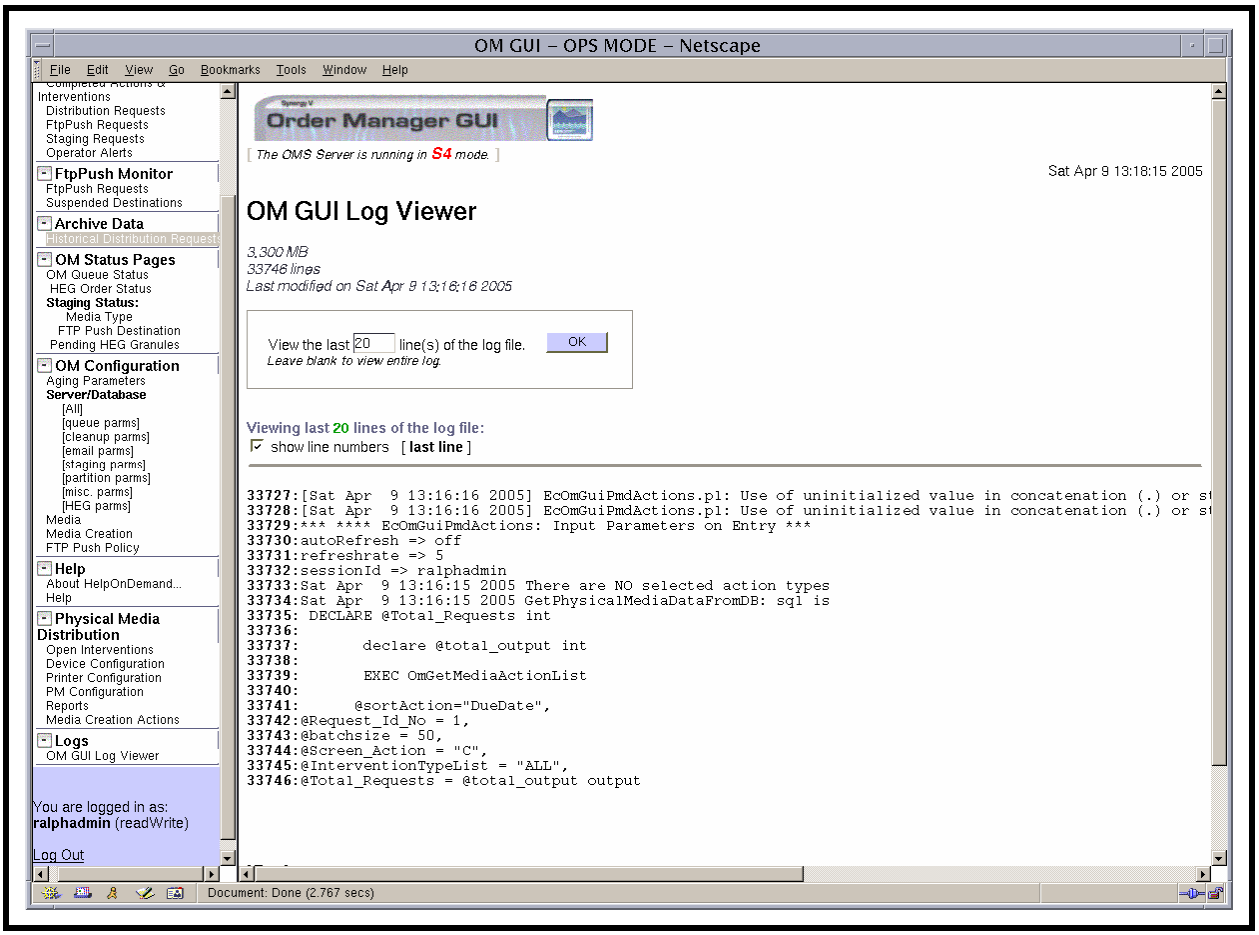


***Figure 18.14-2. Example of OM GUI Log Contents***

## 18.15 Viewing PMD Open Intervention Information on the OM GUI

### 18.15.1 Viewing 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 **OM GUI**.

The **Open Physical Media Interventions** page (Figure 18.15-1) provides the full-capability operator with a means of viewing and responding to PMD open interventions.

The procedure for viewing PMD open intervention information on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.

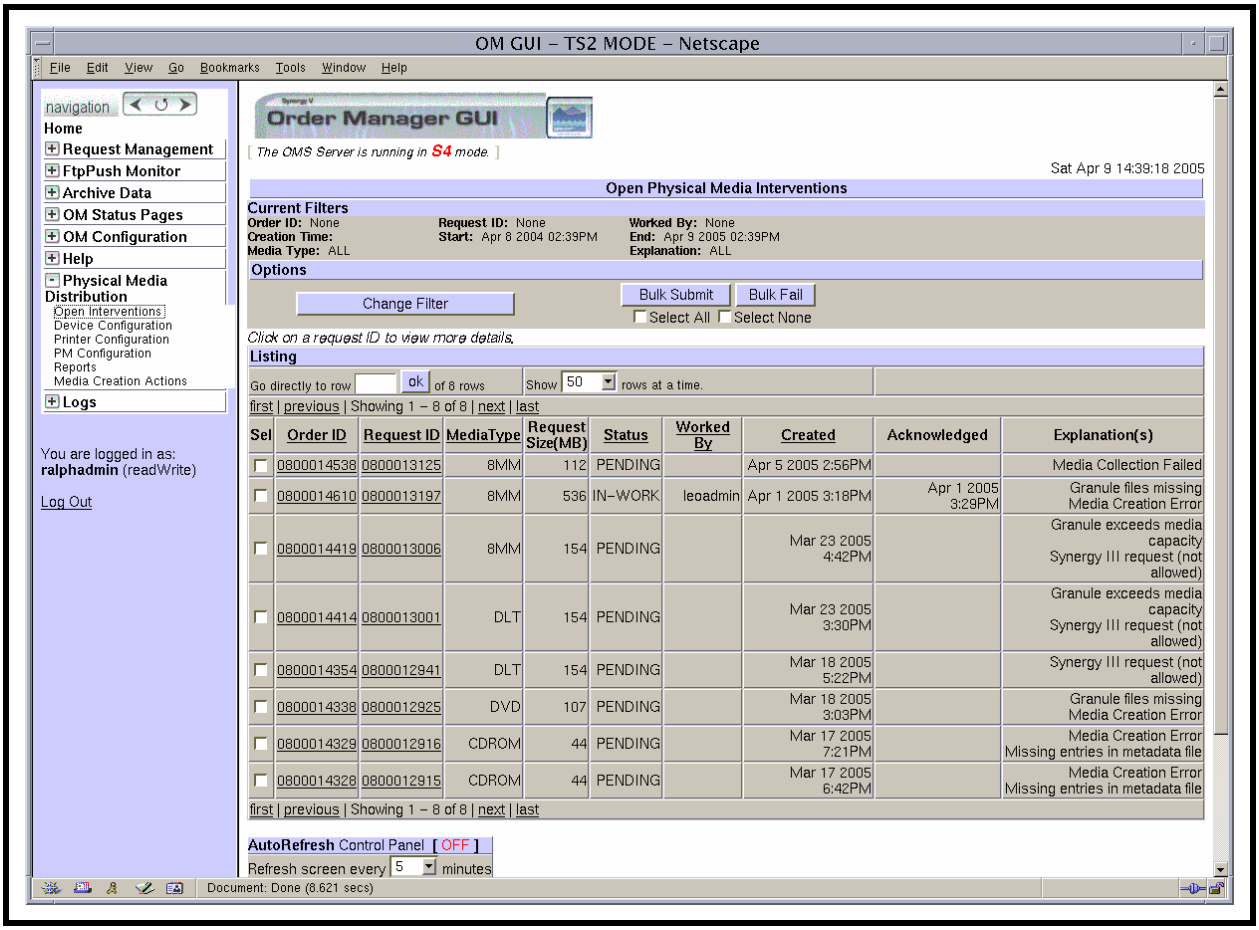


***Figure 18.15-1. Open Pysical Media Interventions Page***

***Table 18.15-1. Viewing PMD Open Intervention - Activity Checklist (1 of 2)***

| Order | Role | Task | Section | Complete? |
|---|---|---|---|---|
| 1 | Distribution Technician | Viewing PMD Open Intervention Information on the OM GUI | (P) 18.15.1.1 | |
| 2 | Distribution Technician | Responding to a PMD Open Intervention | (P) 18.15.2.1 | |
| 3 | Distribution Technician | Checking/Modifying PMD Device Configuration | (P) 18.15.3.1 | |

***Table 18.15-1. Viewing PMD Open Intervention - Activity Checklist (2 of 2)***

| Order | Role | Task | Section | Complete? |
|---|---|---|---|---|
| 4 | Distribution Technician | Filtering Data Displayed on the PMD Device Configuration Page | (P) 18.15.4.1 | |
| 5 | Distribution Technician | Checking/Modifying PMD Printer Configuration | (P) 18.15.5.1 | |
| 6 | Distribution Technician | Checking/Modifying PMD Production Module Configuration | (P) 18.15.6.1 | |
| 7 | Distribution Technician | Checking PMD Reports | (P) 18.15.7.1 | |
| 8 | Distribution Technician | Monitoring/Controlling PMD Media Creation Using the OM GUI | (P) 18.15.8.1 | |
| 9 | Distribution Technician | Activating PMD Requests | (P) 18.15.9.1 | |
| 10 | Distribution Technician | Failing PMD Request | (P) 18.15.10.1 | |
| 11 | Distribution Technician | Annotating a PMD Action | (P) 18.15.11.1 | |
| 12 | Distribution Technician | Confirming Mount Media for PMD | (P) 18.15.13.1 | |
| 13 | Distribution Technician | Failing Mount Media for PMD | (P) 18.15.14.1 | |
| 14 | Distribution Technician | Confirming Media Collection Complete for PMD | (P) 18.15.16.1 | |
| 15 | Distribution Technician | Failing PMD Media Collection | (P) 18.15.17.1 | |
| 16 | Distribution Technician | Activating QC for PMD Requests | (P) 18.15.18.1 | |
| 17 | Distribution Technician | Marking PMD Request Shipped | (P) 18.15.21.1 | |
| 18 | Distribution Technician | Confirming PMD Media Dismount | (P) 18.15.22.1 | |
| 19 | Distribution Technician | Confirming PMD Package Assembled | (P) 18.15.23.1 | |
| 20 | Distribution Technician | Marking PMD Package Not Assembled | (P) 18.15.24.1 | |
| 21 | Distribution Technician | Printing PMD Outputs | (P) 18.15.25.1 | |

### 18.15.1.1 Viewing PMD Open Intervention Information on the OM GUI

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

**2** 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 procedure for **Filtering Data Displayed on the Distribution Requests Pages** (preceding section of this lesson).
- The **Options** area of the **Open Physical Media Interventions** page has the following buttons and selection boxes:
  - **Change Filter** button [refer to the procedure for **Filtering Data Displayed on the Distribution Requests Pages** (preceding section of this lesson)].
  - **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).**

**3** 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.
- 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.
- 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.**
  - Clicking on the ← icon in the **OM GUI** navigation frame causes the **Open Interventions** page to be redisplayed.

- 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 3 and 8).
- 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 procedure for **Setting Refresh Options on OM GUI Pages** (previous section of this lesson).
- 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.

**4** To fail intervention(s) first 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.

**5** To complete the process of failing intervention(s) click on the **Bulk Fail** button in the **Options** area of the **Open Physical Media Interventions** page.

- The selected intervention(s) is/are failed.

**6** To submit intervention(s) first 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.

**7** To complete the process of submitting intervention(s) click on the **Bulk Submit** button in the **Options** area of the **Open Physical Media Interventions** page.

- The selected intervention(s) is/are submitted.

**8** 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**).

**9** Observe information displayed on the **PMD Open Intervention Detail** page (Figure 18.15-2).

- The following items are displayed on the **PMD Open Intervention Detail** page (Figure 18.15-2).
  - **Order ID.**
  - **Request ID.**
  - **Input Size.**
  - **Media Type.**
  - **Priority.**

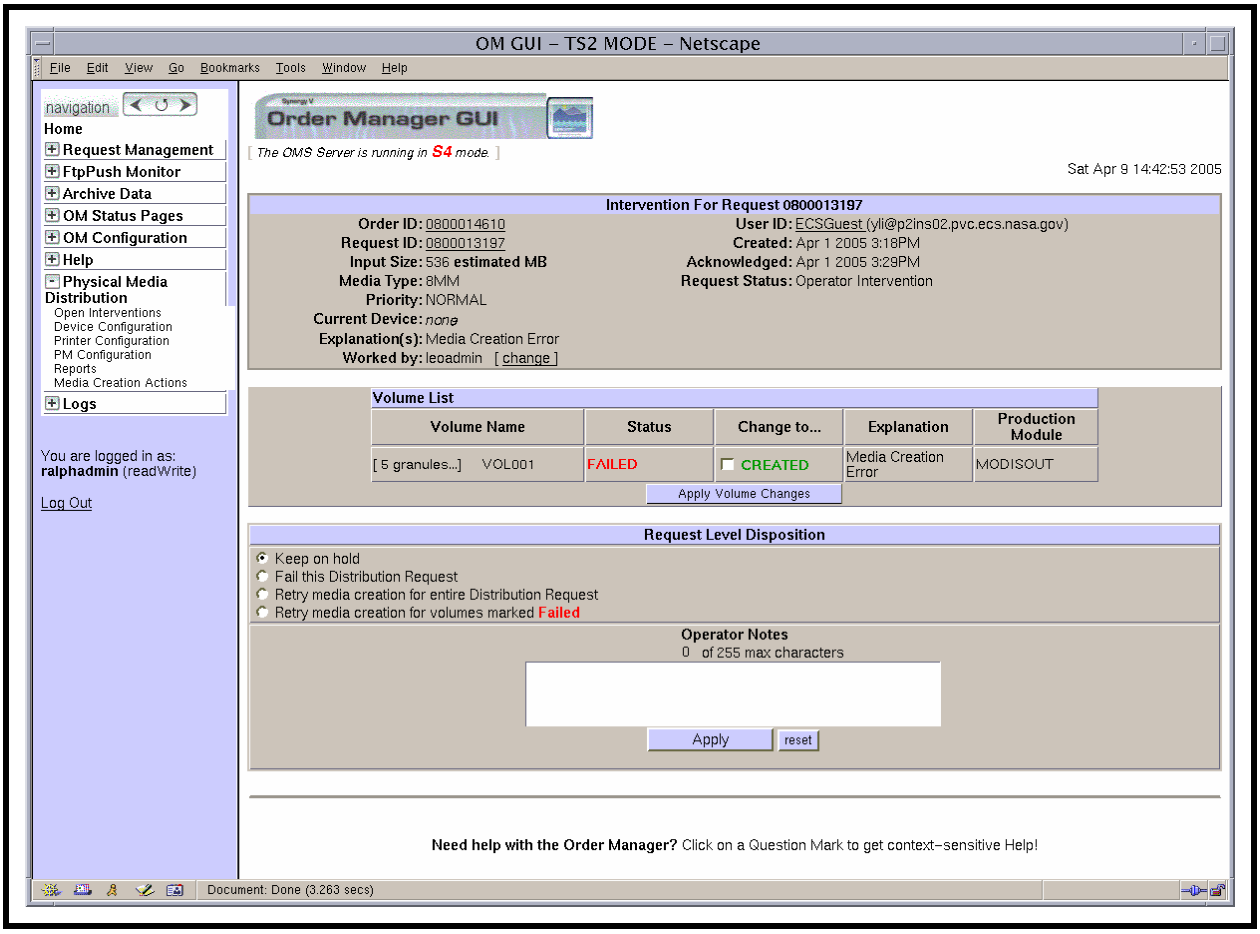


***Figure 18.15-2. PMD Open Intervention Detail (Intervention for Request X) Page***

  - **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.

- Clicking on the ← icon in the **OM GUI** navigation frame causes the **Open Physical Media Interventions** page to be redisplayed.

**10** To work on the intervention being displayed on the **PMD Open Intervention Detail** page, perform the procedure for **Responding to a PMD Open Intervention** (subsequent section of this lesson).

**11** To view the details of another open intervention first click on the 🡄 icon in the **OM GUI** navigation frame then return to Step 2.

- The **PMD Open Intervention Detail** page is dismissed.
- The **Open Physical Media Interventions** page is displayed.

**12** To start the process of logging out (if applicable) 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) 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.

---

### 18.15.2 Responding 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.

**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.

The procedure for responding to a PMD open intervention starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].
- The **PMD Open Intervention Detail** page is being displayed on the **OM GUI**.
  - If the **PMD Open Intervention Detail** page is not being displayed on the **OM GUI**, go to the procedure for **Viewing PMD Open Intervention Information on the OM GUI** (preceding section of this lesson).

### 18.15.2.1 Responding to a PMD Open Intervention

**1** Observe the information displayed in the **Worked by:** field 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 procedure for **Viewing PMD Open Intervention Information on the OM GUI** (preceding section of this lesson).
- 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 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.
- 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, type the appropriate user ID in the text box displayed beside the **assign** or **change** link in the **Worked by:** field.

**4** To continue the process of assigning oneself to work on the intervention, 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 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, 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 click on the **granule…** link associated with the volume name in the **Volume List**.

- The **Granule List for Volume *Y* of Request *X*** (Figure 18.15.3) 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**), first type the Database ID (DBID) of the replacement granule in the **DBID** text box.

- 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, click on the **Apply** button associated with the DBID.

- A dialogue box is displayed to confirm the change to the granule.

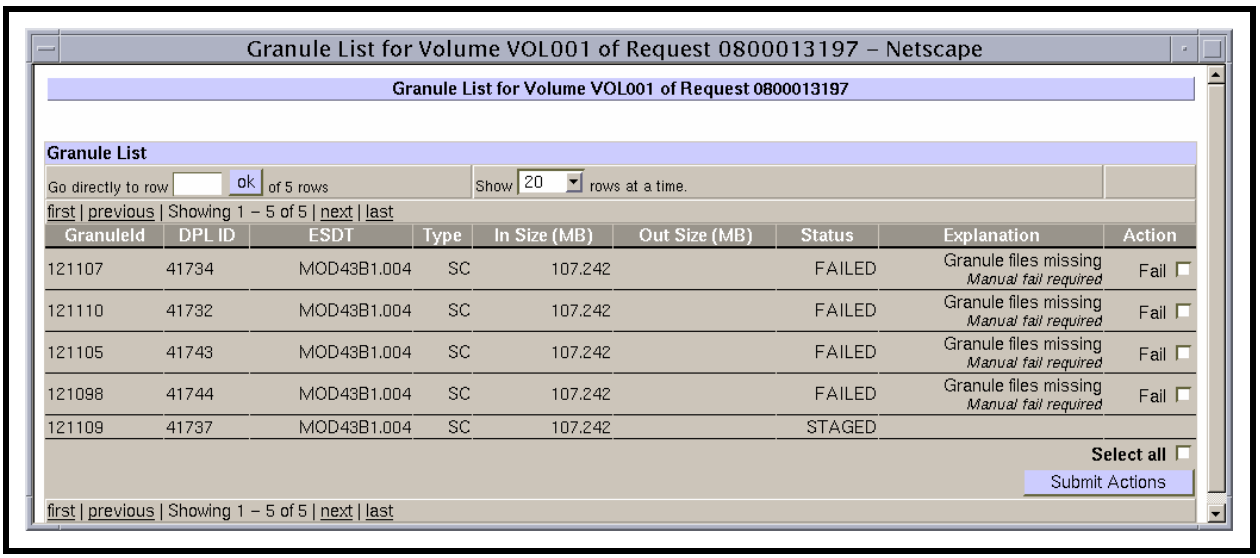


***Figure 18.15.3. Granule List for Volume Y of Request X***

**11** To continue the process of specifying a replacement granule, 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**), 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, 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** 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, 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) click on the **Apply** button at the bottom of the **Volume List**.

**22** If a note should be entered concerning the request (e.g., the reason for making a particular type of intervention), type the applicable text in the **OPERATOR NOTES** text box.

**23** To select the disposition for the request 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** 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, or modify the granules in 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, type the appropriate text in the **Additional e-mail text** text box on the **Close Confirmation** page.

**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, 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** 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?" 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) 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) 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.

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### 18.15.3 Checking/Modifying PMD Device Configuration

Tthe **OM GUI** displays the configuration of devices used in physical media creation. Additional devices can be "added." The **PMD Device Configuration** page (Figure 18.15-4) 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 (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 Luminex device is only considered "Busy" if it has reached 100% of its Job Allocation; otherwise, a Luminex 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 (Figure 18.15-4) gives the operator a quick visual indicator of the load for each Luminex 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.

The procedure for checking/modifying PMD device configuration information on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.

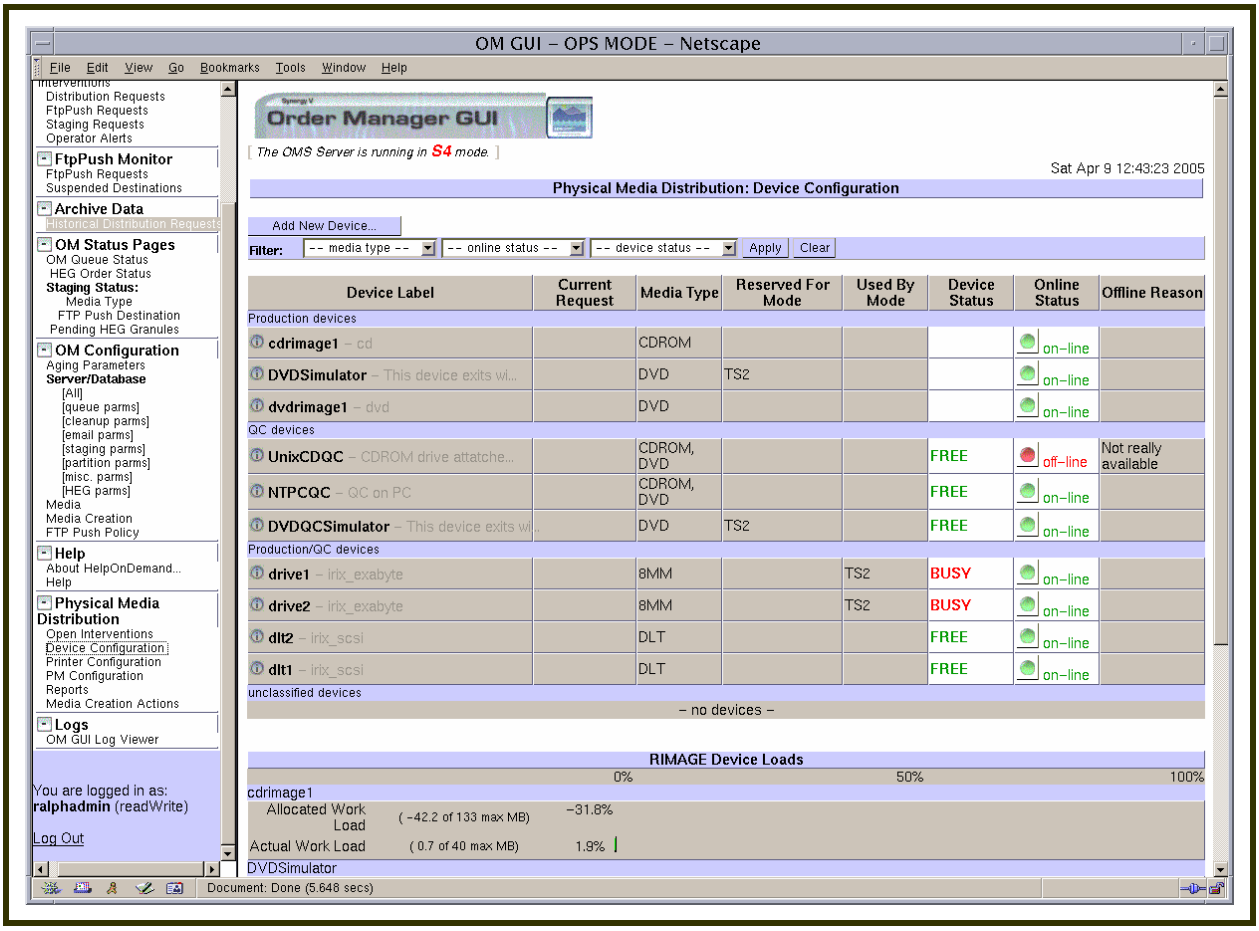


***Figure 18.15-4. PMD Device Configuration Page***

- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

### 18.15.3.1 Checking/Modifying PMD Device Configuration

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

**2** 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 procedure for **Filtering Data Displayed on the PMD Device Configuration Page** (subsequent section of this lesson).
- 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 **Luminex Device Loads** area of the **PMD Device Configuration** page shows the following types of information for each Luminex 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).

**3** 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 procedure for **Setting Refresh Options on OM GUI Pages** (previous section of this lesson).
- To manually update (refresh) the data on the screen, click on the ↻ icon in the **OM GUI** navigation frame.

**4** If the desired configuration information is not listed in the device configuration table of the **PMD Device Configuration** page, perform the procedure for **Filtering Data Displayed on the PMD Device Configuration Page** (subsequent section of this lesson).

**5** If request filtering was necessary, return to Step 3.

**6** To change the on-line or off-line status of a device, first 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 (Figure 18.15-5) 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.


***Figure 18.15-5. Pop-Up Dialogue Box for Changing the On-Line/Off-Line Status of a Device***

**7** 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 type an explanation for taking the device off line.

**8** To continue the process of changing the on-line or off-line status of a device, 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.

**9** To start the process of adding a new device to the configuration click on the **Add New Device** button near the top of the **PMD Device Configuration** page.

- An **Add New Device** page (Figure 18.15-6) is displayed.

**10** To continue the process of adding a new device to the configuration 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 click on the desired selection.

- If **Production** was selected, the **Add New Device** page displays **Device Type** radio buttons (as shown in Figure 18.15-7).
- If **QC** or **Production and QC** was selected, the corresponding **Device Details** page (Figure 18.15-8 or Figure 18.15-9) is displayed.

**11** To continue the process of adding a new device to the configuration if the device is going to be used for production (only), click on the appropriate radio button (i.e., **Luminex** or **Tape**).

- The corresponding **Device Details** page (Figure 18.15-10 or Figure 18.15-11) is displayed.

**12** To continue the process of adding a new device to the configuration click on the appropriate **Media Type** radio button from the choices listed.

