

15. Distribution Concepts

15.1 System Overview

Data distribution is accomplished at the Distributed Active Archive Centers (DAACs). The Order Manager Subsystem (OMS) manages all orders arriving via the EWOC [EOSDIS ClearingHouse (ECHO) Web Service Distribution Language (WSDL) Ordering Component (OC)]. All data order requests received into the OMS subsystem are validated by the server, then staged in the Data Pool (DPL) storage area. The OMS manages distribution of data in two ways:

- 1 - Electronically (FtpPush/SCP, FtpPull).
- 2 - Physical Media (DLT, DVD or CD).

Ftp (file transfer protocol) Pull requests links are created from the staged files to the directory in the Data Pool storage while waiting for Ftp/Scp Push requests, then the OMS Ftp Push driver directly distributes the staged data.

Physical media requests are created on the physical media by the Production Module Device (PMD). Upon successful shipment, OMS sends a Distribution Notice (DN) to the end user for both request types.

An order is considered complete when it becomes “Shipped”:

- FtpPull orders - The request status is updated to “Shipped” after the order is staged (order expires as configured by DAAC’s FtpPull retention time) and file links are made in the Data Pool storage. The DN includes an ftp link to the files.
- FtpPush and SCP (Secure Copy Protocol) orders – The request status is “Shipped” after Order Manager Server finishes pushing all the order’s associated data to its destination.
- Physical media orders - The order is shipped when the Operator updates the request status to “Shipped” through the OMS GUI (Graphic User Interface).

Special orders, such as HEG (HDF-EOS to GeoTIFF) Conversion Tool 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 original HEG order processing instructions. It then submits order to the HEG Server through the HEG API (Application Program Interface). The HEG requests are processed 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 with the EPD Server order. The Order Manager Server will later distribute the output granules.

The context diagram (Figure 15.1-1) shows a generalized (high-level) view of the system. The Order Manager Subsystem (OMS) architecture diagram (Figure 15.1-2) 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.

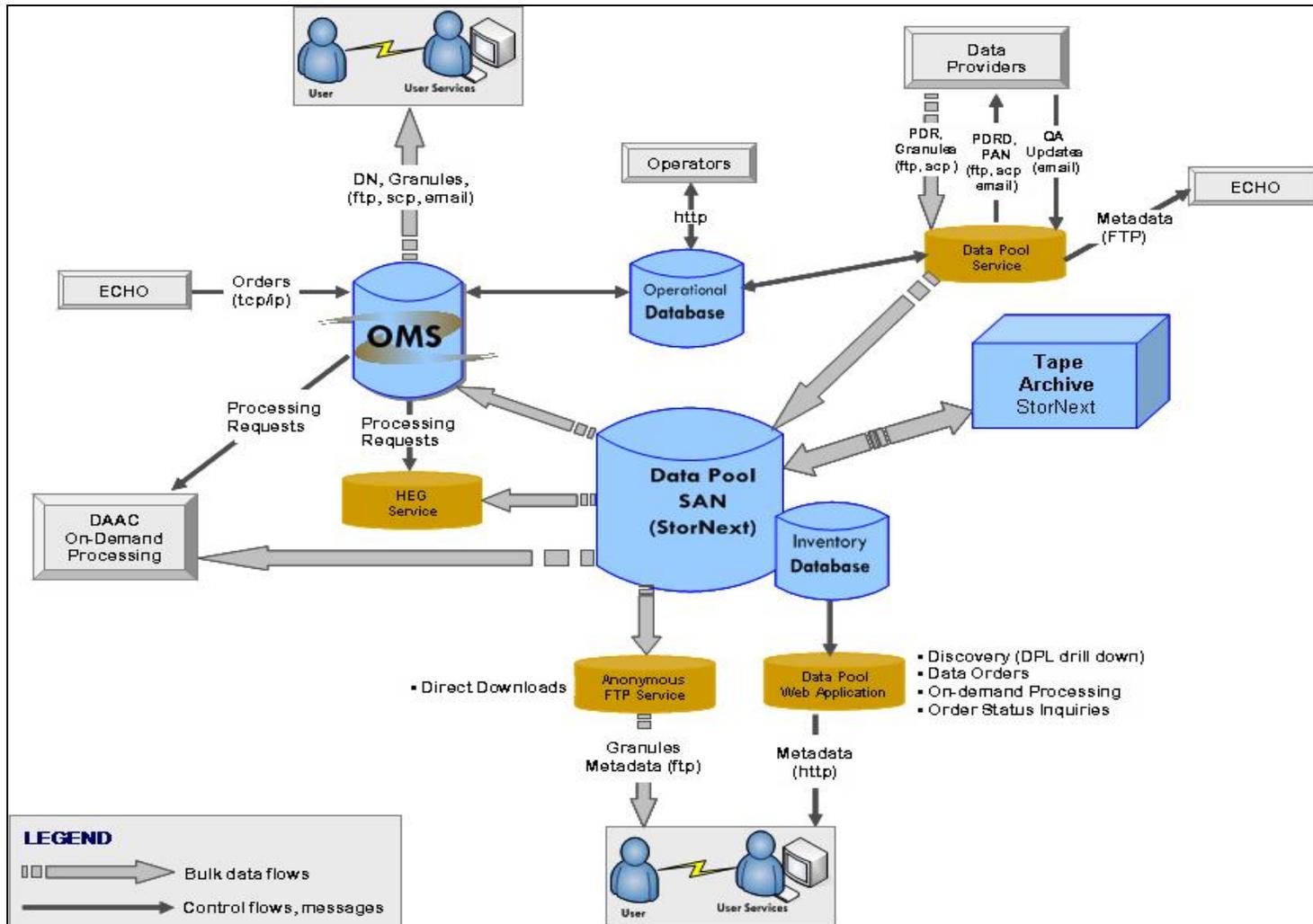


Figure 15.1-1. System Context Diagram

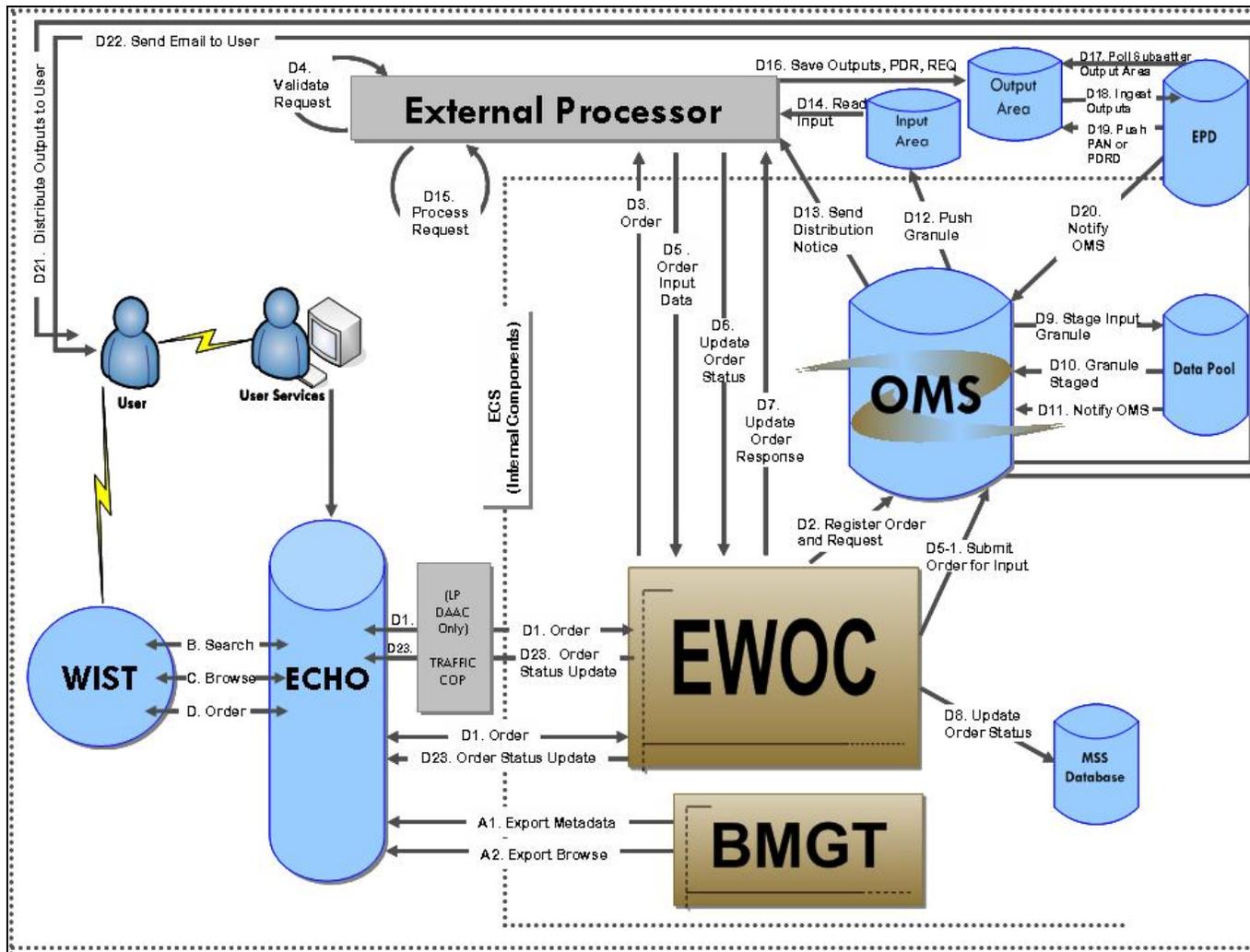


Figure 15.1-2. Order Manager Subsystem (OMS) Context Diagram

15.2 Order Manager Subsystem (OMS)

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

- Manages all the orders arriving from Warehouse Inventory Search Tool (WIST), ECHO and the External Processor via the EWOC (including hard-media orders and HDF-EOS to GeoTIFF (HEG) Conversion Tool orders).
- 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.
- OMS stages each order to Data Pool (DPL) 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 FtpPush/SCP, 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.
- The OMS Bulk Browse Utility 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 Bulk Browse 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 EWOC are those that have been submitted by WIST, ECHO, or ASTER Ground Data System (GDS) users.
 - EWOC registers external processing orders with OMS.
 - EPD registers external processing outputs with OMS.
 - OMS distributes external processing outputs like any other data.
 - 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 suspended that requires 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 products electronically via:

- FtpPush
 - FtpPull
 - SCP Requests
 - Transfers digital products to any of the following physical media types:
 - CD-ROM (compact disk)
 - DVD-ROM (digital video disk)
 - DLT (digital linear tape)
 - 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 (ECSBBR):
- Extracts the browse cross-reference (after Data Pool 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.

15.3 OM GUI Operator Security

The OM GUI allows DAAC Operators to completely manage order distribution requests from a web browser. Operator GUI security offers two levels of permissions, Full and Limited Capability, for OM GUI operations. Table 15.3-1 Operator GUI Security Capabilities defines the allowable security level capabilities of the Operators within the OM GUI.

Table 15.3-1. OM GUI Operator Security Capabilities

ROLE	CAPABILITY
Full-Capability Operator (FC)	<ul style="list-style-type: none"> • Ability to configure parameters and perform all other actions (i.e., resubmit, suspend, resume, cancel, stop distribution requests) that can be accomplished with the OM GUI. • Modify request parameter values associated with Operator interventions and PMD. • Configure, view and monitor OM server, database and HEG parameters and orders. • Configure PMD devices, printers, production modules and define each media type settings. • Performs PMD requests actions e.g., activate, fail, annotate, confirm/fail mount media; confirm/fail media collection; activate quality check (QC); mark shipped and confirm media dismounted; confirm/mark package assembled/not assembled; print output. • Suspend/Resume and monitor processing queue states, staging states, current status by media type or FtpPush/SCP destination. • Resume suspended, define and configure ftppush/scp destinations, as well as the “policies” for those destinations.
Limited-Capability Operator (LC)	<ul style="list-style-type: none"> • Can view most information; however some buttons and links have been disabled so it is impossible to perform certain actions or access certain pages. Capabilities are limited to basic functionality i.e., view the Distribution Request page, but can take no action. • View and monitor OM’s server, database and HEG parameters. • Monitor current status, processing queue and staging states by media type or FtpPush/SCP destination.
FC or LC Operators	<ul style="list-style-type: none"> • View and monitor for operator interventions and actions, including physical media distribution (PMD) interventions, device, printer, and production module configurations and each media type settings. • View lists of all detailed distribution requests i.e., ftppush/scp distribution, staging distribution, or historical distribution requests and status (suspended, shipped, staged, not in terminal state, etc). • Filter distribution requests by combinations of available named data fields. • Monitor for interventions associated with HDF-EOS to GeoTIFF (HEG) Conversion Tool processing, pending HEG granules and order status. • Monitor operator alerts (i.e., ftppush operations, dpl file system errors, archive server or tape errors), monitor processing queue and staging states (including by media type or ftppush/scp destination). • Monitor current status, processing queue and staging states by media type or FtpPush/SCP destination. • Get general and context-based help for all OM GUI functions.
Administrator	<ul style="list-style-type: none"> • Administers and maintains FC or LC Operator’s read (r) and/or read/write (rw) permissions for all fields on every page within the OM GUI.

15.4 Order Manager GUI

There are several key features that describe the general functionality of the Order Manager (OM) Graphic User Interface (GUI):

- The GUI is accessed through a web browser.

- 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.
- The OM GUI allows operators to configure ODL metadata users, external subsetter and SCP policy.

OM GUI is certified for use with any Mozilla 5.0 based browser, e.g., Netscape 7+, Firefox 0.9+, generic “Mozilla” browsers for Linux or UNIX. 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. The ability to create popup windows must be enabled.