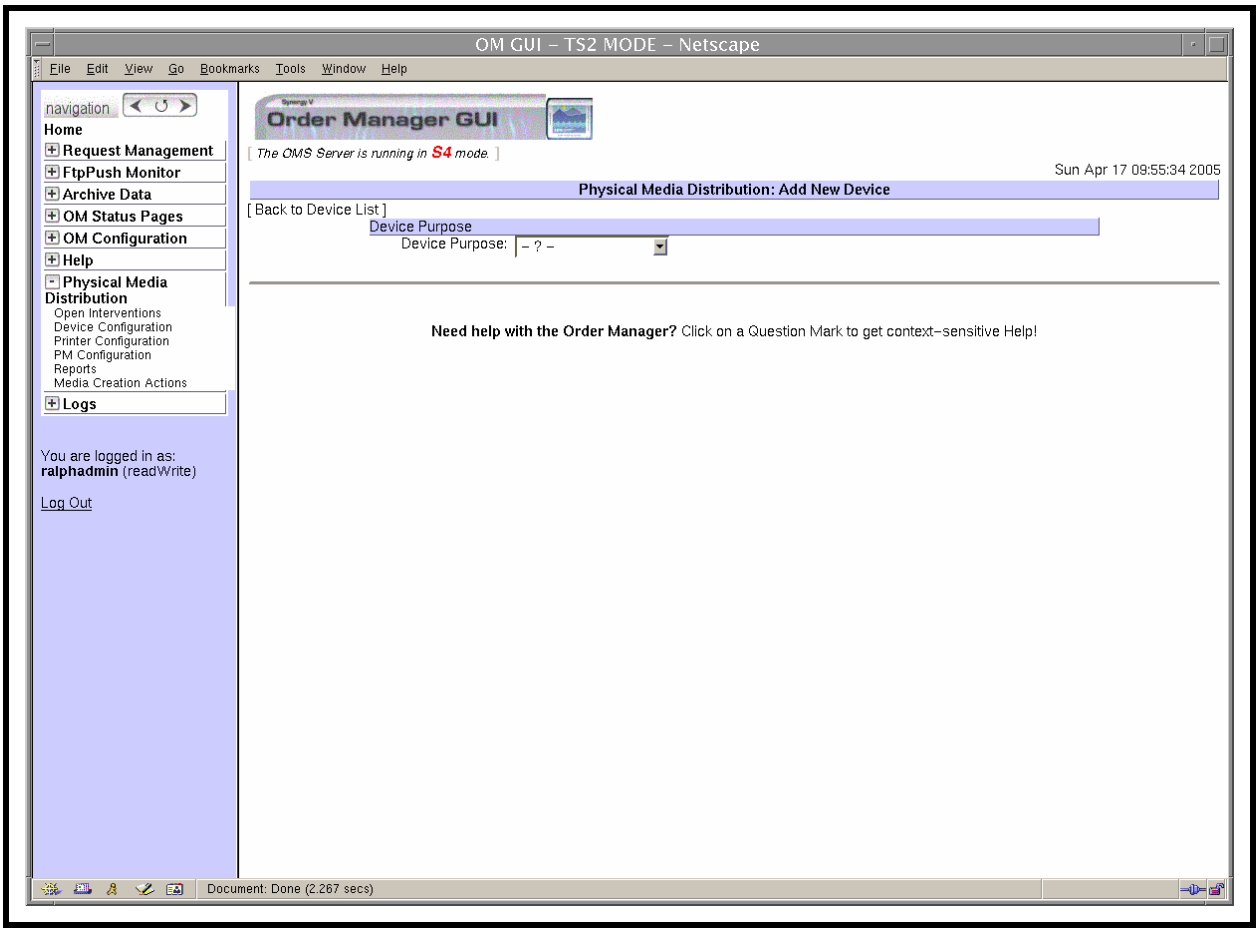


***Figure 18.15-6. Add New Device Page***

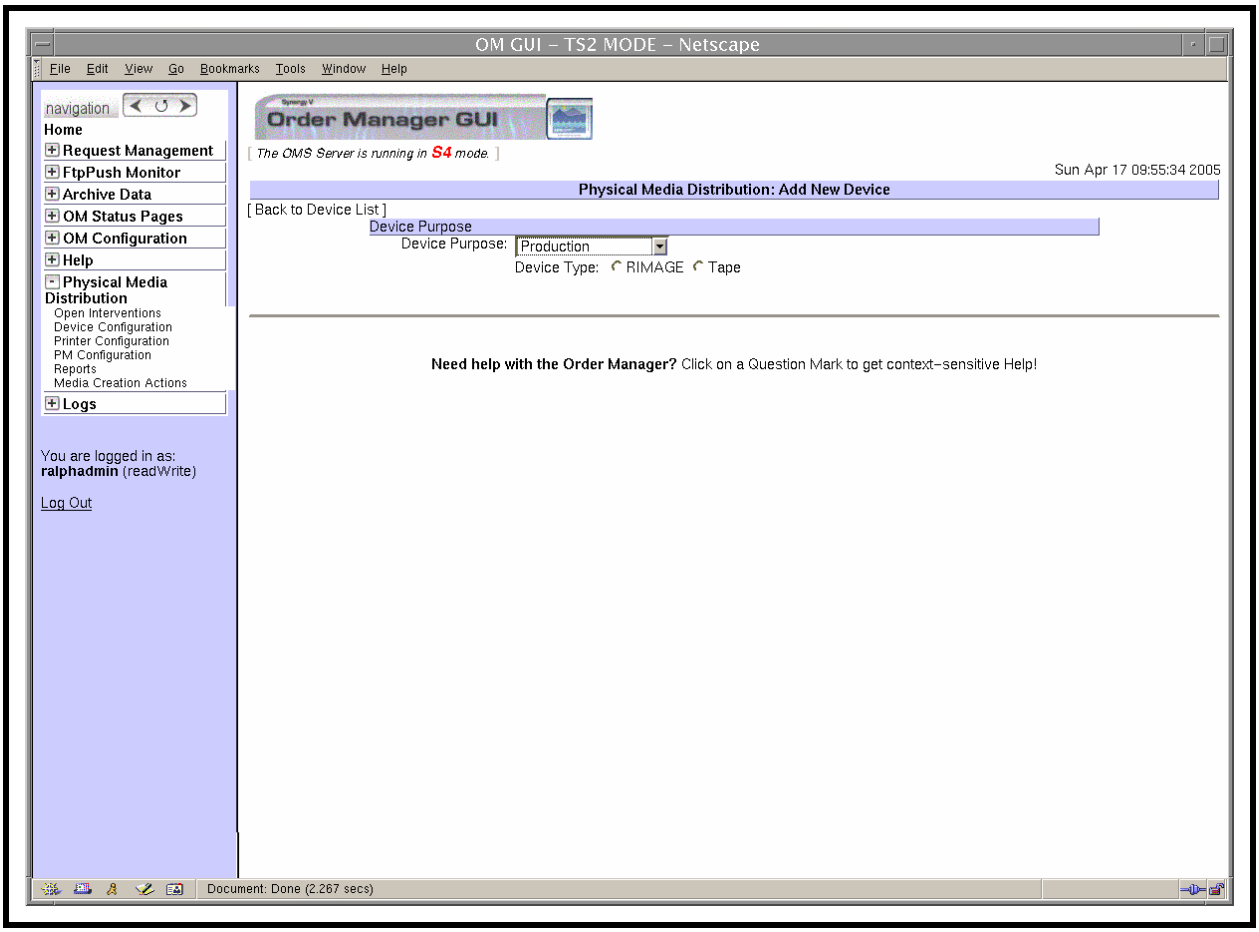


***Figure 18.15-7. Add New Device Page with Device Type Radio Buttons***

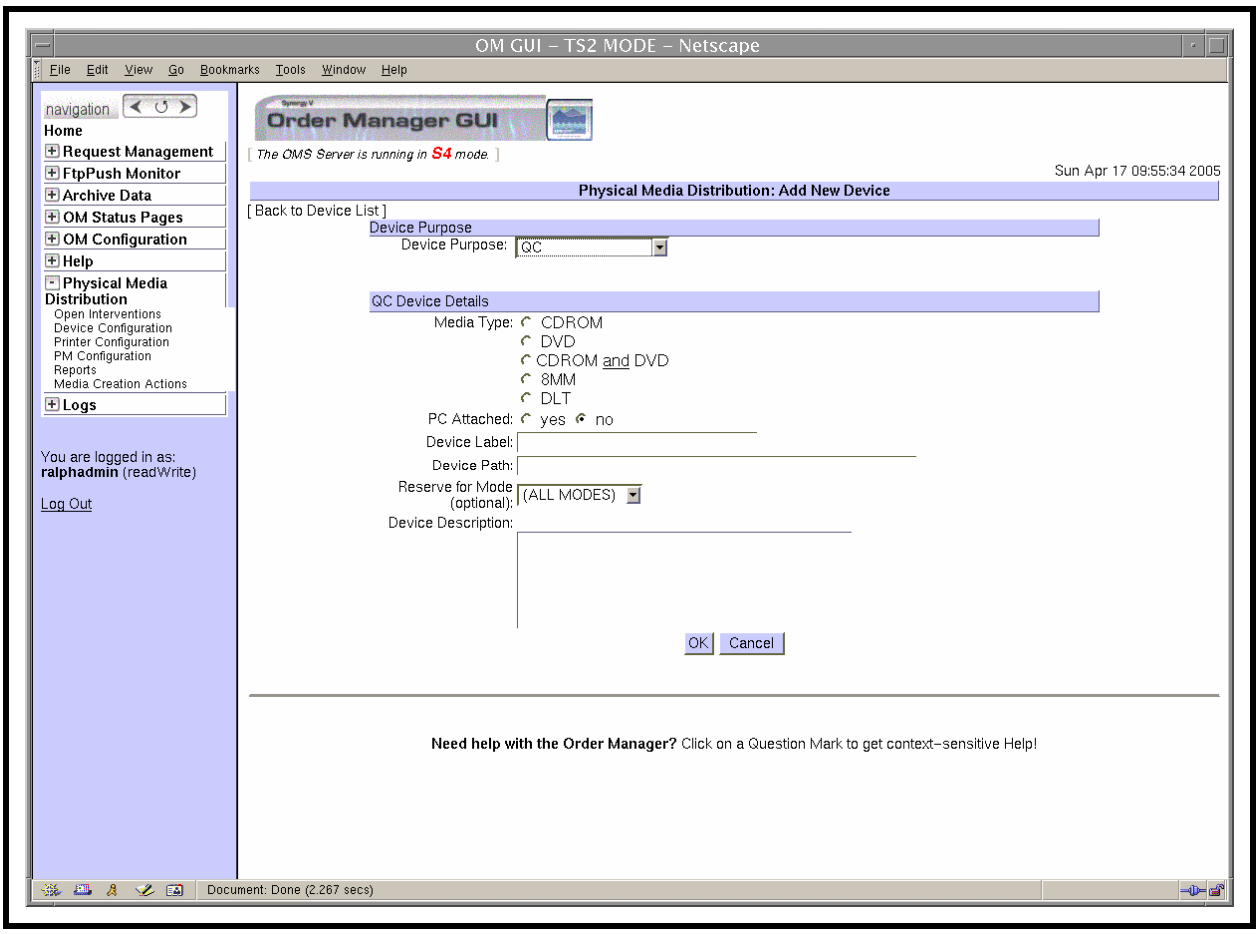


***Figure 18.15-8. Add New Device Page - QC***

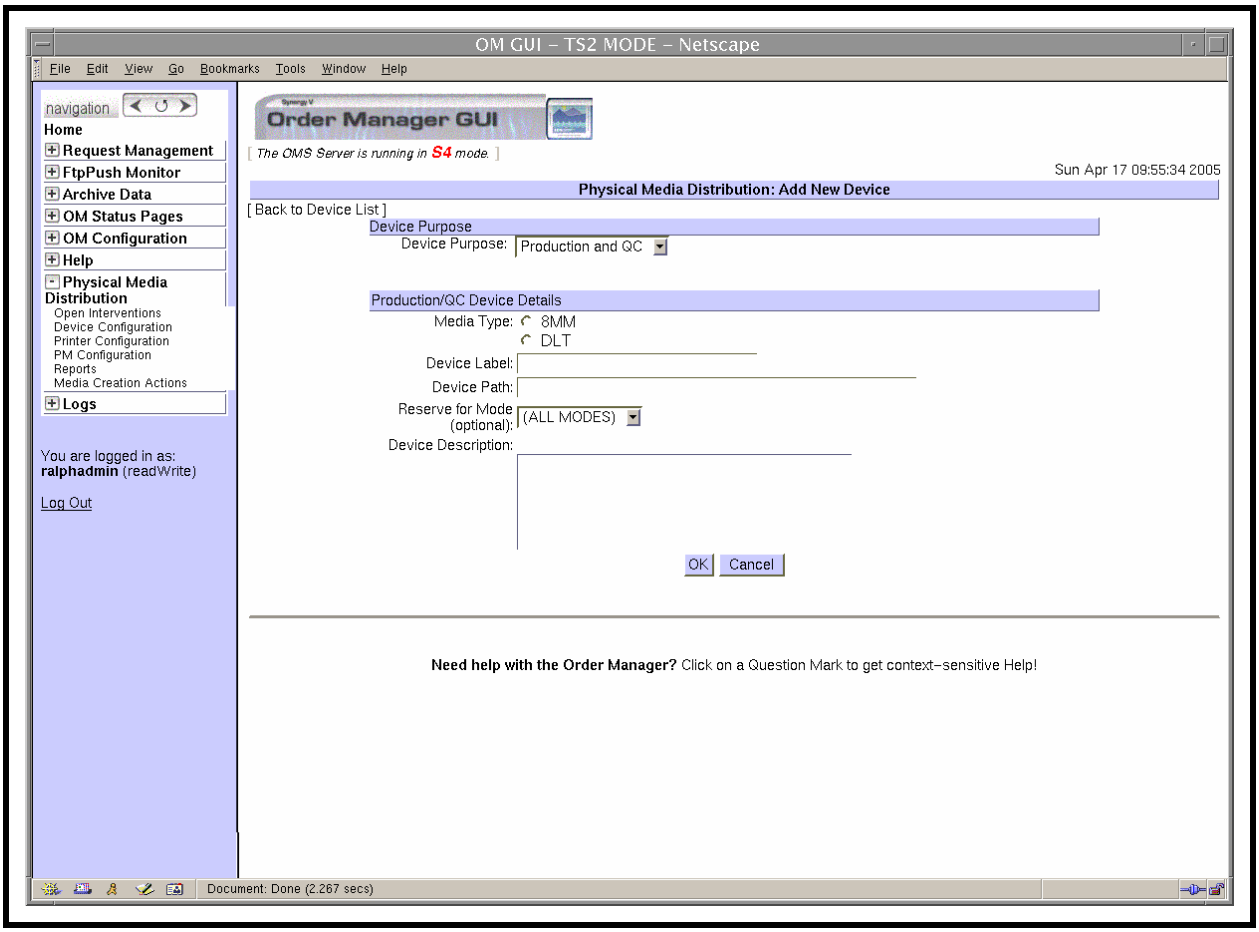


***Figure 18.15-9. Add New Device Page – Production and QC***

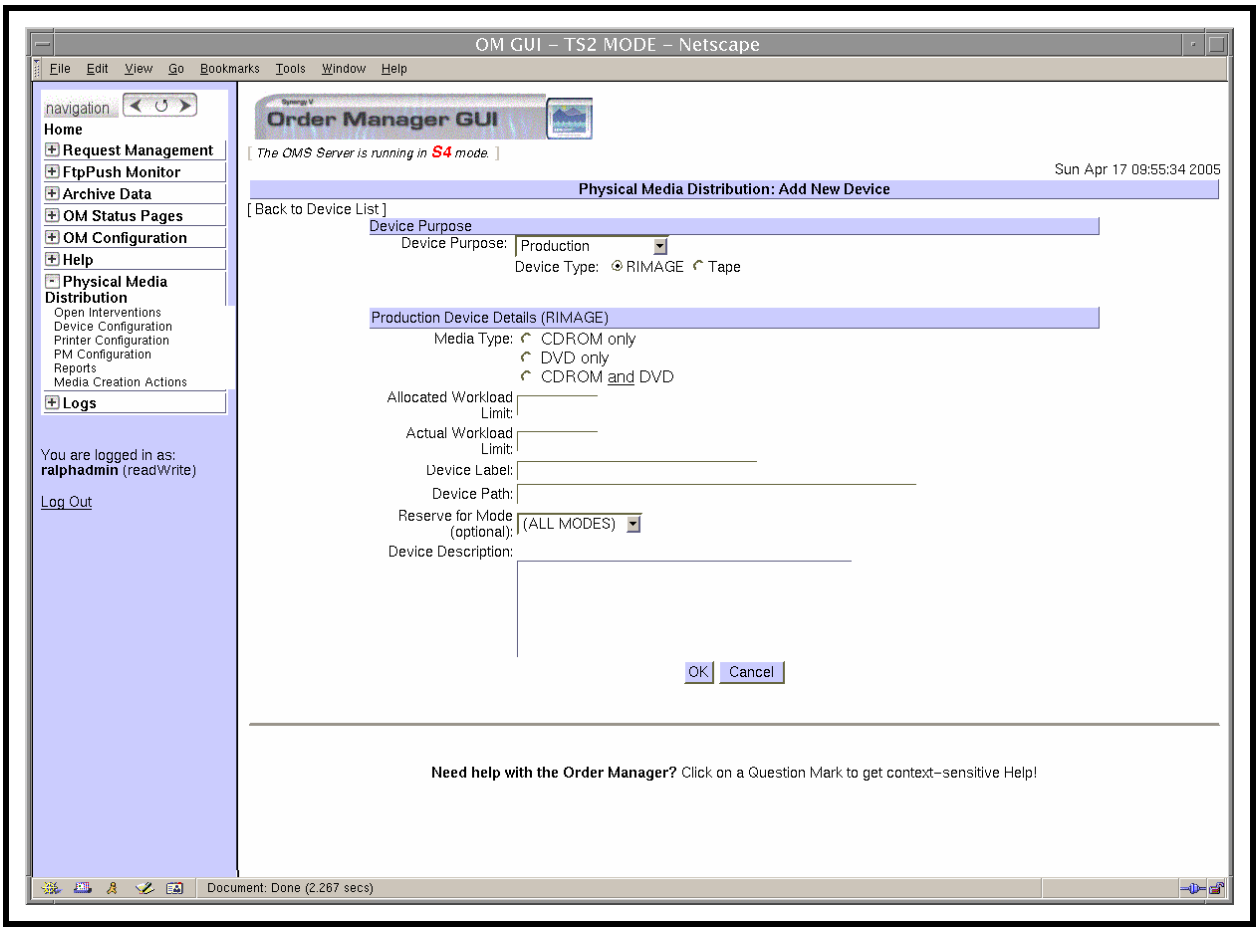


***Figure 18.18-10. Add New Device Page – Production (Luminex)***

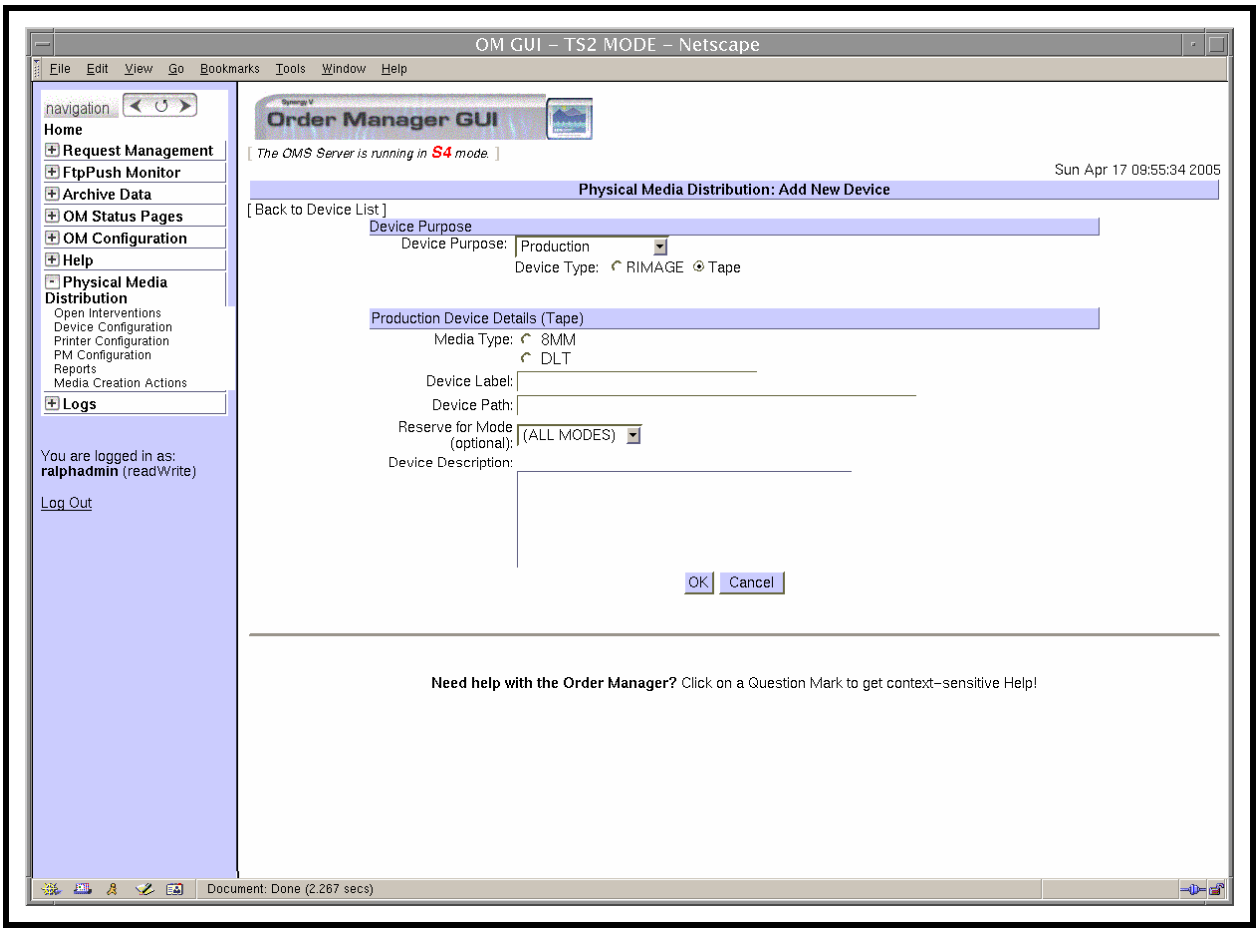


***Figure 18.15-11. Add New Device Page – Production (Tape)***

**13** To continue the process of adding a new device to the configuration if the device is going to be used for QC (only), click on the appropriate **PC Attached** radio button (i.e., **yes** or **no**).

**14** To continue the process of adding a new device to the configuration type the appropriate text in the corresponding text boxes (as applicable):

- **Allocated Workload Limit** (applicable to Luminex production only).
- **Actual Workload Limit** (applicable to Luminex production only).
- **Device Label.**
- **Device Path.**
- **Device Description.**

**15** To continue the process of adding a new device to the configuration if the device is to be reserved for use by a particular system mode only, click on the option button associated with the **Reserve for Mode (optional)** box to display a menu of modes then click on the desired selection.

- **ALL MODES** is the default.

**16** To conclude the process of adding a device to the configuration 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; click on **OK** to cancel the new device and go to the **PMD Device Configuration** page; click on **Cancel** to return to the **Add New Device** page.

**17** To add additional devices to the configuration repeat Steps 9 through 16 as necessary.

**18** To start the process of logging out (if applicable) 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.

**19** To complete the process of logging out (when applicable) 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.

### 18.15.4 Filtering 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.

The procedure for filtering data displayed on the **PMD Device Configuration** page starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].
- The **PMD Device Configuration** page is being displayed.

#### 18.15.4.1 Filtering Data Displayed on the PMD Device Configuration Page

**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), click on the **media type** option button to display a menu of media types then 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), click on the **online status** option button to display a menu of online statuses then 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), click on the **device status** option button to display a menu of device statuses then 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), 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 procedure for **Checking/Modifying PMD Device Configuration**.

---

### 18.15.5 Checking/Modifying PMD Printer Configuration

The **OM GUI** handles the configuration of printers used in physical media creation. The printer configurations can be "edited." The **PMD Printer Configuration** page (Figure 18.15-12) 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.

The procedure for checking/modifying PMD printer configuration information on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

#### 18.15.5.1 Checking/Modifying PMD Printer Configuration

---

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

**2** Click on the **Printer Configuration** link in the navigation frame of the **OM GUI**.

- The **PMD Printer Configuration** page is displayed below.

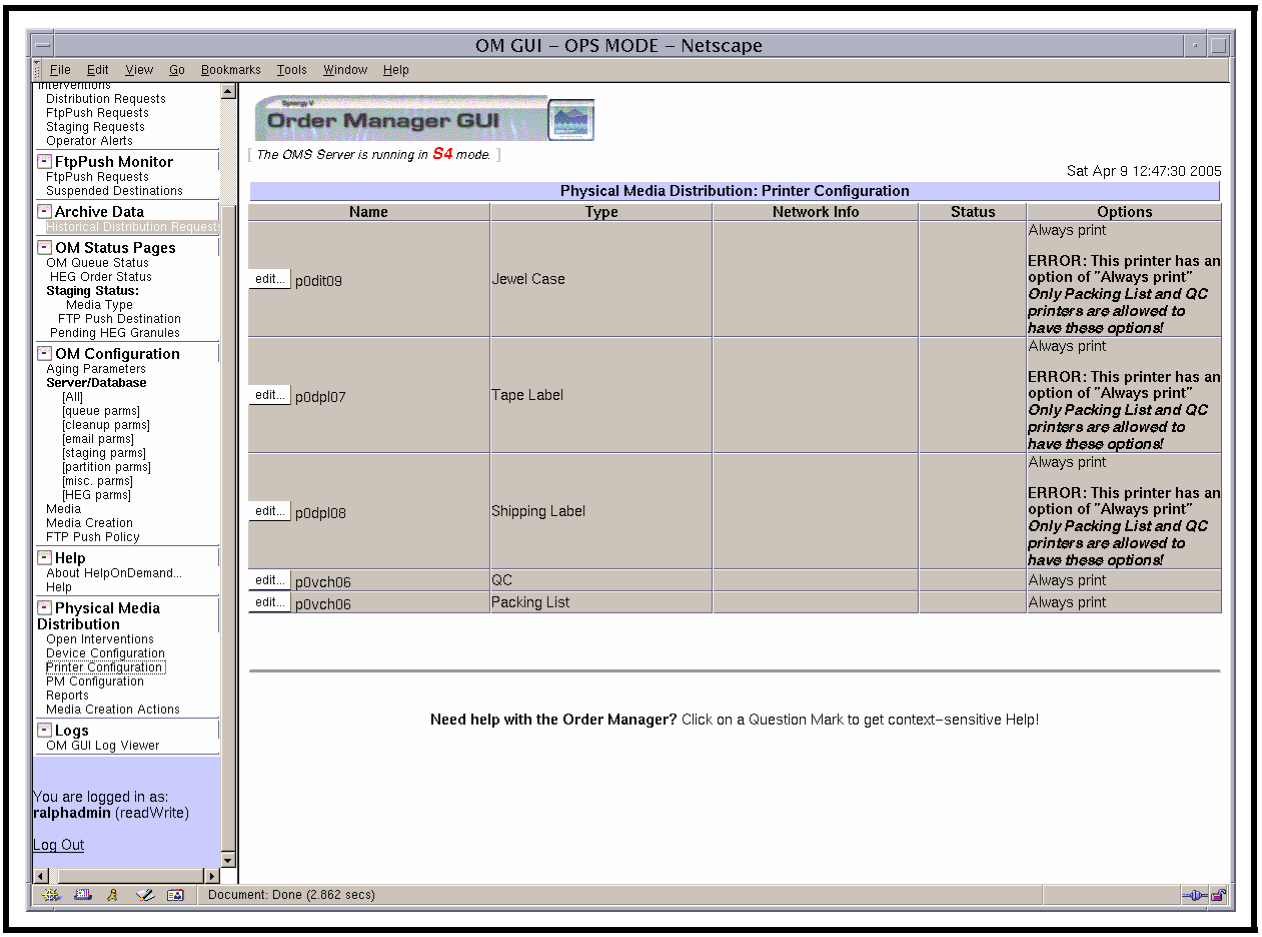


***Figure 18.15-12. PMD Printer Configuration Page***

- 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.**

3 Observe information displayed in the **Printer Configuration** table.

4 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 (Figure 81).

- A **PMD Printer Configuration** page with an **Edit parameters** area for the specified printer (Figure 18.15-13) is displayed.

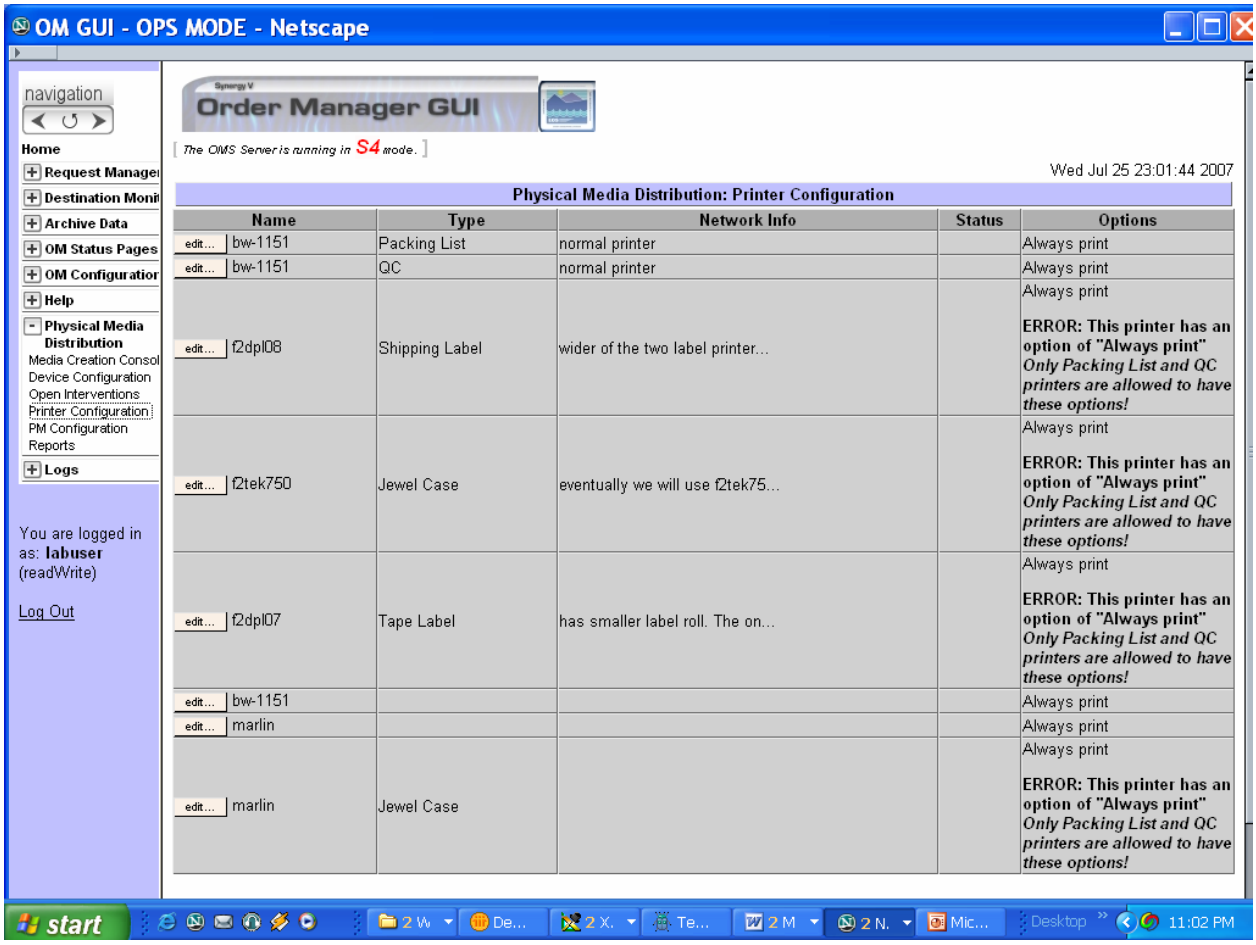


***Figure 18.15-13. PMD Printer Configuration Page with Edit Parameters Area***

5 Observe information displayed on the **PMD Printer Configuration** page with **Edit parameters** area for the selected printer (Figure 18.15-13).

- The following items are displayed in the **Edit parameters** area for the selected printer:
  - **Type.**
  - **Name.**

- **Network Info.**
- **Options.**

- Clicking on the ← icon in the **OM GUI** navigation frame causes the **PMD Printer Configuration** page to be redisplayed.

**6** To change the value assigned to either of the following parameters first type the appropriate text in the corresponding text box:

- **Name.**
- **Network Info.**
  - Changes to any of the preceding parameter values are not effective until they have been implemented using the **Apply** button (Step 8).

**7** To change the "**Options**" first click on the appropriate radio button from the following selections:

- **Always** (print).
- **Never** (print).

**8** 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.

**9** To edit the configuration parameters of another printer (if applicable) return to Step 4.

**10** To start the process of logging out (if applicable) 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) 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.

---

### 18.15.6 Checking/Modifying PMD Module Configuration

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 Module Configuration** page (Figure 18.15-14)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.

The procedure for checking/modifying PMD production module configuration information on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

#### 18.15.6.1 Checking/Modifying PMD Production Module Configuration

---

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

2 Click on the **PM Configuration** link in the navigation frame of the **OM GUI**.

- The **PMD Production Module Configuration** page is displayed below.
- Each production module is listed in a separate table that has the following columns:
  - **Name.**
  - **Created** (date/time).

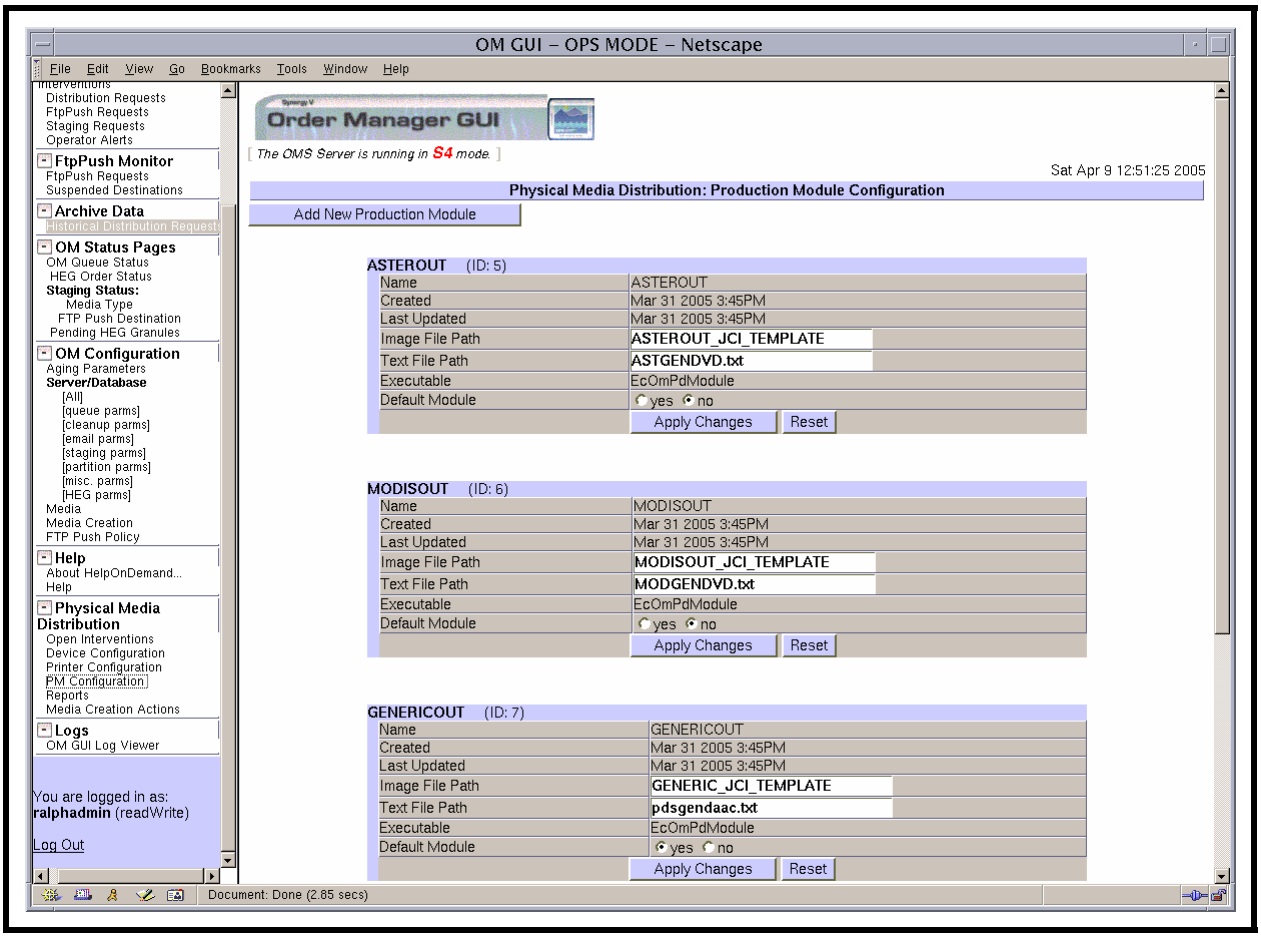


***Figure 18.15-14. PMD Production Module Configuration Page***

- **Last Updated** (date/time).
- **Image File Path.**
- **Text File Path.**
- **Executable.**
- **Default Module** (yes/no).

**3** 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.

**4** To modify the values assigned to parameters for a particular production module first type the appropriate information in the corresponding text box(es) of the table for the production module on the **PMD Production Module Configuration** page.

- Values for the following three parameters can be changed:
  - **Image File Path** (type the desired value in the corresponding text box if applicable).
  - **Text File Path** (type the desired value in the corresponding text box if applicable).
- Modifications to production module parameter values are not implemented until the **Apply Changes** button for the production module has been activated.

**5** To designate whether or not a production module is the default production module 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.

**6** Repeat Steps 4 and 5 as necessary to identify parameter values to be modified for other production modules.

**7** 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, 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.

**8** To add a new production module first click on the **Add New Production Module** button on the **PMD Production Module Configuration** page (Figure 18.15-15).

- An **Add New Production Module** table is displayed on the **PMD Production Module Configuration** page below.

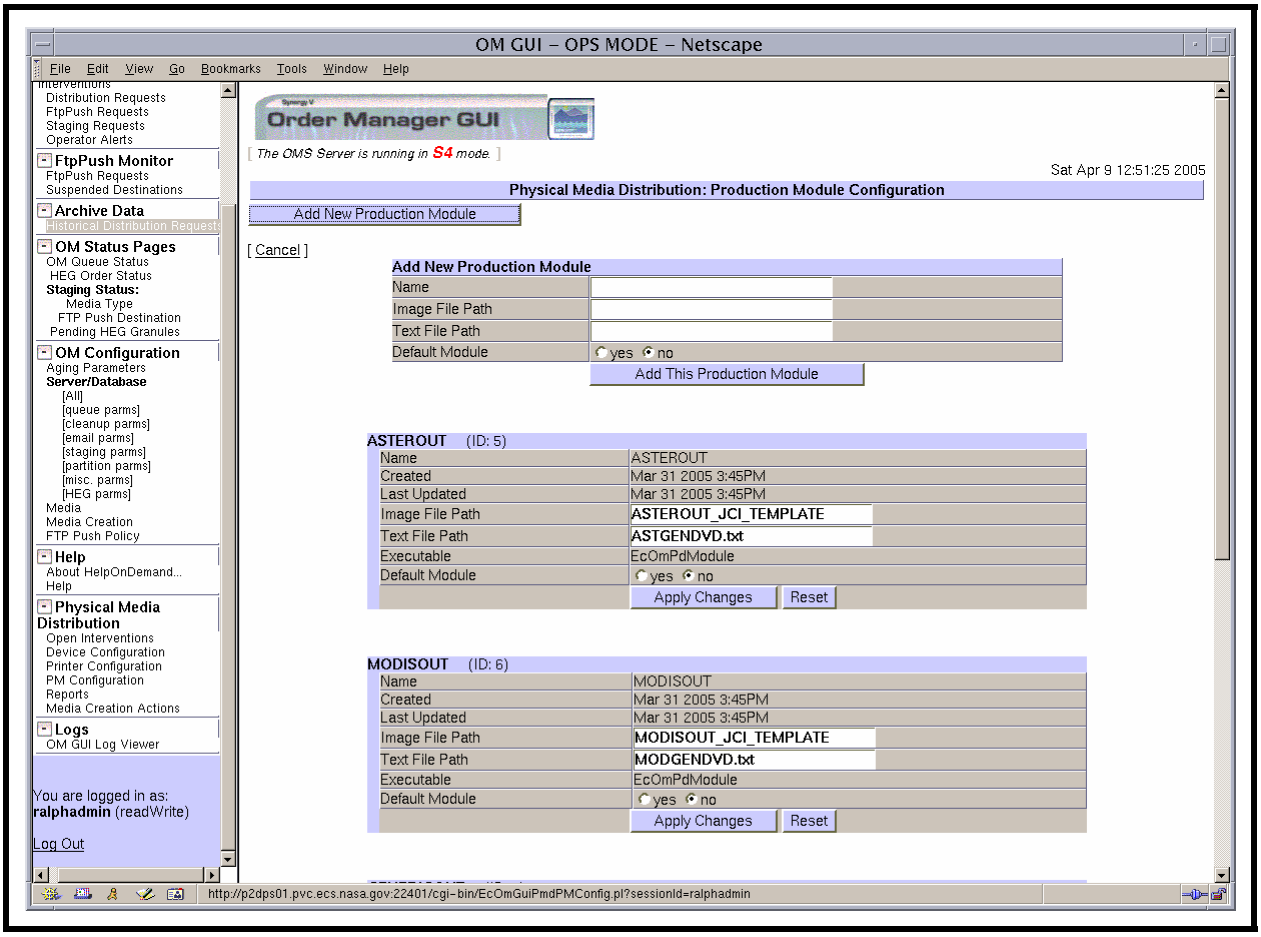


***Figure 18.15-15. Add New Production Module Table (PMD Production Module Configuration Page***

**9** To continue the process of adding a new production module type the appropriate information in the text boxes of the **Add New Production Module** table on the **PMD Production Module Configuration** page.

- Enter values for the following three parameters:
  - **Name.**
  - **Image File Path.**
  - **Text File Path.**

**10** To designate whether or not a production module being added to the configuration is the default module 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.

**11** 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.above.
- **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.

**12** Repeat Steps 8 through 11 as necessary to add new production modules to the PMD configuration.

**13** To start the process of logging out (if applicable) 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) 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.

### 18.15.7 Checking PMD Reports

The **PMD Report Summary** page (Figure 18.15-16) is located under the **Physical Media Distribution** menu. 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.

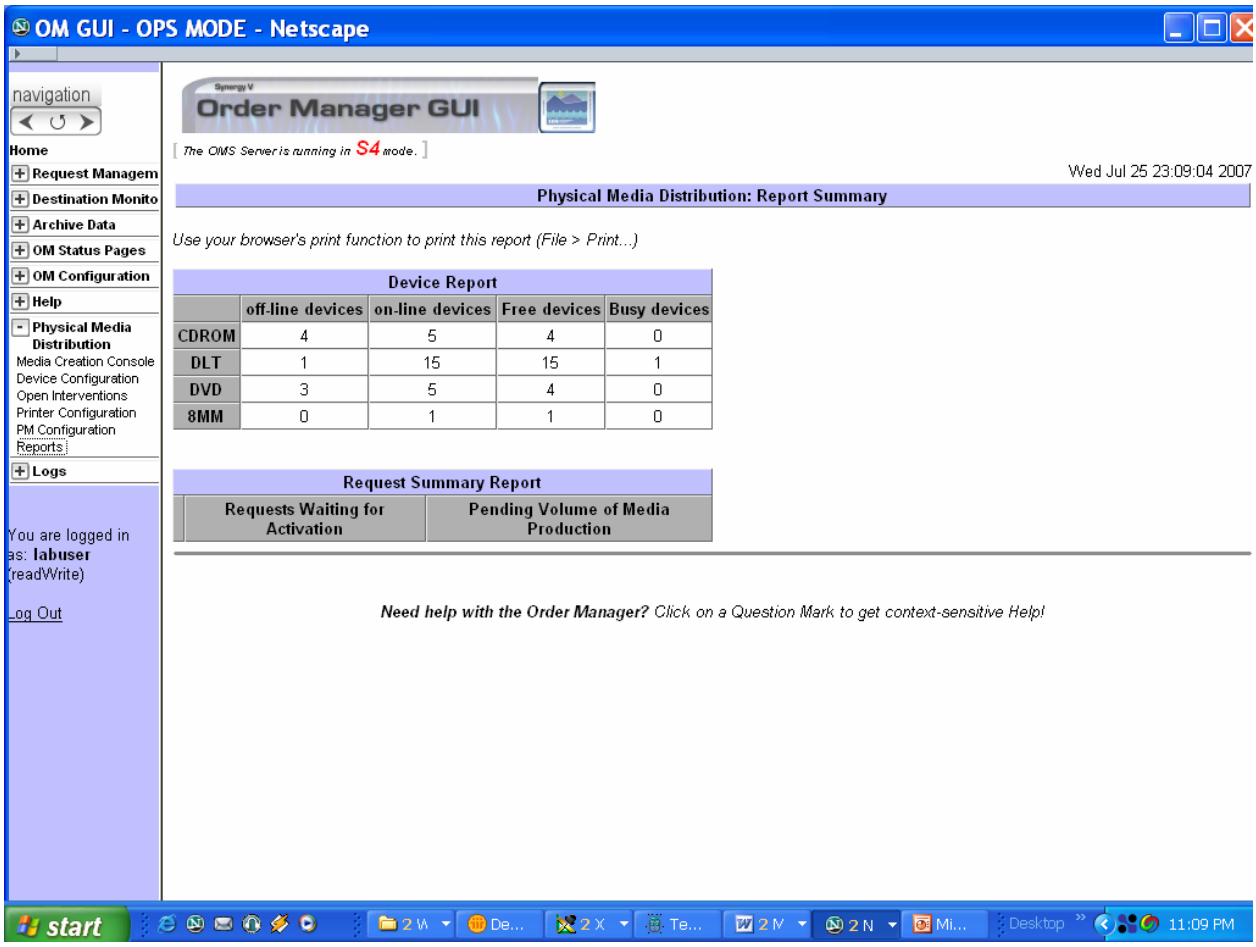


***Figure 18.15-16. PMD Report Summary Page***

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
- **LUMINEX Device Report** - Unlike the tape device report, this shows the number and volume (in MB) of jobs queued, since LUMINEX 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.

The procedure for checking PMD reports on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

### 18.15.7.1 Checking PMD Reports

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

**2** Click on the **Reports** link in the navigation frame of the **OM GUI**.

- The **PMD Report Summary** page is displayed.

**3** 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.**
- **LUMINEX 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 → Find 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.

**4** To print the PMD reports first select **File → Print** from the browser pull-down menu.

- A **Print** dialogue box is displayed.

**5** To continue the process of printing the PMD reports 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.

**6** To start the process of logging out (if applicable) 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.

---

### 18.15.8 Monitoring/Controlling PMD Media Creation Using the OM GUI

The **Media Creation Console page** (Figure 18.15-17) provides the full-capability operator with a means of performing various types of media creation actions.

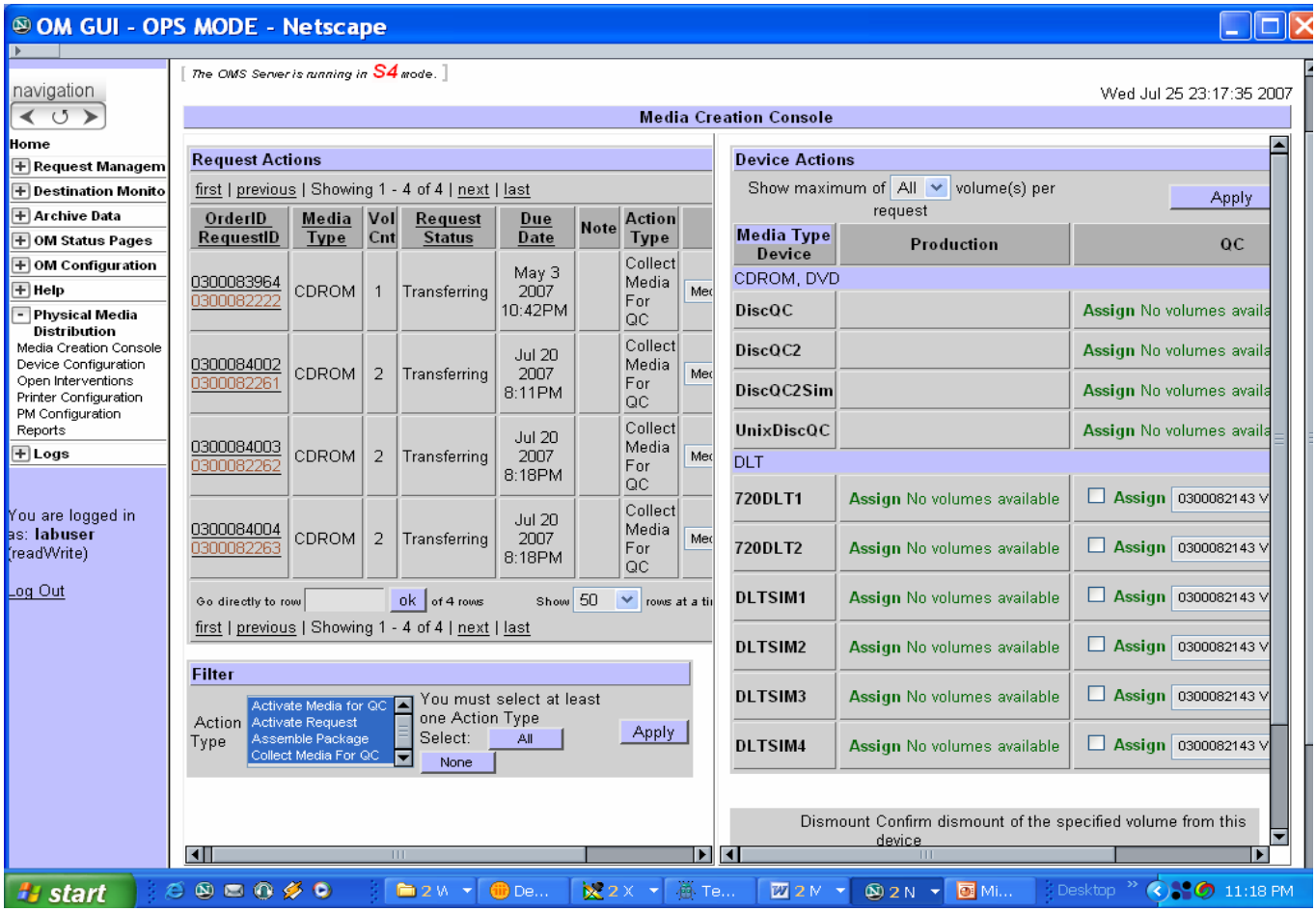


***Figure 18.15-17. Media Creation Actions Page***

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 Console 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.
  - Luminex interface file is created.
  - Luminex 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 that 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 Console 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.

The procedure for monitoring/controlling PMD media creation actions starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

### 18.15.8.1 Monitoring/Controlling PMD Media Creation Using the OM GUI

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

**2** Click on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.

- The **Media Creation Console page** (Figure 18.15-17) is displayed.
- The **Filter** area of the **Media Creation Console 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 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.].

**3** Observe information displayed in the **Listing** table of the **Media Creation Console 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 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 **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.
- 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.**

- Clicking on the ← icon in the **OM GUI** navigation frame causes the **Media Creation Console page** to be redisplayed.

- Clicking on a specific Request ID in the **Listing** table of the **Media Creation Console page** brings up a **Distribution Request Detail** page.
  - For example, clicking on Request ID **_XXXX_** brings up a **Distribution Request Detail** page (i.e., **DISTRIBUTION REQUEST XXXXX** -below) 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].
- **Edit ScpPush Parameters**
- **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.**
- **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 Console page** refreshes automatically as often as specified in the **Refresh screen every *x* minutes** window.
  - If a different refresh option is preferred, perform the procedure for **Setting Refresh Options on OM GUI Pages** (previous section of this lesson).

- 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.

**4** To change the priority of a distribution request first click on the option button in the **Priority** column of the row associated with the request to display a menu of priorities then 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), click on the option button on the **Priority** line to display a menu of priorities, then click on the desired selection.

**5** To implement a priority change 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.

**6** Repeat Steps 4 and 5 as necessary to change the priority of additional distribution requests.

**7** If **Activate Request** is displayed in the **Action Type** column for a request on the **Media Creation Console page**, go to the appropriate procedure (from the list that follows) for responding to the action type associated with the request.

- **Activating PMD Requests** [to start the media creation process for PMD requests] (subsequent section of this lesson).

- **Failing a PMD Request** [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] (subsequent section of this lesson).

- **Annotating a PMD Action** [to add notes to any PMD action] (subsequent section of this lesson).

**8** If **Mount Media for Production** is displayed in the **Action Type** column for a request on the **Media Creation Console page**, go to the appropriate procedure (from the list that follows) for responding to the action type associated with the request.

- **Confirming Mount Media for PMD** [to confirm media mounting for the next volume of the request] (subsequent section of this lesson).

- **Failing Mount Media for PMD** [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] (subsequent section of this lesson).
- **Annotating a PMD Action** [to add notes to any PMD action] (subsequent section of this lesson).

**9** If **Collect Media for QC** is displayed in the **Action Type** column for a request on the **Media Creation Console page**, go to the appropriate procedure (from the list that follows) for responding to the action type associated with the request.

- **Confirming Media Collection Complete for PMD** [to confirm media collection complete for PMD (i.e., the recently created volume(s) that was/were waiting for dismount has/have been dismounted)] (subsequent section of this lesson).
- **Failing PMD Media Collection** [to indicate that the media collection or dismount failed] (subsequent section of this lesson).
- **Annotating a PMD Action** [to add notes to any PMD action] (subsequent section of this lesson).

**10** If **Activate Media for QC** is displayed in the **Action Type** column for a request on the **Media Creation Console page**, go to the following procedure:

- **Activating QC for PMD Requests** [to start the media QC process for PMD requests] (subsequent section of this lesson).
- **Failing a PMD Request** [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] (subsequent section of this lesson).
- **Annotating a PMD Action** [to add notes to any PMD action] (subsequent section of this lesson).

**11** If **Mount Media for QC** is displayed in the **Action Type** column for a request on the **Media Creation Console page**, go to the appropriate procedure (from the list that follows) for responding to the action type associated with the request.

- **Confirming Mount Media for PMD** [to confirm media mounting for the next volume of the request] (subsequent section of this lesson).
- **Failing Mount Media for PMD** [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] (subsequent section of this lesson).
- **Annotating a PMD Action** [to add notes to any PMD action] (subsequent section of this lesson).

**12** If **Assemble Package** is displayed in the **Action Type** column for a request on the **Media Creation Console page**, go to the appropriate procedure (from the list that follows) for responding to the action type associated with the request.

- **Marking PMD Request Shipped** [to confirm media dismount for a particular request that has passed QC and is ready to be marked "shipped"] (subsequent section of this lesson).
- **Confirming PMD Media Dismounted** [to confirm media dismount for a particular request] (subsequent section of this lesson).
- **Confirming PMD Package Assembled** [to confirm that the package was assembled for shipment] (subsequent section of this lesson).
- **Marking PMD Package Not Assembled** [to indicate that the package was **not** assembled for shipment] (subsequent section of this lesson).
- **Failing a PMD Request** [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] (subsequent section of this lesson).
- **Printing PMD Outputs** [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] (subsequent section of this lesson).
- **Annotating a PMD Action** [to add notes to any PMD action] (subsequent section of this lesson).

**13** Repeat Steps 3 through 12 as necessary to monitor/control PMD media creation.

**14** 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 procedure for **Viewing PMD Open Intervention Information on the OM GUI** (previous section of this lesson).

**15** To start the process of logging out (if applicable) 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.
- **Cancel** - to dismiss the dialogue box without logging out.
  - The dialogue box is dismissed.
  - The **OM GUI** is displayed.

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### 18.15.9 Activating PMD Requests

The OMS queues an action (i.e., **Activate Request**) indicating to the operator (in the **Action Type** column of the **Media Creation Console page**) to activate a distribution request by

allocating it to a device. The "normal" operator response would be to select a device from the list of available devices and (in the case of a tape medium) confirm the presence of a blank tape in the device. However, activating the request is not the only possibility. When the **Activate Request** action for a particular request appears on the **Media Creation Console page**, the operator has the following options:

- Activate request [Refer to the **Activating PMD Requests** procedure (subsequent section of this lesson).]
- Fail request [Refer to the **Failing a PMD Request** procedure (subsequent section of this lesson).]
- Annotate action [Refer to the **Annotating a PMD Action** procedure (subsequent section of this lesson).]

The procedure for **Activating PMD Requests** 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 Console page**. **Activating PMD Requests** is typically performed in association with other procedures (e.g., **Monitoring/Controlling PMD Media Creation Using the OM GUI**).

The **Activate Request** pages (Figures 90 and 91) 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 Console page** and the appropriate **Activate Request** page.

The procedure for activating PMD requests on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

### 18.15.9.1 Activating PMD Requests

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

**2** Click on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.

- The **Media Creation Console page** is displayed.

- The **Filter** area of the **Media Creation Console 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 Console 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**.

**4** To start the process of activating a PMD request, 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 (Figure 18.15-18) or for disk media (Figures 18.15-19 and 18.15-20) (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 Luminex (disk) unit, the dialogue box displays the following current workload information for each available unit:
  - **Device Name.**
  - **Workload (MB).**
  - **Workload Limit.**

**5** If a device other than the one displayed in the **Activate Request** dialogue box is preferred, 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.

**6** Click in the **Select … Device to Allocate** check box.

- A checkmark is displayed in the **Select … Device to Allocate** check box.

**7** If the device is a Luminex (disk) unit, ensure that the input bins of the Luminex 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 Luminex unit operating manual.

**8** 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.

**9** 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.

**10** 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 procedure for **Failing Mount Media for PMD** (subsequent section of this lesson).

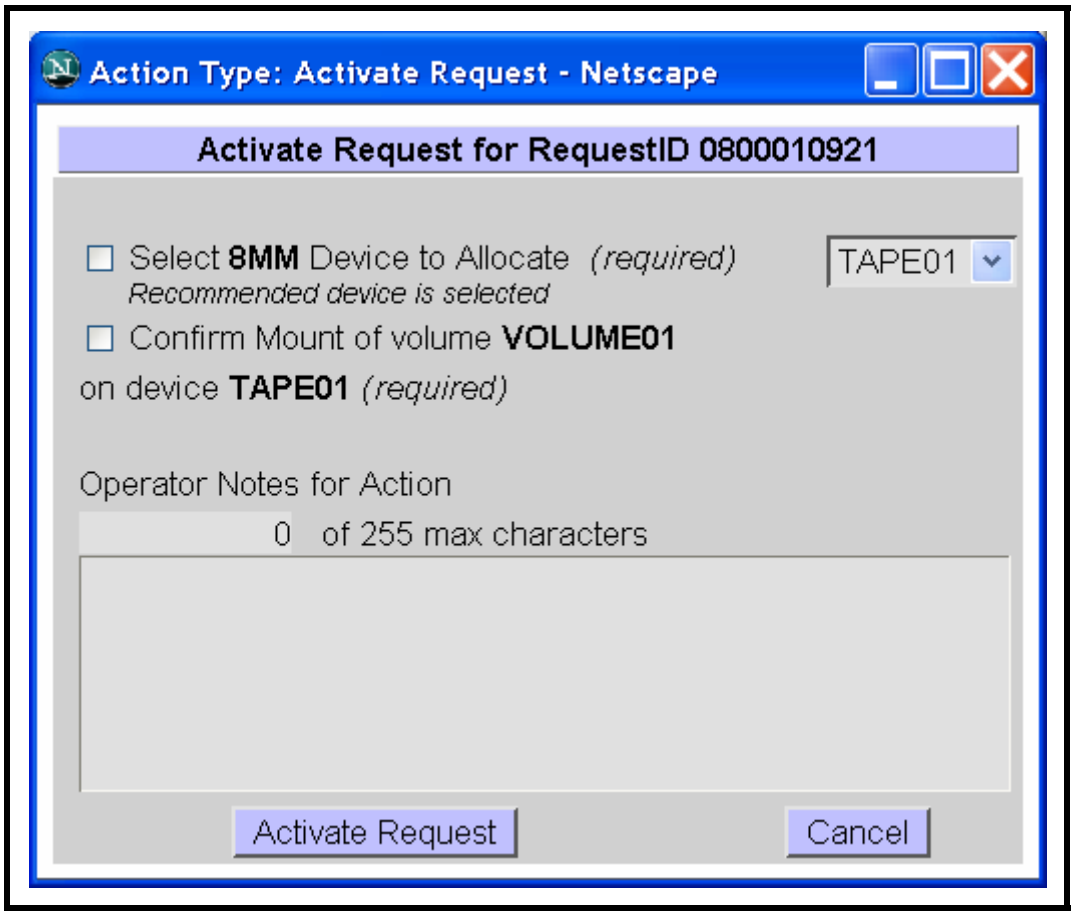


***Figure 18.15-18 Activate Request Dialogue Box for Tape Media***

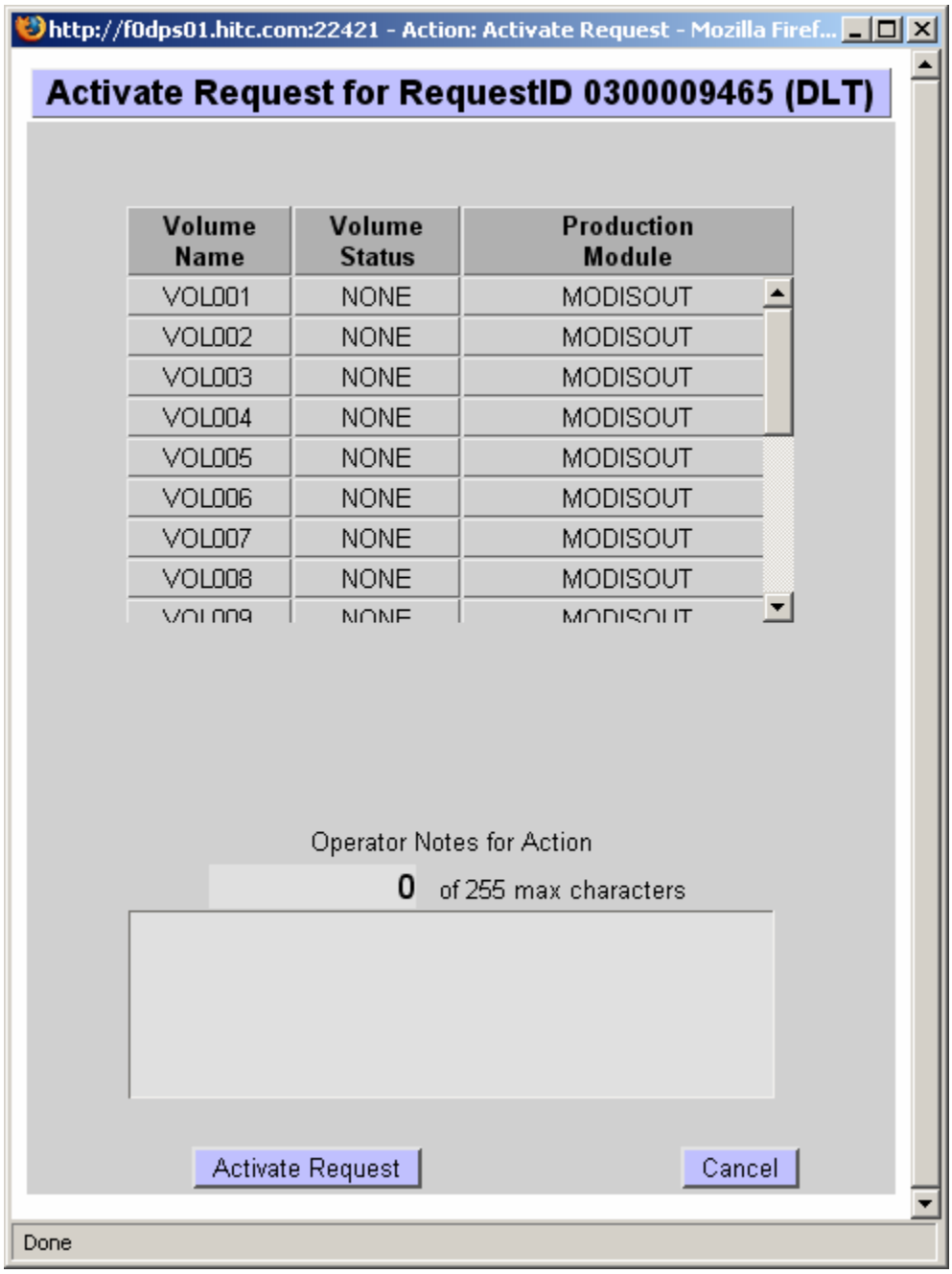


***Figure 18.15-19. Activate Request Dialogue Box for Disk Media (1of 2)***

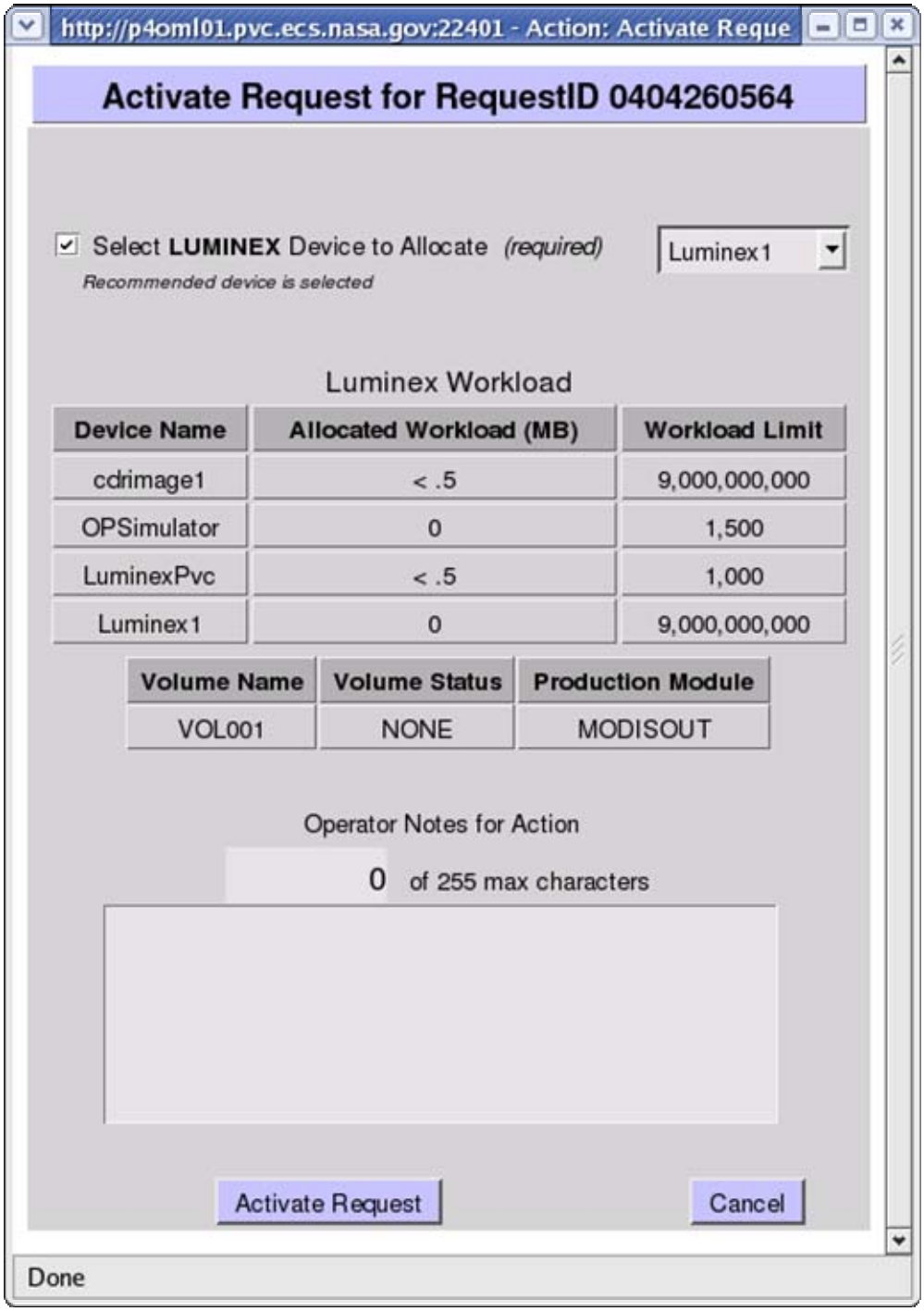


***Figure 18.15-20. Activate Request for CD-ROM and DVD Media Types Page (2 of 2)***

**11** 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, 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.

**12** If notes are to be entered for the "activate" action, type the appropriate text in the **Operator Notes for Action** text box of the **Activate Request** dialogue box.

- Text is displayed in the **Operator Notes for Action** text box of the **Activate Request** dialogue box.

**13** To complete the process of activating the request 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 Console 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 Console page** is displayed.

**14** Repeat Steps 3 through 13 as necessary to activate additional requests.

**15** Return to the procedure that specified activating PMD requests [e.g., **Monitoring/Controlling PMD Media Creation Using the OM GUI** (previous section of this lesson)].

---

### 18.15.10 Failing a PMD Request

The procedure for **Failing a PMD Request** (Figure 18.15-21) 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**, **Activate Media for QC**, or **Assemble Package** action displayed in the **Action Type** column of the **Media Creation Console page**. **Failing a PMD Request** is typically performed in association with other procedures (e.g., **Monitoring/Controlling PMD Media Creation Using the OM GUI**).

The **Fail Request** figure below 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.

The procedure for failing a PMD request on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)]

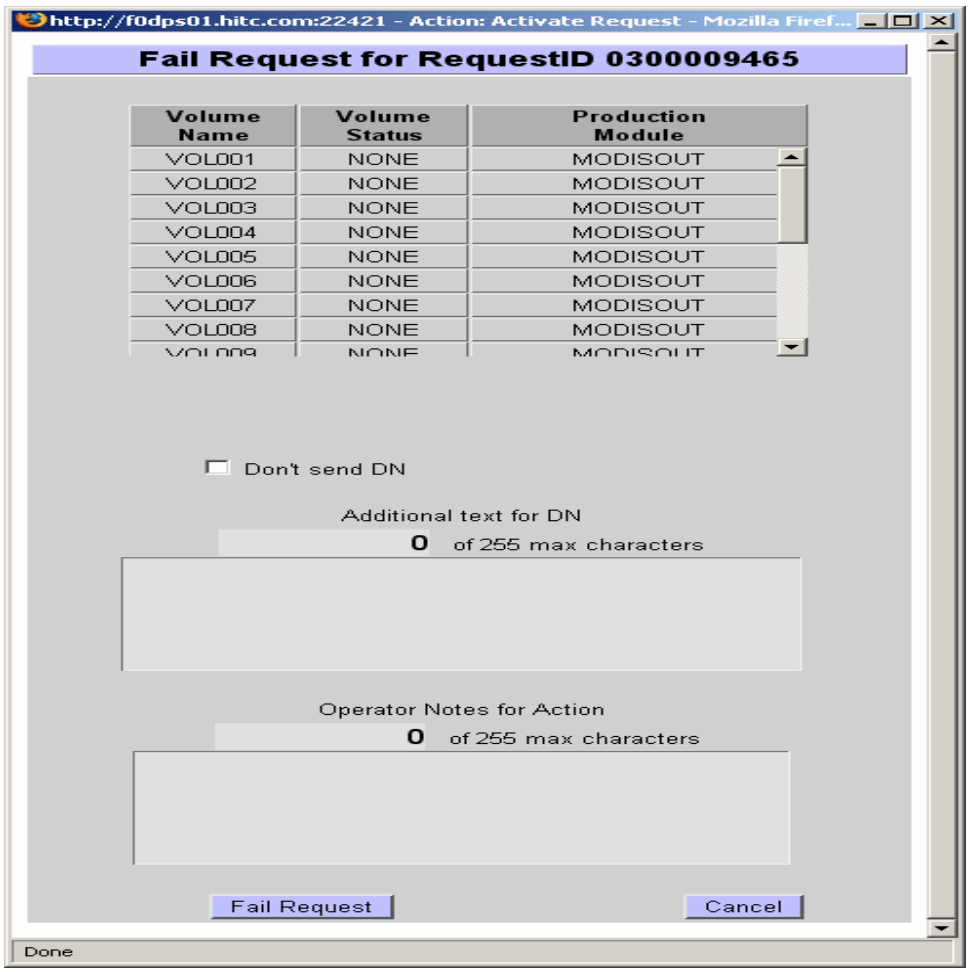


***Figure 18.15-21. Fail Request Page***

### 18.15.10.1 Failing a PMD Request

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

**2** Click on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.

- The **Media Creation Console page** is displayed.
- The **Filter** area of the **Media Creation Console 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 Console 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, 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, type the appropriate text in the **Additional text for DN** text box of the **Fail Request** dialogue box.

- 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, 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, type the appropriate text in the **Operator Notes for Action** text box of the **Fail Request** dialogue box.

- 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 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 Console 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 Console 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., **Monitoring/Controlling PMD Media Creation Using the OM GUI** (previous section of this lesson)].

---

### 18.15.11 Annotating a PMD Action

The procedure for **Annotating a PMD Action** 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 Console page**. **Annotating a PMD Action**

is typically performed in association with other procedures (e.g., **Monitoring/Controlling PMD Media Creation Using the OM GUI**).

The **Annotate Action** page (Figure 18.15-22) provides the full-capability operator with a means of adding notes to PMD actions.

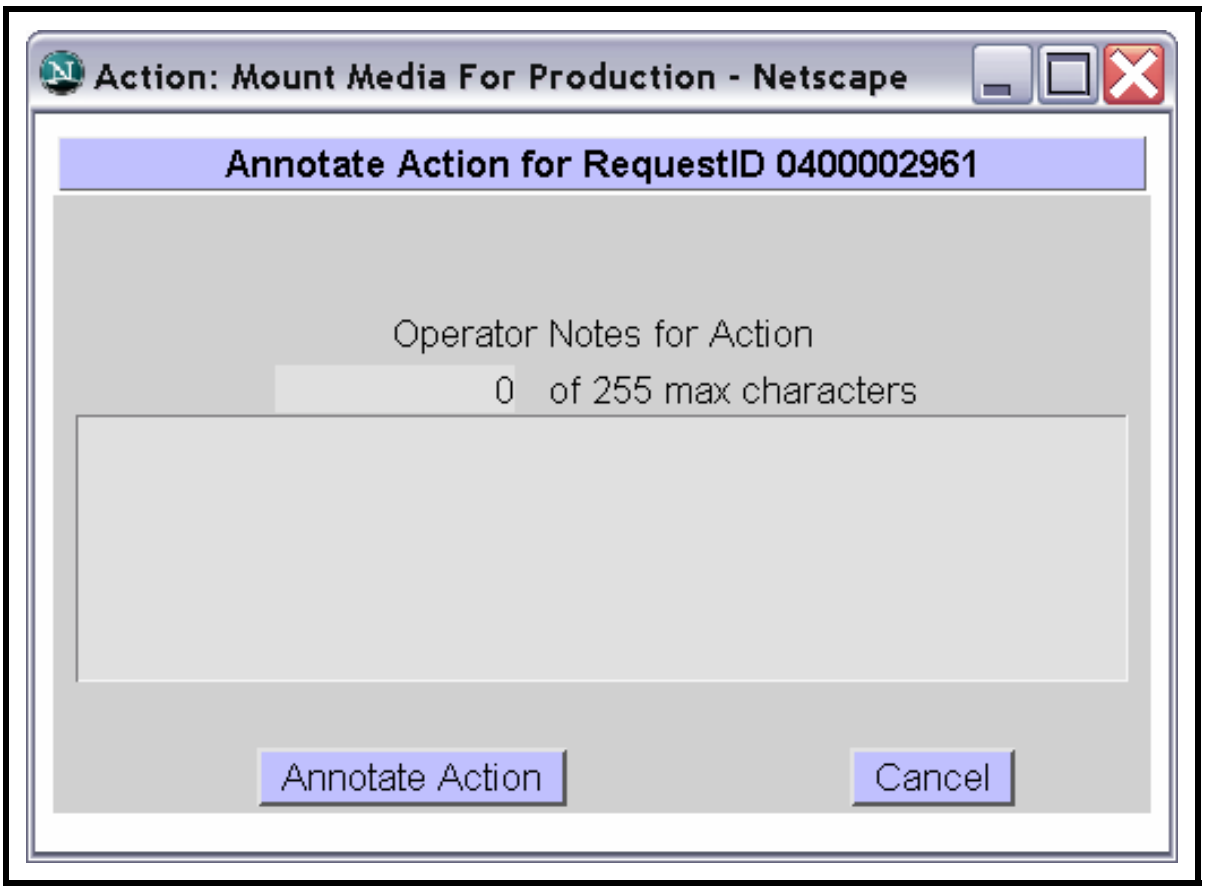


***Figure 18.15-22. Annotate Action Page***

The procedure for annotating a PMD action on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

### 18.15.11.1 Annotating a PMD Action

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

**2** Click on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.

- The **Media Creation Console page** is displayed.
- The **Filter** area of the **Media Creation Console 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 Console 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, 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** Type the appropriate text in the **Operator Notes for Action** text box of the **Annotate Action** dialogue box.

- 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 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 Console page** is displayed.
- **Cancel** - to dismiss the dialogue box without annotating the action.
  - The dialogue box is dismissed.
  - The **Media Creation Console 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., **Monitoring/Controlling PMD Media Creation Using the OM GUI** (previous section of this lesson)].

---

### 18.15.12 Mounting Media for PMD Production

The OMS queues an action (i.e., **Mount Media for PMD Production**) indicating to the operator (in the **Action Type** column of the **Media Creation Console page**) to mount media for the second (or subsequent) volume of a multi-volume request for media creation. The "normal" operator response would be to ensure that there is a blank tape in the drive to be used for recording the data and confirm media mounting. However, that is not the only possibility. When the **Mount Media for PMD Production** action for a particular request appears on the **Media Creation Console page**, the operator has the following options:

- Confirm mount media [Refer to the **Confirming Mount Media for PMD** procedure (subsequent section of this lesson).]
- Fail mount media [Refer to the **Failing Mount Media for PMD** procedure (subsequent section of this lesson).]