Table 15.4-1. Launch Order Manager GUI - Activity Checklist

Order	Role	Task	Section	Complete?
1	Distribution Technician	Launching the Order Manager GUI	(P) 15.4.1	15.4.1

15.4.1 Launching the Order Manager GUI

- 1 To activate the OM GUI, access a terminal and logon to a host that has access to a recommended web browser:
 - ▶ Type <URL> and press <Enter>
 - Example URL: http://x4iil01.<DAAC_extension>:<port>

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

- 2 Type the appropriate security information in the Security Login Prompt dialog box:
 - ▶ Type <User Name>, then **tab**
 - ▶ Type <Password>
 - The **security login Prompt** (Figure 15.4-1) dialog box displays.

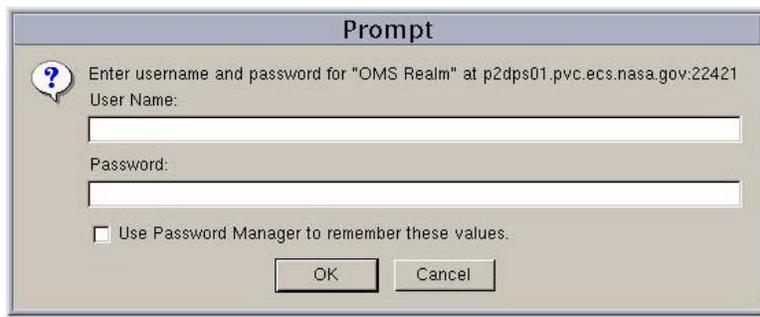


Figure 15.4-1. Security Login Prompt

- 3 Select the appropriate button to continue/discontinue the login process:
 - ▶ Click **OK** - to complete the login and to dismiss the dialog box.
 - The **Order Manager GUI Home Page** (Figure 15.4-2) displays.
 - ▶ Click **Cancel** - to dismiss the dialog box without logging in.

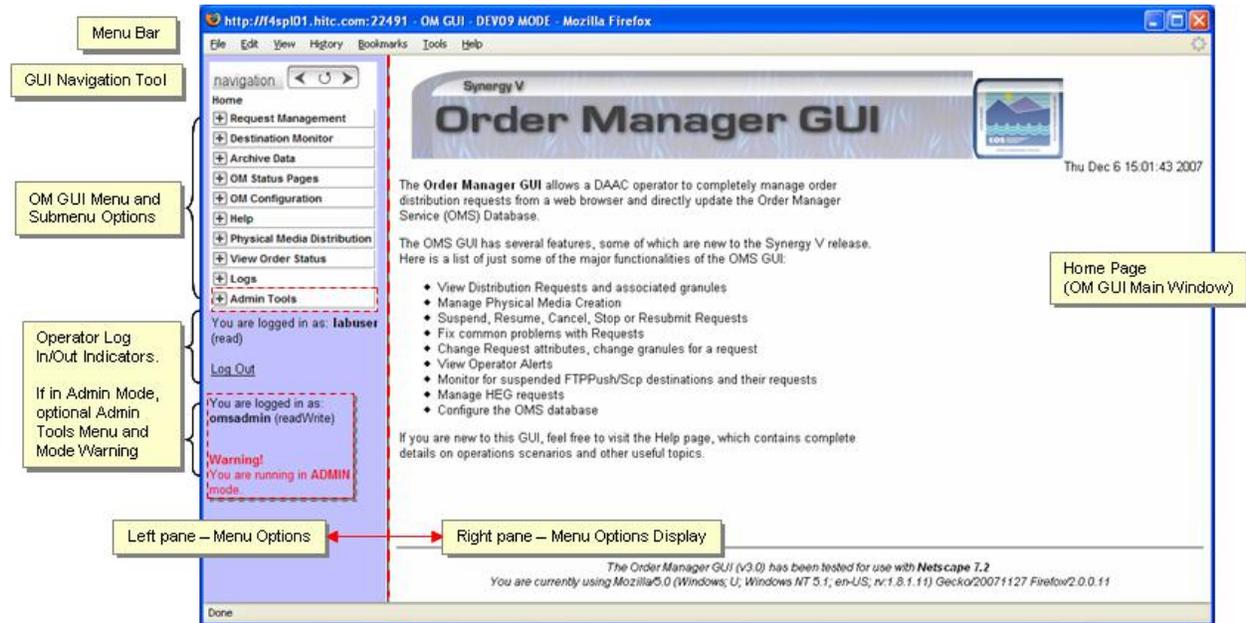


Figure 15.4-2. Order Manager Home Page

15.5 Order Manager GUI Operations

Activities (Table 15.5-1 Operator GUI Security Capabilities) for Order Management are performed using the OM GUI.

Table 15.5-1. Operator GUI Security Capabilities

ORDER MANAGER GUI MENUS		
Navigation Menu Options	Submenu Options	
Request Management – provide options to manage all validated requests; provide interventions capabilities; and process subsetting. It also allows Operators to fix common problems with requests within the OMS GUI.	<ul style="list-style-type: none"> • Open Interventions • HEG Interventions • Completed Actions & Interventions • Distribution Requests [filter] 	<ul style="list-style-type: none"> • Processing Service Requests [filter] • FtpPush/SCP Requests [filter] • Staging Requests [filter] • Operator Alerts
Destination Monitor – provides monitoring capability to suspend distributions and resume them.	<ul style="list-style-type: none"> • Suspended Destinations 	
Archive Data – is the repository for all historical distributed and processed requests.	<ul style="list-style-type: none"> • Historical Distribution Requests [filter] 	<ul style="list-style-type: none"> • Historical Processing Requests [filter]
OM Status Pages – displays summary information of current states, i.e., suspended or active, for each media server or email. It also displays each archive server’s staging status.	<ul style="list-style-type: none"> • OM Queue Status • HEG Order Status Staging Status: <ul style="list-style-type: none"> • Media Type • FTP Push Destination 	<ul style="list-style-type: none"> • Pending HEG Granules • SCP Destination • DPL File System Status
OM Configuration – allows Operator to configure aging rules for each priority level – Aging Parameters; to set database and server parameters, which affect the entire system – Server/Database Configuration; and to set and adjust media types attributes – Media Configuration. Provides checksum validation on files distributed by OMS and allow Users to perform validity tests against granules they receive.	<ul style="list-style-type: none"> • Aging Parameters Server/Database <ul style="list-style-type: none"> • [All] • [queue], [cleanup], [email] • [media], [staging], [partition], [misc.], [HEG] 	<ul style="list-style-type: none"> • Media • Media Creation • ODL Metadata Users • Checksum Users • External Processing • FtpPush/SCP Policy
Help – provides guidelines to using the OMS GUI.	<ul style="list-style-type: none"> • About HelpOnDemand... • Help 	
Physical Media Distribution – Controls and some configurations for creating and distributing Physical Media.	<ul style="list-style-type: none"> • Media Creation Console • Device Configuration • Open Interventions • Printer Configuration 	<ul style="list-style-type: none"> • PM Configuration • Reports • ESDT Configuration
View Order Status – displays summary states information of current requests.	<ul style="list-style-type: none"> • OM GUI Order Status 	
Logs – A log viewer is a convenient diagnostic tool that displays all current activity in the OM GUI. Records of every running page and stored procedure are recorded in the log file located under «cgi-bin/logs» directory.	<ul style="list-style-type: none"> • OM GUI Log Viewer 	
Admin Tools – Controls the Operator profiles and configurations for all fields of every page within the OM GUI.	<ul style="list-style-type: none"> • Server/Database Parameters • Media Parameters • Aging Parameters 	<ul style="list-style-type: none"> • FtpPush Policy • Action Pages • Profile Management

15.6 OM GUI – Request Management

The Operator is provided with the options to manage, monitor and control open/completed interventions. Allowing the means to provide intervention capabilities help to ensure eligible requests from varying order sources are distributed or handled appropriately. The action to process subsetting is also available. Non-fatal errors and warnings related to data space/storage, ftppush/scp destination, and server warnings are functions handled within the OM GUI.

The Request Management submenu options will be examined using the following checklist:

Table 15.6-1. Request Management - Activity Checklist

Order	Role	Task	Section	Complete ?
1	Distribution Technician	Setting Refresh Option	(P)15.6.1.1.1	
2	Distribution Technician	Viewing and Responding to Open Interventions: <ul style="list-style-type: none"> • Assignment of Worker • Manual Fail of Granule • Specifying a Replacement Granule • Changing Granule Attributes • Changing Granule Media Type, Priority and Formats • Changing Request Disposition • Close Interventions 	(P) 15.6.1.2	
3	Distribution Technician	Viewing and Responding to Open HEG Interventions: <ul style="list-style-type: none"> • Assign/Change Worker • Fail Action on Request • Fail Request 	(P) 15.6.2.1	
4	Distribution Technician	Filtering Data on Completed Actions and Interventions Page	(P) 15.6.3.1	
5	Distribution Technician	Filtering Data on Distribution Requests Page	(P) 15.6.4.1	
6	Distribution Technician	Filtering FtpPush/SCP Requests or Staging Distribution Requests Page	(P) 15.6.5.1	
7	Distribution Technician	Filtering Processing Service Requests Page	(P) 15.6.6.1	
8	Distribution Technician	Handling Operator Alerts	(P) 15.6.7.1	
9	Distribution Technician	Logging Out of OM GUI	(P) 15.6.8.1	

15.6.1 Request Management Submenu Page – Open Interventions

The **Open Interventions Page** (Figure 15.6-3) provides the full-capability Operator with a means of performing the following kinds of interventions (limited-capability operator can view, but cannot work on (respond to) open interventions.):

- Select a different granule to replace an unavailable granule.
- Fail selected granule(s).
- Disable limit checking.
- Change the distribution media for a request.
- Resubmit, Fail, or Partition (divide) a request.

The **Open Interventions** page has three working parts:

- 1 - **Current Filters** – describes the set of pre-defined criteria (Figure 15.6-1, Frame 1) on which the list of distribution requests are to display.
- 2 - **Options** – has several features (Figure 15.6-1, Frame 2) to allow operator to:
 - **Change Filter** – define or redefine the criteria for displaying the list of distribution request on a page.
 - **Bulk Fail** – provides capability to fail “All” or “None” (checkbox) of the eligible selected intervention(s) requests on a page.
 - **Bulk Submit** – provides capability to submit “All” or “None” (checkbox) of the eligible selected intervention(s) requests on a page.
- 3 - **Listing** – captures the requested distribution output (Figure 15.6-1, Frame 3) of what is being filter.
 - The **Sel Fail Sub** column provides checkboxes to mark a single request to be submitted or failed.
 - It displays several underscored **column headings** that if clicked, will display additional information regarding the request.

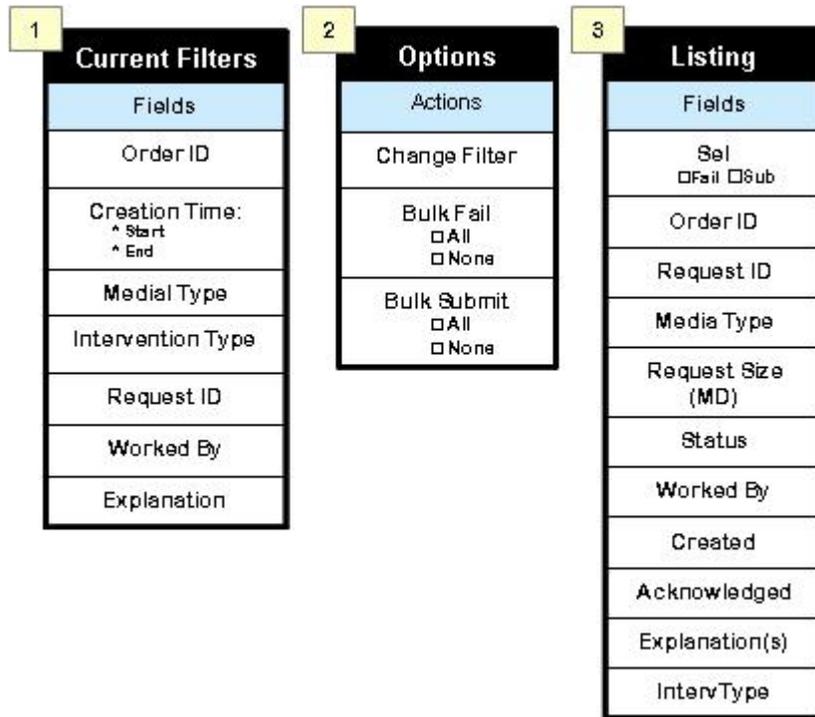


Figure 15.6-1. Open Interventions Page – Fields and Options

The procedure for viewing request management submenu pages information on the **OM GUI** starts with the following assumptions:

- The OM GUI has been launched.
- The browser menu option, **Edit, Find in this Page (Ctrl+F)** features a keyword search of the data within the current screen (page) display. When active, the Find tool (Figure 15.6-2 OM GUI Tools, Frame A) is accessible at the lower panel of page.



Figure 15.6-2. Order Manager GUI Tools: Find (A), Navigation (B), and Refresh (C)

15.6.1.1 Refresh Options on OM GUI Pages

The OM GUI pages data can be manually refreshed (updated) using the “refresh (↻)” icon on the OM GUI Navigation tool. Several OM GUI pages refreshes automatically, if “AutoRefresh” is set to the “ON” position, as often as specified by the “Refresh screen every <number> minutes” tool.

NOTE: This tool is found at the lower-left bottom of most OM GUI pages.

15.6.1.1.1 Setting Refresh Option

- 1 Click **Request Management** menu option to expand its submenu.
 - 2 Click **Open Interventions** submenu option to display its page (Figure 15.6-3). Locate the **AutoRefresh Control Panel** at bottom of **Open Interventions** page.
 - 3 If applicable, click on appropriate option button of the **AutoRefresh Control Panel** to toggle control “on” or “off”.
 - **on** – useful when working with current orders/requests with frequent changes in status and most current updates are desirable.
 - **off** – useful to suspend the refresh option when processing large volume of orders/requests and it is desirable to preserve the current screen’s display.
 - 4 Change the refresh rate (assuming **AutoRefresh** is **on**):
 - ▶ Click **Refresh screen every <number> minutes** option on list arrow to display minute option.
 - ▶ Click on the desired **refresh minutes** (range 1 – 45) from list.
-

15.6.1.2 Viewing and Responding to Open Interventions Page

- 1 Click **Request Management** menu option to expand its submenu.
- 2 Click **Open Interventions** submenu option to display its page (Figure 15.6-3).
- 3 Observe information displayed under the **Listing** section of the page.
- 4 To set the number of rows to display on the page, modify the **Show <number>** rows at a time option:
 - ▶ Select **20** to specify the number of rows to display.

Open Interventions

Current Filters
 Order ID: None Request ID: None Worked By: None
 Creation Time: Start: Jan 9 2007 10:42AM End: Jan 10 2008 10:42AM
 Media Type: Explanation: ALL
 Intervention Type: ALL Explanation: ALL

Options

 All None All None

Click on a request ID to view more details.

Listing
 Go directly to row of 540 rows Show rows at a time.
[first](#) | [previous](#) | Showing 1 - 50 of 540 | [next](#) | [last](#)

Sel	Fail	Sub	Order ID	Request ID	Media Type	Request Size (MB)	Status	Worked By	Created	Acknowledged	Explanation(s)	Interv Type
<input type="checkbox"/>	<input type="checkbox"/>		2000013584	2000013940	FtpPush	2	PENDING		Jan 9 2008 3:16PM		Failed transferring Request Canceled Transfer failed	Operator Intervention
<input type="checkbox"/>	<input type="checkbox"/>		2000013582	2000013938	FtpPush	2	PENDING		Jan 9 2008 12:14PM		Ftp Login Errors Request Canceled Transfer failed	Operator Intervention
<input type="checkbox"/>	<input type="checkbox"/>		2000013577	2000013933	FtpPush	< .5	IN-WORK	omsadmin	Jan 9 2008 11:22AM	Jan 9 2008 11:38AM	FtpPush Directory does not Exist or No Write Permission Transfer failed	Operator Intervention
<input type="checkbox"/>	<input type="checkbox"/>		2000013566	2000013922	FtpPush	154	PENDING		Dec 18 2007 12:48PM		Request Resubmitted	Operator Intervention
<input type="checkbox"/>	<input type="checkbox"/>		2000013464	2000013820	DLT	11	PENDING		Dec 18 2007 12:42PM		Media Creation Stopped	Media Creation Error
<input type="checkbox"/>	<input type="checkbox"/>		2000013561	2000013917	FtpPush	< .5	PENDING		Nov 27 2007 1:38PM		Ftp Login Errors Transfer failed	Operator Intervention
<input type="checkbox"/>	<input type="checkbox"/>		2000013560	2000013916	FtpPush	< .5	IN-WORK	omsadmin	Oct 18 2007 4:16PM	Oct 25 2007 12:05PM	Failed by Operator Transfer failed	Operator Intervention
<input type="checkbox"/>	<input type="checkbox"/>		2000013559	2000013915	FtpPush	< .5	PENDING		Oct 18 2007 4:11PM		Failed transferring Transfer failed	Operator Intervention
<input type="checkbox"/>	<input type="checkbox"/>		2000009817	2000010182	DVD	154	PENDING		Oct 16 2007 9:24AM		Media Creation Error	Media Creation Error

Figure 15.6-3. Open Interventions Page

- 5 Change the page display order by clicking on an underscored column heading (label):
 - ▶ Click **Created** to organize page by Creation Time, in ascending order.
 - ▶ Click a specific **Order ID** <number> to display more detailed data concerning that particular order number.
 - The **ECS Order** <number> details page (Figure 15.6-4) displays.
 - If a bundled order (where **Order Type** is **Bundled Order or BO**), the ECS Order Page includes a link to the Spatial Subscription Server GUI.

ECS ORDER 0300083268			
Request ID:	0300081491		
Order Type:	Regular	Start Date:	Not available
Order Source:	OmSrCliDriver	User ID:	ECSGuest
Ext. RequestId	Not available	Status:	Pending
Receive Date:	Jan 16 2007 2:07PM	Ship Date:	Not available
Last Update:	Jan 19 2007 3:58PM	Order Home DAAC:	RBD
Description:	Not available		

Figure 15.6-4. ECS Order <ID> Details Page

- ▶ Click the navigation tool **Previous Page** (◀) button, to return to the **Open Interventions** page.
- ▶ Click **Request ID** <number> to view open **Interventions For Request** <ID> details page (Figure 15.6-5), which displays additional intervention related data for the request.

Intervention For Request 0300082129

Order ID: 0300083871 Request ID: 0300082129 Input Size: 119 estimated MB Media Type: scp Priority: VHIGH Explanation(s): Transfer failed Worked by: - no worker assigned - [assign]	User ID: labuser(labuser@eos.hitc.com) Created: Apr 17 2007 11:04AM Acknowledged: Request Status: Operator Intervention Metadata Format: XML
---	--

Granule List

Go directly to row of 1 row Show rows at a time.
[first](#) | [previous](#) | Showing 1 - 1 of 1 | [next](#) | [last](#)

GranuleId	DPL ID	ESDT	Type	In Size (MB)	Out Size (MB)	Status	Explanation	Action
124258		157831	AST_L1B.003	SC	118.753	FAILED	scp Copy Server is down <i>Manual fail required</i>	Fail <input type="checkbox"/>

Select all

[first](#) | [previous](#) | Showing 1 - 1 of 1 | [next](#) | [last](#)

<div style="border: 1px solid red; text-align: center; background-color: #e6e6fa; margin-bottom: 5px;">Request Attributes</div> Change Priority to: <input type="text" value="--"/> <input type="checkbox"/> Disable limit checking <input type="checkbox"/> Change XML to ODL <input type="checkbox"/> Update SCP Parameters	<div style="border: 1px solid red; text-align: center; background-color: #e6e6fa; margin-bottom: 5px;">Request Level Disposition</div> <input checked="" type="radio"/> Keep on hold <input type="radio"/> Submit <input type="radio"/> Fail Request <input type="radio"/> Partition [Interval: <input type="text"/> day(s) and <input type="text"/> hours]
---	--

Operator Notes
 0 of 255 max characters

Figure 15.6-5. Open Intervention For Request <ID> Page

- 6 The **Open Intervention For Request <ID>** page (Figure 15.6-5) has four working parts:
- 1 - **Intervention For Request <number>** – provide details of the Request ID, its size, type, status, format, etc.
 - 2 - **Granule List** – details technical data of the requested granule, including its type of download (secure copy or ftp).
 - 3 - **Request Attributes** – available options to modify the characteristic of the granule being requested.
 - 4 - **Request Level Disposition** – available options to determine disposition of request.
- 7 To view the details of another Open Interventions page:
- ▶ Select the **Request Management submenu** option, **Open Interventions**.
 - The **Open Interventions detail page** dismisses.
 - The **new Open Interventions page** displays.

Request ID: Assignment of Worker

- 8 Select the underscored **Request ID <number>** on the **Open Intervention** page.
- The **Interventions For Request <ID>** page displays.
- 9 Observe the **Worked by** column information displayed in the **Open Intervention For Request <ID>** page (Figure 15.6-5):
- If User is currently working on the intervention, that userid appears in the **Worked by** field on the **Open Intervention For Request <ID>** page (Figure 15.6-5).
 - In general, working on an intervention is the responsibility of the assigned worker, unless the change is coordinated with the assignee or the assignee is 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 an intervention.
- 10 To assign or change worker to the **Worked by** field (Figure 15.6-6, Worker Assignment) on the Intervention For Request <ID> page perform one of the following:

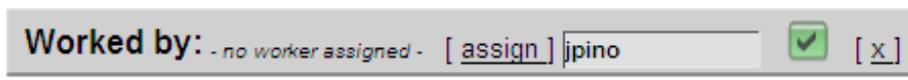


Figure 15.6-6. Worker Assignment

- ▶ If no worker is assigned, click the **assign** link (input box displays).
- ▶ To modify/change current worker, click the **change** link (input box displays).
- ▶ Enter worker's **<employeeID>** in the input box.
- ▶ Click the **green-checked button** to confirm entry (or to cancel input).

Granule List: Manual Fail of Granule

- 11 Observe information in the **Explanation** column of the **Granules List**. Locate a row that indicated that a **Manual fail required** by Operated is necessary. Several reasons for a fail request action may include:
- **Invalid UR/Granule Not Found** – Transfer Failed.
 - **scp Copy Server is down** – Granule failed Staging.
 - **Max Retry Reached** – Granule failed Staging.
 - **FtpPush Directory does not Exist or No Write Permission** – FtpPush Transfer failed.
 - **Archive Host Cannot be Reached** – Transfer failed.
- 12 If a granule **Explanation** column indicates, “Manual fail required”:
- ▶ Click the **Fail** checkbox (in **Action** column of the failed granule row) from the list.
 - ▶ Click the **Submit Actions** button.
 - A dialog box displays to confirm the change to the granule.

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

- ▶ Click **Ok** to confirm action.

Granule List: Specifying a Replacement Granule

- 13 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**):

- ▶ Type replacement granule **Database ID (DBID)** in “**DBID**” text box

NOTE: Locate the replacement granule DBID.

- ▶ Click the **Apply** button (associated with the DBID)
- A dialog box displays to confirm change to granule.
- ▶ Click **OK** to confirm change.

Request Attributes: Changing Granule Attributes

- 14 Changing attributes (Figure 15.6-7 Request Attributes) of a granule will alter its characterization or features. Several changes to a granule attributes includes:
- **Change Priority to** – Processing order of Low, High, VHigh (VeryHigh), XPress (Express or Expedite).
 - **Change Media To** – This option allow for selection one of six (6) medium types (Figure 15.6-7B Request Attributes).
 - **Disable limit checking** – Disables/Overrides the standard media capability limits for a particular media type, specifically the non-physical medial types (i.e., ftpPush, ftpPull, SCP). This option can bypass the request size checks if the request is too small or too large.

- **Change XML to ODL** – data type conversion; the Operator will receive metadata in XML format which is the default metadata format. If changed to ODL TO XML option, then conversion to ODL format is received.
- **Update <media type> Parameters** – option allows for editing of existing selected media type when the intervention is closed. This option varies according to type of media e.g., if media type is SCP or FtpPush, this option is available; otherwise no action to update media parameters can be performed or is displayed. Example displays variation in Frames A and B of Figure 15.6-7 Request Attributes.

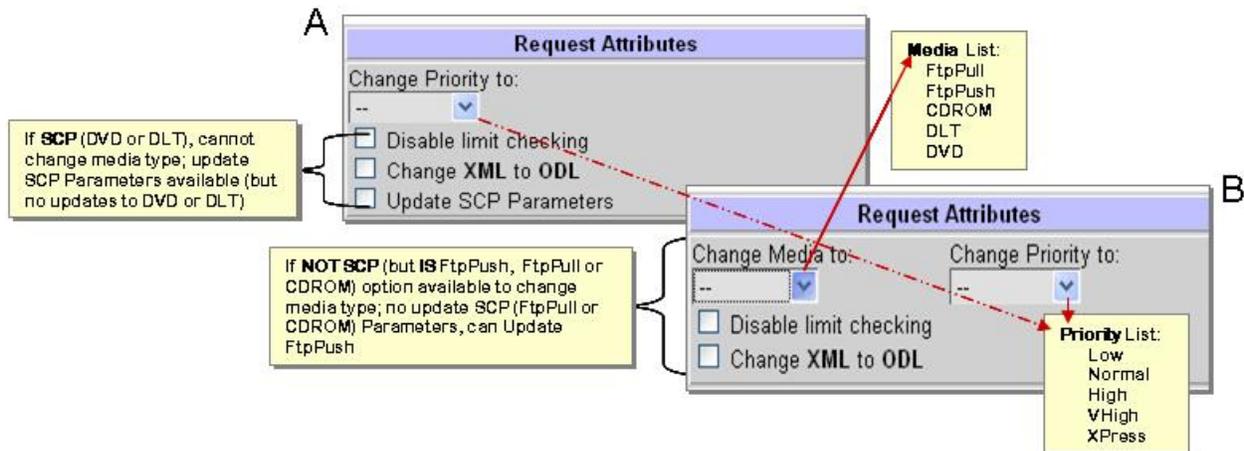


Figure 15.6-7. Request Attributes

Request Attributes: Changing Granule Media Type, Priority and Formats

15 If the distribution medium/media should be changed for those distribution types that are types other than SCP (Secure Copy Protocol), a list of available media types (Figure 15.6-7B Request Attributes) will display under the “Request Attributes” section:

‣ Click the **Change Media to** listbox arrow to review those choices:

- **FtpPull** (File transfer protocol – Pull Technology)
- **FtpPush** (File transfer protocol – Push Technology)
- **CDROM** (Compact Disk Random Operating Memory)
- **DLT** (Digital Linear Tape)
- **DVD** (Digital Video Display)

‣ Select <medium> from list.

16 To change the priority of the request, a list of priorities is available in the “Change Priority to” listbox (Figure 15.6-7B):

‣ Click the **Change Priority to** listbox arrow to review choices.

‣ Select **Priority** from list.

- 17 To **Disable size limit** checking attribute:
 - ▶ Click the Disable limit checking checkbox.
- 18 To **change the values** assigned to FtpPush parameters:
 - ▶ Click the **Update FtpPush Parameters** checkbox.

NOTE: This option will only appear if SCP was the originally media type. When this option is checked, the operator will be prompted to change the existing SCP parameters on the next page.

Request Level Disposition: Changing Request Disposition

- 19 Changing a request disposition (Figure 15.6-8) will alter the queuing of its distribution or how it is handled. There are several options to change the level disposition:
 - **Keep on hold** – Delays applying any intervention action (keeps open the intervention) and dismiss the “Open Intervention Detail” page. This action does not allow changes to the request’s attributes, but saves Operator notes and allows intervention to open at a later time (essentially, the intervention is being “saved”).
 - **Submit** – Applies any actions or changes to the intervention specified in the “Granule List” and “Request Attributes” sections of the “Open Intervention Detail” page and then dismisses the page.
 - **Fail Request** – Fails the entire request (including all associated granules) and dismiss the “Open Intervention Detail” page.
 - **Partition** – This option will start the process of partitioning a request that exceeds maximum request size. The process will perform the distribution of granules in Intervals (days and hours) over a period of time (Figure 15.6-8 Request Level Disposition).