- Annotate action [Refer to the **Annotating a PMD Action** procedure (previous section of this lesson).]

### 18.15.13 Confirming Mount Media for PMD

The procedure for **Confirming Mount Media for PMD** (Figure 18.15-23)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 Console page**. **Confirming Mount Media for PMD** is typically performed in association with other procedures (e.g., **Monitoring/Controlling PMD Media Creation Using the OM GUI**).

The **Confirm Mount Media** page (Figure 18.15-23) 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.

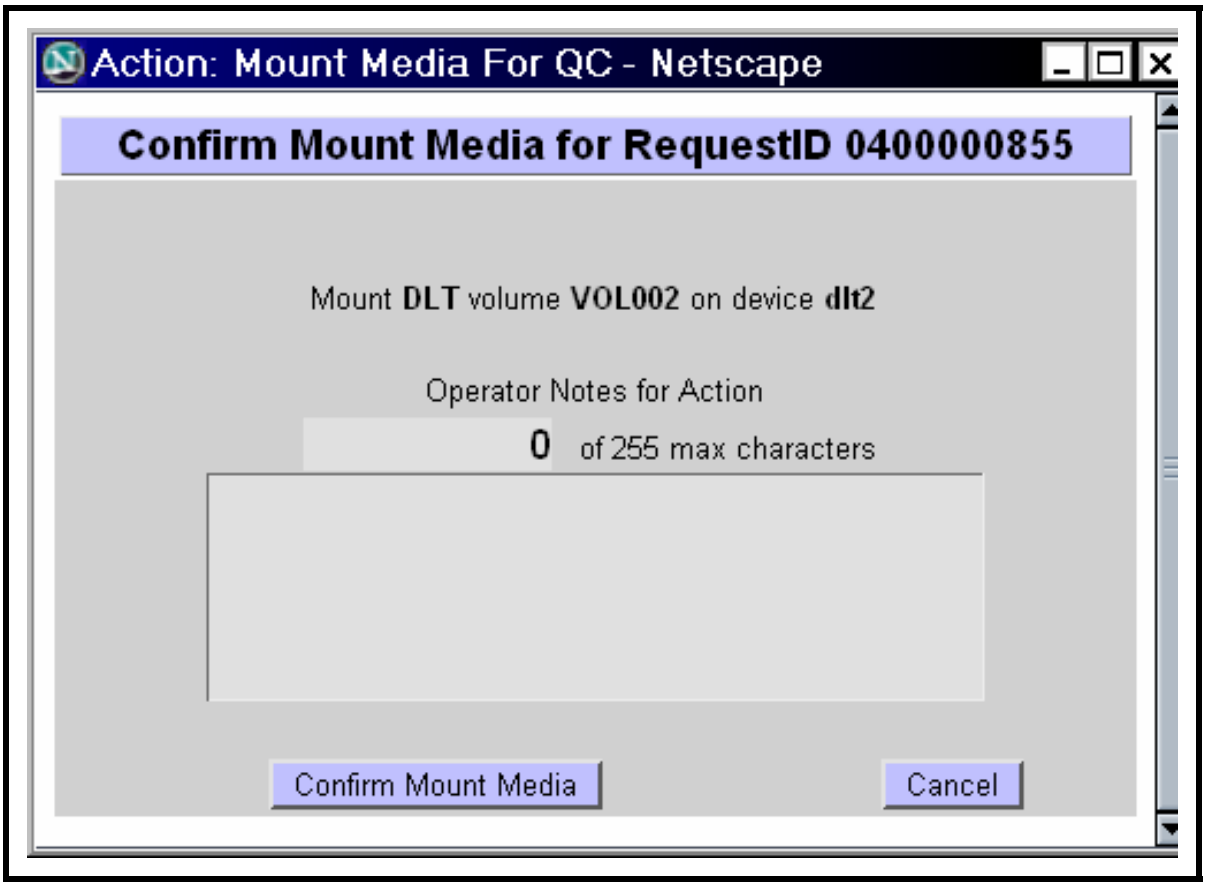


***Figure 18.15-23. Confirm Mount Media Page***

The procedure for confirming mount media on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

### 18.15.13.1 Confirming Mount Media for PMD

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

**2** Click on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.

- The **Media Creation Console page** is displayed.
- The **Filter** area of the **Media Creation Console 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 Console 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, 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 (Figure 90) 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 procedure for **Failing Mount Media for PMD** (previous section of this lesson).

**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 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 Console 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 Console 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., **Monitoring/Controlling PMD Media Creation Using the OM GUI** (previous section of this lesson)].

---

### 18.15.14 Failing Mount Media for PMD

The procedure for **Failing Mount Media for PMD** (Figure 18.15-24) 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 Console page**. **Failing Mount Media for PMD** is typically performed in association with other procedures (e.g., **Monitoring/Controlling PMD Media Creation Using the OM GUI**).

The **Fail Mount Media** page (Figure 18.15-24) 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.

The procedure for failing mount media starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

### 18.15.14.1 Failing Mount Media for PMD

---

**1** If the failure to mount media occurs during the procedure for **Activating PMD Requests** or the procedure for **Activating QC for PMD Requests**, first 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** 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 Console page** is not being displayed already, click on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.

- The **Media Creation Console page** is displayed.
- The **Filter** area of the **Media Creation Console 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.**

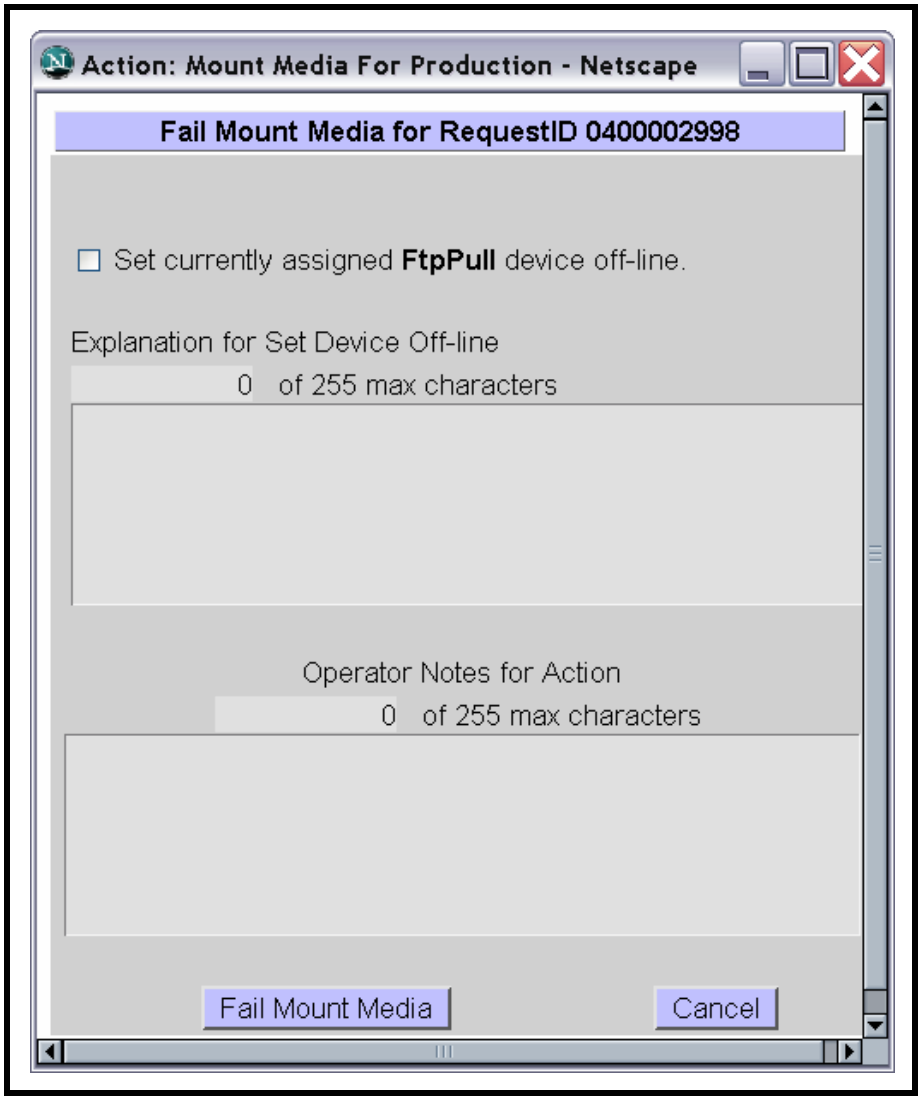


***Figure 18.15-24. Fail Mount Media Page***

- **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 Console 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, 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 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, type the appropriate text in the **Explanation for Set Device Off-line** text box of the **Fail Mount Media** dialogue box.

- 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, type the appropriate text in the **Operator Notes for Action** text box of the **Fail Mount Media** dialogue box.

- 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 procedures for **Viewing PMD Open Intervention Information on the OM GUI** and **Responding to a PMD Open Intervention** (previous sections of this lesson).]
  - – 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 Console 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 Console 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., **Monitoring/Controlling PMD Media Creation Using the OM GUI** or **Activating PMD Requests** (previous sections of this lesson) or **Activating QC for PMD Requests** (subsequent section of this lesson)].

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### 18.15.15 Collecting Media for PMD QC

The OMS queues an action (i.e., **Collect Media for QC**) indicating to the operator (in the **Action Type** column of the **Media Creation Console page**) to collect the media (relevant to a particular request) for automatic QC. The "normal" operator response would be to dismount the specified volume(s) from the drive where it/they was/were produced and confirm that the collection of media for QC is complete. However, that is not the only possibility. When the

**Collect Media for QC** action for a particular request appears on the **Media Creation Console page**, the operator has the following options:

- Confirm media collection complete [Refer to the **Confirming Media Collection Complete for PMD** procedure (subsequent section of this lesson).]
- Fail media collection [Refer to the **Failing PMD Media Collection** procedure (subsequent section of this lesson).]
- 1Annotate action [Refer to the **Annotating a PMD Action** procedure (previous section of this lesson).]

### 18.15.16 Confirming Media Collection Complete for PMD

The procedure for **Confirming Media Collection Complete for PMD** 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 Console page**. **Confirming Media Collection Complete for PMD** is typically performed in association with other procedures (e.g., **Monitoring/Controlling PMD Media Creation Using the OM GUI**).

The **Media Collection Complete** page (Figure 18.15-25) 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.

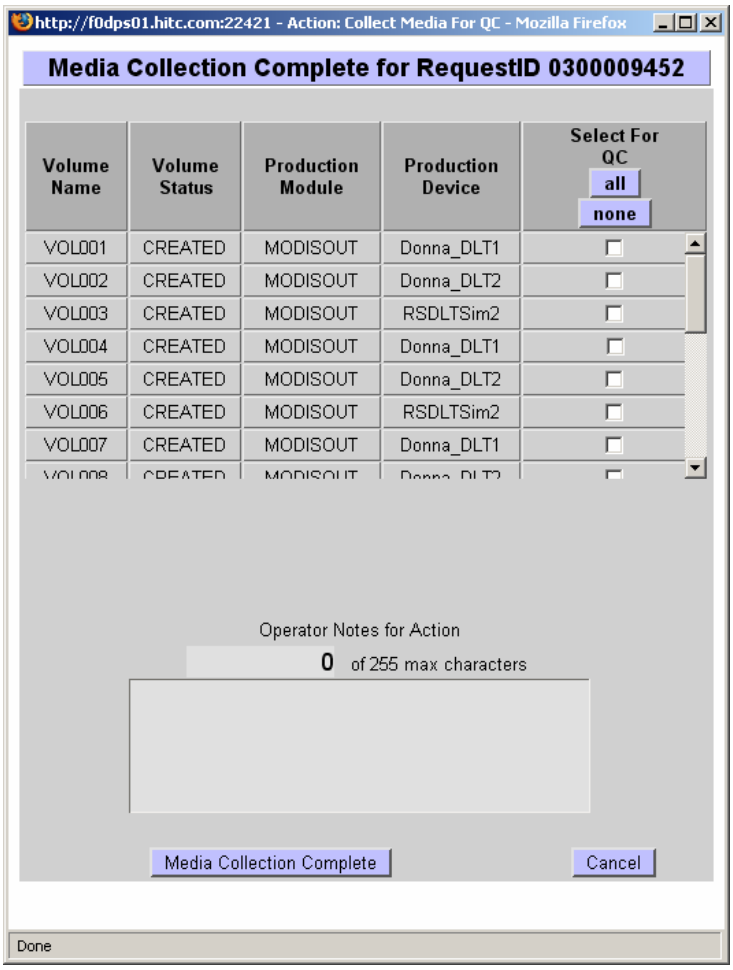


***Figure 18.15-25. Media Collection Complete Page***

The procedure for confirming media collection complete for PMD on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

### 18.15.16.1 Confirming Media Collection Complete for PMD

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

**2** Click on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.

- The **Media Creation Console page** is displayed.
- The **Filter** area of the **Media Creation Console 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 Console 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, 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** 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, type the appropriate text in the **Operator Notes for Action** text box of the **Media Collection Complete** dialogue box.

- 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 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 Console 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 Console 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., **Monitoring/Controlling PMD Media Creation Using the OM GUI** (previous section of this lesson)].

---

### 18.15.17 Failing PMD Media Collection

The procedure for **Failing PMD Media Collection** 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 Console page**. **Failing PMD Media Collection** is typically performed in association with other procedures (e.g., **Monitoring/Controlling PMD Media Creation Using the OM GUI**).

The **Fail Media Collection** page (Figure 18.15-26) 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.

The procedure for failing PMD media collection on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

### 18.15.17.1 Failing PMD Media Collection

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

**2** Click on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.

- The **Media Creation Console page** is displayed.
- The **Filter** area of the **Media Creation Console 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.**

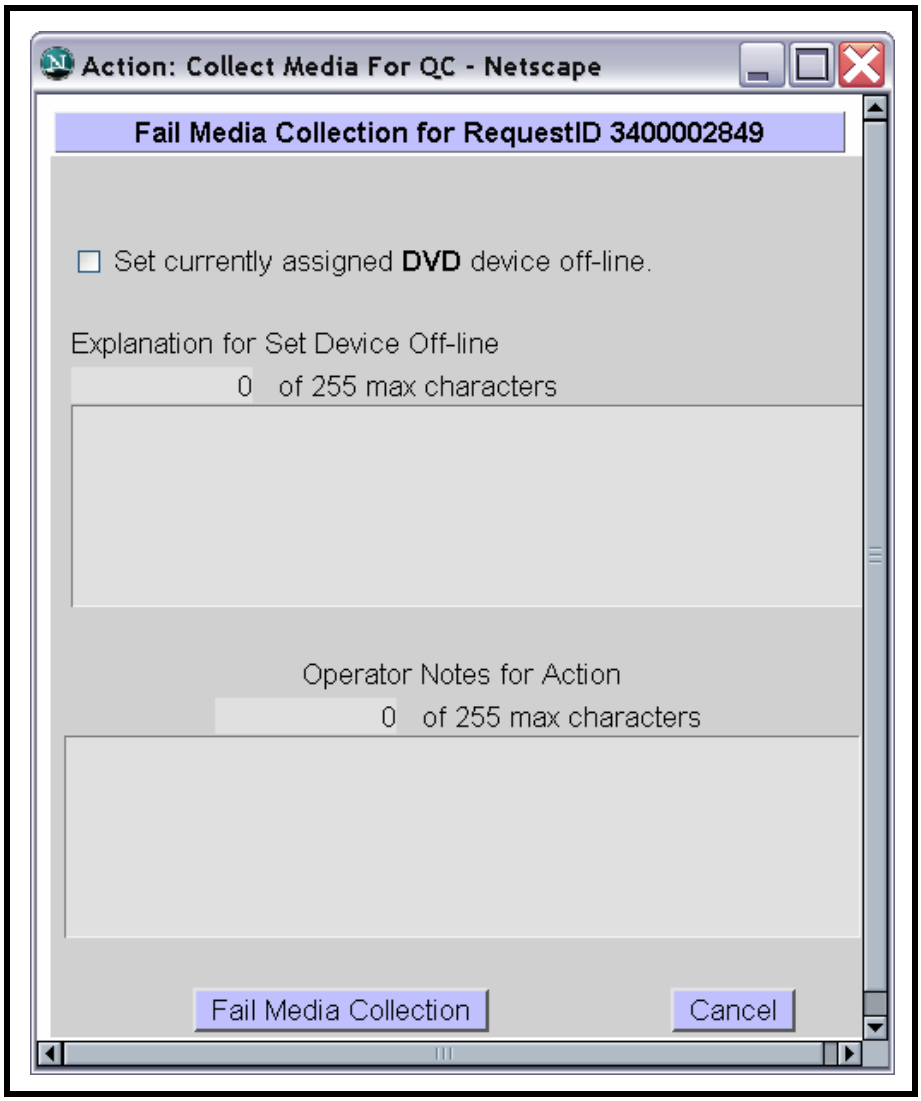


***Figure 18.15-26. Fail Media Collection Page***

  - **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 Console 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, 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 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, type the appropriate text in the **Explanation for Set Device Off-line** text box of the **Fail Media Collection** dialogue box.

- 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, type the appropriate text in the **Operator Notes for Action** text box of the **Fail Media Collection** dialogue box.

- 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 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 Console 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 Console 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., **Monitoring/Controlling PMD Media Creation Using the OM GUI** (previous section of this lesson)].

---

### 18.15.18 Activating Media for QC

The OMS queues an action (i.e., **Activate Media for QC**) indicating to the operator (in the **Action Type** column of the **Media Creation Console page**) to activate QC for a request by allocating it to a device. The "normal" operator response would be to select a device from the list of available devices and confirm the presence of the appropriate tape or disk in the device. However, activating the request is not the only possibility. When the **Activate Request** action for a particular request appears on the **Media Creation Console page**, the operator has the following options:

- Activate QC [Refer to the **Activating QC for PMD Requests** procedure (subsequent section of this lesson).]
- Fail request [Refer to the **Failing a PMD Request** procedure (previous section of this lesson).]
- Annotate action [Refer to the **Annotating a PMD Action** procedure (previous section of this lesson).]

The procedure for **Activating QC for PMD Requests** is used for activating QC by allocating distribution requests to devices (tape or disk drives). The operator must confirm the presence of the appropriate tape or disk 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 Console page**. **Activating QC for PMD Requests** is typically performed in association with other procedures (e.g., **Monitoring/Controlling 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 (Figure 18.15-27) 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.

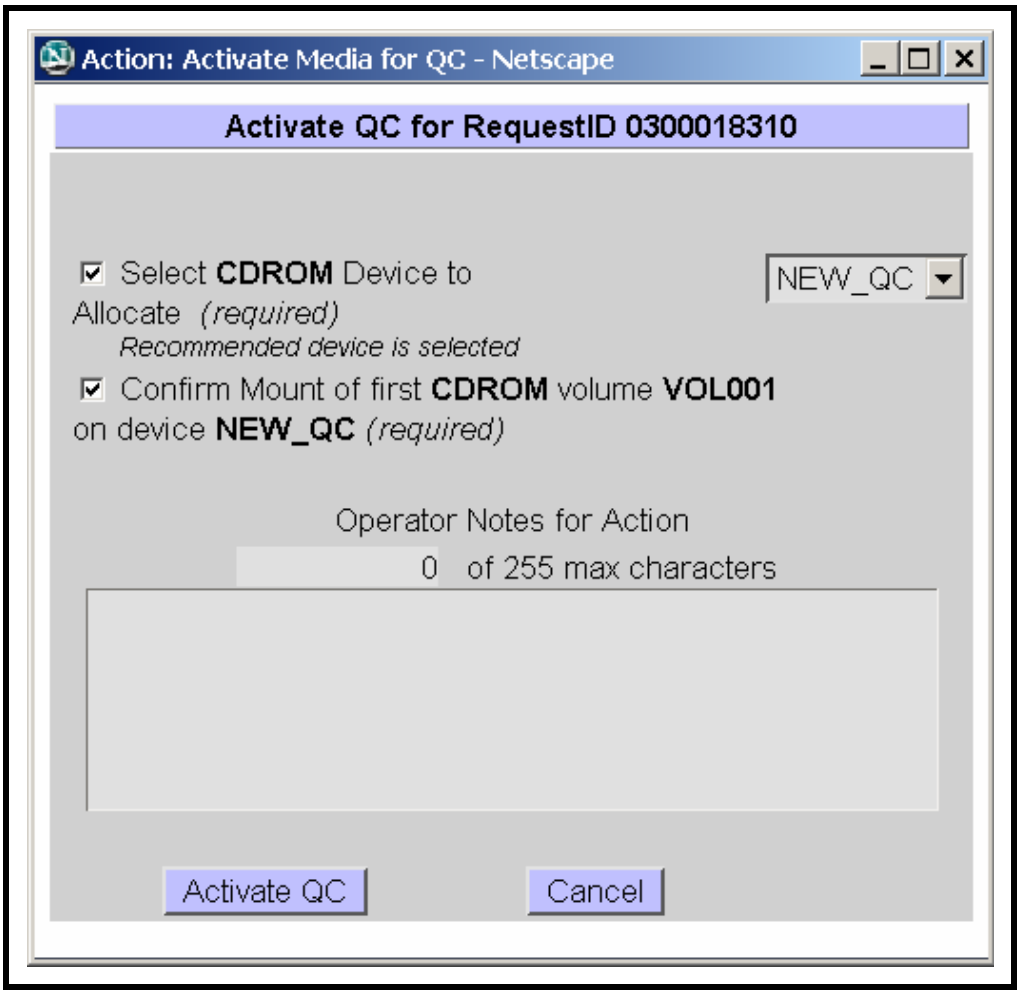


***Figure 18.15-27. Activate QC Dialogue Box***

The procedure for activating QC on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

### 18.15.18.1 Activating QC for PMD Requests

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

**2** Click on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.

- The **Media Creation Console page** is displayed.
- The **Filter** area of the **Media Creation Console 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 Console page**.

**NOTE:** In order to activate QC the entry in the **Action Type** column for that request must be **Activate Media for QC**.

**4** To start the process of activating QC, 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 (Figure 94) 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, 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** 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), go to the procedure for **Failing Mount Media for PMD** (previous section of this lesson).

**10** After ensuring that the drive has come on line, 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, type the appropriate text in the **Operator Notes for Action** text box of the **Activate QC** dialogue box.

- 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 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 Console 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 Console 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., **Monitoring/Controlling PMD Media Creation Using the OM GUI** (previous section of this lesson)].

---

### 18.15.19 Mounting Media for PMD QC

The OMS queues an action (i.e., **Mount Media for QC**) indicating to the operator (in the **Action Type** column of the **Media Creation Console page**) to mount the second and subsequent volumes of a multi-volume request for QC. The "normal" operator response would be to confirm the presence of the appropriate tape or disk in the drive to be used for performing QC. However, that is not the only possibility. When the **Mount Media for QC** action for a particular request appears on the **Media Creation Console page**, the operator has the following options:

- Confirm mount media [Refer to the **Confirming Mount Media for PMD** procedure (previous section of this lesson).]
- Fail mount media [Refer to the **Failing Mount Media for PMD** procedure (previous section of this lesson).]
- Annotate action [Refer to the **Annotating a PMD Action** procedure (previous section of this lesson).]

### 18.15.20 Assembling PMD Packages

The OMS queues an action (i.e., **Assemble Package**) indicating to the operator (in the **Action Type** column of the **Media Creation Console page**) to confirm that the package (relevant to a particular request) is assembled and ready for shipment. The "normal" operator response would be to collect all printed outputs, assemble the distribution package and confirm the successful completion of package assembly. However, that is not the only possibility. When the **Assemble Package** action for a particular request appears on the **Media Creation Console page**, the operator has the following options:

- Mark request shipped [Refer to the **Marking PMD Request Shipped** procedure (subsequent section of this lesson).]
- Confirm media dismounted [Refer to the **Confirming PMD Media Dismounted** procedure (previous section of this lesson).]

- Confirm package assembled [Refer to the **Confirming PMD Package Assembled** procedure (subsequent section of this lesson).]
- Package not assembled [Refer to the **Marking PMD Package Not Assembled** procedure (subsequent section of this lesson).]
- Fail request [Refer to the **Failing a PMD Request** procedure (previous section of this lesson).]
- Print outputs [Refer to the **Printing PMD Outputs** procedure (subsequent section of this lesson).]
- Annotate action [Refer to the **Annotating a PMD Action** procedure (previous section of this lesson).]

### 18.15.21 Marking PMD Request Shipped

The procedure for **Marking PMD Request Shipped** 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 Console page**. **Marking PMD Request Shipped** is typically performed in association with other procedures (e.g., **Monitoring/Controlling PMD Media Creation Using the OM GUI**).

The **Mark Request Shipped** page (Figure 18.50-1) 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.

The procedure for marking a PMD request shipped on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

#### 18.15.21.1 Marking PMD Request Shipped

---

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

**2** Click on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.

- The **Media Creation Console page** is displayed.

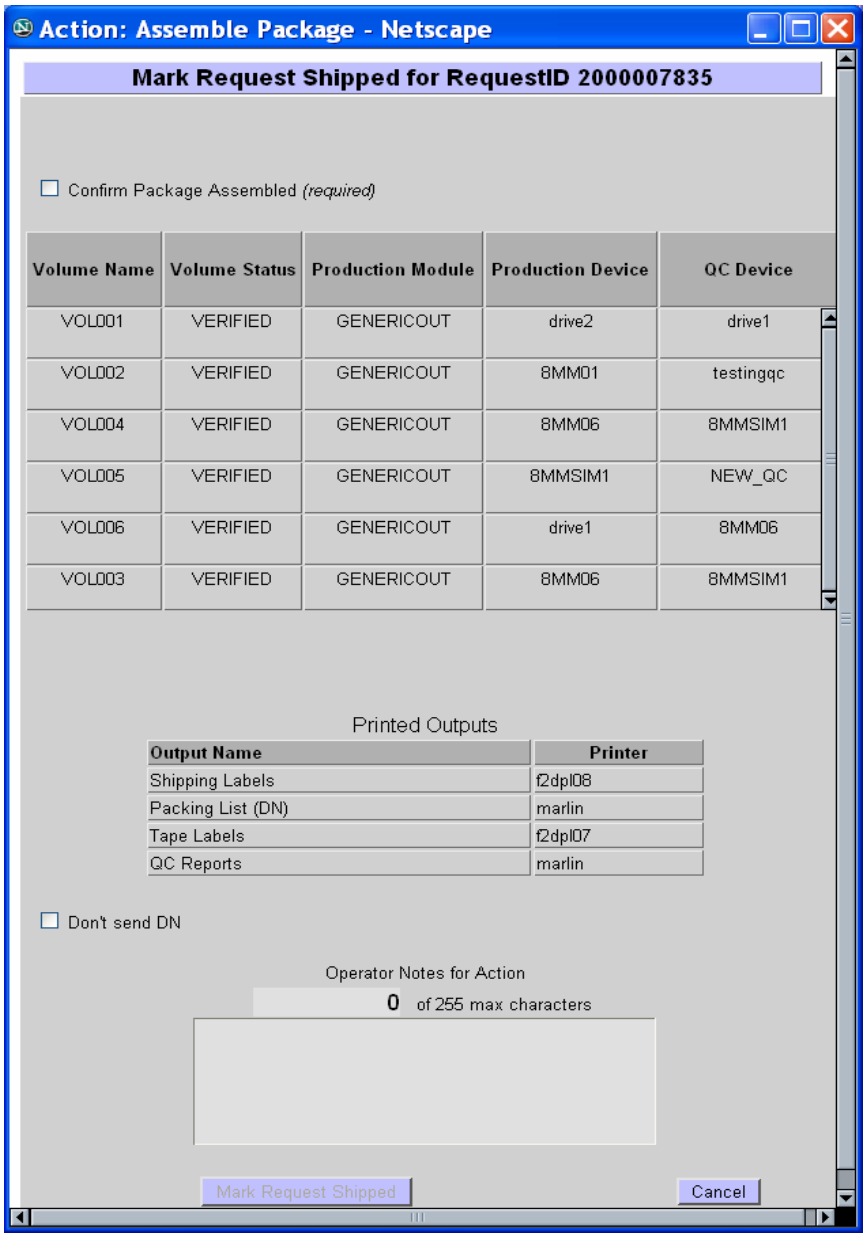


***Figure 18.15-28. Mark Request Shipped Page***

- The **Filter** area of the **Media Creation Console 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 Console page**.

**NOTE:** In order to a mark a PMD request shipped the entry in the **Action Type** column for that request must be **Assemble Package**.

**4** To start the process of confirming PMD package assembly, 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 (Figure 18.15-28).
  - The **Mark Request Shipped** dialogue box displays the following information concerning each volume created for the request:
    - **Volume Name.**
    - **Volume Status.**
    - **Production Module.**
  - 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** 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** Click in the **Confirm Package Assembled** check box.

- A checkmark is displayed in the **Confirm Package Assembled** check box.

**8** If no DN is to be sent, 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, type the appropriate text in the **Operator Notes for Action** text box of the **Mark Request Shipped** dialogue box.

- 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 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 Console 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 Console page** is displayed.

**11** Repeat Steps 3 through 10 as necessary to mark additional requests shipped.

**12** Return to the procedure that specified marking a request shipped [e.g., **Monitoring/Controlling PMD Media Creation Using the OM GUI** (previous section of this lesson)].

---

### 18.15.22 Confirming PMD Media Dismounted

The procedure for **Confirming PMD Media Dismounted** 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 Console page**. **Confirming PMD Media Dismounted** is typically performed in association with other procedures (e.g., **Monitoring/Controlling PMD Media Creation Using the OM GUI**).

The **Confirm Media Dismounted** page (Figure 18.15.29) 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.

The procedure for confirming media dismounted on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

### 18.15.22.1 Confirming PMD Media Dismounted

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

**2** Click on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.

- The **Media Creation Console page** is displayed.
- The **Filter** area of the **Media Creation Console 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.**

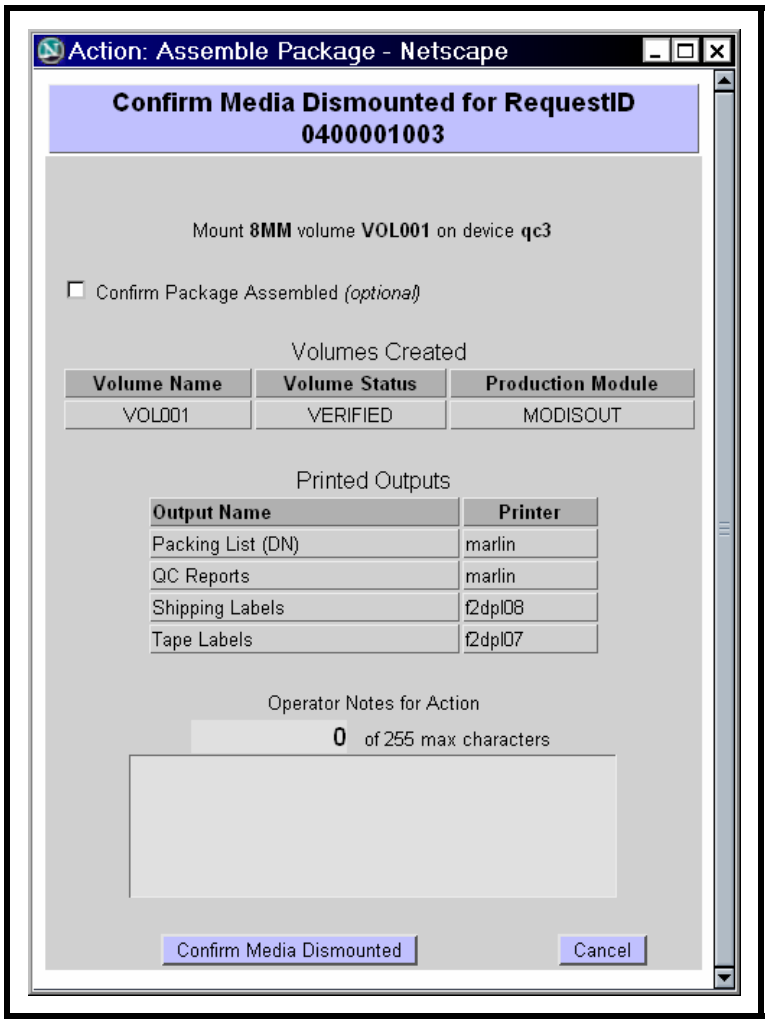


***Figure 18.15-29. Confirm Media Dismounted Page***

– **Media Action Note.**

– **Action Type.**

– **Options.**

**3** Observe information displayed in the **Listing** table of the **Media Creation Console page**.

**NOTE:** In order to confirm media dismounted the entry in the **Action Type** column for that request must be **Assemble Package**.

**4** To start the process of confirming media dismounted, 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.**
    - **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) 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, type the appropriate text in the **Operator Notes for Action** text box of the **Media Collection Complete** dialogue box.

- 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 dismounted click on the appropriate button from the following selections:

- **Confirm Media Dismounted** - to dismiss the dialogue box and confirm media dismounted.
  - The dialogue box is dismissed.
  - The **Media Creation Console page** is displayed.
- **Cancel** - to dismiss the dialogue box without confirming media dismounted.
  - 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 Console page** is displayed.

**9** Repeat Steps 3 through 8 as necessary to confirm media dismounted for additional requests.

**10** Return to the procedure that specified confirming media dismounted [e.g., **Monitoring/Controlling PMD Media Creation Using the OM GUI** (previous section of this lesson)].

---

### 18.15.23 Confirming PMD Package Assembled

The procedure for **Confirming PMD Package Assembled** 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 Console page**. **Confirming PMD Package Assembled** is typically performed in association with other procedures (e.g., **Monitoring/Controlling PMD Media Creation Using the OM GUI**).

The **Confirm Package Assembled** page (Figure 18.15-30) 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). In addition, the full-capability operator has the option of annotating the action.

The procedure for confirming package assembly on the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

#### 18.15.23.1 Confirming PMD Package Assembled

---

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

**2** Click on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.

- The **Media Creation Console page** is displayed.
- The **Filter** area of the **Media Creation Console 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.**

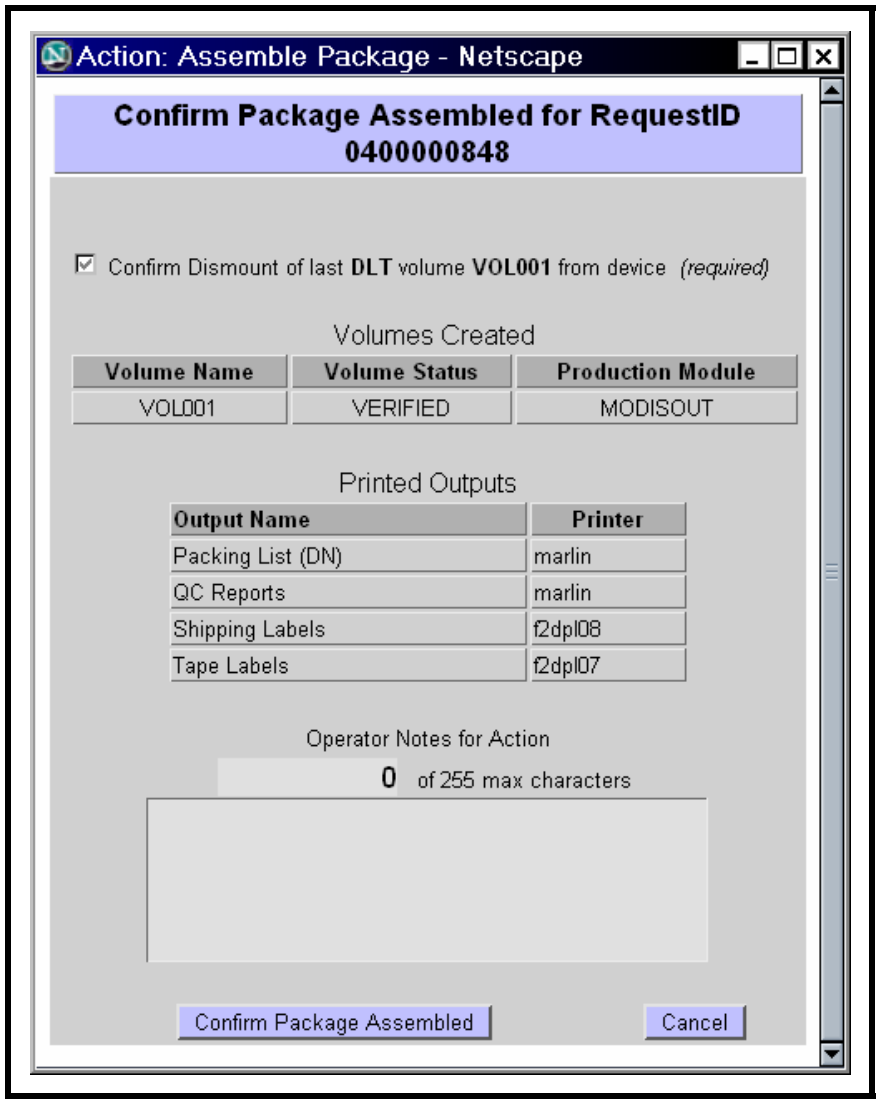


***Figure 18.15-30. Confirm Package Assembled Page***

- **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 Console 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, 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.**
    - **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, type the appropriate text in the **Operator Notes for Action** text box of the **Confirm Package Assembled** dialogue box.

- 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 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 Console 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 Console 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., **Monitoring/Controlling PMD Media Creation Using the OM GUI** (previous section of this lesson)].

---

### 18.15.24 Marking PMD Package Not Assembled

The procedure for **Marking PMD Package Not Assembled** 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 Console page**. **Marking PMD Package Not Assembled** is typically performed in association with other procedures (e.g., **Monitoring/Controlling PMD Media Creation Using the OM GUI**).

The **Package Not Assembled** page (Figure 18.15-31) 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.

The procedure for marking a PMD package "not assembled" using the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.

- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)]

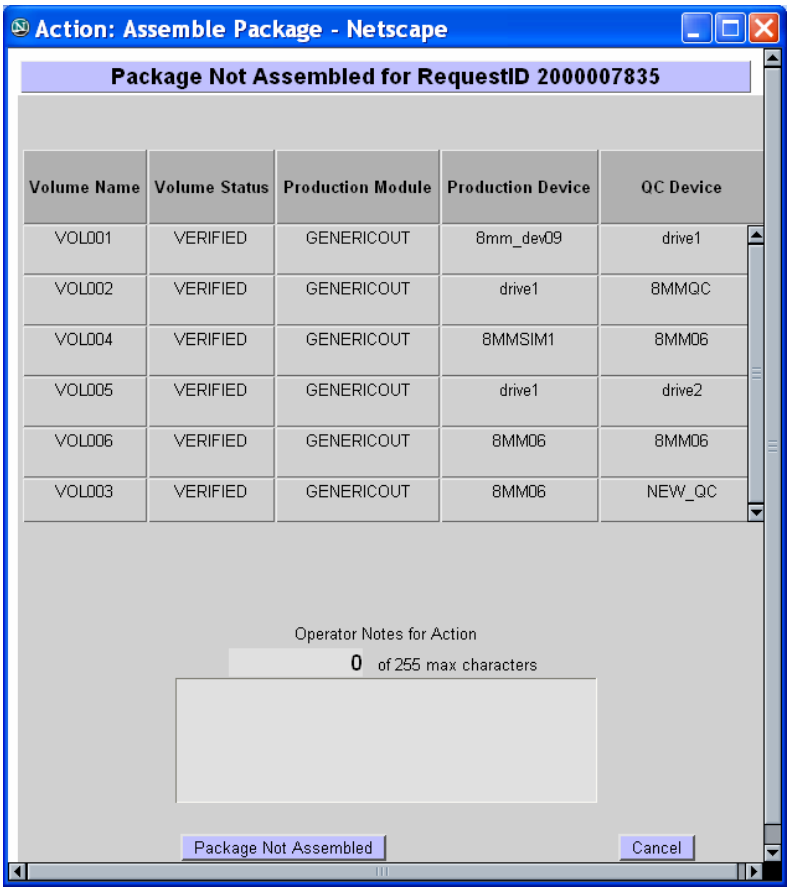


***Figure 18.15-31. Package Not Assembled Page***

### 18.15.24.1 Marking PMD Package Not Assembled

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

**2** Click on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.

- The **Media Creation Console page** displayed.

- The **Filter** area of the **Media Creation Console 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 Console 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," 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, 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, 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, type the appropriate text in the **Explanation for Set Device Off-line** text box of the **Fail Mount Media** dialogue box.

- 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, type the appropriate text in the **Operator Notes for Action** text box of the **Package Not Assembled** dialogue box.

- 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" 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 Console 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 Console 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., **Monitoring/Controlling PMD Media Creation Using the OM GUI** (previous section of this lesson)].

---

### 18.15.25 Printing PMD Outputs

The procedure for **Printing PMD Outputs** (Figure 18.15-32 and Figure 18.15-33) 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 Console page**. **Printing PMD Outputs** is typically performed in association with other procedures (e.g., **Monitoring/Controlling 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.

The procedure for reprinting PMD outputs using the **OM GUI** starts with the following assumptions:

- All applicable servers are currently running.
- The **OM GUI** has been launched [e.g., as described in the procedure for **Launching the Order Manager GUI** (preceding section of this lesson)].

#### 18.15.25.1 Printing PMD Outputs

---

**1** Click on the **Physical Media Distribution** link in the navigation frame of the **OM GUI**.

- The **Physical Media Distribution** menu is expanded.

**2** Click on the **Media Creation Actions** link in the navigation frame of the **OM GUI**.

- The **Media Creation Console page** is displayed.
- The **Filter** area of the **Media Creation Console 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.**

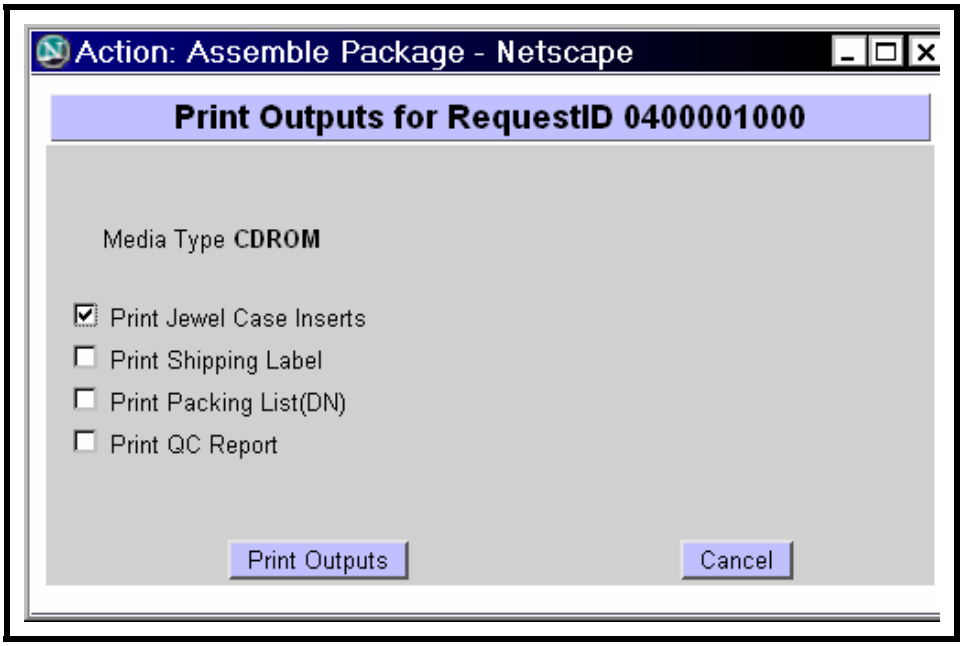


***Figure 18.15-32. Print Outputs Page***

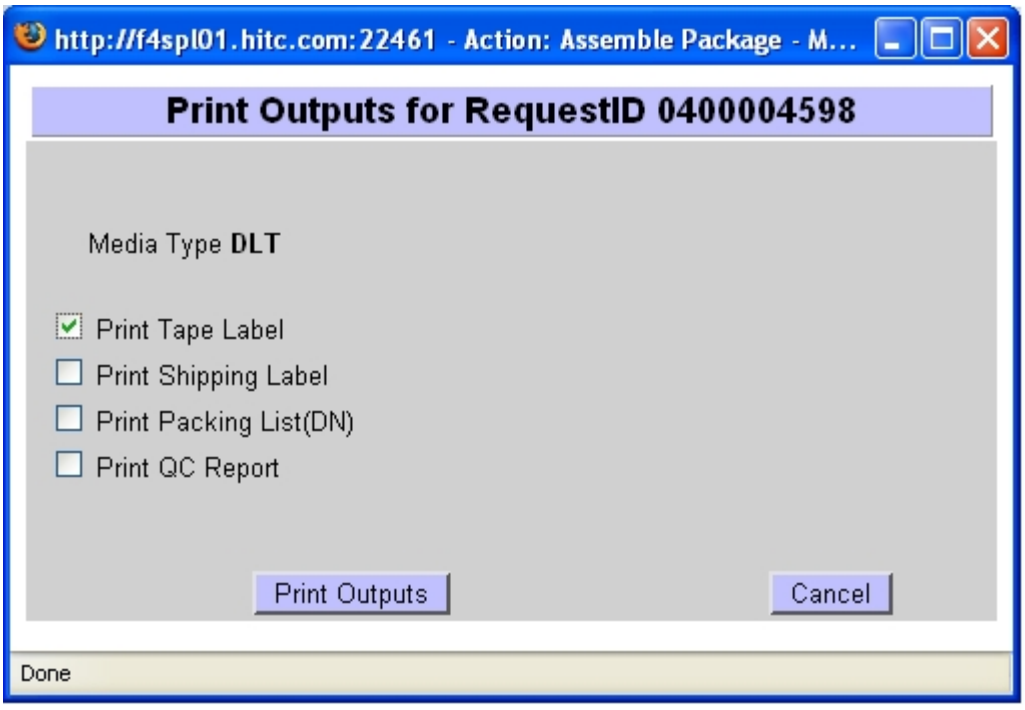


***Figure 18.15-33. Print Outputs Page for Tape Media***

- **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 Console 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, 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, 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, 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, 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, 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 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 Console 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.
  - – The **Media Creation Console 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., **Monitoring/Controlling PMD Media Creation Using the OM GUI** (previous section of this lesson)].

---

## 18.16 Using the Order Manager Command Line Utility

### 18.16.1 Order Manager Command Line Utility

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).

### 18.16.2 Running the OM Command Line Utility

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.

Preparing input files for use with the **OM Command Line Utility** starts with the assumption that the operator has logged in to the system.

***Table 18.16-1. Using Order Manager Command Line Utility - Activity Checklist***

| Order | Role | Task | Section | Complete? |
|---|---|---|---|---|
| 1 | Distribution Technician | Prepare Input Files for Use with the OM Command Line Utitlity | (P) 18.16.2.1 | |
| 2 | Distribution Technician | Run Order Manager from the Command Line Interface/Comand Line Utitlity | (P) 18.16.2.2 | |
| 3 | Distribution Technician | Running the OM Command Line Utitlity | (P) 18.16.3.1 | |
| 4 | Distribution Technician | Preparing Input Files for Use with the OMS Configuration CI | (P) 18.16.4.1 | |
| 5 | Distribution Technician | Starting the OMS Configuration CI | (P) 18.16.4.2 | |
| 6 | Distribution Technician | Coinfiguring How Long Order-Tracking Information is Kept in the OMS Database | (P) 18.16.5.1 | |
| 7 | Distribution Technician | Getting OMS Configuration CI Help | (P) 18.16.6.1 | |

## 18.16.2.1 Preparing Input Files for Use with the OM Command Line Utility

**1** Access a terminal window logged into the host where Order Manager is installed e.g n4oml01, e4oml01.

**2** Copy the template from **/usr/ecs/*MODE*/CUSTOM/data/OMS/template** to a working directory;

**3** Change directory to the directory containing the copy of the Product Request ODL templates (e.g., prod.0, prod.1, prod.2, and prod.3).

**4** Open the file using the vi command

- 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.

The operator can **:**

**5** Customize the lines and groups using the brackets or braces in the new file

**6** Remove the brackets and braces around the lines and groups from the new file.

– -

– - The brackets mean it is optional and subject to change its contents.

– - The braces mean it is not optional but subject to change its contents.

- The lines or group of lines with no brackets or braces around them means: "do not change them..

### Sample file:

### ODL Template File for "FtpPull" Media Type

```
  GROUP = PRODUCT_REQUEST
    MESSAGE_ID = "B1027711830"
    [REQUEST_ID = "37475:27364"]
```

**The above line is optional. If it is there, the value part must be in the format of "order id:requst id" which you retrieve from the MSS database, in this case <order id>=37475 and <request id>=27364. If it is not there, command line utility creates an order id and request id for this request.**

```
    DATA_CENTER_ID = "ECS-TEST"
    [ECS_AUTHENTICATOR = "labuser"]
```

**The above line is optional. If it is there, the value ought to be a valid ECS user in the ECS User Registration Database. If it is not there, this request is regarded as an "ECSGuest" user.**

```
    GROUP = USER_AFFILIATION
       CATEGORY = "USA"
       TYPE = "GOVERNMENT"
    END_GROUP = USER_AFFILIATION
    {
    GROUP = CONTACT_ADDRESS
       TITLE = ""
       FIRST_NAME = "Yu"
       MIDDLE_INITIAL = ""
       LAST_NAME = "Zhongfei"
       ORGANIZATION = ""
       ADDRESS = ("abcd")
       CITY = "Landover"
       STATE = "MD"
       ZIP = ""
       COUNTRY = "UNITED STATES"
       PHONE = "301-925-1042"
       FAX = ""
       EMAIL = "zyu@eos.hitc.com"
    END_GROUP = CONTACT_ADDRESS
    }
```

**The above group is not optional, but the contents of each line could be customized.**

```
    {
    GROUP = SHIPPING_ADDRESS
       TITLE = ""
       FIRST_NAME = "Yu"
       MIDDLE_INITIAL = ""
```

```
      LAST_NAME = "Zhongfei"
      ORGANIZATION = ""
      ADDRESS = ("abcd")
      CITY = "Landover"
      STATE = "MD"
      ZIP = ""
      COUNTRY = "UNITED STATES"
      PHONE = "301-925-1042"
      FAX = ""
      EMAIL = "zyu@eos.hitc.com"
   END_GROUP = SHIPPING_ADDRESS
   }
```
**The above group is not optional, but the contents of each line could be customized.**
```
   {
   GROUP = BILLING_ADDRESS
      TITLE = ""
      FIRST_NAME = "Yu"
      MIDDLE_INITIAL = ""
      LAST_NAME = "Zhongfei"
      ORGANIZATION = ""
      ADDRESS = ("abcd")
      CITY = "Landover"
      STATE = "MD"
      ZIP = ""
      COUNTRY = "UNITED STATES"
      PHONE = "301-925-1042"
      FAX = ""
      EMAIL = "zyu@eos.hitc.com"
   END_GROUP = BILLING_ADDRESS
   }
```
**The above group is not optional, but the contents of each line could be customized.**
```
   GROUP = LINE_ITEM
      {DATASET_ID = "LANDSAT-7 LEVEL-0R FLOATING SCENES V002"}
```
**This line could be changed to the ESDT long name matching with the granule given in the next line.**
```
      {PACKAGE_ID = "SC:L70R.002:23420"}
```
**This line could be customized in the format of “granule type:ESDT shortname:ESDT version id:db id.”**
```
      PROCESSING_OPTIONS = "Native Granule"
      {MEDIA_TYPE = "FtpPull"}
```
**This line could be customized to any media type such as CDROM, DVD, DLT, or DLT.**
```
      {MEDIA_FORMAT = "FILEFORMAT"}
```
**This line could be changed to match the media type given in the above line.**
```
      EST_COST = 777.88
      [
      GROUP = SUBSET_SPEC
         GROUP = SPECIALIZED_CRITERIA
            CRITERIA_NAME = "Band Subsetting"
            CRITERIA_TYPE = "STRING"
            CRITERIA_VALUE = ("QA_BAND2_PRESENT", "QA_BAND3_PRESENT",
"QA_BAND4_PRESENT", "QA_BAND5_PRESENT", "QA_BAND6_PRESENT_F1",
"QA_BAND6_PRESENT_F2", "QA_BAND7_PRESENT", "QA_BAND8_PRESENT")
         END_GROUP = SPECIALIZED_CRITERIA
         GROUP = SPECIALIZED_CRITERIA
            CRITERIA_NAME = "Spatial Subsetting"
            CRITERIA_TYPE = "GEO"
            CRITERIA_VALUE = "BY_POLYGON_LOC"
            GROUP = POLYGON_LOC
               TANGENT_LATITUDE = 81.8895
```

```
            TANGENT_LONGITUDE = 158.423
            MAP_PROJECTION_TYPE = "ORTHOGRAPHIC"
            LATITUDE = (83.2017, 81.4847, 80.4686, 81.8274)
            LONGITUDE = (-175.078, -176.234, 155.986, 151.309)
            WG_ZOOM = 2
          END_GROUP = POLYGON_LOC
        END_GROUP = SPECIALIZED_CRITERIA
        GROUP = SPECIALIZED_CRITERIA
          CRITERIA_NAME = "Scan Line Size"
          CRITERIA_TYPE = "INTEGER"
          CRITERIA_VALUE = 1104
        END_GROUP = SPECIALIZED_CRITERIA
      END_GROUP = SUBSET_SPEC
      ]
```
**This group is optional, indicates the subset option goes along with this granule.**
```
      GROUP = PATH_ROW_LOC
        PATH = (119)
        ROW = (233)
      END_GROUP = PATH_ROW_LOC
      GROUP = POLYGON_LOC
        LATITUDE = (70.31, 69.6, 64.78, 65.36)
        LONGITUDE = (-80.91, -85.44, 136.97, 133.18)
        CENTROID_LAT = 81.94
        CENTROID_LON = -170.59
        POLE_INCLUDED = "X"
      END_GROUP = POLYGON_LOC
    END_GROUP = LINE_ITEM
```
**The LINE_ITEM group could be repeated if there are more granules to be ordered in one request.**
```
    GROUP = MONITOR
      SESSION_ID = "cheyenne.hitc.com:24496:20020726:153027"
      TX_CLIENT = ("1027711832", "939137")
    END_GROUP = MONITOR
    GROUP = VERSION
      SENDER_VERSION = "imswww-3_4b_6"
      PROTOCOL_VERSION = 3.2
      IMS_STAFF = "1"
    END_GROUP = VERSION
    [PRIORITY = "HIGH"]
```
**This line is optional. The default is LOW with the possible values being LOW, NORMAL, HIGH, VHIGH and XPRESS.**
```
    [USERSTRING = "TESTFOR"]
```
**This line is optional. But if it is there, the length must be less than 80 characters.**
```
    [NOTIFY = "zyu@eos.hitc.com"]
```
**This line is optional. But if it is there, the length must be less than 255 characters.**
```
    [DDISTNOTIFYTYPE = “MAIL”]
```
**This line is optional.**
```
  END_GROUP = PRODUCT_REQUEST
END
```

- Edited files will specify the request information to be sent to the OMS.

  --A UNIX editor can be used to edit the file.

**7** 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.

**8** Remove the brackets and braces around the lines and groups in the file being edited**.**

- The following vi editor commands are useful: Any UNIX editor can be used to edit the file.
-
  - **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).

**9** **Press the Esc key to save and exit**

**10** **Type** ZZ

- **vi** exits and the edited file is saved.
  - To exit **vi** without saving the new entries in the file type **:q!**
  - Press **Return/Enter**.

- The UNIX command line prompt is displayed.

---

### Running the OM Command Line Utility

Limited-capability operators should not be able to access the **OMS Configuration CI**.

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**.

The procedure for running the **OM Command Line Utility** starts with the following assumptions:

- The operator has logged in to the system.
- Input files for requests are to be submitted using the **OM Command Line Utility** must have been created [e.g., as described in the procedure for **Preparing Input Files for Use with the OM Command Line Utility** (preceding section of this lesson)] before the utility is started.

## 18.16.2.2 Running the Order Manager from the Command Line Interface/ Command Line Utility

---

**1** Access a terminal window logged in a host.

**2** Type **cd /usr/ecs/*MODE*/CUSTOM/utilities** then press **Return/Enter**.

- 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
  - TS1
  - TS2

Type **EcOmSrCliDriverStart *MODE rootname numRequests [ sub-interval ] [ dBretries ] [ retry-interval ]*** then press **Return/Enter**.

- 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.

---

### 18.16.3 Running the OM Command Line Utility

Limited-capability operators should not be able to access the **OMS Configuration CI**.

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**.

The procedure for running the **OM Command Line Utility** starts with the following assumptions:

- The operator has logged in to the system.
- Input files for requests are to be submitted using the **OM Command Line Utility** must have been created [e.g., as described in the procedure for **Preparing Input Files for Use with the OM Command Line Utility** (preceding section of this lesson)] before the utility is started.

#### 18.16.3.1 Running the OM Command Line Utility

---

**1** Access a terminal window logged in a host.

**2** Type **cd /usr/ecs/*MODE*/CUSTOM/utilities** then press **Return/Enter**.

- 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
  - TS1
  - TS2

**3** Type **EcOmSrCliDriverStart *MODE rootname #requests [ sub-interval ] [ dBretries ] [ retry-interval ]*** then press **Return/Enter**.

- 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.

---

### 18.16.4 OMS Configuration Script (OMS Configuration CI) Activities

The Synergy IV OMS Configuration Command Line Interface (hereafter referred to as the OMS Configuration CI) provides DAAC operators with the ability to configure specific parameters for the OMS Server and Database that are not configurable via the OMS GUI.

The ability to configure these parameters and settings in this utility is restricted to limited-capability operators

The **OMS Configuration Script** or **OMS Configuration Command-Line Interface** (**OMS Configuration CI**) allows full-capability operators to configure certain attributes of the using the **OM GUI**; Others are configured using the **OMS GUI** (Reference the Operations Tools EMD 609 for more detail)..

The **OMS Configuration CI** utility is intended for full-capability operators only. Because it is a UNIX utility, the **OMS Configuration CI** depends on standard UNIX permissions to restrict execution of the script to authorized users.

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**.

There are two general types of input files used with the **OMS Configuration CI**:

- Order-tracking retention time data.

Each potential input is a “flat” file that contains one of the following types of data:

- ESDT collection(s).
- Media type(s).
- FTP Push/SCP 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 .
- Delete the data in the file from the current types of data being .

Files may be created for the following six conditions:

- Add ESDT collection(s) to processing.

- Delete ESDT collection(s) from processing.
- Add media type(s) to processing .
- Delete media type(s) from processing.
- Add FTP Push/SCP Destination(s.

Delete FTP Push/SCP Destination(s).

**NOTE:** The capability to support distribution of bulk browse (ECSBBR) granules through OMS (rather than SDSRV) has been implemented. Make sure (e.g., with the installation of Release 7.20), Operationschanges the OMS configuration to delete the ECSBBR collection from processing in Synergy III mode.

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.

For information concerning the reasons for modifying order-tracking retention time, refer to the **OMS Database Cleanup Guidelines** subsection of the **Tuning Order Manager Subsystem Parameters** section (subsequent section of this lesson).

Preparing input files for use with the **OMS Configuration CI** starts with the assumption that the full-capability operator has logged in to the system.

### 18.16.4.1 Preparing Input Files for Use with the OMS Configuration CI

**1** Access a terminal window logged in to the Linux Server host.

**2** Type **cd /usr/ecs/*MODE*/CUSTOM/utilities** then press **Return/Enter**.

- 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 . TS1, TS2

- 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 file of order-tracking retention time data "imported" from the OMS database) or the name of a new fileFor 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.

– 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:

**DLT**
**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:

  · 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.

---

### 18.16.4.2 Starting the OMS Configuration CI

**1** Access a terminal window logged in to a host.

- For detailed instructions refer to the procedure for **Logging in to System Hosts** (preceding section of this lesson).

**2** Type **cd /usr/ecs/*MODE*/CUSTOM/utilities** then press **Return/Enter**.

- 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
  - TS1
  - TS2
- Note that the separate subdirectories under /usr/ecs apply to different operating modes.

**3** Type **EcOmConfig.pl *MODE [* -s3col *filename ] [* -s3media *filename ] [* -s3dest *filename ] [* -ot *filename ] [* -help *]*** then press **Return/Enter**.

- The **OMS Configuration CI Main Menu** (Figure 18.16-1) is displayed.

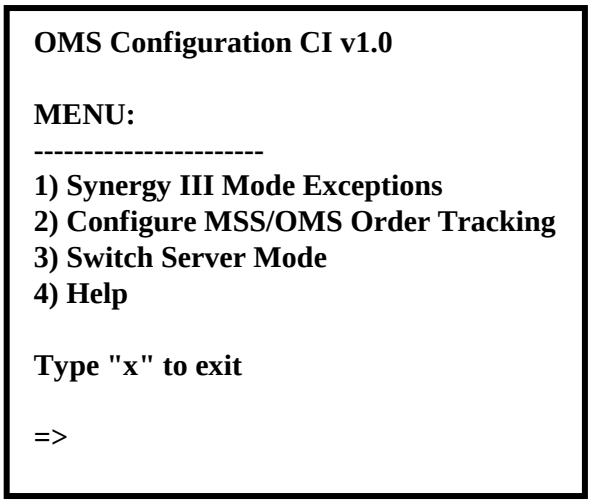


***Figure 18.16-1. OMS Configuration CI Main Menu***

- **-s4col *filename*** is an optional argument that specifies a flat file (***filename***) 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.

- **-s4media** ***filename*** is an optional argument that specifies a flat file (***filename***) 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.
- **-s4dest** ***filename*** is an optional argument that specifies a flat file (***filename***) containing a list of Ftp/SCPPush destinations to be added or deleted for processing in Synergy III mode, depending on the selection made by the operator.
- **-ot** ***filename*** is an optional argument that specifies a flat file (***filename***) 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:

- **Configuring How Long Order-Tracking Information is Kept in the OMS Database** (to configure how long order-tracking information is kept in the OMS database).
- **Getting OMS Configuration CI Help** (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 type **x** then press **Return/Enter**.

- The **OMS Configuration CI** is closed.

---

### 18.16.5 Configuring 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.

The procedure for configuring how long order-tracking information is kept in the OMS database starts with the following assumptions:

- The **OMS Configuration CI** has been started.
- If applicable, the appropriate input file for configuring how long order-tracking information is kept in the OMS database has been prepared and placed in the appropriate directory [e.g., as described in the procedure for **Preparing Input Files for Use with the OMS Configuration CI** (preceding section of this lesson)].

### 18.16.5.1 Configuring How Long Order-Tracking Information is Kept in the OMS Database

**1** If it has not been started already, start the **OMS Configuration CI**.

- For detailed instructions refer to the procedure for **Starting the OMS Configuration CI** (preceding section of this lesson).

**2** At the **OMS Configuration CI Main Menu** prompt type **2** then press **Return/Enter**.

- The **Configure Order Tracking Data Menu** (Figure 18.16-2) is displayed.

```
Configure Order Tracking Data
-----------------------------

1) Import current configuration to file...
2) Export new configuration to database...
3) View current configuration
4) Back to main menu
=>
```

***Figure 18.16-2. Configure Order Tracking Data Menu***

**3** At the **Configure Order Tracking Data Menu** prompt, type the appropriate number from the following list then press **Return/Enter**:

- 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 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       DLT     0
S       DLT     0
V       DLT     0
M       DLT     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, type **x** then press **Return/Enter**.

- 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) as described in the procedure for **Preparing Input Files for Use with the OMS Configuration CI** (preceding section of this lesson).

**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 procedure for **Starting the OMS Configuration CI** (preceding section of this lesson).

**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 type **n** then press **Return/Enter**.

- 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, type **x** then press **Return/Enter**.

**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 procedure for **Starting the OMS Configuration CI** (preceding section of this lesson).

**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 type **y** then press **Return/Enter**.

- The following prompt is displayed:

  **You are about to export file "<*filename*>". 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 type **y** then press **Return/Enter**.

- 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.

---

### 18.16.6 Getting 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.

The procedure for getting **OMS Configuration CI** help starts with the assumption that the **OMS Configuration CI** has been started.

#### 18.16.6.1 Getting OMS Configuration CI Help

---

**1** If it has not been started already, start the **OMS Configuration CI**.

- For detailed instructions refer to the procedure for **Starting the OMS Configuration CI** (preceding section of this lesson).

**2** At the **OMS Configuration CI Main Menu** prompt type **4** then press **Return/Enter**.

- The first page of the **OMS Configuration CI Help** is displayed.

**3** To view additional help information press either **Return/Enter** or the space bar.

- Another line of the **OMS Configuration CI Help** is displayed if **Return/Enter** is pressed.

4 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.

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.

---

## 18.17 Tuning Order Manager Subsystem and Data Pool Parameters

- work when there is either an unusual peak in the orders for that destination or a bandwidth problem.
- For detailed instructions on how to modify ftp push parameter values refer to the procedure for **Checking/Modifying FTP Push/SCP Policy Configuration** (previous section of this lesson).
  - Set the RHWM to DHWM divided by the average request size (or set RHWM to the number of requests that typically need to be processed in a 30-minute interval).
  - Some FTP Push/SCP Destinations are connected to the system via high-throughput networks. Unless such destinations receive large amounts of data from AMASS cache, they never have a significant ftp push queue because data is distributed as quickly as it can be staged. So DHWM and RHWM serve as throttles only when the connection experiences problems. Under normal circumstances, such destinations receive archive resources as quickly as their priority and the competing archive workload permit.
- Ftp push requests that do not match any of the explicitly configured FTP Push/SCP Destinations are collected into a general ftp push group. The ftp hosts in the group vary from day to day, and the connection bandwidth to the hosts is generally unpredictable.
  - Set the RHWM to twice the number of ftp connections that the DAAC is willing to devote to these orders
  - Set the DHWM to the hourly amount of data that typically needs to be pushed for such orders. Ensure that the limit is several [e.g., five (5)] times larger than the configured maximum size for a single un-partitioned ftp push distribution request (so OMS can make full use of the configured number of connections).

- For ftp pull:

– Start out by setting DHWM to the current size of the ftp pull area.

  · For detailed instructions on how to modify media parameter values refer to the procedure for **Checking/Modifying Values Assigned to Media Parameters** (previous section of this lesson).

– Adjust the ftp pull DHWM parameter as necessary to accommodate the current user demand for ftp pull.

  · For example, the DHWM could be set to the expected maximum daily ftp pull order volume times one day more than the number of days of ftp pull retention.

- Adjust the parameters based on experience.

  – For example, if it turns out that most of the orders are fairly large, the DHWM may need to be raised so it does not act as a throttle for normal distribution workloads.

### 18.17.1 Throttling Archive Staging for Output Devices and FTP Connections

Under normal circumstances the archive drives are the key distribution bottleneck. In many cases the output devices and ftp connections are able to distribute data as quickly as it can be staged. However, this can change if one of the output channels experiences problems; for example, if media drives fail or the throughput for some ftp connection suddenly deteriorates. If staging were to continue regardless of such problems, a lot of disk space might be consumed by orders that could not be completed and (consequently) could not have their data removed. At a minimum, it is desirable to throttle the archive staging activity for such devices or connections. The applicable tuning parameters are the same as those used in adjusting the pace of staging, specifically:

- **RHWM** (Request High Water Mark) parameters on the **OM GUI**.
- **DHWM** (Data Volume High Water Mark) parameters on the **OM GUI**.

Note that the OMS stops dispatching distribution requests that require resources that have been suspended. This behavior is automatic and there are no related tuning parameters apart from the retry behavior.

For additional information on RHWM/DHWM refer to the section on **Adjusting the Pace of Staging** (previous section of this lesson).

### 18.17.2 Ensuring the Staging of Low-Priority Requests at a Reasonable Pace

If the archive staging workload is close to the archive capacity for extended periods of time, requests that have a low priority could wait for a long time before being serviced. Once they are submitted to staging their tape-mount requests may be serviced infrequently and intermittently because higher-priority requests that get promoted into staging would be given preference. As a

result, low-priority requests may have to wait for a long time to get into the staging state and then stay in staging for a very long time. Eventually, a backlog of low-priority requests could build up and the response time would be very poor. Furthermore, once such a low-priority request got in staging, its data would accumulate in the Data Pool and could not be removed until the request completed. So it could end up blocking disk resources for an extended period of time.

To alleviate the problem of low-priority requests seeming to hang in Queued or Staging forever one can implement request aging, which is implemented through the following two types of aging parameters:

- OMS **Age Step** parameters on the **OM GUI**.
- OMS **Maximum Priority** parameters on the **OM GUI**.
- DPL **Age Step** parameters (**agingStep** column in the DPL database).
- DPL **Maximum Priority** parameters (**MaxPriLevel** column in the DPL database).

OMS aging parameters (**Age Step** and **Maximum Priority**) cause OMS to increase the priority of a distribution request as it waits for promotion into the Staging state. This can help reduce the order completion time for low-priority requests.

DPL aging parameters raise the priority of requests that are in staging but have had long waits for tape mounts. By implementing DPL aging even low-priority requests can be made to move through the Staging state at a reasonable pace.

So OMS aging parameters are useful in increasing the priority of low-priority requests so the eventually get into the Staging state. DPL aging parameters raise the priority of requests so they get access to tape mounts and get out of the Staging state.

When request aging is in effect, OMS and DPL update request priorities regularly. The DAAC can enable or disable aging for each ECS priority level separately (e.g., aging may be in effect for LOW priority requests but not for any others); and the DAAC can set the hourly rate of priority increase and the maximum priority a request can achieve.

The OMS configuration parameters **Age Step** and **Maximum Priority** can be configured separately for each ECS priority level on the **Aging Parameters** page of the **OM GUI**.