Figure 15.6-8. Request Level Disposition

- 20 To **select a disposition**, click the option button (Ⓒ) from the list of dispositions.
 - ▶ To Fail Request, click the **Fail Request** option button.
 - ▶ Click the **Apply** button to commit change.

NOTE: The Apply and Reset buttons at bottom of the Open Intervention Detail page will commit change. 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’s option buttons for the Request Level Disposition section to its original state.

- **Close Confirmation for Intervention** (Figure 15.6-9, Frame A) page displays.

Request Level Operator Notes: Close Interventions

NOTE: The Close Confirmation page displays varying actions to be taken; for example, the following types of actions may be displayed:

- **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].

NOTE: If the intervention involved changing the medium from electronic to physical media, text boxes for entering shipping information displays on the Close Confirmation for Intervention page (shown in Figure 15.6-9, Frame A close). The display will indicate “placed on hold” for suspended interventions (shown in Figure 15.6-9, Frame B hold).

The Operator Notes are saved when confirmation is accepted, but will lose all noted/changed attributes.

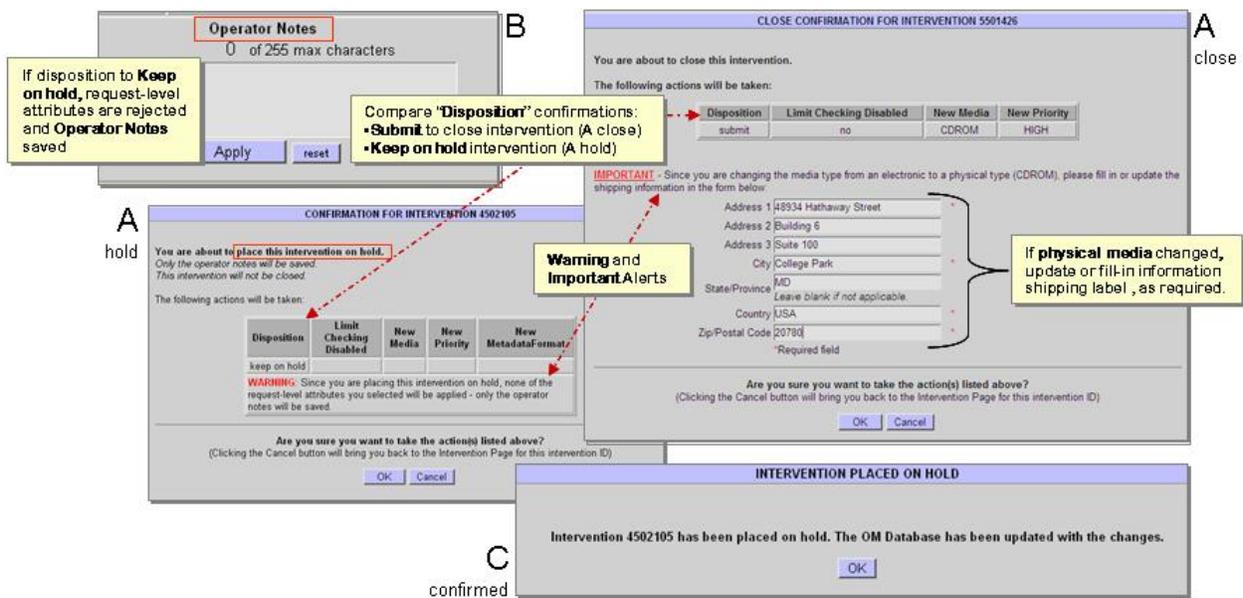


Figure 15.6-9. Close Confirmation for Intervention (FTPPush/SCP to CDROM)

21 If the intervention involved **changing the medium to FtpPush/SCP or updating the values assigned to FtpPush/SCP parameters**, textboxes for the following FtpPush/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].**

22 If a **failed request or granule(s) within a request’s partition or to modify granules in a request**, the **Close Confirmation** page (Figure 15.6-10) includes two options:

- ▶ **To append additional text** to the default e-mail message sent to the requester:
 - An **Additional e-mail text** textbox for appending text (if desired) to the standard (default notification of failure) e-mail text is displayed on the **Close Confirmation** page (shown in Figure 15.6-10).
- ▶ **To choose not to send an e-mail message** to the requester:
 - A **Don’t send e-mail** box to suppress the sending of an e-mail message indicating request/granule failure is displayed on the **Close Confirmation** page (Figure 15.6-10).

23 If the intervention involved **changing the medium from an electronic medium to a physical medium**:

- ▶ Type **<appropriate values>** in the required text boxes for input/update to mailing/delivery label (Figure 15.6-9, Frame A close).

CLOSE CONFIRMATION FOR INTERVENTION 9000257

You are about to close this intervention.

The following actions will be taken:

Disposition	Limit Checking Disabled	New Media	New Priority
fail			

Note: For this action, you have the option of sending out an e-mail to the user. Please add any useful comments in the box below that will be appended to the standard e-mail preamble.

You may also decline to send the email by checking the box below.

This e-mail will be sent to at .

Additional e-mail text

Don't send e-mail

Are you sure you want to take the action(s) listed above?
(Clicking the Cancel button will bring you back to the Intervention Page for this intervention ID)

Figure 15.6-10. Close Confirmation for Intervention <ID> with E-Mail

- 24 To **Close the Intervention**, click on the appropriate button from the following selections:
- ▶ **OK** - to apply the specified intervention actions (if any) and dismiss the “Intervention Closed” dialog box.
 - An **Intervention Closed** dialog box (Figure 15.6-11) displays.
 - ▶ **Cancel** - to dismiss the **Intervention Close** dialog box, without applying the specified intervention actions.

NOTE: A warning dialog box is displayed with the message “WARNING: The disposition and actions you have taken for this intervention will be lost. Continue?”

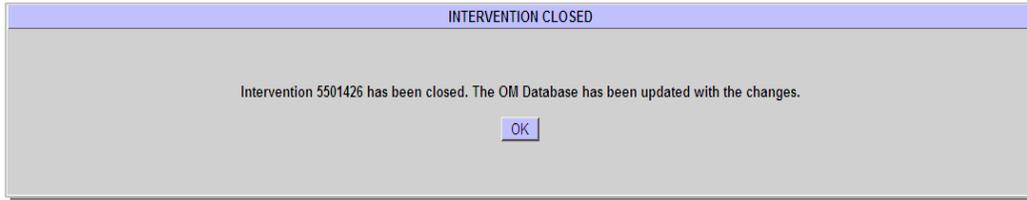


Figure 15.6-11. Intervention Closed

- 25 If a warning dialog box is displayed with the message “WARNING: The disposition and actions you have taken for this intervention will be lost. Continue?”
- ▶ **OK** - to dismiss the warning dialog box and the close confirmation.
 - The **Open Interventions** detail page returns.
- 26 To exit the **Intervention Closed** prompt and display the **Open Interventions** detail page:
- ▶ Click the **OK** button.
- 27 On the OM GUI left pane menu options, click the **Home** link to return to the **Order Manager Home** page.
- The **Order Manager Home** page (Figure 15.4-2) displays.
-

15.6.2 Request Management Submenu Page – HEG Interventions

HEG Interventions processing involve “line items” and associated detail links. Although a HEG order may contain a mix of granule types (i.e., those with and without line items), an additional column will show in the granule list containing the number of line items and its details link. The **Open HEG Interventions** page (Figure 15.6-12) is a hard-coded display that provides the Operators (either full-capability or limited-capability) the option to only view HEG interventions. The **HEG Intervention For Request <ID>** page (Figure 15.6-14) provides the full-capability operator with a means of performing the following kinds of interventions:

- Assign/Change Worker.
- Fail selected granule(s).
- Fail a request.

15.6.2.1 Viewing and Responding to Open HEG Interventions

- 1 Click **Request Management** menu option to expand its submenu.
- 2 Click **HEG Interventions** submenu option to display the **Open HEG Interventions** page (Figure 15.6-12).
 - The **Open HEG Interventions** page (Figure 15.6-12) displays.

Sel	Fail	Sub	Order ID	Request ID	Media Type	Request Size (MB)	Status	Worked By	Created	Acknowledged	Explanation(s)
<input type="checkbox"/>	<input type="checkbox"/>		0800000087	0800000091	FtpPull	30	PENDING		Sep 7 2006 1:58PM		Heg Processing Error
<input type="checkbox"/>	<input type="checkbox"/>		0800000088	0800000092	FtpPull	58	PENDING		Sep 7 2006 3:10PM		Heg Processing Error
<input type="checkbox"/>	<input type="checkbox"/>		0800000089	0800000093	FtpPull	30	PENDING		Sep 11 2006 3:04PM		Heg Processing Error Duplicate Req. Ids

Figure 15.6-12. Open HEG Interventions Page

The **Open HEG Interventions** page has three working parts:

- 1 - **Current Filters** – describes the set of pre-defined criteria (Figure 15.6-13, Frame 1) on which the list of distribution requests are to display.
- 2 - **Options** – has several features (Figure 15.6-13, Frame 2) to allow Operator to:
 - **Change Filter** – define or redefine the criteria for displaying the list of distribution request on a page.
 - **Bulk Fail** – provides capability to fail “All” or “None” (checkbox) of the eligible selected intervention(s) requests on a page.
 - **Bulk Submit** – provides capability to submit “All” or “None” (checkbox) of the eligible selected intervention(s) requests on a page.
- 3 - **Listing** – captures the requested distribution output (Figure 15.6-13, Frame 3) of what is being filtered.

- The **Sel Fail Sub** column provides checkboxes to mark request to be submitted or failed.
- It displays several **underscored column headings** that if clicked, will display additional information regarding the request.

NOTE: It is important to check the filter settings when opening the Open HEG Interventions page to clear filter settings from one session to another.

1	2	3
Current Filters	Options	Listing
Fields	Actions	Fields
Order ID	Change Filter	Sel <input type="checkbox"/> Fail <input type="checkbox"/> Sub
Creation Time: * Start * End	Bulk Fail <input type="checkbox"/> All <input type="checkbox"/> None	Order ID
Media Type	Bulk Submit <input type="checkbox"/> All <input type="checkbox"/> None	Request ID
Request ID		Media Type
Worked By		Request Size (MD)
Explanation		Status
		Worked By
		Created
		Acknowledged
		Explanation(s)

Figure 15.6-13. Open HEG Interventions – Fields and Options

- 3 Observe information in the **Listing** section of the **Open HEG Interventions** (Figure 15.6-12) page:
 - ▶ Set the **Show <number> rows at a time** to equal **20**.
 - ▶ If **AutoRefresh** is **ON**, the **Open HEG Interventions** page refreshes automatically as often as specified in the **Refresh screen every x minutes** window. Click on the **U** icon, on the **OM GUI** navigation tool, to manually refresh.
 - ▶ The Netscape browser **Edit** → **Find in Page** menu provides keyword searches of the currently displayed data.
 - ▶ Click on an **underscored column header** of the table to sort column's content.
 - **Order ID** to sort data and line items in ascending order.
- 4 To observe detailed information for particular line item on the **Open HEG Interventions** page, click on the **associated detail link** under the column header:
 - **Order ID <number>** to display detailed data related to that particular order number.

- **Request ID <number>** to display detailed data related to the intervention for that particular request.
- The **Open HEG Intervention For Request <ID>** detail page (Figure 15.6-14) displays.

Intervention For Request 0800013233

Order ID: 0800014646 User ID: ECSGuest (y4@p2ins02.pvc.ecs.nasa.gov)
 Request ID: 0800013233 Created: Apr 5 2005 2:08PM
 Input Size: 22 estimated MB Acknowledged:
 Media Type: CDROM Request Status: Operator Intervention
 Priority: NORMAL
 Explanation(s): Heg Processing Error
 Worked by: - no worker assigned - [assign]

Input Granule List

Go directly to row: of 2 rows Show: 20 rows at a time

first | previous | Showing 1 - 2 of 2 | next | last

GranuleID	DPL ID	ESDT	Type	Processing Instructions	In Size (MB)	Out Size (MB)	Status	Explanation	Action
121860	36718	MOD29.004	SC	[View...]	19.272		FAILED	Heg Processing Error Manual fail required	Fail <input type="checkbox"/>
121861	38468	MOD29.004	SC	[View...]	3.152	8.404	STAGED		

Select all Submit Actions

first | previous | Showing 1 - 2 of 2 | next | last

Request Level Disposition

Keep on hold
 Submit
 Resubmit and retry processing of failed granules
 Fail Request

Operator Notes
 0 of 255 max characters

Apply reset

Figure 15.6-14. Open HEG Intervention For Request <ID> Detail Page

The **Interventions For Request <ID>** detail Page has three working parts:

- 1 - **Intervention For Request <number>** – displays data (Figure 15.6-15, Frame 1) that identify the attributes of the specified (filtered) request.
- 2 - **Input Granule List** – features a read-only list of input granules (Figure 15.6-15, Frame 2) which allows operator to submit action against on or more granules in list.
- 3 - **Request Level Disposition** – provides several disposition options which include the collection of Operator notes and ability to set/reset disposition of granules (Figure 15.6-15, Frame 3).