The DPL **Age Step** and **Maximum Priority** configuration parameters are set by changing values of entries in the **agingStep** and **MaxPriLevel** columns in the **DlAgingConfig** table of the DPL database. Values for **agingStep** and **MaxPriLevel** can be set in the DPL database for each ECS priority level (**ECSPriority** column) using isql commands.

Use the following guidelines to determine the appropriate values for the parameters:

- Settings are at the discretion of each DAAC; however, it is recommended that OMS request aging be turned off initially.
  - For detailed instructions on how to modify aging parameter values refer to the procedure for **Checking/Modifying Values Assigned to Aging Parameters** (previous section of this lesson).
- It is recommended that request aging be turned on for the DPL insert service for LOW and NORMAL priority requests to ensure that they complete staging promptly once they have started.
  - For example, a LOW or NORMAL priority request should attain the next higher ECS priority level after one or two hours of remaining in staging (but not go beyond that).
  - To change the DPL aging parameters notify the Database Administrator that values need to be modified in the DPL database and specify [for each ECS priority level (in the **ECSPriority** column)] the values for **agingStep** (how many points the priority should be raised every hour) and **MaxPriLevel** (maximum priority value for the ECS priority).
- Adjust the aging parameters as necessary to accommodate the current user demand.

### 18.17.3 Ensuring That High-Priority Requests Are Expedited

The mechanisms described in the preceding sections on **Adjusting the Pace of Staging** and **Throttling Archive Staging for Output Devices and FTP Connections** limit the number of requests that are submitted for staging from the archive. However, occasionally high-priority requests are received and should be processed in an expedited fashion. The following tuning parameters affect the expedited processing of high-priority requests:

- **RLWM** (Request Low Water Mark) parameters on the **OM GUI**.
- **DLWM** (Data Volume Low Water Mark) parameters on the **OM GUI**.
- **Min Pri to Preempt** parameter on the **OM GUI.**

It is possible to mark a point in the distribution queue where new requests that are queued below RLWM or DLWM values become eligible for preemptive dispatching, even if the requests/data in work are at RHWM/DHWM. An RLWM can be set for physical media only; a DLWM is available for physical media and each FTP Push/SCP Destination. Neither RLWM nor DLWM has much relevance to ftp pull, which has a special preemptive dispatching parameter, **Min Pri to Preempt**.

RLWM and DLWM are OMS configuration parameters that are set using the **OM GUI**. RLWM and DLWM for physical media are configured on the **Media Configuration** page of the **OM GUI**. For FTP Push/SCP Destinations, DLWM (only) can be configured on the **FTP Push/SCP Destination Details** page of the **OM GUI**.

The OMS and the DPL dispatch work in priority order and within the same priority on a first-in-first-out basis. This normally ensures that within a given output queue, higher-priority requests are serviced before lower-priority requests unless request aging is configured. However, if the output channel for some queue is fairly slow (e.g., tape or slow ftp connections), then the amount of work in progress usually will be at RHWM/DHWM. High-priority requests might be dispatched next as soon as other work completes, but this could be viewed as an unacceptable delay. It may be preferable for OMS to dispatch such requests in a preemptive manner, i.e., regardless of how much work is currently in progress (even if RHWM and DHWM have been reached or exceeded).

Use the following guidelines to determine the appropriate values for the parameters:

- No general recommendation is made; the settings for RLWM and DLWM are at the discretion of each DAAC.
  - A low setting for RLWM/DLWM requires most high-priority requests in the applicable output queue to wait for normal dispatching, i.e., until the work that is in progress drops below RHWM and DHWM.
    - That waiting time may be negligible if the output channel is fast.
  - If the amount of work in progress is hardly ever at RHWM and DHWM, configuring low watermarks is superfluous except to account for unusual circumstances.
    - For example, if some temporary device or connection problems caused a significant amount of data to be staged that is now waiting for ftp or transfer to a device (i.e., in a backlog situation).
  - For detailed instructions on how to modify ftp push parameter values refer to the procedure for **Checking/Modifying FTP Push/SCP Policy Configuration** (previous section of this lesson).
  - For detailed instructions on how to modify other media parameter values refer to the procedure for **Checking/Modifying Values Assigned to Media Parameters** (previous section of this lesson).
- Adjust the RLWM/DLWM parameters as necessary to accommodate the current user demand.

**Min Pri to Preempt** is the preemptive dispatch priority for ftp pull requests. When an ftp pull request has the **Min Pri to Preempt** or a higher priority, it is dispatched even if the disk space currently consumed by unexpired ftp pull requests is at or above the HWM. So the **Min Pri to Preempt** parameter makes it possible to service high-priority ftp pull requests while lower-priority requests have to wait for disk space to become available.

**Min Pri to Preempt** is an OMS configuration parameter that is configured on the **OMS Server and Database Configuration** page of the **OM GUI**.

Use the following guidelines to determine the appropriate value for the parameter:

- No general recommendation is made; the setting for **Min Pri to Preempt** is at the discretion of each DAAC.
- Adjust the **Min Pri to Preempt** parameter as necessary to accommodate the current user demand for ftp pull.
  - For detailed instructions on how to modify OMS parameter values refer to the procedure for **Checking/Modifying Values Assigned to OMS Server or Database Parameters** (previous section of this lesson).

## 18.18 OMS Database Cleanup Guidelines

From the perspective of system performance it is very important to clean up the OMS database and MSS order-tracking tables on a regular basis. Not cleaning up the database tables would have the following effects:

- Overall order-processing throughput would slow down due to the deterioration of OMS/MSS response times.
- Response time of the OMS GUI would increase.

If order information must be kept for extended periods of time (e.g., for reporting purposes), it is recommended that on a regular basis information be copied (via scripts or Sybase replication) from the operational tables to a separate set of historical tables. The OMS database itself is an operational database and is not suited for long-term retention of order information.

To assist with database cleanup, the OMS provides the following two levels of cleanup:

- Removal of completed OMS actions, interventions and notifications.
- Removal of order-tracking information for completed orders.
  - Order-tracking information for completed orders includes order, request, and granule information.

### 18.18.1 Removal of Completed OMS Actions, Interventions and Notifications

The removal of completed OMS actions, interventions and notifications is configured by setting the values of the following parameters on the **OM GUI**:

- **Delete Complete Interventions After**.
- **Delete Complete Actions After.**

Except for special circumstances when the DAAC needs to retain information for subsequent analysis by system support staff or DAAC performance engineers, the parameter settings should be as short as possible (e.g., two hours).

For detailed instructions on how to modify OMS parameter values using the **OM GUI** refer to the procedure for **Checking/Modifying Values Assigned to OMS Server or Database Parameters** (previous section of this lesson).

### 18.18.2 Removal of Order-Tracking Information for Completed Orders

The removal of order-tracking information for completed orders is configured using the **OMS Configuration CI**.

It is possible to configure separate retention time periods (in days) for each combination of the following factors:

- Order source (e.g., Data Pool, Spatial Subscription Server, V0 Gateway, or Machine-to-Machine Gateway).
- Distribution medium.

Order-tracking information is not removed until all distribution requests that belong to a particular order have been completed. Note that in this context an ftp pull request is considered "completed" when the time for retaining its granules in the ftp pull area has expired. At that time the order-tracking retention time begins. (In other words the ftp pull retention time should not be considered when determining the order-tracking information retention time for ftp pull because the latter is calculated from the end of the ftp pull retention time.)

The main purpose of retaining order-tracking information in the OMS database past order completion time is to allow DAAC Operations/User Services to use the OM GUI to investigate the history of distribution requests when responding to user inquiries or complaints. The retention time period should be the minimum necessary or there could be negative effects on OMS throughput.

The following order-tracking retention settings are recommended (but each DAAC should make adjustments based on local conditions/needs):

- Successful ftp push subscriptions: one day.
- Successful media and ftp pull subscriptions: no more than 7 days.
- Successful Machine-to-Machine Gateway orders: one day.
- Successful orders submitted via the V0 Gateway: no more than 120 days.

### 18.18.3 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.

### 18.18.4 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.
- Warning.
    - Provided when operations can proceed without interruption, but an unexpected circumstance was detected.
    - For example, if a client requests a file to be removed but the file does not exist, there is no error per se; however, a warning is generated to caution the client that the file to be removed did not exist in the first place.

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 5.

### 18.18.5 Client Crash and Restart

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.
- 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 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.

### 18.18.6 Server Crash and Restart

When a server crashes, clients cannot continue to submit requests for processing.

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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.
  - **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
  - **Cold Start or Cold Restart:**
    - Purge the queue of asynchronous "acquire" requests.
    - Purge the queue of Subscription Server Event Notifications.
  - **Warm Restart:**
    - Existing request queues are retained.
  - **Cold Start or Cold Restart:**
    - Existing request queues are cleared.

### 18.18.7 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.
  -
- **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.
  - .

## 18.19 Troubleshooting a Order Manager GUI Failure

Actions to be taken in response to some common OM GUI problems are described in Table 18.19-1 Order Manager GUI User Messages.

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 18.19-1 is a list of host machines that identifies the servers, clients and other software relevant to Data Distribution and the Order Manager GUI.

***Table 18.19-1. Order Manager GUI User Messages (1 of 12)***

| Message Text | Impact | Cause and Corrective Action |
|---|---|---|
| !!! 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.<br>[Displayed in a dialogue box] | Intervention cannot be resolved. | The message appears on the **Open Intervention Detail** page.<br>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.<br>1. Click on the **OK** button to dismiss the dialogue box.<br>2. Either fail the entire request or place it on hold.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |
| 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. | Intervention cannot be resolved. | 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.<br>1. Click on the ← icon in the **OM GUI** navigation frame to redisplay the **Open Intervention Detail** (**Intervention for Request *x***) page.<br>2. Fail the entire request.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |
| An error has occurred with the page you are requesting.<br>Error Message: <message> | Various. | 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).<br>1. If feasible, retry the operation that resulted in the error message.<br>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. |

***Table 18.19-1. Order Manager GUI User Messages (2 of 12)***

| Message Text | Impact | Cause and Corrective Action |
|---|---|---|
| An error message was not available. Please contact the system administrator for further assistance. | Various. | 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.<br>Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| An undefined error occurred executing the stored procedure | Various. | 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).<br>1. Resubmit the changes for the intervention.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).]<br>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. | 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.<br>Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| Error: <VALUE> is an invalid number for this parameter."<br>[Displayed in a dialogue box] | A parameter value does not get modified. | 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.<br>1. Click on the **OK** button to dismiss the dialogue box.<br>2. Enter a valid value for the parameter.<br>[For detailed instructions refer to the procedure for **Checking/Modifying OM Configuration Parameters** (previous section of this lesson).] |

***Table 18.19-1. Order Manager GUI User Messages (3 of 12)***

| Message Text | Impact | Cause and Corrective Action |
|---|---|---|
| Error: A worker must be assigned to this intervention before any actions may be taken.<br>[Displayed in a dialogue box] | Actions cannot be taken on an intervention. | 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.<br>1. Click on the **OK** button to dismiss the dialogue box.<br>2. Enter a valid name in the **Worked by:** text entry box on the **Open Intervention Detail** page.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |
| ERROR: An [sic] database error was encountered: deadlock could not be resolved after <NUMBER> tries | An action requiring a call to a stored procedure or access to a database table is not taken. | 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.<br>1. At a later time retry the operation that resulted in the error message.<br>2. If the operation fails again, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| ERROR: Can't open session file: <message> | Requested page does not display. | 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.<br>1. Reload the GUI by starting it from a bookmark or manually typing the base URL (without a session ID).<br>[For detailed instructions refer to the procedure for **Launching the Order Manager GUI** (previous section of this lesson).] |

***Table 18.19-1. Order Manager GUI User Messages (4 of 12)***

| Message Text | Impact | Cause and Corrective Action |
|---|---|---|
| ERROR: Invalid name entered into Worked by field. You must enter a name into this field before proceeding.<br>[Displayed in a dialogue box] | Actions cannot be taken on an intervention. | 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.<br>1. Click on the **OK** button to dismiss the dialogue box.<br>2. Enter a valid name in the **Worked by:** text entry box on the **Open Intervention Detail** page.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |
| 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.<br>[Displayed in a dialogue box] | Intervention cannot be resolved. | The message appears on the **Open Intervention Detail** page.<br>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.<br>1. Click on the **OK** button to dismiss the dialogue box.<br>2. Either fail the entire request or place it on hold.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |
| Error: Not that many rows or invalid row number.<br>[Displayed in a dialogue box] | The Operator is unable to navigate through rows (on various pages). | 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.<br>1. Click on the **OK** button to dismiss the dialogue box.<br>2. In the navigation box type a row number within the range of rows displayed on the GUI screen.<br>3. Click on the **ok** button. |
| ERROR: Partition days must be an integer.<br>[Displayed in a dialogue box] | Intervention cannot be resolved. | 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.<br>1. Click on the **OK** button to dismiss the dialogue box.<br>2. Verify that the **Partition (current size is *x* MB)** button has been selected (click on the button if necessary).<br>3. Type the appropriate value (as a whole number) in the **days** text box to specify the time period.<br>4. Complete the intervention.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |

***Table 18.19-1. Order Manager GUI User Messages (5 of 12)***

| Message Text | Impact | Cause and Corrective Action |
|---|---|---|
| ERROR: Partition hours must be an integer.<br>[Displayed in a dialogue box] | Intervention cannot be resolved. | 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.<br>1. Click on the **OK** button to dismiss the dialogue box.<br>2. Verify that the **Partition (current size is *x* MB)** box has been selected (click on the box if necessary).<br>3. Type the appropriate value (as a whole number) in the **hours** text box to specify the time period.<br>4. Complete the intervention.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |
| ERROR: You can not change the media type and update the FTP Push parameters.<br>[Displayed in a dialogue box] | Intervention cannot be resolved. | 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.<br>1. Click on the **OK** button to dismiss the dialogue box.<br>2. If the **Update FtpPush Parameters** box was inadvertently checked, click on the box to uncheck it.<br>3. If the **Update FtpPush Parameters** box was checked on purpose, verify that the **Change Media to:** box is not checked. (Click on it if necessary).<br>4. If the **Update FtpPush Parameters** box was checked on purpose, verify that the **New Medium** option button is displaying "**- -**". [If necessary, 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.]<br>5. Complete the intervention.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |

***Table 18.19-1. Order Manager GUI User Messages (6 of 12)***

| Message Text | Impact | Cause and Corrective Action |
|---|---|---|
| ERROR: You can not change the media type from <MEDIA> to <MEDIA> - the media types are the same.<br>[Displayed in a dialogue box] | Intervention cannot be resolved. | 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 "**- -**".<br>1. Click on the **OK** button to dismiss the dialogue box.<br>2. Verify that the **Change Media to:** box is not checked. (Click on it if necessary).<br>3. Verify that the **New Medium** option button is displaying "**- -**". [If necessary, 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.]<br>4. Complete the intervention.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |
| ERROR: You can not modify request-level attributes and place the intervention on hold.<br>[Displayed in a dialogue box] | Intervention cannot be resolved. | 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.<br>1. Click on the **OK** button to dismiss the dialogue box.<br>2. If the selected request-level attribute(s) should be implemented, either submit or partition the request.<br>3. If the selected request-level attribute(s) should not be implemented, click on the **Reset** button, then place the intervention on hold.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |

***Table 18.19-1. Order Manager GUI User Messages (7 of 12)***

| Message Text | Impact | Cause and Corrective Action |
|---|---|---|
| ERROR: You can not modify request-level attributes if you are failing the request.<br>[Displayed in a dialogue box] | Intervention cannot be resolved. | 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.<br>1. Click on the **OK** button to dismiss the dialogue box.<br>2. If the selected request-level attribute(s) should be implemented, either submit or partition the request.<br>3. If the request should be failed, first deselect the request-level attribute(s), then fail the request.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |
| ERROR: You must assign a worker to this intervention before proceeding.<br>[Displayed in a dialogue box] | Actions cannot be taken on an intervention. | 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.<br>1. Click on the **OK** button to dismiss the dialogue box.<br>2. Enter a valid name in the **Worked by:** text entry box on the **Open Intervention Detail** page.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |
| ERROR: You must enter a name into the Worked by field before proceeding.<br>[Displayed in a dialogue box] | Actions cannot be taken on an intervention. | 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.<br>1. Click on the **OK** button to dismiss the dialogue box.<br>2. Enter a valid name in the **Worked by:** text entry box on the **Open Intervention Detail** page.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |

***Table 18.19-1. Order Manager GUI User Messages (8 of 12)***

| Message Text | Impact | Cause and Corrective Action |
|---|---|---|
| INPUT ERROR: There was a problem with the input parameter for a User Profile. Please contact your system's administrator to fix this problem. | Information about a User profile is not displayed. | 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.<br>1. Click on the ← icon in the **OM GUI** navigation frame to redisplay the previous page.<br>2. Attempt to access the desired page by clicking on the appropriate link.<br>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. |
| INPUT ERROR: There was a problem with the input parameter for ECS Order. Please contact your system's administrator to fix this problem. | Information about an ECS Order does not get displayed. | 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.<br>1. Click on the ← icon in the **OM GUI** navigation frame to redisplay the previous page.<br>2. Attempt to access the desired page by clicking on the appropriate link.<br>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. |
| Please hit your browser's Back button and enter a valid name into the "worked by" field and click on "Override Current Worker | Intervention cannot be resolved. | 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.<br>1. Click on the ← icon in the **OM GUI** navigation frame to redisplay the **Open Intervention Detail** page.<br>2. Enter a valid name in the **Worked by:** text entry box on the **Open Intervention Detail** page.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |

***Table 18.19-1. Order Manager GUI User Messages (9 of 12)***

| Message Text | Impact | Cause and Corrective Action |
|---|---|---|
| Please hit your browser's Back button and select a disposition. | Intervention cannot be resolved. | No disposition was selected on the **Open Intervention Detail** page. Go to the previous page and select a disposition.<br>1. Click on the ← icon in the **OM GUI** navigation frame to redisplay the **Open Intervention Detail** page.<br>2. Select an appropriate disposition on the **Open Intervention Detail** page.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |
| 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.<br>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.<br>[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.<br>1. Click on the **OK** button to dismiss the dialogue box.<br>2. Enter appropriate text in the e-mail text box or click on the **Don't send e-mail** box (as applicable).<br>3. Complete the intervention.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |
| 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.<br>1. Click on the ← icon in the **OM GUI** navigation frame to redisplay the **Open Intervention Detail** page.<br>2. Click on the **Update FtpPush Parameters** box to uncheck it.<br>3. Complete the intervention.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |

***Table 18.19-1. Order Manager GUI User Messages (10 of 12)***

| Message Text | Impact | Cause and Corrective Action |
|---|---|---|
| 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. | Intervention cannot be resolved. | 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.<br>1. Click on the ← icon in the **OM GUI** navigation frame to redisplay the **Open Intervention Detail** page.<br>2. Click on the **Update FtpPush Parameters** box to uncheck it.<br>3. Complete the intervention.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |
| 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. | Intervention cannot be resolved. | 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.<br>1. Click on the ← icon in the **OM GUI** navigation frame to redisplay the **Open Intervention Detail** page.<br>2. Click on the box in front of **and spread request over**.<br>3. Complete the intervention.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |

***Table 18.19-1. Order Manager GUI User Messages (11 of 12)***

| Message Text | Impact | Cause and Corrective Action |
|---|---|---|
| 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 | Intervention cannot be resolved. | 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 "**- -**".<br>1. Click on the ← icon in the **OM GUI** navigation frame to redisplay the **Open Intervention Detail** page.<br>2. If a new distribution medium is being selected, verify that the **Change Media to:** box is checked. (Click on it if necessary).<br>3. If a new distribution medium is being selected, verify that the **New Medium** option button is displaying the appropriate medium. [If necessary, 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.]<br>4. If the old distribution medium is being retained, verify that the **Change Media to:** box is not checked. (Click on it if necessary).<br>5. If the old distribution medium is being retained, verify that the **New Medium** option button is displaying "**– –**". [If necessary, 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.]<br>6. Complete the intervention.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |

***Table 18.19-1. Order Manager GUI User Messages (12 of 12)***

| Message Text | Impact | Cause and Corrective Action |
|---|---|---|
| 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. | Intervention cannot be resolved. | 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).<br><br>1. Click on the ← icon in the **OM GUI** navigation frame to redisplay the **Open Intervention Detail** page.<br>2. If a new distribution medium is being selected, verify that the **Change Media to:** box is checked. (Click on it if necessary).<br>3. If a new distribution medium is being selected, verify that the **New Medium** option button is displaying the appropriate medium. [If necessary, 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.]<br>4. If the old distribution medium is to be retained, verify that the **Change Media to:** box is not checked. (Click on it if necessary).<br>5. If the old distribution medium is to be retained, verify that the **New Medium** option button is displaying "**– –**". [If necessary, 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.]<br>6. Complete the intervention.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |

## 18.19.1 Checking the Science Data Server Log Files

The procedure for checking the Science Data Server log files starts with the assumption that the operator has logged in to the system.

***Table 18.19-2. Troubleshooting Order Manger GUI Failure - Activity Checklist***

| Order | Role | Task | Section | Complete? |
|---|---|---|---|---|
| 1 | Distribution Technician | Checking the Science Data server Log Files | (P) 18.19.1.1 | |
| 2 | Distribution Technician | Checking the Archive Server Log Files | (P) 18.19.2.1 | |
| 3 | Distribution Technician | Checking the Staging Disk | (P) 18.19.3.1 | |
| 4 | Distribution Technician | Checking the Staging Disk ALOG File | (P) 18.19.4.1 | |
| 5 | Distribution Technician | Checking the Space Available in the Staging Area | (P) 18.19.5.1 | |
| 6 | Distribution Technician | Checking Log Files | (P) 18.19.6.1 | |
| 7 | Distribution Technician | Checking Database connections | (P) 18.19.7.1 | |
| 8 | Distribution Technician | Determining the Permissions for Creating an FTP Pull Subdirectory | (P) 18.19.9.1 | |
| 9 | Distribution Technician | Troubleshooting a HEG Failure | (P) 18.19.10.1 | |
| 10 | Distribution Technician | Checking HEG Server Log Files | (P) 18.19.11.1 | |
| 11 | Distribution Technician | Checking Files in the HEG Tempfiles Directory | (P) 18.19.12.1 | |

### 18.19.1.1 Checking the Science Data Server Log Files

**1** Access a terminal window logged in to the SDSRV Server host.

- Examples of SDSRV Server host names include **x4oml01**.
- For detailed instructions refer to the procedure for **Logging in to System Hosts** (preceding section of this lesson).

**2** Type **cd /usr/ecs/*MODE*/CUSTOM/logs** then press **Return/Enter**.

**3** Type **view *filename*** then press **Return/Enter**.

- 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 was successfully acquired.

- 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 :DsSrWorkingCollectionDoDitributeDistributeFile**

**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** Type **:q!** then press **Return/Enter** to quit the view application.

**6** If the ShortName does **not** appear in the ALOG file, with a timestamp corresponding to the time of the attempted acquire, ensure (e.g., using EcCsIdPingServers) that it is possible to connect to the necessary hosts and servers (listed in Table 10).

- 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.

- Return to the procedure for **Recovering from a Data Distribution Failure** after the problem has been corrected.

**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 removed from the Science Data Server and reinserted.

- Return to the procedure for **Recovering from a Data Distribution Failure** after the problem has been corrected.

**8** If the ALOG file does contain entries for the ShortName and indicates that two files (the file and its associated metadata file) are being distributed, continue with the procedure for **Checking the Archive Server Log Files**.

---

### 18.19.2 Checking the Archive Server Log Files

Acquire success from the Science Data Server is only part of the acquire process. Since any file entered into SDSRV is stored in the archive, the Archive Server must be 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.

The procedure for checking the archive server log files starts with the assumption that the operator has logged in to the system.

#### 18.19.2.1 Checking the Archive Server Log Files

---

**1** Access a terminal window logged in to the appropriate host.

- Examples of appropriate host names include **e4eil01,n4eil01**
- For detailed instructions refer to the procedure for **Logging in to System Hosts** (preceding section of this lesson).

**2** Type **cd /usr/ecs/*MODE*/CUSTOM/logs** then press **Return/Enter**.

**3** Type **view *filename*** then press **Return/Enter**.

- 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 was successfully acquired.

**5** Type **:q!** then press **Return/Enter** to quit the view application.

**6** If the relevant file was **not** successfully acquired, notify the Archive Manager to have the data file reacquired for Data Processing.

- Return to the procedure for **Recovering from a Data Distribution Failure** after the problem has been corrected.

**7** If the relevant file was successfully acquired, continue with the procedure for **Checking the Staging Disk**.

---

### 18.19.3 Checking the Staging Disk

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.

The procedure for checking the staging disk starts with the assumption that the operator has logged in to the system.

#### 18.19.3.1 Checking the Staging Disk

---

**1** Access a terminal window logged in to the Distribution Server host.

- Examples of Distribution Server host names include **x4oml01**.
- For detailed instructions refer to the procedure for **Logging in to System Hosts** (preceding section of this lesson).

**2** Type **cd /usr/ecs/*MODE*/CUSTOM/drp/*archivehost*/data/staging/*disk#*** then press **Return/Enter**.

**3** Type **ls -lrt** then press **Return/Enter**.

**4** Review the directory to determine whether the relevant file was successfully staged.

**5** If the relevant file was successfully staged, ensure (e.g., using EcCsIdPingServers) that it is possible to connect to the necessary hosts and servers (listed in Table 10).

- 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.
- Return to the procedure for **Recovering from a Data Distribution Failure** after the problem has been corrected.

**6** If the relevant file was **not** successfully staged, continue with the procedure for **Checking the Staging Disk ALOG File** to determine why it was not successfully staged.

---

### 18.19.4 Checking the Staging Disk ALOG File

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.

The procedure for checking the staging disk ALOG file starts with the assumption that the operator has logged in to the system.

#### 18.19.4.1 Checking the Staging Disk ALOG File

---

**1** Access a terminal window logged in to the Distribution Server host.

- Examples of Distribution Server host names include **x4oml01**.
- For detailed instructions refer to the procedure for **Logging in to System Hosts** (preceding section of this lesson).

**2** Type **cd /usr/ecs/*MODE*/CUSTOM/logs** then press **Return/Enter**.

**3** Type **view EcDsStStagingDiskServer.ALOG** or **EcDsStCacheManagerServer.ALOG** then press **Return/Enter**.

- 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 was successfully staged.

**5** Type **:q!** then press **Return/Enter** to quit the view application.

**6** If the relevant file was successfully staged, ensure (e.g., using EcCsIdPingServers) that it is possible to connect to the necessary hosts and servers (listed in Table 10).

- 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.
- Return to the procedure for **Recovering from a Data Distribution Failure** after the problem has been corrected.

**7** If the relevant file was **not** successfully staged, continue with the procedure for **Checking the Space Available in the Staging Area**.

---

### 18.19.5 Checking the Space Available in the Staging Area

Failure can be caused by a lack of space in the staging area.

The procedure for checking the space available in the staging area starts with the assumption that the operator has logged in to the system.

### 18.19.5.1 Checking the Space Available in the Staging Area

**1** Access a terminal window logged in to the Distribution Server host.

- Examples of Distribution Server host names include **x4oml01**.
- For detailed instructions refer to the procedure for **Logging in to System Hosts** (preceding section of this lesson).

**2** Type **cd /usr/ecs/*MODE*/CUSTOM/drp/*archivehost*/data/** then press **Return/Enter**.

**3** Type **df -k .** (being sure to include the dot) then press **Return/Enter**.

**4** Review the available space listed to determine whether there is adequate space for staging the relevant file.

**5** If there is **not** adequate space for staging the relevant file, notify the Operations Controller/System Administrator of the lack of space.

**6** If there is adequate space for staging the relevant file, notify the Archive Manager to have the data file reacquired for Data Processing.

**7** Return to the procedure for **Recovering from a Data Distribution Failure** after the problem has been corrected.

## 18.19.6 Checking Log Files

Log files can provide indications of the following types of problems:

- Communication problems.
- Database problems.
- Lack of disk space.

The procedure for checking log files starts with the assumption that the operator has logged in to the system and the appropriate host.

### 18.19.6.1 Checking Log Files

**1** Access a terminal window logged in to the appropriate host.

- Linux internal server (e.g., x4oml01) host has the following data distribution, storage management, science data server, subscription server (SBSRV), and Order Manager ALOG files:
  - EcDsDistributionServer.ALOG.

- EcDsStDLTServerNONE.ALOG.
- EcDsStRequestManagerServer.ALOG
- EcDsStStagingDiskServerDIP1.ALOG.
- EcDsGranuleDelete.ALOG.
- EcDsScienceDataServer.ALOG.
- EcDsScienceDataServerClient.ALOG.
- EcDsSdSrvGui.ALOG.
- EcSbSubServer.ALOG.
- EcOmOrderManager.ALOG

- APC Server (e.g., x4oml01) host has the following storage management ALOG files:
  - EcDsStArchiveServerACM1.ALOG.
  - EcDsStCacheManagerServerACM1.ALOG.
  - EcDsStFtpServerNONE.ALOG.
  - EcDsStStagingDiskServerACM1.ALOG.
- FSMS Server (e.g., x4oml01) host has the following storage management ALOG files:
  - EcDsHdfEosServer.ALOG.
  - EcDsStArchiveServerDRP1.ALOG
  - EcDsStCacheManagerServerDRP1.ALOG.
  - EcDsStFtpServerDRP1.ALOG.
  - EcDsStStagingDiskServerDRP1.ALOG.
- Operations Workstation (e.g., x4oml01) host has the following GUI ALOG files:
  - EcDsDdistGui.ALOG.
  - EcDsStmgtGui.ALOG.
  - EcDsSdSrvGui.ALOG.
- Data Pool Server (e.g., x4oml01) host has the following Data Pool and Spatial Subscription Server log files:
  - EcDlActionDriver.ALOG.
  - EcDlInsertUtility.log.
  - EcDlMostRecentInsert.log.

- EcDlWebaccess.log.
- EcDlWebaccess.DEBUGLOG.
- EcDlDpmDataPoolGUI.log.
- EcDlM2XT.ALOG.
- EcDlRollupFwFtpLogs.log.
- EcNbGUI.log.

- In addition to the ALOG files mentioned the preceding hosts have corresponding debug log files.
- For detailed instructions refer to the procedure for **Logging in to System Hosts** (preceding section of this lesson).

**2** Type **cd /usr/ecs/*MODE*/CUSTOM/logs** then press **Return/Enter**.

- Change directory to the directory containing the data distribution, science data server, or storage management log files (e.g., EcDsDdistGui.ALOG, EcDsDistributionServer.ALOG).

**3** Type **pg *filename*** then press **Return/Enter**.

- ***filename*** refers to the data distribution, science data server, or storage management 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., **vi**, **view, more**) can be used to review the log file.

**4** Review the log file to identify problems that have occurred.

**5** Respond to problems as follows:

- DDIST- or STMGT-related problems.
  - Perform the appropriate procedure(s) from the list near the beginning of the **DDIST Troubleshooting Procedures** section.
- 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 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.

---

### 18.19.7 Checking 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.

The procedure for checking database connections starts with the assumption that the operator has logged in to the system.

#### 18.19.7.1 Checking Database Connections

---

**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 **e4eil01,n4eil01**
- For detailed instructions refer to the procedure for **Logging in to System Hosts** (preceding section of this lesson).
- APC Server typically hosts Sybase for the storage management/data distribution shared database.

**3** Type **isql –U*userID* -S*DBServer*** then press **Return/Enter**.

- For example:

  **isql –Ustmgt_role –Sx0oml01_srvr**

**4** At the **Password:** prompt type ***dbpassword*** then press **Return/Enter**.

- The ***dbpassword*** is the password for logging in to the database using the specified ***userID***.