1	2	3
Intervention For Request <n>	Input Granule List	Request Level Disposition
Fields	Fields	Actions
OrderID	Granule ID	<input type="checkbox"/> Keep on hold
Request ID	DPL ID	<input type="checkbox"/> Submit
Input Size	ESDT	<input type="checkbox"/> Resubmit and retry processing of failed granules
Media Type	Type	<input type="checkbox"/> Fail Request
Priority	Processing Instructions [View...]	Operator Notes (input field)
Explanation(s)	In Size (MB)	Apply
Worked by [assign]	Status	reset
User ID	Explanation	
Created	Action <input type="checkbox"/> Fail <input type="checkbox"/> Select all	
Acknowledge	Submit Actions	
Submit Actions		

Figure 15.6-15. Open HEG Interventions For Request <ID> Detail – Fields and Options

- 5 From the OM GUI menu, click the **previous page icon** (◀) to return to the **Open HEG Interventions** page.
 - The **Open HEG Interventions** page (Figure 15.6-12) displays.
- 6 To view processing instructions detailed data related to a particular granule ID:
 - ▶ Click **[View...]** link associated with the specific GranuleID, under the column heading “Processing Instructions” in the **Input Granule List** section of the **Open HEG Intervention Detail** page.
 - The **Processing Instructions for Request ID** <number> displays (Figure 15.6-16).

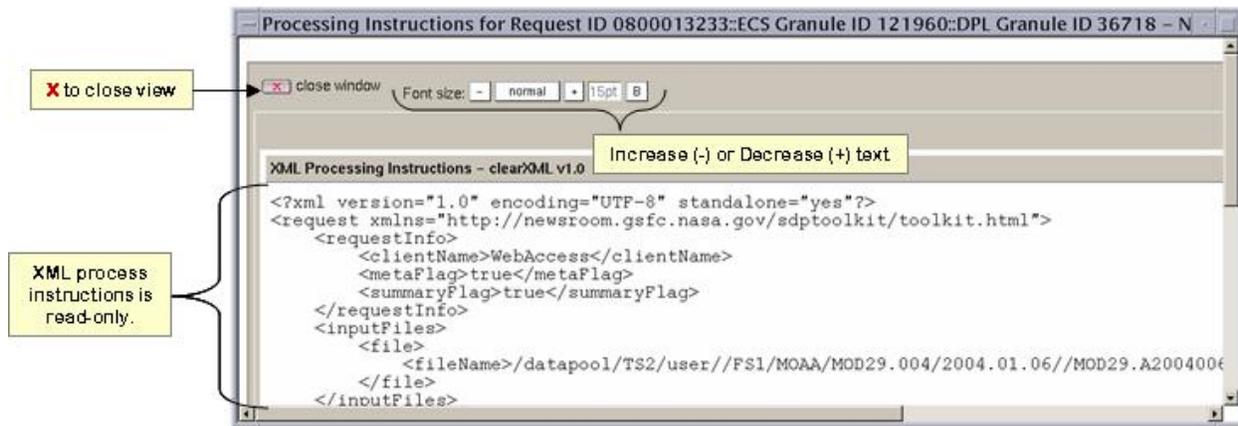


Figure 15.6-16. Processing Instructions Window

- The Processing Instructions is read-only, using clearXML application.
- Operator can use the Font size tool to increase or decrease text size of the instructions. Although the text is not modifiable, Operator can highlight text, copy and paste into a software editor.
- To close the **Processing Instructions for Request ID <number>** window, click on the **close window** button.

7 Click the red X close window button to **close the processing instructions window** and return to the **Open HEG Interventions for Request <ID>** detail page.

Intervention For Request <number>: Assign/Change Worker

- 8 From the **Open Interventions** page, click on the desired **Request< ID>**:
- Observe the information displayed in **Worked by** input box, of the **Open HEG Intervention For Request <ID>** detail page:
 - The userid of the user currently working on the intervention appears in the **Worked by** field of the **Open HEG Intervention for Request <ID>** detail page.
 - Ensure appropriate User is assigned to work on the intervention.
- 9 To assign or reassign user to work on the intervention:
- ▶ Click on the **assign** or **change** link of the **Worked by** (input box displays).
 - ▶ Click the **change** link, to modify/change current user (input box displays).
 - ▶ Enter **appropriate worker's id** in the input box.
 - ▶ Click the **green checked button** to confirm entry (or to cancel input).

Input Granule List: Fail Action on Request

10 The operator can fail intervention(s) using the **checkbox** options located under the **Action** column of the **Input Granule List** section. 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). There are two possible checkbox options that can be implemented from this section:

- **Fail** – fails an individual granule in the specified row.
- **Select All** – fails all actions for granules with Accept/Fail options.

11 To implement one or all action(s) to fail intervention(s) on the **Open HEG Interventions For Request <ID>** page:

- ▶ Select the **Fail** checkbox, on the row of a specific granule, to fail “individual” granules.
- ▶ Select the **Select all** (bulk fail) checkbox to fail “all” interventions displayed on the page.

NOTE: Set options in the Request Level Disposition section before submitting action.

Request Level Disposition: Fail Request

12 Select one or more of the of the following requests in the **Request Level Disposition** section:

- **Submit** - to apply any changes of failing granule(s), which are not reprocessed.
- **Keep on hold** – to delay applying any intervention action (retain as open).

NOTE: 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”).

- **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.

13 Enter **Operator Notes**, if more details should be communicated concerning the request (e.g., the reason for making a particular type of intervention).

14 Click **Apply** to commit/submit action.

NOTE: The reset button does not cancel any changes made to the request (changed or failed). It simply resets the form buttons for the Request Level Disposition section to their original states.

- The **Close Confirmation for Intervention <ID>** displays (Figure 15.6-17)

CLOSE CONFIRMATION FOR INTERVENTION 6500901

You are about to close this intervention.

The following actions will be taken:

Disposition	Limit Checking Disabled	New Media	New Priority
Resubmit, retrying failed granules	no		

PLEASE NOTE: Any granules marked "failed by operator" will attempt to be reprocessed. If this is not what you wanted, go back and select the "Submit" disposition, which will permanently remove any "failed by operator" granules from the request.

Are you sure you want to take the action(s) listed above?
 (Clicking the Cancel button will bring you back to the Intervention Page for this intervention ID)

Figure 15.6-17. Close Confirmation for Intervention <ID> Page

- 15 Click **OK** to complete and confirm the process of failing intervention(s) or to take action(s) listed on the closed confirmation:
 - **Intervention Closed** confirmation displays.
- 16 Click **OK** to acknowledge confirmation.
 - The **Open HEG Interventions** page is returned.

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

15.6.3 Request Management Submenu Page – Completed Actions and Interventions Filter

The Completed Action and Interventions page displays all Operators (either full-capability or limited-capability) recently closed interventions, including those that have been resubmitted, partitioned, or failed.

The **Completed Action and Interventions** page (Figure 15.6-19) displays filter results of the Operator defined options and fields (Figure 15.6-18):

1	Filter	2	filter display
	Options		Fields
	Intervention Type: <input type="checkbox"/> All <input type="checkbox"/> None		Order Id
	▼ Intervention Types : ▪ Activate Media for QC ▪ Activate Request ▪ Assemble Package ▪ 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		Request Id
	Worked By		User ID
	Completion Time: <input type="checkbox"/> Apply <input type="checkbox"/> Reset		Size (MB)
			Media
			Worked By
			Intervention Type
			Created
			Completed
			Disposition

Figure 15.6-18. Completed Action and Interventions – Fields and Options

15.6.3.1 Filtering Data on Completed Actions and Interventions Page

- 1 Click **Request Management** menu option to expand its submenu.
- 2 Click **Completed Actions and Interventions** submenu option to display its page (Figure 15.6-19).
- 3 Define the **filter criteria** as follows:
 - ▶ Select one or more **Intervention Type** from the filter section list.
 - ▶ Select an available User or All Users from the **Worked By** listbox.
 - ▶ Define the **Completion Time**.
- 4 To apply the filter, click the **Apply** button.

- The **Completed Operator Actions and Interventions** page refreshes with results.

Figure 15.6-19. Completed Action and Interventions Page

15.6.4 Request Management Submenu Page – Distribution Requests [filter]

The Distribution Request page allows Operators (either full-capability or limited-capability) the ability to filter and view lists of all currently distributed requests processed through Order Manager from all order sources. The data distribution function will also allow the Operator to perform the following actions (on eligible requests):

- suspend new request processing.
- suspend or cancel individual requests.
- and change the priority of any request.

In addition to these capabilities, the Operator can view extensive details of FTP Push distribution and staging requests by selecting column links of the order id or request id.

NOTE: Filter settings can persist from session to session when opening the Distribution Request page.

15.6.4.1 Filtering Data on Distribution Requests Page

- 1 Click **Request Management** menu option to expand its submenu.
- 2 Click **Distribution Requests [filter]** submenu option to display its.
 - The **Distribution Requests [filter]** page (Figure 15.6-20, Frame A) displays.

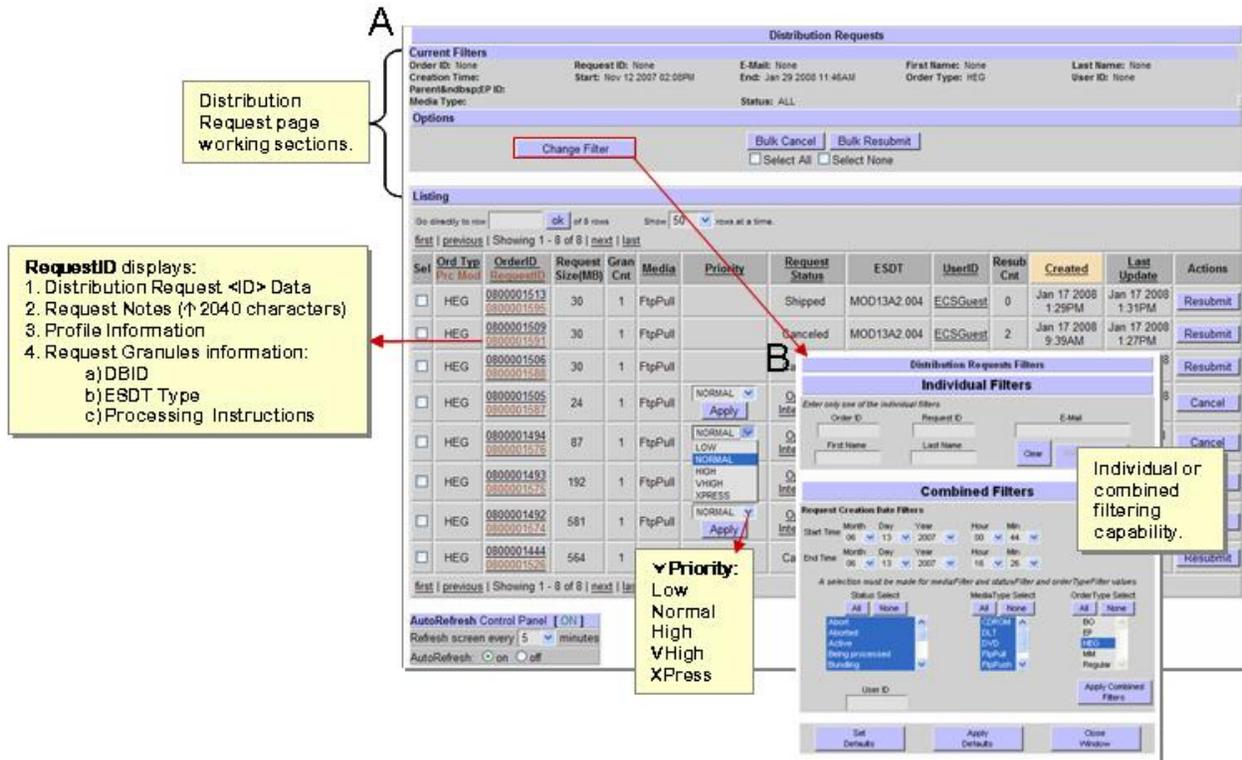


Figure 15.6-20. Distribution Requests Page and Filter Window

- 3 Observe the **Distribution Requests** page, which has three working parts:
 - 1 - **Current Filters** – displays data (Figure 15.6-21, Frame 1) by the set of pre-defined criteria specified (Figure 15.6-20, Frame B) by the Operator.
 - 2 - **Options** – has three features (Figure 15.6-21, Frame 2) to allow operator to:
 - **Change Filter** – define or redefine the criteria for displaying the list of distribution request on a page.
 - **Bulk Cancel** – provides capability to cancel “All” or “None” (checkbox) of the eligible selected requests on a page.
 - **Bulk Resume** – provides capability to submit “All” or “None” (checkbox) of the eligible selected requests on a page.
 - 3 - **Listing** – captures the distribution requests filter output (Figure 15.6-21, Frame 3):
 - The **Sel** column provides checkboxes to mark or select a single request (row) to be resubmitted, suspended or canceled.
 - **Ord Typ/Prc Mod** represents the Order Type or Processing Mode.
 - Several underscored column headings, when clicked, displays additional information regarding the details of a request.

- The **Priority** column allows Operator to change a request priority using the options listed in the drop-down listbox on a row.
- The **Actions** checkbox permits Operator to resubmit, cancel, suspend or resume eligible request(s).

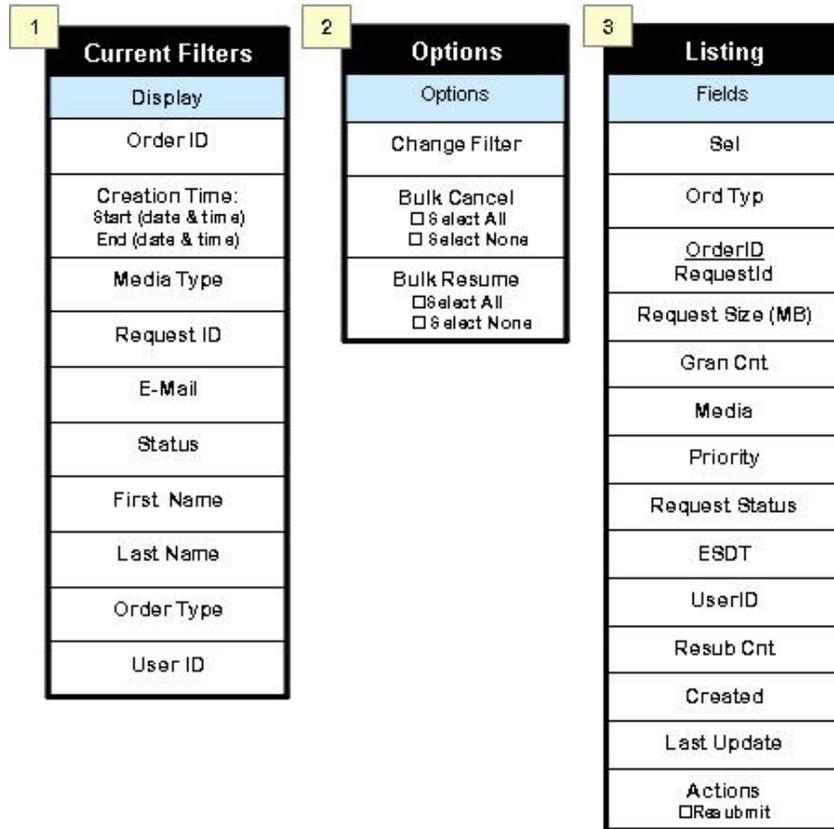
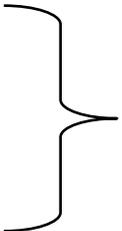


Figure 15.6-21. Distribution Requests Page – Fields and Options

- 4 To define the filter criteria:
 - Click the **Change Filter** button, in the **Options** area (Figure 15.6-20, Frame A).
 - The **Distribution Requests Filters** window appears

- 5 Observe the **Distribution Request Filter** window, which has two working parts:
- 1 - **Individual Filters** – displays limited options (Figure 15.6-20, Frame B) to set a defined criterion specific to a request (Figure 15.6-20, Frame B). Those options are:
 - **Order ID**
 - **Request ID**
 - **E-Mail**
 - **First Name**
 - **Last Name**



NOTE: Operator can apply only one option of the individual filter.
 - 2 - **Combined Filters** – has several options (Figure 15.6-20, Frame B) to allow operator to combine multiple criteria to define the filter.
- 6 Create a **combined filter** by performing the following:
- ▶ Select a **Start Time** (Month, Day, Year).
 - ▶ Select an **End Time** (Month, Day, Year) ensuring different that start time.
 - ▶ Depressing the <Ctrl> keep, make multiple **Status Select** selections: **Cancelled, Completed processing, Pending, Shipped.**
 - ▶ Select **All** for **Media Type Select** (can include CDROM, DLT, DVD, FtpPull, FtpPush, SCP (Secure Copy Protocol).
 - ▶ Select **HEG** for **Order Type Select** (can include Order types include “Regular,” “BO” (Bundled Order), and “HEG” (HDF-EOS to GeoTIFF Conversion).
 - ▶ Click **Apply Combined Filters** button to generate filter.
 - The **Distribution Requests Filters** window closes and the Distribution Requests window displays with the applied combined filter results.
- 7 Click **ECSGuest** under the UserID column to view profile information for request.
- The **PROFILE FOR ECSGuest OrderId <ID>** displays six parts of information (Figure 15.6-22).

PROFILE FOR ECSGuest OrderId 080001509		
Contact Information	<p>CONTACT INFORMATION</p> <p>Name: F Parris E-Mail address: Faye_E_Parris@raytheon.com Organization: User Verification Key: Affiliation: Project: Home DAAC: Primary area of study:</p>	Account Information
Contact Address	<p>CONTACT ADDRESS</p> <p>Address: City: State/Province: Country: Zip/Postal code: Telephone: 123-456-7890 Fax:</p>	DAR Information
Shipping Address	<p>SHIPPING ADDRESS</p> <p>Title: First Name: F Middle Initial: Last Name: Parris Email: Faye_E_Parris@raytheon.com Address: City: not supplied State/Province: Country: not supplied Zip/Postal code: Telephone: 123-456-7890 Fax:</p>	Billing Address
	<p>ACCOUNT INFORMATION</p> <p>Date created: Expiration date: Privilege level: NASA user: Access privilege:</p>	
	<p>DAR INFORMATION</p> <p>Aster category: DAR expedited data:</p>	
	<p>BILLING ADDRESS</p> <p>Title: First Name: Middle Initial: Last Name: Email: Organization: Address: City: State/Province: Country: Zip/Postal code: Telephone: Fax:</p>	

Figure 15.6-22. Profile for ECSGuest OrderID <ID>

- 8 Click the navigation tool **Previous Page** (◀) button, to return to the **Distribution Requests Page**.
- 9 Click the **request <ID>** under the **Request ID** column to view the distribution request profile information, request notes, addresses (mailing, shipping, billing) and granule information for the request.
 - The **Distribution Request <ID> Profile** appears displaying its multiple parts of information (Figure 15.6-23).

DISTRIBUTION REQUEST 2000010420			
Userid	ECSGuest	Orderid	2000010047
E-mail	Faye_E_Parris@raytheon.com	Order Type	HEG
Request Size (MB)	0	Ext. Requestid	Not available
# Granules	1	Priority	
# Granules Staged	1	Request Status	Shipped
Receive Date/Time	Jun 13 2007 7:55AM	Resubmit Count	1
Start Date/Time	Jun 13 2007 11:32AM	Media Type	FtpPull
Metadata Format	XML	Resource Class	C
Last Update	Jun 13 2007 11:33AM	Actions	
End Date/Time	Jun 13 2007 11:33AM		

RequestID profiles specific information related to the request.

Request Notes displays notes up to 2040 characters.

Request Notes: 157 characters of 2040 maximum

[Operator Intervention] Date Closed: Jun 13 2007 11:31AM Worked By: omsadmin Outcome: Submit Operator/Notes: [None]

MAILING ADDRESS	SHIPPING ADDRESS	BILLING ADDRESS
Title: First Name: Faye Middle Initial: Last Name: Parris Email: Faye_E_Parris@raytheon.com Organization: Address: City: State/Province: Country: Zip/Postal code: Telephone: 301-925-0776 Fax:	Title: First Name: Faye Middle Initial: Last Name: Parris Email: Faye_E_Parris@raytheon.com Organization: Address: City: not supplied State/Province: Country: not supplied Zip/Postal code: Telephone: 301-925-0776 Fax:	Title: First Name: Middle Initial: Last Name: Email: Organization: Address: City: State/Province: Country: Zip/Postal code: Telephone: Fax:

Addresses displayed for mailing, shipping and billing information.

Request Granules displays attributes of the request granules.

Show 20 rows at a time

DBID	ESOT Type	Input/Output	Size (MB)	Status	Processing Instructions
8983 DPL Granule ID: 5434	MOD29P1D.086 SC	N/A	0.000	SHIPPED	View...

first | previous | Showing 1 - 1 of 1 | next | last

Figure 15.6-23. Distribution Requests <ID> Profile

NOTE: The Profile For ECSGuest can also be reviewed from this window by selecting the ECSGuestID.

10 Click the **Home** link on the left pane of the OM GUI menu option to return to the **Order Manager Home** page.

- The **Order Manager Home** page (Figure 15.4-2) displays.

15.6.5 Request Management Submenu Page – FtpPush/SCP Requests Filters and Staging Requests Filters

The distribution requests filtering allow Operators (either full-capability or limited-capability) the ability to view extensive details of FtpPush/SCP and Staging distribution requests currently processed through Order Manager from all order sources. The limited-capability Operator is not allowed to edit FtpPush parameter values for distribution requests using the OM GUI.

The FtpPush/SCP and Staging distribution requests pages allows the Operator to:

- Change the priority of or suspend a distribution request while the requested granules are in a staged or pushed waiting state.
- Resume a request that was suspended by the OM GUI operator or while the processing of new requests by the OMS is suspended.
- Resubmit a request in a terminal state (e.g., aborted, cancelled, terminated, or shipped).
- Cancel a request that is not in a terminal state and while the requested granules are in a staged or pushed waiting state.

15.6.5.1 Filtering FtpPush/SCP Requests or Staging Requests Page

- 1 Click **Request Management** menu option to expand its submenu.
- 2 Click **FtpPush/SCP Requests [filter]** submenu option to display its page.
 - The **FtpPush/SCP Distribution Requests** page (Figure 15.6-24) displays.
(Or to view **Staging Distribution Requests** page:
 - ▶ Click **Staging Requests [filter]** submenu option to display its page.
 - The **Staging Distribution Requests** page displays.)
- 3 To define the **filter criteria**:
 - ▶ Click on the **Change Filter** button, from the Options section of the FtpPush/SCP (or Staging) Distribution Requests page.
 - The **FtpPush/SCP (or Staging) Distribution Requests Filters** window (Figure 15.6-24, Frame A (or Frame B) appears.
- 4 Observe the **FtpPush/SCP (or Staging) Distribution Requests Filters** window, which has two working parts:
 - 1 - **Individual Filters** – displays limited options (Figure 15.6-24, Frame A (or B) to set a defined criteria specific to a distribution request. Those options are:
 - **Order ID**
 - **Request ID**
 - **E-Mail**
 - **First Name**
 - **Last Name**

NOTE: Operator can apply only one option of the individual filter.
 - 2 - **Combined Filters** – has several options (Figure 15.6-24, Frame A (or B) to allow operator to combine multiple criteria to define the filter.

- 5 Create a **Combined Filter** by performing the following:
 - ▶ Select a **Start Time** (Month, Day, Year)
 - ▶ Select an End Time (Month, Day, Year) ensuring different that start time
 - ▶ Depressing the <Ctrl> keep, make multiple **Status Select** selections: **Cancelled, Completed processing, Pending, Shipped**
 - ▶ Select **All** for **Media Type Select** option:
 - For **FtpPush/SCP** distribution requests, media options include FtpPush or SCP (Secure Copy Protocol), Figure 15.6-24, Frame A.
 - For **Staging** distribution requests, media options include CDROM, DLT, DVD, FtpPull, FtpPush, SCP (Secure Copy Protocol), Figure 15.6-24, Frame B.
 - ▶ Select **HEG** for **Order Type Select** option:
 - For **Staging** distribution requests, order type options include, “Regular,” “BO” (Bundled Order), “EP” (Extended Play), “HEG” (HDF-EOS to GeoTIFF Conversion), Figure 15.6-24, Frame B.

NOTE: FtpPush/SCP distribution requests do not support Order Type options.

- 6 Click **Apply Combined Filters** button to generate filter.
 - The **FtpPush/SCP (or Staging) Distribution Requests Filters** window closes and the **FtpPush/SCP (or Staging) Distribution Requests** page displays with the applied combined filter results.

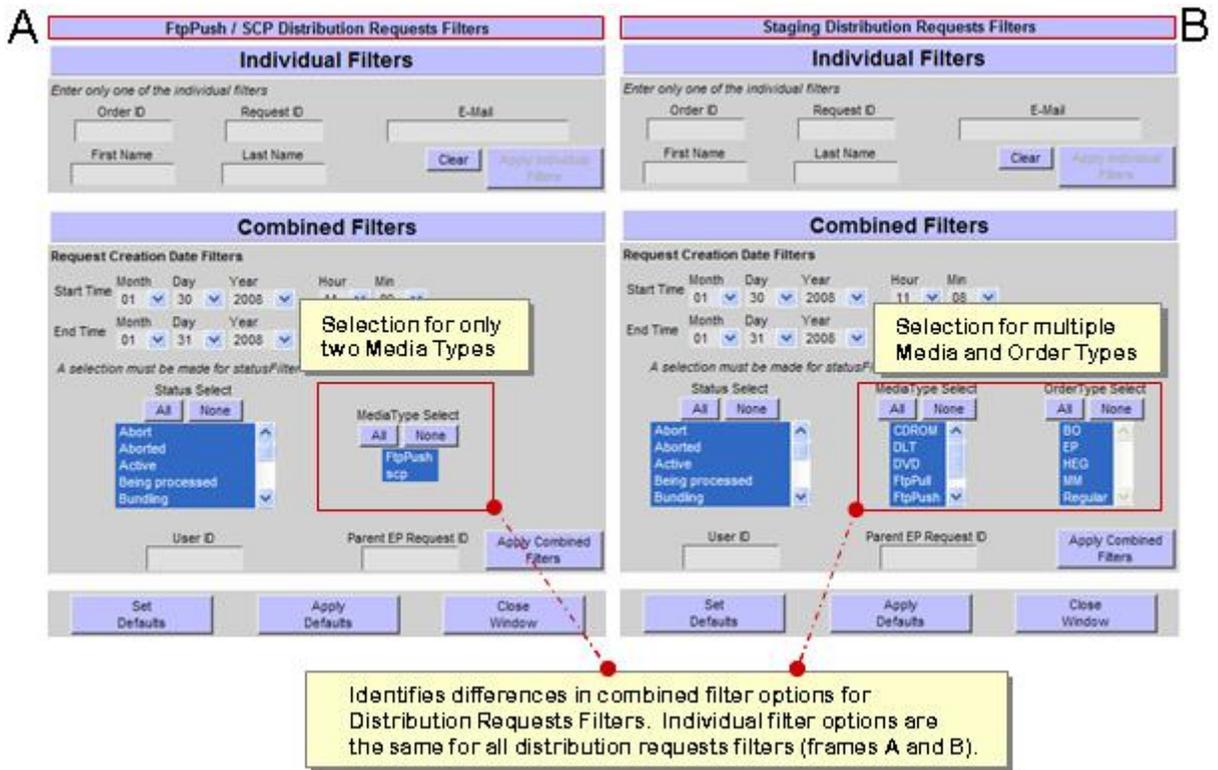


Figure 15.6-24. FtpPush/SCP (A) and Staging (B) Distribution Requests Filters

15.6.6 Request Management Submenu Page – Processing Service Requests [filter]

The Processing Service Requests [Filter] page (Figure 15.6-25, Frame A) allows an Operator to cancel or suspend the external processing requests while those requests are under OMS control. The external processing requests do not have any actions (cancel or suspend) while under the control of the external system. The processing services filter includes HEG, all external subsetter requests and a “Processor” column which indicates the processor name (which includes HEG). The Processing Service Request page does not include filter for media type and order type. It has a processing filter instead. The “Actions” column in the Listing section of the page displays an “InActive” button.