**5** Type **sp_who** at the **1>** prompt then press **Return/Enter**.

**6** Type **go** at the **2>** prompt then press **Return/Enter**.

- A listing similar to the following one is displayed (some 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
    4 sleeping    NULL                           0
      master                  MIRROR HANDLER
    5 sleeping    NULL                           0
      master                  HOUSEKEEPER
    6 sleeping    NULL                           0
      master                  CHECKPOINT SLEEP
    7 sleeping    NULL                           0
      master                  AUDIT PROCESS
    8 recv sleep   stmgt_role               x0ais01   0
      stmgtdb1_TS1              AWAITING COMMAND
    9 recv sleep   EcDsStArchiveServer            0
      stmgtdb1_TS2              AWAITING COMMAND
   10 recv sleep   EcInReqMgr                     0
      Ingest_TS3                AWAITING COMMAND
   11 recv sleep   EcDsStCacheManagerServer       0
      stmgtdb1_TS2              AWAITING COMMAND
   12 recv sleep   EcDsStStagingDiskServer        0
      stmgtdb1_TS2              AWAITING COMMAND
   13 recv sleep   EcInGran                x0icg01   0
      Ingest_TS3                AWAITING COMMAND
   14 recv sleep   EcDsStFtpServer                0
      stmgtdb1_TS2              AWAITING COMMAND
   15 recv sleep   EcDsStArchiveServer            0
      stmgtdb1_TS1              AWAITING COMMAND
   16 recv sleep   EcDsStCacheManagerServer       0
      stmgtdb1_TS1              AWAITING COMMAND
```

**17 recv sleep EcDsStStagingDiskServer 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**18 recv sleep EcInGran 0**
**Ingest_TS3 AWAITING COMMAND**
**19 recv sleep EcDsStStagingDiskServer 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**20 recv sleep EcInGUI 0**
**Ingest_TS1 AWAITING COMMAND**
**21 recv sleep EcDsDistributionServer 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**22 recv sleep EcDsDistributionServer 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**23 recv sleep EcDsDistributionServer 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**24 recv sleep EcDsDistributionServer 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**25 recv sleep EcDsDistributionServer 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**26 recv sleep EcDsDistributionServer 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**27 recv sleep EcDsDistributionServer 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**28 recv sleep EcDsDistributionServer 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**29 recv sleep EcDsDistributionServer 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**30 recv sleep EcDsDistributionServer 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**31 recv sleep EcDsDistributionServer 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**32 recv sleep EcDsDistributionServer 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**33 recv sleep EcDsDistributionServer 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**34 recv sleep EcDsDistributionServer 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**35 recv sleep EcDsDistributionServer 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**36 recv sleep EcInPolling 0**
**Ingest_TS1 AWAITING COMMAND**
**[…]**
**49 recv sleep EcDsStmgtGui 0**
**stmgtdb1_TS1 AWAITING COMMAND**
**50 recv sleep EcDsDdistGui 0**
**stmgtdb1_TS1 AWAITING COMMAND**

```
51 recv sleep   EcDsDdistGui                    0
   stmgtdb1_TS1              AWAITING COMMAND
52 recv sleep   EcDsDdistGui                    0
   stmgtdb1_TS1              AWAITING COMMAND
53 recv sleep   EcDsDdistGui                    0
   stmgtdb1_TS1              AWAITING COMMAND
54 running      stmgt_role              x0icg01  0
   stmgtdb1                  SELECT
55 recv sleep   EcDsStArchiveServer             0
   stmgtdb1                  AWAITING COMMAND
(55 rows affected)
(return status = 0)
```

**7** Type **sp_configure "user connections"** at the **1>** prompt then press **Return/Enter**.

**8** Type **go** at the **2>** prompt then press **Return/Enter**.

- A listing similar to the following one is displayed:

```
Parameter Name              Default     Memory Used Config Value
      Run Value
 --------------------------- ----------- ----------- ------------
      -----------
number of user connections          25       20195        255
           255
(1 row affected)
(return status = 0)
```

**9** Type **quit** at the **1>** prompt then press **Return/Enter**.

**10** Compare the number of actual connections (results of **sp_who**) with the number of connections for which the database has been configured (results of **sp_configure "user connections"**).

**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).

**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.

### 18.19.8 Recovering from Order Manager Failures

Actions to be taken when recovering from some common Order Manager problems are described in Table 18.19-3.

***Table 18.19-3. Recovering from Order Manager Failures (1 of 6)***

| Symptom | Likely Cause(s) | Response |
|---|---|---|
| Request is hanging in Queued status | Global Staging Status parameter is set to "S." | On the **OMS Server and Database Configuration** page determine whether or not Global Staging Status is set to "S."<br>[For detailed instructions refer to the procedure for **Checking/Modifying Values Assigned to OMS Server or Database Parameters** (previous section of this lesson).] |
| | Archive Server queue is suspended. | On the **OM Queue Status** page determine whether or not the archive server queue where the data comes from is suspended.<br>[For detailed instructions refer to the procedure for **Checking/Modifying OM Queue Status** (previous section of this lesson).] |
| Request is hanging in Queued status (Cont.) | Media type specific staging parameter(s) set to 0. | 1. For a hard media or ftp pull request, on the **Media Configuration** page check the two parameters under the media type of the request. (If either of the two sets to 0, the request cannot be promoted to "Staging.")<br>[For detailed instructions refer to the procedure for **Checking/Modifying Values Assigned to Media Parameters** (previous section of this lesson).]<br>2. For an ftp push request, check the configuration on the **FTP Push/SCP Policy Configuration** page (If it is a request for the general group, check the RHWM and DHWM. If it is a request for a configured destination, click into that destination to check its RHWM and DHWM.)<br>[For detailed instructions refer to the procedure for **Checking/Modifying FTP Push/SCP Policy Configuration** (previous section of this lesson).] |

***Table 18.19-3. Recovering from Order Manager Failures (2 of 6)***

| Symptom | Likely Cause(s) | Response |
|---|---|---|
| | Number of requests in the request resource category hits the limit. | 1. On the **Staging Distribution Requests** page determine the request category for the request (in the "Resource Class" column).<br>[For detailed instructions refer to the procedure for **Monitoring/Controlling Distribution Request Information on the OM GUI** (previous section of this lesson).]<br>2. On the **OMS Server and Database Configuration** page determine the maximum number of requests in the appropriate category (i.e., Max Cheap Requests, Max Moderate Requests, or Max Expensive Requests) that could be processed concurrently by OMS.<br>[For detailed instructions refer to the procedure for **Checking/Modifying Values Assigned to OMS Server or Database Parameters** (previous section of this lesson).]<br>3. Count the number of requests in the appropriate resource class in "Staging." If the number is greater than or equal to the value of the maximum number of requests for the category, that is why the request is stuck in "Queued." (The system has to work off its load before it gets to process the request.)<br>[For detailed instructions refer to the procedure for **Monitoring/Controlling Distribution Request Information on the OM GUI** (previous section of this lesson).] |

***Table 18.19-3. Recovering from Order Manager Failures (3 of 6)***

| Symptom | Likely Cause(s) | Response |
|---|---|---|
| Request is hanging in Queued status (Cont.) | RHWP/DHWP exceeds RHWM/DHWM in the staging pool of the media type. | If the Order Manager Server is running at DebugLogLevel 3, open the server debug log, search for the following keywords: OmSrStagingPool(FtpPull)::UpdateWaterMarks Adding ReqId=XXX ReqSize=XXX ReqPriority=XXX pending=xxx, active=xxx, RHWP=aaa RHWM=bbb DHWP=ddd DHWM=eee. (RHWP is the number of requests currently active in the staging pool. DHWP is the amount of data currently being staging in the staging pool. Usually both RHWP and DHWP must be lower than the corresponding RHWM and DHWM. (NOTE: There are some exceptions.) This could be the reason why the request is stuck in "Queued;" the system has to work off its load before it gets to process the request.<br>[For detailed instructions refer to the procedure for **Checking Log Files** (previous section of this lesson).] |
| | All archive tape drivers are busy. | Determine whether all archive tape drivers are busy. (The number of archive tape drivers per archive that OMS could use is maintained by the Data Pool Maintenance GUI. The OM Server could not dispatch more granules to DPL if all the archive tape drivers are busy for the archive. So the system has to work off its load before it gets to process the request.)<br>[For detailed instructions refer to the **Monitor Data Pool Active Insert Processes Using the DPM GUI** procedure in the Archive Processing lesson (625-EMD-110).] |
| | DPL file system is down/not available. | On the **Operator Alerts** page determine whether a specific file system alert has been generated. (If one of DPL file systems is down or not available, ESDTs that are configured for staging to that file system are suspended for staging in OMS.)<br>[For detailed instructions refer to the procedure for **Viewing Operator Alerts on the OM GUI** (previous section of this lesson).] |
| | Queue is suspended. | On the **OM Queue Status** page determine whether or not the corresponding queue has been suspended. (If so, the request is not going to be worked off until the queue is reactivated.)<br>[For detailed instructions refer to the procedure for **Checking/Modifying OM Queue Status** (previous section of this lesson).] |

***Table 18.19-3. Recovering from Order Manager Failures (4 of 6)***

| Symptom | Likely Cause(s) | Response |
|---|---|---|
| Request is hanging in Staging status (Cont.) | Granule(s) of the request is (are) stuck in "Staging." | 1. On the **Distribution Requests** page click on the request ID to bring up the **Distribution Request Detail** page.<br>[For detailed instructions refer to the procedure for **Monitoring/Controlling Distribution Request Information on the OM GUI** (previous section of this lesson).]<br>2. Check the status of each individual granule in the request. (If one of them stays in "Staging," the whole request will remain in "Staging" until the granule finishes staging.)<br>[For detailed instructions refer to the procedure for **Monitoring/Controlling Distribution Request Information on the OM GUI** (previous section of this lesson).]<br>3. If at least one of the granules in the request is still in "Staging," check the DPL DlActionDriver log and DlInsertUtility log to determine why the granule has not completed staging yet.<br>[For detailed instructions refer to the procedure for **Checking Log Files** (previous section of this lesson).] |
| | Global Staging Status Parameter flag is suspended while the request is in the middle of staging. | Check the Global Staging Status parameter. (If the flag is suspended while the request is in the middle of staging, the request will stay in "Staging" until the suspension is lifted.)<br>[For detailed instructions refer to the procedure for **Checking/Modifying Values Assigned to OMS Server or Database Parameters** (previous section of this lesson).] |
| | Archive Sever queue is suspended while the request is in the middle of staging. | On the **OM Queue Status** page determine whether or not the Archive Server queue has been suspended. (If the archive is suspended while the request is in the middle of staging, the request will remain in that status until the suspension is lifted.)<br>[For detailed instructions refer to the procedure for **Checking/Modifying OM Queue Status** (previous section of this lesson).] |
| Request goes to Operator Intervention from Staging | There is a bad granule in the request. | On the **Open Interventions Detail** page fail the bad granule (or replace it with a good one) then resubmit the request.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |

***Table 18.19-3. Recovering from Order Manager Failures (5 of 6)***

| Symptom | Likely Cause(s) | Response |
|---|---|---|
| Request is hanging in Transferring status | A request usually stays in "Transferring" for one of the following reasons:<br>· Ftp Push login/password failure.<br>· Destination host not reachable.<br>· Destination disk space is full.<br>· Ftp Push operation timed out.<br>· Number consecutive failure for that destination exceeds configured maximum number.<br>If one of the preceding situations occurs, the destination of the request is suspended. | 1. On the **Operator Alerts** page or **Suspended Destinations** page get access to the detailed explanation for the alert associated with the FTP Push/SCP Destination name/target host. (Ftp push operations that caused the suspension of destination are listed.)<br>[For detailed instructions refer to the procedure for **Viewing Operator Alerts on the OM GUI** (previous section of this lesson).]<br>2. If there is a large ftp push load within a certain period of time and it seems that the request stays in "Transferring" for a very long time check the configuration on the **FTP Push/SCP Policy Configuration** page (The number of concurrent ftp push requests for the destination may be set too low.)<br>[For detailed instructions refer to the procedure for **Checking/Modifying FTP Push/SCP Policy Configuration** (previous section of this lesson).]<br>3. If it is a request for a configured destination, first check Max Operations on the upper left corner. (If its value is 0, there is no ftp push operation allowed for the configured destination. If the value is too low, the workload will be worked off very slowly.)<br>[For detailed instructions refer to the procedure for **Checking/Modifying FTP Push/SCP Policy Configuration** (previous section of this lesson).]<br>4. If it is a request for the general group, check the Max Operations.<br>[For detailed instructions refer to the procedure for **Checking/Modifying FTP Push/SCP Policy Configuration** (previous section of this lesson).] |
| Request goes to Operator Intervention from Transferring status | A granule of the request failed ftp push for a reason other than those listed under "Request is hanging in Transferring status." | 1. On the **Open Interventions Detail** page fail the bad request (or replace it with a good one) then resubmit the request.<br>[For detailed instructions refer to the procedure for **Responding to an Open Intervention** (previous section of this lesson).] |
| Ftp pull request goes to Operator Intervention | Quick Server on the APC Server host (e.g., e0acg11, g0acg01, l0acg02, or n0acg01) is down. | On the APC Server host (e.g., x4oml01) determine the status (up or down) of the Quick Server.<br>[For detailed instructions refer to the procedure for **Checking Connections to Hosts/Servers** (previous section of this lesson).] |

***Table 18.19-3. Recovering from Order Manager Failures (6 of 6)***

| Symptom | Likely Cause(s) | Response |
|---|---|---|
| Ftp pull request goes to Operator Intervention (Cont.) | Permission for creating a subdirectory is denied on the APC Server host. | On the APC Server host determine the permissions for creating an Ftp Pull subdirectory.<br>[For detailed instructions refer to the procedure for **Determining the Permissions for Creating an FtpPull Subdirectory** (subsequent section of this lesson).] |

## 18.19.9 Determining the Permissions for Creating an Ftp Pull Subdirectory

One of the criteria for a successful Ftp Pull distribution is the creation of an Ftp Pull subdirectory for staging the data to be distributed. If permission for creating a subdirectory is denied on the host, the Ftp Pull distribution cannot be accomplished.

The procedure for determining the permissions for creating an Ftp Pull subdirectory starts with the assumption that the operator has logged in to the system.

### 18.19.9.1 Determining the Permissions for Creating an Ftp Pull Subdirectory

**1** Access a terminal window logged in to the appropriate host.

- For example APC Server host names include **e4eil01,n4eil01**
- For detailed instructions refer to the procedure for **Logging in to System Hosts** (preceding section of this lesson).

**2** At the command line prompt type **cd *path*** then press **Return/Enter**.

- ***path*** indicates the path to the directory with the permissions to be checked.
- For example:

  **cd /usr/ecs/OPS/CUSTOM/acm/x0acg01/data/PullDisk/user**

**3** Type **ls -al** then press **Return/Enter**.

- The following type of result is obtained:

```
total 32
drwxrwxr-x   30 cmops    cmops       4096 Mar 21  2005 ./
drwxrwxr-x    4 cmops    cmops         88 Nov  9  2002 ../
drwxr-xr-x    2 cmshared cmshared     135 Jun  7  2004 0800011693bFwLJA/
drwxr-xr-x    2 cmshared cmshared     135 Jul  7  2004 0800011693rPWeDb/
[…]
```

**4** Observe the results of the **ls –al** command.

- In the example in Step 3 the permissions for the current directory (represented by ./ at the end of the end of the line) allow user cmops and other members of the same group (including cmshared, cmts1, and cmts2) but no others to write to the directory. So cmshared could create a subdirectory in the current directory.
- In the example that follows the permissions for the current directory allow the owner (i.e., cmops) only to write to the directory. So cmshared could not create a subdirectory in the current directory.

**total 960**
**drwxr-xr-x 5 cmops 4096 Jul 30 2004 .**
**drwxr-xr-x 37 cmops 28672 Oct 7 10:48 ..**
**-rw-r--r-- 1 cmops 20210 Jul 30 2004**
**MISR_AM1_AS_AEROSOL_P015_O008407_F06_0013.hdf**
**-rw-r--r-- 1 cmops 78009 Jul 30 2004**
**MISR_AM1_AS_AEROSOL_P015_O008407_F06_0013.hdf.met**
**[…]**

---

### 18.19.10 HEG Failures

A common means of detecting a HEG failure is the appearance of an intervention on the **OM GUI** [refer to the procedure for **Viewing Open HEG Intervention Information on the OM GUI** (previous section of this lesson)]. Another means of detecting a HEG failure is receiving notification from a user (i.e., via User Services) that the order has not been shipped.

#### 18.19.10.1 Troubleshooting a HEG Failure

---

**1** View information concerning the pertinent open HEG intervention on the **OM GUI**.

- For detailed instructions refer to the procedure for **Viewing Open HEG Intervention Information on the OM GUI** (previous section of this lesson).
- On the **Open HEG Intervention Detail** page there is a link for viewing the HEG processing instructions (XML file).
  - The XML processing instructions may provide indications as to why the request could not be completed.

**2** If review of the HEG information on the **OM GUI** indicates that there are no impediments to completing the HEG request, retry processing of the request.

- For detailed instructions refer to the procedure for **Responding to an Open HEG Intervention** (previous section of this lesson).

**3** If additional information is needed before taking action, check the log files for error codes.

- Log files include the following files:
  - HEG Server operations log (HegServer.ops.log).
  - HEG Server debug log (HegServer.debug.log).
  - HEG Server performance log (HegServer.perf.log), if available (typically turned off in normal operations)
- Log files are located in the /usr/ecs/*MODE*/CUSTOM/logs directory.
- Error codes and the appropriate responses to them are described in Table 18.19-3.
- For detailed instructions refer to the **Checking HEG Server Log Files** procedure (subsequent section of this lesson).

**4** If further information is needed before taking action, check the files in the HEG tempfiles directory.

- The tempfiles directory contains the following types of files:
  - Converter logs.
    - resample.log.
    - swtif.log.
    - gdtif.log.
  - Parameter file (.prm).
  - EcHgHEGConversion.log.
- If debug is on (HegServer.application.debugFlag = true in the EcHgServerConfig.properties file in the /usr/ecs/*MODE*/CUSTOM/cfg directory), a tempfiles directory containing pertinent files is created at the configurable location ***tempDirRoot*/*MODE*/*tempDirTop*/*outputdirectory*/tempfiles**.
  - ***tempDirRoot*** and ***tempDirTop*** arespecified in the EcHgServerConfig.properties file in the /usr/ecs/*MODE*/CUSTOM/cfg directory.
  - ***outputdirectory*** is specified in the HEG request XML file.
- For detailed instructions refer to the procedure for **Checking Files in the HEG Tempfiles Directory** (subsequent section of this lesson).

**5** 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 18.19-4. Troubleshooting HEG Problems (1 of 17)***

| Error Code/String | Response |
|---|---|
| -3 ClientDown | Ensure that the client is up. |
| -2 Rejected | 1. Ensure that the MAX_NUM_OF_CONCURRENT_HEG_PROCESS value in the OMS Database OmConfigParameter table (Max Num of Concurrent HEG Process parameter as displayed on the **OM GUI**) is configured to be less than the configured value of HegServer.application.maxClientRequests in HEG server configuration file (/usr/ecs/*MODE*/CUSTOM/cfg/EcHgServerConfig.properties). [For detailed instructions refer to the procedure for **Checking Files in the HEG Tempfiles Directory** (subsequent section of this lesson) and the procedure for **Checking/Modifying Values Assigned to OMS Server or Database Parameters** (previous section of this lesson).]<br>2. If the value assigned to the configuration parameter is correct and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| -1 Cancelled | [No action necessary.] |
| 0 HegConversionSuccessful | [No action necessary.] |
| 200 InputXmlValidationErr | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 201 ErrCreateWorkingDirectory | 1. Verify that cmshared has write permission ("drwxrwxr-x") to the working directory (/datapool/*MODE*/user/*FS#*/HEGWorking).<br>2. If the write permission is correct, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 202 InvalidInputInBandContainerErr | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 203 CreateSummaryFileErr | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 204 MoveOutputErr | 1. Verify that there is enough space to move the TIF/HDF/MET files from the working directory (/datapool/*MODE*/user/*FS#*/HEGWorking) to the destination directory (/datapool/*MODE*/user/*FS#*/.orderdata/OUTPUTS*encrypted*/HEGOUT.001*encrypted*/HEG/requestID.granuleID).<br>2. Ensure that cmshared has write permission ("drwxrwxr-x") to the destination directory (/datapool/*MODE*/user/*FS#*/.orderdata/OUTPUTS*encrypted*/HEGOUT.001*encrypted*/HEG/requestID.granuleID).<br>3. If cmshared has write permission to the destination directory and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |

***Table 18.19-4. Troubleshooting HEG Problems (2 of 17)***

| Error Code/String | Response |
|---|---|
| 205 CreateTempFilesDirErr | 1. Verify that cmshared has write permission ("drwxrwxr-x") to the temp files directory (/datapool/*MODE*/user/*FS*#/HEGTemp/datapool/*MODE*/user/*FS*#/.orderdata/OUTPUTS*encrypted*/HEGOUT.001*encrypted*/HEG/requestID.granuleID/tempfiles).<br>2. If cmshared has write permission to the tempfiles directory and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 206 RunConverterExceptionErr | 1. Verify that the HEG converters and jar file (bandtool, swtif, gdtif, resample, hegtool, and HEG.jar) exist in the correct location (/usr/ecs/*MODE*/CUSTOM/bin/HEG).<br>2. If the HEG converters and jar file are in the correct location and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 207 OutputDirIsNotADirErr | 1. Verify that the output directory (/datapool/*MODE*/user/*FS*#/.orderdata/OUTPUTS*encrypted*/HEGOUT.001*encrypted*/HEG/requestID.granuleID) is a directory.<br>2. If there is an appropriate output directory and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 208 OutputDirUnwritableErr | 1. Verify that cmshared has write permission ("drwxrwxr-x") to the output directory (/datapool/*MODE*/user/*FS*#/.orderdata/OUTPUTS*encrypted*/HEGOUT.001*encrypted*/HEG/requestID.granuleID).<br>2. If cmshared has write permission to the output directory and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 209 OutputDirCreateErr | 1. Verify that cmshared has permission ("drwxrwxr-x") to create the output directory (/datapool/*MODE*/user/*FS*#/.orderdata/OUTPUTS*encrypted*/HEGOUT.001*encrypted*/HEG/requestID.granuleID).<br>2. If cmshared has permission to create the output directory and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 210 WorkingDirIsNotADirErr | 1. Verify that the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) is a directory.<br>2. If there is an appropriate working directory and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 211 WorkingDirUnwritableErr | 1. Verify that cmshared has write permission ("drwxrwxr-x") in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking).<br>2. If cmshared has write permission in the working directory and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |

***Table 18.19-4. Troubleshooting HEG Problems (3 of 17)***

| Error Code/String | Response |
|---|---|
| 212 ConversionLogCreateErr | 1. Verify that cmshared has permission ("drwxrwxr-x") to create/write the EcHgHEGConversion.log file in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking).<br>2. If cmshared has permission to create/write the EcHgHEGConversion.log file in the working directory and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 213 InputHDFEOSFileNotExistErr | 1. Verify that the hdfeos file exists in the datapool.<br>2. If the hdfeos file exists in the datapool and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 214 ErrDeleteExistingWorkingDir | 1. Verify that cmshared has permission ("drwxrwxr-x") to delete the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking).<br>2. Determine whether the debug flag in the HEG Server cfg file (/usr/ecs/*MODE*/CUSTOM/cfg/EcHgServerConfig.properties) is set to false for the server to remove the working directory. (If the debug flag isn't set to false, this error won't occur because the working directory will be preserved.)<br>3. If the debug flag is set to false, cmshared has delete permission, and an error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 500 CantRunHegtool | 1. Verify that the hegtool executable exists in the correct location (/usr/ecs/*MODE*/CUSTOM/bin/HEG).<br>2. Check the /usr/ecs/*MODE*/CUSTOM/utilities/EcHgServerStart script to ensure that the environment variables MTDDATADIR, MRTDATADIR, PGSHOME are set correctly; i.e.,<br>MTDDATADIR=/usr/ecs/$MODE/CUSTOM/data/HEG<br>MRTDATADIR=/usr/ecs/$MODE/CUSTOM/data/HEG<br>PGSHOME=/usr/ecs/$MODE/CUSTOM/data/HEG/TOOLKIT_MTD<br>3. If the hegtool executable is present in the correct location, the environment variables are set correctly, and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 501 ErrReadingProperties | 1. Verify that the HEG Server properties file exists in the correct location (/usr/ecs/*MODE*/CUSTOM/cfg/EcHgServerConfig.properties).<br>2. If the HEG Server properties file is present in the correct location and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 502 ErrReadingHdfeos | 1. Verify that the hdfeos file exists in the datapool.<br>2. If the hdfeos file is present in the datapool and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |

***Table 18.19-4. Troubleshooting HEG Problems (4 of 17)***

| Error Code/String | Response |
|---|---|
| 503 InputFileNotHdfeos | 1. Verify that the input file is an hdfeos file.<br>2. If the input file is an hdfeos file and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 504 ErrLoadingDataInArray | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 505 ErrWritingParameterFile | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 506 ConverterExecuteErr | 1. Verify that the HEG converters and HEG jar file (bandtool, hegtool, swtif, gdtif, resample, HEG.jar) exist in the correct location (/usr/ecs/*MODE*/CUSTOM/bin/HEG).<br>2. If the HEG converters and HEG jar file are present in the correct location and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 508 NoParameterFile | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 509 ErrCopyCompressedFile | 1. Verify that the compressed file exists in the datapool.<br>2. Verify that cmshared has write permission ("drwxrwxr-x") to the destination directory (/datapool/*MODE*/user/*FS#*/.orderdata/OUTPUTS*encrypted*/HEGOUT.001*encrypted*/HEG/requestID.granuleID).<br>3. If the compressed file is in the datapool, cmshared has write permission to the destination directory, and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 510 ErrDecompressingFile | 1. Verify that the correct decompression utility is specified in the HEG Server cfg file (/usr/ecs/*MODE*/CUSTOM/cfg/EcHgServerConfig.properties) and that it exists in the operating system.<br>2. Verify that the compressed file exists in the datapool.<br>3. If the correct decompression utility is specified in the HEG Server cfg file, the compressed file is in the datapool, and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 511 DecompressCommandFormatErr | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 512 SubsetAreaNotInMISRFile | 1. Verify that the geographic extent of the spatial subset area entered by the user intersects the granule.<br>2. If the geographic extent of the spatial subset area intersects the granule and an error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 600 NO ERROR - SUCCESSFUL | [No action necessary.] |
| 601 GeneralProcessingErr | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |

***Table 18.19-4. Troubleshooting HEG Problems (5 of 17)***

| Error Code/String | Response |
|---|---|
| 602 AssertErr | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 603 EnvironmentVariableNotFound | 1. Verify that the environment variables are set correctly (i.e., MTDDATADIR=/usr/ecs/$MODE/CUSTOM/data/HEG MRTDATADIR=/usr/ecs/$MODE/CUSTOM/data/HEG PGSHOME=/usr/ecs/$MODE/CUSTOM/data/HEG/TOOLKIT_MTD) in the EcHgServerStart script, which is located at /usr/ecs/*MODE*/CUSTOM/utilities.<br>2. If the environment variables are set correctly and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 604 MemoryAllocationErr | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 605 ErrWaitingForThreadTermination | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 606 SemaphoreErr | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 607 MutexErr | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 608 ErrSpaceInName | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 609 ErrCommandLineUsage | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 610 ErrOpenInputParameterFile | 1. Verify that the parameter file (.prm) exists in the working directory (/datapool/*MODE*/user/*FS#*/HEGWorking).<br>2. If the parameter file exists in the working directory and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 611 ErrReadInputParameterFile | 1. Verify that the input parameter file (.prm) in the working directory (/datapool/*MODE*/user/*FS#*/HEGWorking) is a valid file.<br>2. If the input parameter file is a valid file and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 612 ErrOpenOutputParameterFile | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 613 ErrWriteOutputParameterFile | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 614 ErrOpenInputImageFile | 1. Verify that the input image file (hdfeos file) exists in the datapool.<br>2. If the input image file is in the datapool and the error still occurs, submit a trouble ticket. |
| 615 ErrReadInputImageFile | 1. Verify that the input image file (hdfeos file) read in is valid.<br>2. If the input image file read in is valid and the error still occurs, submit a trouble ticket. |

***Table 18.19-4. Troubleshooting HEG Problems (6 of 17)***

| Error Code/String | Response |
|---|---|
| 616 ErrOpenOutputImageFile | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 617 ErrWriteOutputImageFile | 1. Verify that cmshared has write permission ("drwxrwxr-x") in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking)<br>2. Verify that there is enough space to write the output image file to the working directory.<br>3. If cmshared has write permission, there is enough space to write the output image file to the working directory, and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 618 ErrOpenInputHeaderFile | 1. Verify that the HegHdr.hdr file exists in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking).<br>2. If HegHdr.hdr file is in the working directory and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 619 ErrReadInputHeaderFile | 1. Verify that the HegHdr.hdr file [in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking)] is a valid file.<br>2. If the HegHdr.hdr file is a valid file and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 620 ErrOpenOutputHeaderFile | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 621 ErrWriteOutputHeaderFile | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 622 NoCommandLineArgument | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 623 MissingOrBadParameterFile | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 624 UnknownCommandLineArgument | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 625 BadOrMissingInputFileNameExtension | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the value assigned to the INPUT_FILENAME contains an hdfeos file with a .hdf extension.<br>2. If the value assigned to INPUT_FILENAME contains a .hdf file and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |

***Table 18.19-4. Troubleshooting HEG Problems (7 of 17)***

| Error Code/String | Response |
|---|---|
| 626 BadOrMissingOutputFileNameExtension | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the value assigned to the OUTPUT_FILENAME parameter contains a filename with either a .hdf or .tif extension.<br>2. If the value assigned to OUTPUT_FILENAME contains a .hdf file or a .tif file and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 627 BadOrMissingResampleType | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the value assigned to the RESAMPLING_TYPE parameter is NN, BI, or CC.<br>2. If the value assigned to RESAMPLING_TYPE is NN, BI, or CC and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 628 BadOrMissingProjectionType | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the value assigned to the OUTPUT_PROJECTION_TYPE parameter is one that works for that particular hdfeos (granule) file.<br>2. If the value assigned to OUTPUT_PROJECTION_TYPE is one that works for that particular hdfeos (granule) file and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 629 BadOrMissingInputFileNameField | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the value assigned to the INPUT_FILENAME parameter specifies an hdfeos file from the datapool.<br>2. If the value assigned to INPUT_FILENAME specifies an hdfeos file from the datapool and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 630 BadOrMissingSpectralSubsetField | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 631 BadOrMissingSpatialSubsetField | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the values assigned to the SPATIAL_SUBSET_UL_CORNER and SPATIAL_SUBSET_LR_CORNER parameters are valid.<br>2. If the values assigned to the SPATIAL_SUBSET_UL_CORNER and SPATIAL_SUBSET_LR_CORNER parameters are valid and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |

***Table 18.19-4. Troubleshooting HEG Problems (8 of 17)***

| Error Code/String | Response |
|---|---|
| 632 BadOrMissingOutputFileNameField | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the value assigned to the OUTPUT_FILENAME parameter has the correct file extension.<br>2. If the value assigned to OUTPUT_FILENAME has the correct file extension and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 633 BadOrMissingResampleTypeField | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the value assigned to the RESAMPLING_TYPE parameter is NN, BI, or CC.<br>2. If the value assigned to RESAMPLING_TYPE is NN, BI, or CC and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 634 BadOrMissingOutputProjectionField | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the value assigned to the OUTPUT_PROJECTION_TYPE parameter is one that works for that particular hdfeos (granule) file.<br>2. If the value assigned to OUTPUT_PROJECTION_TYPE is one that works for that particular hdfeos (granule) file and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 635 BadOrMissingOutputProjectionParametersField | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the values assigned to the OUTPUT_PROJECTION_PARAMETERS parameter are valid.<br>2. If the values assigned to OUTPUT_PROJECTION_PARAMETERS are valid and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 636 BadOrMissingDataTypeField | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |

***Table 18.19-4. Troubleshooting HEG Problems (9 of 17)***

| Error Code/String | Response |
|---|---|
| 637 BadOrMissingProjectionParameters Field | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that each of the following parameters: INPUT_FILENAME, OBJECT_NAME, FIELD_NAME, BAND_NUMBER, OUTPUT_PIXEL_SIZE_X, OUTPUT_PIXEL_SIZE_Y, SPATIAL_SUBSET_UL_CORNER, SPATIAL_SUBSET_LR_CORNER, RESAMPLING_TYPE, OUTPUT_PROJECTION_TYPE, OUTPUT_PROJECTION_PARAMETERS, OUTPUT_FILENAME, and OUTPUT_TYPE is enclosed in a BEGIN and END block.<br>2. Ensure that the first line of the parameter file has a value assigned to the NUM_RUNS parameter that is equal to the number of BEGIN and END blocks in the file.<br>3. If the parameters are formatted properly, the NUM_RUNS parameter has a value that is equal to the number of BEGIN and END blocks in the file, and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 638 BadOrMissingProjectionParameters Value | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that values assigne to the following parameters: INPUT_FILENAME, OBJECT_NAME, FIELD_NAME, BAND_NUMBER, OUTPUT_PIXEL_SIZE_X, OUTPUT_PIXEL_SIZE_Y, SPATIAL_SUBSET_UL_CORNER, SPATIAL_SUBSET_LR_CORNER, RESAMPLING_TYPE, OUTPUT_PROJECTION_TYPE, OUTPUT_PROJECTION_PARAMETERS, OUTPUT_FILENAME, and OUTPUT_TYPE are valid.<br>2. If the parameters are valid and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 639 BadOrMissingSpatialExtentsCorner | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the values assigned to the SPATIAL_SUBSET_UL_CORNER and SPATIAL_SUBSET_LR_CORNER parameters are valid.<br>2. If the spatial subsetting values are valid and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 640 BadOrMissingNBANDSField | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that there is a BAND_NUMBER parameter.<br>2. If there is a BAND_NUMBER parameter and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |

***Table 18.19-4. Troubleshooting HEG Problems (10 of 17)***

| Error Code/String | Response |
|---|---|
| 641 BadOrMissingNBANDSValue | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the value assigned to the BAND_NUMBER parameter is valid.<br>2. If the value assigned to the BAND_NUMBER parameter is valid and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 642 BadOrMissingBANDNAMESField | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that there is a BANDNAMES parameter.<br>2. If there is a BANDNAMES parameter and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 643 BadOrMissingBANDNAMESValue | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the value assigned to the BANDNAMES parameter is valid.<br>2. If the value assigned to the BANDNAMES parameter is valid and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 644 BadOrMissingDATATYPEField | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 645 BadOrMissingDATATYPEValue | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 646 BadOrMissingNLINESField | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 647 BadOrMissingNLINESValue | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 648 BadOrMissingNSAMPLESField | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 649 BadOrMissingNSAMPLESValue | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 650 BadOrMissingPIXEL_SIZEField | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that there are OUTPUT_PIXEL_SIZE_X and OUTPUT_PIXEL_SIZE_Y parameters.<br>2. If there are OUTPUT_PIXEL_SIZE_X and OUTPUT_PIXEL_SIZE_Y parameters and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |

***Table 18.19-4. Troubleshooting HEG Problems (11 of 17)***

| Error Code/String | Response |
|---|---|
| 651 BadOrMissingPIXEL_SIZEValue | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the values assigned to the OUTPUT_PIXEL_SIZE_X and OUTPUT_PIXEL_SIZE_Y parameters are valid.<br>2. Ensure that the correct units are specified for the parameters (either meters or degree decimal). [If Geographic projection is selected, the pixel sizes should be in degree decimal (DD) units. For all other projections, the pixel size should be in meters.]<br>3. If the parameter values are valid and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 652 BadOrMissingMINVALUEField | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 653 BadOrMissingMINVALUEValue | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 654 BadOrMissingMAXVALUEField | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 655 BadOrMissingMAXVALUEValue | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 656 BadOrMissingBACKGROUND_FILL Field | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 657 BadOrMissingBACKGROUND_FILL Value | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 658 TotalBandsFoundInconsistantWithN BANDS | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 659 NoBandsSelectedForOutput | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 660 BadOrMissingUTMZoneField | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that there is a UTM_ZONE parameter.<br>2. If there is a UTM_ZONE parameter and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 661 BadOrMissingUTMZoneValue | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the value assigned to the UTM_ZONE parameter is valid.<br>2. If the value assigned to the UTM_ZONE parameter is valid and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |

***Table 18.19-4. Troubleshooting HEG Problems (12 of 17)***

| Error Code/String | Response |
|---|---|
| 662 BadOrMissingELLIPSOID_CODEField | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that there is a ELLIPSOID_CODE parameter.<br>2. If there is a ELLIPSOID_CODE parameter and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 663 BadOrMissingELLIPSOID_CODEValue | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the value assigned to the ELLIPSOID_CODE parameter is valid.<br>2. If the value assigned to the ELLIPSOID_CODE parameter is valid and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 664 MissingBoundingRectangularCoordinates | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 665 ErrPixelSizeLessThanMinimum | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the values assigned to the pixel size parameters (e.g., OUTPUT_PIXEL_SIZE_X and OUTPUT_PIXEL_SIZE_Y) are not less than the minimum value.<br>2. Ensure that the correct units are specified for the parameters (either meters or degree decimal). [If Geographic projection is selected, the pixel sizes should be in degree decimal (DD) units. For all other projections, the pixel size should be in meters.]<br>3. If the parameter values are not less than the minimum value, are expressed in the appropriate units, and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 666 ErrPixelSizeGreaterThanMaximum | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that the values assigned to the pixel size parameters (e.g., OUTPUT_PIXEL_SIZE_X and OUTPUT_PIXEL_SIZE_Y) are not greater than the maximum value.<br>2. Ensure that the correct units are specified for the parameters (either meters or degree decimal). [If Geographic projection is selected, the pixel sizes should be in degree decimal (DD) units. For all other projections, the pixel size should be in meters.]<br>3. If the parameter values are not greater than the maximum value, are expressed in the appropriate units, and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 667 ErrCommandLineUsage | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 668 ErrOpenLogFile | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |

*Table 18.19-4. Troubleshooting HEG Problems (13 of 17)*

| Error Code/String | Response |
|---|---|
| 669 ErrOpenGeoTemp | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 670 ProjectionProcessingErr | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 671 OpenDatumFileErr | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 672 OpenSpheroidFileErr | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 673 ProjectionMathErr | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 674 PointLiesInBreakErr | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 675 OutputFileNameNotSpecifiedErr | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS#*/HEGWorking) ensure that a value is specified for the OUTPUT_FILENAME parameter.<br>2. If a value is specified for the OUTPUT_FILENAME parameter and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 676 ProjectionTransformationFailed | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 677 FailedToConvergeAfterManyIterations | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 678 TooManyIterationsForInverseRobinson | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 679 TooManyIterationsInInverse | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 680 InputDataErr | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 681 IllegalDMSField | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 682 InconsistentUnitAndSystemCodesForInput | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 683 IllegalInputSystemCode | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 684 IllegalInputUnitCode | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 685 IllegalInputZoneCode | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |

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| Error Code/String | Response |
|---|---|
| 686 PointProjectsIntoInfinity | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 687 LatitudeFailedToConvergeAfterManyIterations | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 688 InconsistentUnitAndSystemCodesForOutput | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 689 IllegalOutputSystemCode | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 690 IllegalOutputUnitCode | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 691 IllegalOutputZoneCode | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 692 TransformationCantBeComputedAtThePoles | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 693 PointCantBeProjected | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 694 PointProjectsIntoACircleOfUnacceptableRadius | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 695 FiftyIterationsPerformedWithoutConversion | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 696 SpheroidCodeResetToDefault | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 697 EqualLatitudesForStdParallelsOnOppositeSidesOfEquator | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 698 IllegalZoneNumber | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 699 ErrOpenStatePlaneParameterFile | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 700 IllegalSourceOrTargetUnitCode | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 701 MissingProjectionParameters | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 702 InvalidCornerCoordinatesForInputImage | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |

***Table 18.19-4. Troubleshooting HEG Problems (15 of 17)***

| Error Code/String | Response |
|---|---|
| 703 OutputWindowFallsOutsideMappingGrid | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 704 NUM_RUNSFieldIncorrect | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 705 ErrorWithBEGIN_ENDFields | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 706 BadOrMissingOBJECT_NAMEField | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that a valid value is specified for the OBJECT_NAME parameter.<br>2. If a valid value is specified for the OBJECT_NAME parameter and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 707 BadOrMissingFIELD_NAMEField | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that a valid value is specified for the FIELD_NAME parameter.<br>2. If a valid value is specified for the FIELD_NAME parameter and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 708 BadOrMissingOUTPUT_TYPEField | 1. In the parameter file (.prm) that is located in the working directory (/datapool/MODE/user/FS#/HEGWorking) ensure that there is an OUTPUT_TYPE parameter.<br>2. If there is an OUTPUT_TYPE parameter and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 709 BadOrMissingOUTPUT_TYPEValue | 1. In the parameter file (.prm) that is located in the working directory (/datapool/MODE/user/FS#/HEGWorking) ensure that the value assigned to the OUTPUT_TYPE parameter is valid.<br>2. If the value assigned to the OUTPUT_TYPE parameter is valid and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 710 BadOrMissingBAND_NUMValue | 1. In the parameter file (.prm) that is located in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking) ensure that a valid value is specified for the BAND_NUMBER parameter.<br>2. If a valid value is specified for the BAND_NUMBER parameter and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 711 SubsetAreaNotInFile | 1. Verify that the geographic extent of the spatial subset area entered by the user intersects the granule.<br>2. If the geographic extent of the spatial subset area intersects the granule and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |

***Table 18.19-4. Troubleshooting HEG Problems (16 of 17)***

| Error Code/String | Response |
|---|---|
| 712 BadOrMissingSTPZoneField | 1. In the parameter file (.prm) that is located in the working directory (/datapool/MODE/user/FS#/HEGWorking) ensure that there is an STP_ZONE parameter.<br>2. If there is an STP_ZONE parameter and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 713 BadOrMissingSTPZoneValue | 1. In the parameter file (.prm) that is located in the working directory (/datapool/MODE/user/FS#/HEGWorking) ensure that the value assigned to the STP_ZONE parameter is valid.<br>2. If the value assigned to the STP_ZONE parameter is valid and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 714 UnableToOpenSTPZoneFile | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 715 GranuleOutsideUSCantFindDefault StatePlaneZone | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 716 ErrorGettingAlaskanSTPZone | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 720 ErrorOpenInputHDFFile | 1. Verify that the the input hdf (granule) file exists in the datapool.<br>2. Ensure that cmshared has read permission on the input hdf file.<br>3. In the HEG Server debug log file (/usr/ecs/*MODE*/CUSTOM/logs/ HegServer.debug.log) verify that the hegtool is called correctly. [The hegtool call should look like this: /usr/ecs/*MODE*/CUSTOM/utilities/EcHgHEGStart *MODE* hegtool -h <*location of the hdf file in the datapool*>.]<br>[For detailed instructions refer to the procedure for **Checking HEG Server Log Files** (subsequent section of this lesson).]<br>4. If the input hdf file is in the datapool, cmshared has read permission on the input hdf file, the hegtool was called correctly, and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 721 ErrorReadingInputHDFFile | 1. Verify that the the input hdf (granule) file is in hdfeos format.<br>2. Ensure that cmshared has read permission on the input hdf file.<br>3. In the HEG Server debug log file (/usr/ecs/*MODE*/CUSTOM/logs/ HegServer.debug.log) verify that the hegtool is called correctly. [The hegtool call should look like this: /usr/ecs/*MODE*/CUSTOM/utilities/EcHgHEGStart *MODE* hegtool -h <*location of the hdf file in the datapool*>.]<br>[For detailed instructions refer to the procedure for **Checking HEG Server Log Files** (subsequent section of this lesson).]<br>4. If the input hdf file is in hdfeos format, cmshared has read permission on the input hdf file, the hegtool was called correctly, and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |

***Table 18.19-4. Troubleshooting HEG Problems (17 of 17)***

| Error Code/String | Response |
|---|---|
| 722 UnableToOpenHeaderFile | 1. Verify that there is a HegHdr.hdr file in the working directory (/datapool/*MODE*/user/*FS*#/HEGWorking).<br>2. If there is a HegHdr.hdr file in the working directory and the error still occurs, call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 723 UnableToFindShortName | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |
| 724 UnableToOpenGEOFile | Call the help desk and submit a trouble ticket in accordance with site Problem Management policy. |

### 18.19.11 Checking HEG Server Log Files

HEG server log files show the activities involved in processing each HEG request. The following types of HEG server log files can be generated:

- HEG Server operations log (HegServer.ops.log).
- HEG Server debug log (HegServer.debug.log).
- HEG Server performance log (HegServer.perf.log), if available (typically turned off in normal operations).

The amount of information provided in logs varies with the type of log being viewed and the level of logging configured for the type of log. In general most of the entries in the operations log are duplicated in the debug log. The HEG Server logs can be set to record data at any of the following levels of detail (listed from most-detailed to no logging):

- XVERBOSE.
- VERBOSE.
- INFORMATION.
- NONE.

In normal operation the HEG Server logs are typically set (in the EcHgServerConfig.properties file in the /usr/ecs/*MODE*/CUSTOM/cfg directory) to record data at the following levels of detail:

- HEG Server operations log (HegServer.ops.log) - INFORMATION.
- HEG Server debug log (HegServer.debug.log) – INFORMATION.
- HEG Server performance log (HegServer.perf.log) – NONE.

The HEG Server can manage several concurrent activities. This is accomplished through the use of threads. Information concerning HEG Server processing of requests (identified by thread) is recorded in the HEG Server logs (assuming some level of log recording is specified in the corresponding configuration file).

The procedure for checking HEG server log files starts with the assumption that the operator has logged in to the system and the appropriate host.

### 18.19.11.1 Checking HEG Server Log Files

**1** If the level of logging should be adjusted to assist in troubleshooting, notify the Operations Controller/System Administrator to have the adjustment made.

- Detailed levels of logging may have negative effects on system performance.

**2** Access a terminal window logged in to the appropriate host.

- HEG Server (e.g., x4hel01) host has the following HEG server log files:
  - HegServer.ops.log.
  - HegServer.debug.log.
- For detailed instructions refer to the procedure for **Logging in to System Hosts** (preceding section of this lesson).

**3** Type **cd /usr/ecs/*MODE*/CUSTOM/logs** then press **Return/Enter**.

- Change directory to the directory containing the HEG server log files (e.g., HegServer.ops.log, HegServer.debug.log).

**4** Type **more *filename*** then press **Return/Enter**.

- ***filename*** refers to the HEG log file to be reviewed (e.g., HegServer.ops.log, HegServer.debug.log).
- The first page of the log file is displayed.
- Although this procedure has been written for the **more** command, other UNIX visualizing commands (e.g., **view**) can be used to review the log file.
- The following **more** commands (at the **--More--** prompt) are useful:
  - **Return/Enter** (go down one line).
  - ***n*Return/Enter** (go down ***n*** number of lines).
  - ***n***Space bar (go down ***n*** number of lines).
  - Space bar (go down one screenful).
  - **z** (go down one screenful).

- ***n*z** (go down ***n*** number of screensful; ***n*** becomes the default for subsequent **z** commands).
- ***n*b** (go back ***n*** number of screensful).
- ***n*CTRL-B** (go back ***n*** number of screensful).
- ***n*d** (go down ***n*** number of lines; ***n*** becomes the default for subsequent **d** commands).
- ***n*CTRL-D** (go down ***n*** number of lines; ***n*** becomes the default for subsequent **d** commands).
- ***n*f** (skip ***n*** screens full and then display a screenful).
- ***n*s** (skip ***n*** lines and then display a screenful).
- **h** (help - display a description of all the **more** commands).
- **CTRL-L** (refresh the screen).
- ***n*/*pattern*** (search forward for the ***n***th occurrence of the ***pattern*** and display a screenful starting two lines before the line that contains the specified pattern match.
- ***n*n** (search for the ***n***th occurrence of the last pattern entered.
- **v** (drop into the **vi** editor at the current line of the current file).
- **=** (display the current line number).
- **:f** (display the name of the current file and the current line number).
- **q** (exit from **more**).
- **Q** (exit from **more**).
- **!*command*** (invoke a shell to execute ***command***).

**5** At the **--More--** prompt type **/*requestID*** then press **Return/Enter**:

- ***requestID*** is the HEG Request ID from the **OM GUI** [refer to the procedure for **Viewing Pending HEG Granules** or the procedure for **Viewing Open HEG Intervention Information on the OM GUI** (previous sections of this lesson)].
  - The XML processing instructions for each HEG request are included in the HEG Server debug log if the log.debug.level is set to XVERBOSE.
- For example, type:

  **/0403300996**

  · 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**
  **12.14.2005 14:22:19.667 : Thread ID [21161] : XVERBOSE : Monitor thread created.**
  **12.14.2005 14:22:19.680 : Thread ID [21161] : VERBOSE : input xml validation succeeded for Request 10576**
  **12.14.2005 14:22:19.680 : Thread ID [21161] : INFORMATION : Incoming request from client: OMS with uid: 0403300996.85000004172274.3312040939 is assigned serverRequestId: 10576**
  **[…]**
  **--More--(16%)**

- If the specified text is not in the log file, the following type of response is displayed.

  **Pattern not found**

- The **Thread ID** (21161 in the preceding example) and **Server Request ID** (10576 in the preceding example) can be used to track entries concerning the specific request in the log file.

**NOTE:** Thread IDs are reused frequently. There may be multiple processes with the same thread ID in any particular log file. It is important to follow the correct instance of the thread (i.e., the one with the desired Server Request ID).

**NOTE:** It is likely that HEG would try again to process a failed request. Subsequent request processing may use the same thread ID or a different thread ID. However, it could be found through the Order Manager (OM GUI) Request ID.

**6** If checking the operations log file, at the **--More--** prompt type **/: 0 for Request: *ServerRequestID*** then press **Return/Enter**:

- ***ServerRequestID*** is the Server Request ID discovered in Step 5.
- For example, type:

  **/: 0 for Request: 10576**

  - The file is searched for the specified text.
    - The following type of response is displayed.

  **...skipping**
  **12.14.2005 14:22:34.138 : Thread ID [21178] : XVERBOSE : poller thread terminated for request: 10582**
  **12.14.2005 14:22:34.139 : Thread ID [21161] : VERBOSE : Move output successfully for Request 10576**
  **12.14.2005 14:22:34.139 : Thread ID [21161] : java.lang.String : INFORMATION : HEGConvProcessor.convert() returned status code: 0 for Request: 10576**
  **12.14.2005 14:22:34.139 : Thread ID [21179] : XVERBOSE : poller thread**

**terminated for request: 10576**
**[…]**
**--More--(18%)**

- If the specified text is not in the log file, the following type of response is displayed.

  **Pattern not found**

- If a status code of 0 (zero) or 600 for a particular Server Request ID is found in the log, HEG processing was successful. This statement should be in the both the operations log and debug log regardless of the level of detail specified in the configuration file (unless logging is turned off; i.e., log level is NONE for a particular type of log).
  - Of course, there could still be problems with the request; e.g., failure to move the ouput files to the output directory.
- If a status code of 0 (zero) or 600 for a particular Server Request ID is **not** found in the log, HEG processing was either unsuccessful or is incomplete.

**7** If checking the debug log file, at the **--More--** prompt type **/: 0 for Request *ServerRequestID*** then press **Return/Enter**:

- ***ServerRequestID*** is the Server Request ID discovered in Step 5.
- For example, type:

  **/: 0 for Request 10576**
  - The file is searched for the specified text.
    - The following type of response is displayed.

**...skipping**
**12.14.2005 14:22:33.771 : Thread ID [21161] : XVERBOSE : Request 10576 converter execution time: 10 seconds.**
**12.14.2005 14:22:33.771 : Thread ID [21167] : XVERBOSE : Request 10582 converter execution time: 10 seconds.**
**12.14.2005 14:22:33.772 : Thread ID [21161] : INFORMATION : Conversion process returned status: 0 for Request 10576**
**12.14.2005 14:22:33.772 : Thread ID [21167] : INFORMATION : Conversion process returned status: 0 for Request 10582**
**[…]**
**--More--(32%)**

- If the specified text is not in the log file, the following type of response is displayed.

  **Pattern not found**

- If a status code of 0 (zero) or 600 for a particular Server Request ID is found in the log, HEG processing was successful. This statement should be in the both the operations log and debug log regardless of the level of detail specified in the

configuration file (unless logging is turned off; i.e., log level is NONE for a particular type of log).

- Of course, there could still be problems with the request; e.g., failure to move the ouput files to the output directory.

- If a status code of 0 (zero) or 600 for a particular Server Request ID is **not** found in the log, HEG processing was either unsuccessful or is incomplete.

**8** Examine the contents of the log file(s) to determine whether there were errors in processing the HEG request.

- If a status code other than 0 (zero) or 600 for the particular Server Request ID is found in the log(s), go to Step 9.

- A successful HEG request should result in the following types of entries being made in the operations log:

**12.14.2005 14:22:19.667 : Thread ID [21161] : XVERBOSE : Monitor thread created.**
**12.14.2005 14:22:19.680 : Thread ID [21161] : VERBOSE : input xml validation succeeded for Request 10576**
**12.14.2005 14:22:19.680 : Thread ID [21161] : INFORMATION : Incoming request from client: OMS with uid: 0403300996.85000004172274.3312040939 is assigned serverRequestId: 10576**
**12.14.2005 14:22:19.685 : Thread ID [21161] : VERBOSE : working directory: /datapool/OPS/user/FS1/HEGWorking/10576 created successfully for Request 10576**
**12.14.2005 14:22:19.686 : Thread ID [21161] : VERBOSE : ConversionItem created successfully for Request 10576**
**12.14.2005 14:22:23.654 : Thread ID [21161] : XVERBOSE : Getting properties**
**12.14.2005 14:22:23.673 : Thread ID [21161] : VERBOSE : parameter file created successfully for Request 10576**
**12.14.2005 14:22:23.884 : Thread ID [21161] : INFORMATION : Sent pid: 5542 back to client for Request 10576**
**12.14.2005 14:22:23.884 : Thread ID [21161] : INFORMATION : Heg converter is running with pid: 5542 for Request 10576**
**12.14.2005 14:22:33.772 : Thread ID [21161] : INFORMATION : Conversion process returned status: 0 for Request 10576**
**12.14.2005 14:22:33.772 : Thread ID [21161] : INFORMATION : Run heg converter executable successfully for Request 10576**
**12.14.2005 14:22:33.824 : Thread ID [21161] : VERBOSE : summary file created successfully for Request 10576**
**12.14.2005 14:22:33.931 : Thread ID [21161] : XVERBOSE : Create temp directory:**
**/datapool/OPS/user/FS1/HEGTemp//datapool/OPS/user/FS1//.orderdata/OUTPUTSDDWmmfGD/HEGOUT.001hMEzIIJI//HEG/0403300996.85000004172274//**

**tempfiles successfully for Request 10576**
**12.14.2005 14:22:34.139 : Thread ID [21161] : VERBOSE : Move output successfully for Request 10576**
**12.14.2005 14:22:34.139 : Thread ID [21161] : java.lang.String : INFORMATION : HEGConvProcessor.convert() returned status code: 0 for Request: 10576**

- A successful HEG request should result in the following types of entries being made in the debug log:

**12.14.2005 14:22:19.666 : Thread ID [21161] : XVERBOSE : Connection from /198.118.220.179**
**12.14.2005 14:22:19.666 : Thread ID [21161] : XVERBOSE : client processing mode is: 1**
**12.14.2005 14:22:19.666 : Thread ID [21161] : XVERBOSE : Start processing request: 10576**
**12.14.2005 14:22:19.667 : Thread ID [21161] : XVERBOSE : client input xml:**

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<request xmlns="http://newsroom.gsfc.nasa.gov/sdptoolkit/toolkit.html">
   <requestInfo>
      <clientName>OMS</clientName>
    <uId>0403300996.85000004172274.3312040939</uId>
  <metaFlag>false</metaFlag>
      <summaryFlag>true</summaryFlag>
   </requestInfo>
   <inputFiles>
      <file>

<fileName>/datapool/OPS/user//FS1/MOGT/MOD02HKM.004/2002.01.01//labtest_2017250970</fileName>
      </file>
   </inputFiles>
   <outputData>

<outputPath>/datapool/OPS/user/FS1//.orderdata/OUTPUTSDDWmmfGD/HEGOUT.001hMEzIIJI//HEG/0403300996.85000004172274/</outputPath>
      <format>GEO</format>
      <projection>
         <projectionType>GEOGRAPHIC</projectionType>
      </projection>
      <spatialSubsetBoundingBox>
         <upperLeftCornerPoint>
            <latitude>10</latitude>
            <longitude>-50</longitude>
         </upperLeftCornerPoint>
         <lowerRightCornerPoint>
```

```
            <latitude>-10</latitude>
            <longitude>50</longitude>
          </lowerRightCornerPoint>
        </spatialSubsetBoundingBox>
        <bandContainer>
          <object>
            <objectName>MODIS_SWATH_Type_L1B</objectName>
            <field>
              <fieldName>EV_500_RefSB</fieldName>
              <dim3>
                <dim3Name>Band_500M</dim3Name>
                <dim3Number>1</dim3Number>
              </dim3>
            </field>
          </object>
        </bandContainer>
    </outputData>
</request>


12.14.2005 14:22:19.667 : Thread ID [21161] : XVERBOSE : Monitor thread
created.
12.14.2005 14:22:19.680 : Thread ID [21161] : VERBOSE : input xml validation
succeeded for Request 10576
12.14.2005 14:22:19.680 : Thread ID [21161] : INFORMATION : Incoming
request from client: OMS with uid: 0403300996.85000004172274.3312040939 is
assigned serverRequestId: 10576
12.14.2005 14:22:19.680 : Thread ID [21161] : XVERBOSE : InputXml content:
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<request xmlns="http://newsroom.gsfc.nasa.gov/sdptoolkit/toolkit.html">
    <requestInfo>
      <clientName>OMS</clientName>
     <uId>0403300996.85000004172274.3312040939</uId>
   <metaFlag>false</metaFlag>
      <summaryFlag>true</summaryFlag>
    </requestInfo>
    <inputFiles>
      <file>

<fileName>/datapool/OPS/user//FS1/MOGT/MOD02HKM.004/2002.01.01//labte
st_2017250970</fileName>
      </file>
    </inputFiles>
    <outputData>
```