15.6.6.1 Filtering Processing Service Requests Page

The Processing Service Requests 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.

To filter external processing service requests perform the following:

- 1 Click **Request Management** menu option to expand its submenu.
- 2 Click **Processing Service Requests [filter]** submenu option to display it’s page (Figure 15.6-25, Frame A).
- 3 Observe the **Processing Service Request** page, which has three working parts:
 - **Current Filters** – describes the set of pre-defined criteria.
 - **Options** – has a “Change Filter” button to allow operator to define display criteria for the page (Figure 15.6-25, Frame B).
 - **Listing** – captures the requested output of what is being filtered.
- 4 To define the **filter criteria**:
 - ▶ Click the **Change Filter** button from the Options section of the page.
 - ▶ Under the **Combined Filter** section, change the **Request Creation Date** year to equal “01 01 2007”.
 - ▶ Select **All** options from the listboxes:
 - Status.
 - Media Type.
 - Process Service.
- 5 To apply the combined filters, select the **Apply Combined Filters** button.
 - The **Processing Service Requests** page refreshes with results.

A

Processing Service Requests

Current Filters
 OrderID: None RequestID: None EMail: None Parent Name: None List Name: None
 Creation Date: Start: Mar 19 2007 10:26AM End: May 1 2007 04:52PM User ID: None

Options
 Change Filter

Listing
 Go directly to row of 63 rows Show 50 rows at a time.
 first | previous | Showing 37 - 20 of 63 | next | last

OrderID RequestID	Processor	Request Size(MB)	Gran Cnt	Media	Priority	Request Status	ESDT	UserID	Resub Cnt	Created	Last Update	Actions
0800011037 0800017024	external subsetter 1	0	1	FtpPull	NO PRIORITY Apply	Operator Intervention	MULTIPLE	ECSGuest	0	Apr 25 2007 1:14PM	Apr 25 2007 1:17PM	Inactive
0800011032 0800017020	external subsetter 1	0	1	FtpPull	NO PRIORITY Apply	Operator Intervention	MULTIPLE	ECSGuest	0	Apr 25 2007 10:45AM	Apr 25 2007 10:48AM	Inactive
0800011030 0800017018	external subsetter 1	0	1	FtpPull	NO PRIORITY Apply	Operator Intervention	MULTIPLE	ECSGuest	0	Apr 25 2007 10:45AM	Apr 25 2007 10:48AM	Inactive
0800010997 0800016985	external subsetter 1	0	1	FtpPull		Shipped	MULTIPLE	ECSGuest	0			
0800010995 0800016983	external subsetter 1	0	1	FtpPull		Shipped	MULTIPLE	ECSGuest	0			
0800010993 0800016981	external subsetter 1	0	1	FtpPull		Shipped	MULTIPLE	ECSGuest	0			
0800010987 0800016976	external subsetter 1	0	1	FtpPull		Terminated	MOD13A2.004	ECSGuest	0			
0800010985 0800016973	external subsetter 1	0	1	FtpPull		Terminated	MOD13A2.004	ECSGuest	0			
0800010979 0800016967	external subsetter 1	0	1	FtpPull	NO PRIORITY Apply	Waiting for data	MOD13A2.004	ECSGuest	0			

B

Processing Service Request Filter

Individual Filters
 Enter only one of the individual filters:
 Order ID Request ID E-Mail
 First Name Last Name Clear Apply Individual Filters

Combined Filters
 Request Creation Date Filters
 Start Time Month Day Year Hour Min
 01 01 2007 02 35
 End Time Month Day Year Hour Min
 02 20 2008 02 39
 Status Select All None
 Abort Aborted Active Being processed Canceled
 MediaType Select All None
 FtpPull FtpPush
 ProcessService Select All None
 HDG OTHER Subsetter1
 User ID Parent EP Request ID Apply Combined Filters
 Set Defaults Apply Defaults Close Window

Figure 15.6-25. Processing Services Requests Page and Filter

15.6.7 Request Management Submenu Page – Operator Alerts

The Operator Alerts are valuable non-fatal warnings or errors concerning distribution resources and will not cause an Operator intervention. Once the error is corrected, the alert automatically clears the alerts page.

The Operator Alerts page (Figure 15.6-26) allows the Operator (full or limited capability) to view four alert types detected by the Order Manager Server:

- 1 - **FtpPush/SCP Destination Alerts** – destination problems not sufficient to cause an Operator Intervention.
- 2 - **Data Pool File System Alerts** – generated warnings regarding malfunctions of the DPL file system:
 - **Unavailability (down).**
 - **No free space.**

NOTE: The alerts clears automatically after system functions are up or space is freed.

3 - **Archive Server (Quick Server) Alerts** – detected warnings regarding the Quick Server malfunctions that suspends the archive server and queues the alerts displaying:

- **Unavailability (down); i.e., “Access to SNSM file system Failed”.**
- **Exceeds configured staging capacity; i.e., “Max Retry Reached”.**

NOTE: The alerts clears automatically after the quick server resumes functionally, but the archive server must be manually resumed on the OM Queue Status page to clear alerts.

4 - **ECS Server Alerts** (AIM database errors warnings) – detected warnings regarding the AIM malfunctions or OMS resources:

- **Unavailability (down).**

15.6.7.1 Handling Operator Alerts

1 Click **Request Management** menu option to expand its submenu.

2 Click **Operator Alerts** submenu option to display its page.

- The **Operator Alerts** page displays.

Operator Alerts

Listing

Show 10 rows at a time. Display ALL alerts

first | previous | Showing 1 - 4 of 4 | next | last

Alert Type	Alert Info	Explanation	Creation Time
DS	DESTINATION.HOST:f2acs01	Max time allowed for Ftp Push Exceeded	May 9 2006 11:13AM
PS	PDS	Submission to PDS Suspended	Jan 26 2006 10:15AM
FtpPush	FtpPush DESTINATION.HOST:xserv01	Ftp Login Errors	Jan 9 2008 11:14AM
FtpPush	FtpPush DESTINATION.HOST:198.117.128.135	FtpPush Host not reachable	Nov 8 2007 10:05AM

first | previous | Showing 1 - 4 of 4 | next | last

Note: All operator alerts are also sent as email to: gojest.mail@gmail.com [Change]

“[Change]” links to OMS Server and Database Configuration Parameters

“details...” links to expanded information on cause of alert

Ftp Push Monitor - Active Configured Destination
Destination Name OTHER Host Name f2acs01

Ftp Push Requests List For this Destination

Order ID	Request Size(MB)	Gran Cnt	Priority	Request Status	Response Class	ESDT	UserID	Result Cnt	Created	Last Update	Actions
2000010010	< 5	1	0	Cancelled	C	ECSBRR 001	ECSQuest	0	Jun 7 2007 10:21AM	Jan 11 2008 11:36AM	
2000010011	< 5	1	0	Cancelled	C	ECSBRR 001	ECSQuest	0	Jun 7 2007 10:21AM	Jan 11 2008 11:36AM	
2000010009	< 5	1	0	Cancelled	C	ECSBRR 001	ECSQuest	0	Jun 7 2007 10:15AM	Jan 11 2008 11:36AM	
2000010008	< 5	1	0	Cancelled	C	ECSBRR 001	ECSQuest	0	Jun 7 2007 8:46AM	Jan 11 2008 11:36AM	
2000009477	25	1	0	Cancelled	C	MOD11_L2_001	ECSQuest	0	Mar 23 2007 2:07PM	Jan 11 2008 11:23AM	

Ftp Push Monitor - Suspended Configured Destination
Destination Name OTHER Host Name xserv01

Destination Failed Request List

Request Id	ECS Granule Id	DFL Granule Id	Last Update	Size (MB)	Explanation
2000013038	19729	16617	Jan 9 2008 12:14PM	0.2054	Request Cancelled
2000013038	19730	16616	Jan 9 2008 12:14PM	0.2070	Request Cancelled
2000013038	19731	16615	Jan 9 2008 12:14PM	0.1457	Request Cancelled
2000013038	19732	16618	Jan 9 2008 12:14PM	0.1710	Request Cancelled
2000013038	19733	16624	Jan 9 2008 12:14PM	0.6161	Request Cancelled
2000013038	19734	16614	Jan 9 2008 12:14PM	0.1020	Request Cancelled
2000013038	19735	16621	Jan 9 2008 12:14PM	0.2699	Request Cancelled
2000013038	19736	16613	Jan 9 2008 12:14PM	0.1726	Request Cancelled
2000013038	19737	16620	Jan 9 2008 12:14PM	0.2826	Request Cancelled
2000013038	19738	16620	Jan 9 2008 12:14PM	0.1465	Ftp Login Errors

Ftp Push Requests List For this Destination

Order ID	Request Size(MB)	Gran Cnt	Priority	Request Status	Resource Class	ESDT	UserID	Result Cnt	Created	Last Update	Actions
2000010002	10	10	0	Operator Intervention	C	MOD14_005	ECSQuest	2	Jan 9 2008 11:14AM	Jan 9 2008 12:10PM	

Figure 15.6-26. Operator Alerts Page (A) and Alert Details Page (B-C)

3 Observe the alerts listed on the **Operator Alerts** page (Figure 15.6-26, Frame A). It displays the Order Manager Server’s detected system malfunctions in the following fields (Figure 15.6-27, Frame 1 Operator Alerts Page – Fields and Options) of the **Listing** section. This section has two display options:

- 1 - **Show <number> rows at a time** – displays limited records (values 5 to 100) on the Operator Alerts Page.
 - 2 - **Display <list> alerts** – displays selection of several alerts types by groups.
- 4 At the bottom of the Operator Alerts Page, a note indicates, “All operator alerts are also sent as email to :<email address> [Change]” when an alert or intervention is generated. This email address is configured using the “OMS Server and Database Configuration: Email parameters” page, under the OMS Configuration submenu.
- ▶ Click [**Change**] to view the configured Operator Alert Email address.
 - The **OMS Server and database Configuration: Email** parameters page displays.
 - ▶ Click the navigation **Previous Page** (◀) button, to return to the **Operator Alerts Page**.

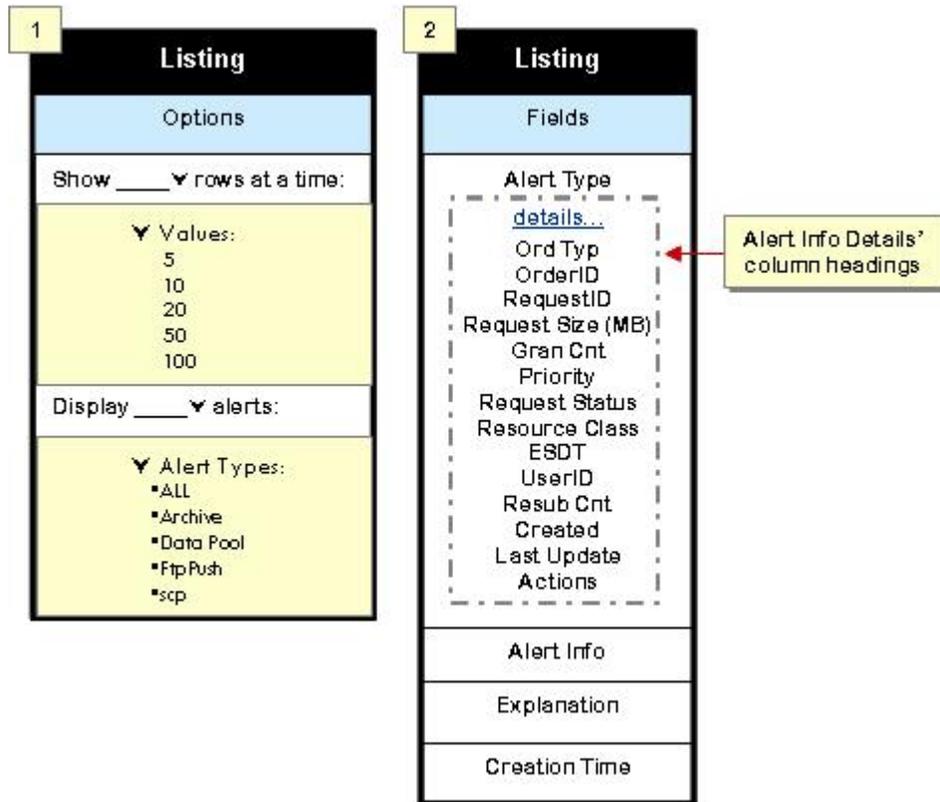


Figure 15.6-27. Operator Alerts Page – Fields and Options

- 5 Select **FtpPush** using from the **display <list> alerts** option to display all FtpPush Requests.

NOTE: Operator Alerts are displayed in ascending order by Creation Time. Operator can use the browser (Edit, Find in Page) menu option to perform keyword searches on displayed data on current page.

- 6 Select **details...** under the **Alert Info** column to display extended details affecting the request (Figure 15.6-26 Alert Details Page, Frame B-C).

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) causing the infarction is satisfied or is in a satisfactory state.

15.6.8 Exiting the OM GUI

The procedure for closing Request Management submenu pages on the **OM GUI** will log-out the Operator. This is necessary for meeting security requirements. The Operator can still view the pages of the submenus, but will not be able to perform any actions. The Operator will use the log out option found in the left-panel of the menu to invoke the following:

- Operator is logged out from the OM GUI.

15.6.8.1 Logging Out of OM GUI

- 1 To logout of the OM GUI, locate the **Log Out** link on the left-pane navigation frame:
 - ▶ Click the **Log Out** link.
 - ▶ A log-out dialog box message, “**Are you sure you want to log out?** This will close your browser displays.
 - ▶ Click **OK** - to dismiss the dialog box and to complete the log-out.
 - ▶ Click **Cancel** – to dismiss the dialog box without logging out.
-

15.7 OM GUI – Destination Monitor

The OM GUI menu, Destination Monitor page provides the full-capability Operator with monitoring capability to suspend distributions.