<outputPath>/datapool/OPS/user/FS1//.orderdata/OUTPUTSDDWmmfGD/HEGOUT.001hMEzIIJI//HEG/0403300996.85000004172274/</outputPath>
<format>GEO</format>
<projection>
<projectionType>GEOGRAPHIC</projectionType>
</projection>
<spatialSubsetBoundingBox>
<upperLeftCornerPoint>
<latitude>10</latitude>
<longitude>-50</longitude>
</upperLeftCornerPoint>
<lowerRightCornerPoint>
<latitude>-10</latitude>
<longitude>50</longitude>
</lowerRightCornerPoint>
</spatialSubsetBoundingBox>
<bandContainer>
<object>
<objectName>MODIS_SWATH_Type_L1B</objectName>
<field>
<fieldName>EV_500_RefSB</fieldName>
<dim3>
<dim3Name>Band_500M</dim3Name>
<dim3Number>1</dim3Number>
</dim3>
</field>
</object>
</bandContainer>
</outputData>
</request>

12.14.2005 14:22:19.680 : Thread ID [21161] : XVERBOSE : currentClientRequestCount = 0, MaxClientRequestCount = 20
12.14.2005 14:22:19.680 : Thread ID [21161] : XVERBOSE : continue processing the request.
12.14.2005 14:22:19.685 : Thread ID [21161] : VERBOSE : working directory: /datapool/OPS/user/FS1/HEGWorking/10576 created successfully for Request 10576
12.14.2005 14:22:19.685 : Thread ID [21161] : XVERBOSE : metaFlag = false, summaryFlag = true for Request 10576
12.14.2005 14:22:19.685 : Thread ID [21161] : XVERBOSE : Request 10576 decompression command is: null
12.14.2005 14:22:19.686 : Thread ID [21161] : VERBOSE : ConversionItem created successfully for Request 10576

**12.14.2005 14:22:19.686 : Thread ID [21161] : XVERBOSE : Startup hegtool: /usr/ecs/OPS/CUSTOM/utilities/EcHgHEGStart OPS hegtool -h /datapool/OPS/user//FS1/MOGT/MOD02HKM.004/2002.01.01//labtest_2017250970**
**12.14.2005 14:22:19.686 : Thread ID [21161] : XVERBOSE : cwd is: /datapool/OPS/user/FS1/HEGWorking/10576**
**12.14.2005 14:22:23.654 : Thread ID [21161] : VERBOSE : hegtool ran OK**
**12.14.2005 14:22:23.657 : Thread ID [21161] : XVERBOSE : We have 1 swaths**
**12.14.2005 14:22:23.657 : Thread ID [21161] : XVERBOSE : Loading swath MODIS_SWATH_Type_L1B into output info list**
**12.14.2005 14:22:23.663 : Thread ID [21161] : XVERBOSE : ParameterFileMaker: createAnOutFileName(): usefulInFileName = labtest_2017250970**
**12.14.2005 14:22:23.663 : Thread ID [21161] : XVERBOSE : ParameterFileMaker: createAnOutFileName(): usefulInFileName = labtest_2017250970**
**12.14.2005 14:22:23.664 : Thread ID [21161] : XVERBOSE : ParameterFileMaker: createAnOutFileName(): usefulInFileName = labtest_2017250970**
**12.14.2005 14:22:23.669 : Thread ID [21161] : XVERBOSE : Preparing to write parameters to /datapool/OPS/user/FS1/HEGWorking/10576/labtest_2017250970_37282773432866145_swath.prm**
**12.14.2005 14:22:23.670 : Thread ID [21161] : XVERBOSE : Band #1: objectName = MODIS_SWATH_Type_L1B, fieldName = EV_500_RefSB, dim3Name = Band_500M, dim3Num = 1, dim4Name = null, dim4Num = -9, bandOutputFileName = null**
**12.14.2005 14:22:23.670 : Thread ID [21161] : XVERBOSE : within method loadARangeOfConversions().**
**12.14.2005 14:22:23.673 : Thread ID [21161] : VERBOSE : parameter file created successfully for Request 10576**
**12.14.2005 14:22:23.673 : Thread ID [21161] : VERBOSE : Request 10576 constructed conversion command: /usr/ecs/OPS/CUSTOM/utilities/EcHgHEGStart OPS swtif -p /datapool/OPS/user/FS1/HEGWorking/10576/labtest_2017250970_37282773432866145_swath.prm -d -noMetadata**
**12.14.2005 14:22:23.684 : Thread ID [21161] : XVERBOSE : About to start heg converter execution for Request 10576**
**12.14.2005 14:22:23.884 : Thread ID [21161] : INFORMATION : Sent pid: 5542 back to client for Request 10576**
**12.14.2005 14:22:23.884 : Thread ID [21161] : INFORMATION : Heg converter is running with pid: 5542 for Request 10576**
**12.14.2005 14:22:33.771 : Thread ID [21161] : XVERBOSE : heg converter execution finished for Request 10576**
**12.14.2005 14:22:33.771 : Thread ID [21161] : XVERBOSE : Request 10576**

**converter execution time: 10 seconds.**
**12.14.2005 14:22:33.772 : Thread ID [21161] : INFORMATION : Conversion process returned status: 0 for Request 10576**
**12.14.2005 14:22:33.772 : Thread ID [21161] : INFORMATION : Run heg converter executable successfully for Request 10576**
**12.14.2005 14:22:33.825 : Thread ID [21161] : VERBOSE : summary file created successfully for Request 10576**
**12.14.2005 14:22:33.931 : Thread ID [21161] : XVERBOSE : Create temp directory:**
**/datapool/OPS/user/FS1/HEGTemp//datapool/OPS/user/FS1//.orderdata/OUTPUTSDDWmmfGD/HEGOUT.001hMEzIIJI//HEG/0403300996.85000004172274//tempfiles successfully for Request 10576**
**12.14.2005 14:22:34.139 : Thread ID [21161] : VERBOSE : Move output successfully for Request 10576**
**12.14.2005 14:22:34.139 : Thread ID [21161] : java.lang.String : INFORMATION : HEGConvProcessor.convert() returned /datapool/OPS/user//FS1/MOGT/MOD02HKM.004/2002.01.01//labtest_2017250970|0|HegConversionSuccessful|/datapool/OPS/user/FS1//.orderdata/OUTPUTSDDWmmfGD/HEGOUT.001hMEzIIJI//HEG/0403300996.85000004172274//labtest_2017250970_0403300996_ConverterSynopsis.txt /datapool/OPS/user/FS1//.orderdata/OUTPUTSDDWmmfGD/HEGOUT.001hMEzIIJI//HEG/0403300996.85000004172274//labtest_2017250970_EV_500_RefSB__1_0403300996.tif for Request: 10576**
**12.14.2005 14:22:34.139 : Thread ID [21161] : XVERBOSE : About to send conversion result back to client.**
**12.14.2005 14:22:34.139 : Thread ID [21161] : INFORMATION : Finished sending conversion result back to client.**
**12.14.2005 14:22:34.139 : Thread ID [21161] : INFORMATION : Finish processing request: 10576**

**9** If a status code other than 0 (zero) or 600 for a particular Server Request ID is found in the log(s), take the appropriate action as indicated in Table 12, Troubleshooting HEG Problems.

**10** If HEG request processing of a particular request is suspected of being incomplete (rather than failed), at the shell prompt type **xterm -n 'HEG Server Log' -sl 5000 -sb &** then press **Return/Enter**.

- A new xterm window is opened.

**11** If HEG request processing of a particular request is suspected of being incomplete (rather than failed), at the shell prompt in the new xterm window type **tail -f *filename* | grep '*ServerRequestID*'** then press **Return/Enter**.

- ***filename*** refers to the HEG log file to be reviewed (e.g., HegServer.ops.log, HegServer.debug.log).

- ***ServerRequestID*** is the Server Request ID discovered in Step 5.
- For example:

  **tail -f HegServer.ops.log | grep '10576'**

- If new entries with the particular Server Request ID 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/converter.
  - Notify the Operations Controller/System Administrator of suspected server problems.
- If it is necessary to exit from a tailed log, type **^c** [Ctrl c] then press **Return/Enter**.

**12** If the operation has not finished yet, monitor the tailed log for a while.

- If a status code other than 0 (zero) or 600 for the particular Server Request ID is found in the log(s), go to Step 9.
- 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, type **^c** [Ctrl c] then press **Return/Enter**.

**13** If errors/problems with HEG request processing of a particular request were detected in the HEG Server log(s), check for a corresponding open HEG intervention (by HEG Request ID) on the **OM GUI**.

- Go to the procedure for **Viewing Open HEG Intervention Information on the OM GUI**. (previous section of this lesson).

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### 18.19.12 Checking Files in the HEG Tempfiles Directory

The HEG Server and the HEG converters create temporary files in the HEG Server working directory while processing each HEG request. If the HEG Server debug flag is on (HegServer.application.debugFlag = true in the HEG Server cfg file), the temporary files are saved in a temporary file directory when the request completes.

The tempfiles directory contains the following types of files:

- Converter logs.
  - resample.log.
  - swtif.log.
- gdtif.log

- Parameter file (.prm).
- EcHgHEGConversion.log.

The procedure for checking files in the HEG tempfiles directory starts with the assumption that the operator has logged in to the appropriate host.

### 18.19.12.1 Checking Files in the HEG Tempfiles Directory

**1** Access a terminal window logged in to the appropriate host (e.g., x4hel01).

- For detailed instructions refer to the procedure for **Logging in to System Hosts** (preceding section of this lesson).

**2** Type **cd /usr/ecs/*MODE*/CUSTOM/cfg** then press **Return/Enter**.

- Change directory to the directory containing the HEG configuration files (e.g., EcHgServerConfig.properties).

**3** Type **more *filename*** then press **Return/Enter**.

- ***filename*** refers to the HEG configuration file to be reviewed (e.g., EcHgServerConfig.properties).

- The first page of the configuration file is displayed.
- Although this procedure has been written for the **more** command, other UNIX visualizing commands (e.g., **view**) can be used to review the log file.
- The following **more** commands (at the **--More--** prompt) are useful:
  - **Return/Enter** (go down one line).
  - ***n*Return/Enter** (go down ***n*** number of lines).
  - ***n***Space bar (go down ***n*** number of lines).
  - Space bar (go down one screenful).
  - **z** (go down one screenful).
  - ***n*z** (go down ***n*** number of screensful; ***n*** becomes the default for subsequent **z** commands).
  - ***n*b** (go back ***n*** number of screensful).
  - ***n*CTRL-B** (go back ***n*** number of screensful).
  - ***n*d** (go down ***n*** number of lines; ***n*** becomes the default for subsequent **d** commands).

- ***n*CTRL-D** (go down ***n*** number of lines; ***n*** becomes the default for subsequent **d** commands).
- ***n*f** (skip ***n*** screens full and then display a screenful).
- ***n*s** (skip ***n*** lines and then display a screenful).
- **h** (help - display a description of all the **more** commands).
- **CTRL-L** (refresh the screen).
- ***n*/*pattern*** (search forward for the ***n***th occurrence of the ***pattern*** and display a screenful starting two lines before the line that contains the specified pattern match.
- ***n*n** (search for the ***n***th occurrence of the last pattern entered.
- **v** (drop into the **vi** editor at the current line of the current file).
- **=** (display the current line number).
- **:f** (display the name of the current file and the current line number).
- **q** (exit from **more**).
- **Q** (exit from **more**).
- **!*command*** (invoke a shell to execute ***command***).

**4** Record (e.g., write down) the values corresponding to the following parameters in the configuration file:

**HegServer.application.workDirRoot**

**HegServer.application.workDirTop**

**HegServer.application.tempDirRoot**

**HegServer.application.tempDirTop**

- For example:

**HegServer.application.workDirRoot = /datapool**

**HegServer.application.workDirTop = user/FS1/HEGWorking**

**HegServer.application.tempDirRoot = /datapool**

**HegServer.application.tempDirTop = user/FS1/HEGTemp**

**5** Type **cd /*path*** then press **Return/Enter**.

- Change directory to the HEG tempfiles directory for the HEG request.

- ***path*** refers to the path to the HEG tempfiles directory for the HEG request. The tempfiles directory is created at the following configurable location:

  ***tempDirRoot*/*MODE*/*tempDirTop*/*outputdirectory*/tempfiles**.

  – ***tempDirRoot*** and ***tempDirTop*** arespecified in the EcHgServerConfig.properties file in the /usr/ecs/*MODE*/CUSTOM/cfg directory.

  – ***outputdirectory*** is specified in the HEG request XML file.

    · The HEG request XML file (processing instructions) can be viewed using the **OM GUI** [e.g., refer to the procedure for **Viewing Pending HEG Granules** or the procedure for **Viewing Open HEG Intervention Information on the OM GUI** (previous sections of this lesson)].

    · If the HEG Server debug log level is set at XVERBOSE, the HEG request information (processing instructions) can be viewed in the log file.

  – In the following example:

    **/datapool/OPS/user/FS1/HEGTemp/datapool/OPS/user/FS1/.orderdata/OUTPUTSDDWmmfGD/HEGOUT.001hMEzIIJI/HEG/0403300996.85000004172274/tempfiles**

    · **/datapool** is the ***tempDirRoot***.

    · **OPS/user/FS1/HEGTemp** is the ***tempDirTop***.

    · **datapool/OPS/user/FS1/.orderdata/OUTPUTSDDWmmfGD/HEGOUT.001hMEzIIJI/HEG/0403300996.85000004172274** is the ***outputdirectory***.

**6** In the terminal window type **ls** then press **Return/Enter**.

- A listing of the directory is displayed, for example:

  **EcHgHEGConversion.log**
  **HegHdr.hdr**
  **labtest_2017250970_37282773432866145_swath.prm**
  **FileNameLog_0403300996.log**
  **hegtool.log**

  - OR -

  **EcHgHEGConversion.log**
  **HegHdr.hdr**
  **resample.log**
  **FileNameLog_0403398929.log**
  **hegtool.log**
  **filetable.temp_3698**
  **labtest_2017201550_2167927653420515_grid.prm**

**7** Review the contents of the HEG request's tempfile directory to determine whether the expected types of files are listed.

- The examples in the preceding step have the expected types of files.

**8** Type **more** ***filename*** then press **Return/Enter**.

- ***filename*** refers to a file (in the HEG tempfile directory) to be reviewed (e.g., FileNameLog_0403300996.log).

- The first page of the specified file is displayed.

- Although this procedure has been written for the **more** command, other UNIX visualizing commands (e.g., **view**) can be used to review the log file.

- The FileNameLog… contains the names of the output file and the input file; for example:

  **OUTPUT FILE: labtest_2017250970_EV_500_RefSB__1_0403300996.tif**
  **INPUT FILE: labtest_2017250970**

- The parameter file (e.g., labtest_2017250970_37282773432866145_swath.prm) contains the names of the output file and the input file (including the directory paths); for example:

  **INPUT_FILENAME =**
  **/datapool/OPS/user//FS1/MOGT/MOD02HKM.004/2002.01.01//labtest_2017250970**
  **[…]**
  **OUTPUT_FILENAME =**
  **/datapool/OPS/user/FS1/HEGWorking/10576/labtest_2017250970_EV_500_RefSB__1_0403300996.tif**

**9** Examine the contents of the file to determine whether there were errors in processing the HEG request.

**10** Repeat Steps 9 and 10 as necessary.

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