The Destination Monitor submenu options will be examined using to the following checklist:

Table 15.7-1. Destination Monitor - Activity Checklist

Order	Role	Task	Section	Complete?
1	Distribution Technician	Viewing and Responding to Suspended FTP Push Distribution Destinations	(P) 15.7.1.1	
2	Distribution Technician	Viewing and Responding to Destination Details	(P) 15.7.1.2	

15.7.1 Destination Monitor Submenu Page – Suspended Destinations

The “Suspended Destinations” (Monitor) page provides the full-capability operator with a means of viewing suspended FTP Push/SCP Destinations and performing several kinds of actions, with respect to suspended FTP Push/SCP Destinations:

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

15.7.1.1 Viewing and Responding to Suspended FTP Push Distribution Destinations

- 1 Click **Destination Monitor** menu option to expand its submenu.
- 2 Click **Suspended Destinations** submenu option to display its page.
- 3 Observe information displayed on the **Suspended Destination Monitor** page (Figure 15.7-1, Frame A).
 - The **Suspended Destinations** page has the following columns:
 - **Media Type.**
 - **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).

A

Suspended Destinations Monitor							
Media Type	Destination Name	Host Name	Time of Suspension	Granules Queued Count	Granules Queued Size MB	Suspend Reason	Resume
FtpPush	OTHER	xserv01	Jan 9 2008 11:15AM	10	2	Ftp Login Errors	Resume
FtpPush	OTHER	198.117.129.135	Nov 8 2007 10:05AM	0	0	FtpPush Host reachable	Resume

<host name> link to Ftp Push Monitor

B

Ftp Push Monitor-- Suspended Configured Destination
Destination Name OTHER Host Name xserv01

Destination Failed Request List						
Request Id	ECS Granule Id	DPL Granule Id	Last Update	Size (MB)	Explanation	
2000013938	19729	16617	Jan 9 2008 12:14PM	0.2554	Request Canceled	
2000013938	19730	16616	Jan 9 2008 12:14PM	0.2070	Request Canceled	
2000013938	19731	16615	Jan 9 2008 12:14PM	0.1457	Request Canceled	
2000013938	19732	16618	Jan 9 2008 12:14PM	0.1310	Request Canceled	
2000013938	19733	16624	Jan 9 2008 12:14PM	0.6161	Request Canceled	
2000013938	19734	16614	Jan 9 2008 12:14PM	0.1220	Request Canceled	
2000013938	19735	16621	Jan 9 2008 12:14PM	0.2699	Request Canceled	
2000013938	19736	16613	Jan 9 2008 12:14PM	0.1735	Request Canceled	
2000013938	19737	16620	Jan 9 2008 12:14PM	0.2826	Request Canceled	
2000013938	19738	16630	Jan 9 2008 12:14PM	0.1455	Ftp Login Errors	

FtpPush Requests List For this Destination

Listing

Go directly to row of 1 row Show 50 rows at a time

Ord Typ	OrderID	Request Size(MB)	Gran Cnt Complete	Priority	Request Status	Resource Class	ESDT	UserID	Resub Cnt	Created	Last Update	Actions
Regular	2000013582 2000013938	2	10 0	NORMAL	Operator Intervention	C	MOD14.005	ECSGuest	2	Jan 9 2008 11:14AM	Jan 9 2008 12:15PM	Cancel

Apply button

Cancel option

Suspend option

Resume option

Figure 15.7-1. Suspended Destinations Monitor (A) and Ftp Push Monitor-Suspended Configured Destination (B) Pages

- 4 To resume a **suspended destination**:
- ▶ Click the **Resume** button in the destination's **Resume** column (if applicable).
 - The destination is resumed.
 - The **Suspended Destinations** page refreshes and the resumed destination is no longer on the list of suspended destinations.

5 To suspend an **active destination or view destination** details of an active or suspended destination:

- ▶ In the **Active Destination** section of the screen, enter the **Destination Name** or the destination **Host Name (FTP Node)** in appropriate text field.
- ▶ Click applicable button:
 - **Suspend** – to suspend an active destination and refresh the page. The suspended destination is included in the list of suspended destinations.
 - **View Requests** - to view ftp push requests associated with an active destination or a suspended destination.
 - The **FtpPush Requests List For this Destination** page (Figure 15.7-1, Frame B) displays.

NOTE: The data displayed in the Ftp Push Requests List For this Destination section are not in a terminal state.

The **Host Name Details** (Destination Details) page (Figure 15.7-1, Frame B) provides the full-capability Operator the ability to view detailed data of a particular destination and can perform the following 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.

15.7.1.2 Viewing and Responding to Destination Details

- 1 Click the **Host Name** link on the **Suspended Destinations Monitor** page to display the Destination Details page (if not already being displayed).
 - The **Ftp Push Monitor-Suspended Configured Destination** page displays (Figure 15.7-1, Frame B).

- 2 Observe information displayed on the **Ftp Push Monitor-Suspended Configured Destination** page.
 - The page displays the **associated destination and host names** in its title.
 - The **Destination Failed Request List** section has the following columns:
 - **Request Id.**
 - **ECS Granule Id.**
 - **DPL Granule Id.**
 - **Last Update.**
 - **Size (MB).**
 - **Explanation.**
 - Click the underscored **column header** causes table contents to be sorted on that column.
 - For example, clicking on the **Last Update** link causes the table to be organized in numerical order by last date updated.
 - The **FtpPush Requests List For This Destination Listing** has the following:
 - The **Show <number> rows at a time** window to minimize or maximize number of data rows to be displayed at a time.
 - For example, if a **Show <number> row 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.
 - 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 <number> 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** 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 Click **Home** link on the OM GUI menu, to return to the home page.
-

15.8 OM GUI – Archive Data

The Operator (whether full-capability or limited capability) is provided with the option of viewing the repository for all historical distributed and processed requests on the OM GUI using filters.

The Archive Data submenu options will be examined using to the following checklist:

Table 15.8-1. Archive Data - Activity Checklist

Order	Role	Task	Section	Complete?
1	Distribution Technician	Filtering Historical Distribution Requests	(P) 15.8.1.1	
2	Distribution Technician	Filtering Historical Processing Requests	(P) 15.8.2.1	

15.8.1 Archive Data Submenu Page – Historical Distribution Requests Filter

The Historical Distribution Requests page (Figure 15.8-1, Frame A) provides the full-capability or limited capability operator the tool to view, by filtering (Figure 15.8-1, Frame B), archived distributed requests information on the OM GUI.

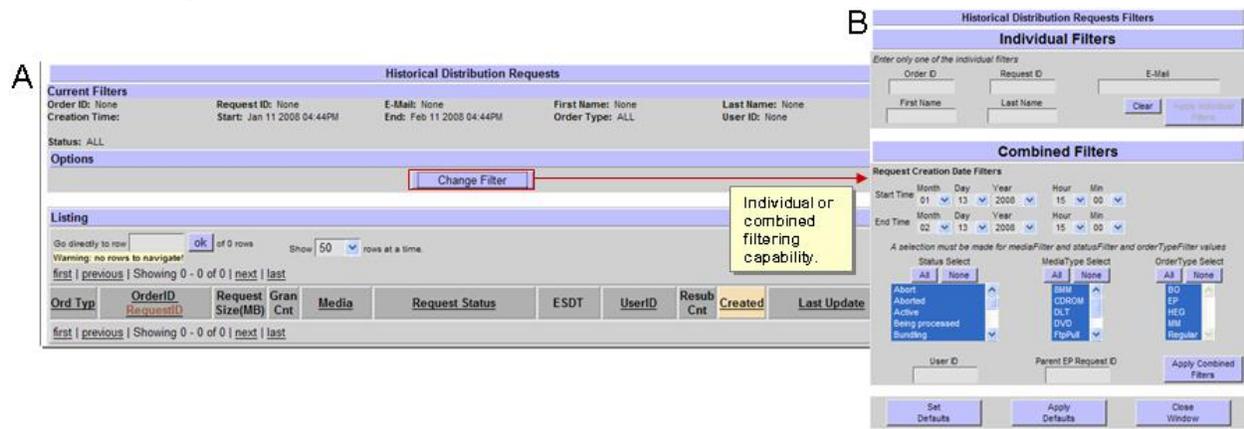


Figure 15.8-1. Historical Distribution Requests Page (A) and Filter (B)

15.8.1.1 Filtering Historical Distribution Requests

- 1 Click **Archive Data** menu option to expand its submenu.
- 2 Click **Historical Distribution Requests [filter]** submenu option to display the **Historical Distribution Requests** page (Figure 15.8-1, Frame A).
 - The **Historical Distribution Requests** page displays.

- 3 Observe the historical information displayed in the three working parts of the **Historical Distribution Requests** page (Figure 15.8-2):

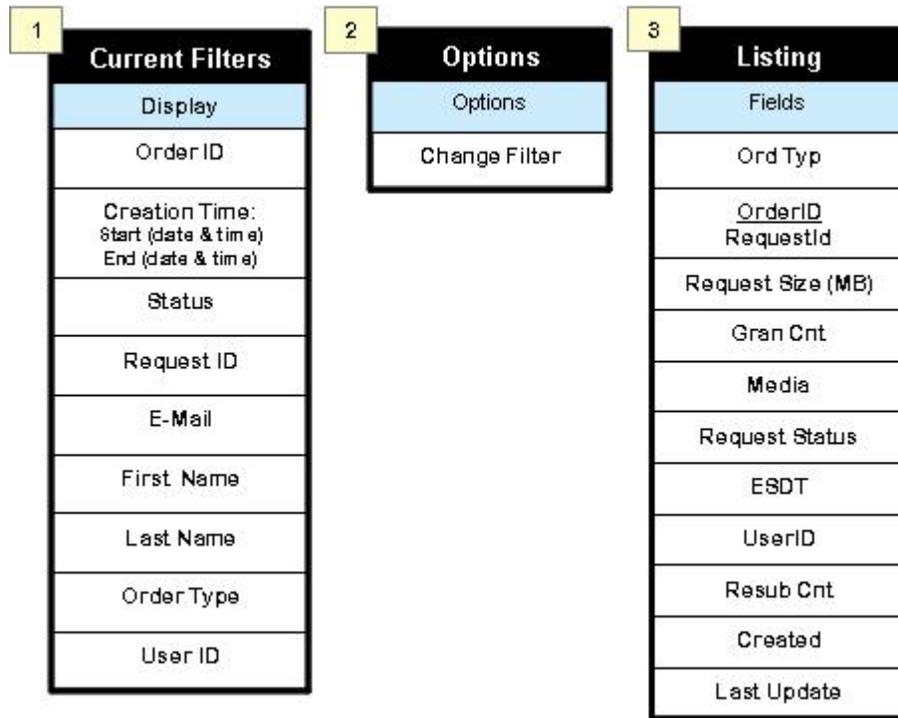


Figure 15.8-2. Historical Distribution Requests Page – Fields and Options

- 4 Click on an underscored **column header** to sort page by that column:
- ▶ Click the **Request Status** to organize the table, alphabetically by the status of the requests in the list.
 - ▶ Click on a specific **Order ID** or **Request ID** to display more detailed data concerning that particular order or request on another page.
- 5 To filter the **Historical Distribution Requests Listing** to display details of a desired request(s), perform the following:
- ▶ Click the **Change Filter** button, in the **Options** section of the page.
 - The **Historical Distribution Requests Filters** window (Figure 15.8-1, Frame B) displays.

- ▶ Define **filter criteria**:
 - Enter search data for any one field of the **Individual Filter**.
 - Select multiple options for one or more fields of the **Combined Filter**.
- ▶ Click **Apply Combined Filter** (or Apply Individual Filter) button to apply the filter criteria.
 - The **Historical Distribution Requests** page displays.

6 Observe results of the filter change on the **Historical Distribution Requests** page.

15.8.2 Archive Data Submenu Page – Historical Processing Requests Filter

The **Historical Processing Requests** page (Figure 15.8-3, Frame A) provides the full-capability or limited capability operator the tool to identify the archived external processing requests, by filtering (Figure 15.8-3, Frame B), archived processing requests information on the OM GUI. The Operator can filter any specific external processing services or HEG through the historical processing services request filter.

Figure 15.8-3. Historical Processing Requests Page (A) and Filter (B)

Frame A: Historical Processing Requests

Current Filters
 Order ID: None Request ID: None E-Mail: None First Name: None Last Name: None
 Creation Time: Start: Mar 9 2006 06:32PM End: Apr 17 2007 10:56PM User ID: None

Options
 Change Filter

Listing
 Go directly to row: [] of 14 rows Show: 20 rows at a time.
 first | previous | Showing 1 - 14 of 14 | next | last

OrderID RequestID	Processor	Request Size(MB)	Gran Cnt	Media	Request Status	ESDT	UserID	Resub Cnt	Created	Last Update
0300076633 0300074955	Subsetter1	< .5	1	FtpPush	Shipped	MOD11A1.004	ECSGuest	0	Sep 21 2006 4:29PM	Sep 21 200 4:32PM
0300076626 0300074847	OTHER	6	1	FtpPull	Operator Intervention	MOD11A1.004	ECSGuest	0	Sep 21 2006 4:14PM	Sep 21 200 4:21PM
0300076604 0300074523	OTHER	0	1	FtpPull	Aborted	MOD11A1.004	ECSGuest	0	Sep 21 2006 3:16PM	Sep 21 200 3:41PM
0300076598 0300074917	OTHER	0	1	FtpPull	Abort	MOD11A1.004	ECSGuest	0	Sep 21 2006 1:27PM	Sep 21 2006 1:27PM
0300076209 0300074424	OTHER	< .5	1	FtpPull	Canceled	MOD11A1.004	ECSGuest	0	Sep 14 2006 10:30AM	Sep 14 2006 11:31AM
0300076202 0300074417	Subsetter1	0	1	FtpPull	Terminated	MOD11A1.004	ECSGuest	0	Sep 13 2006 2:39PM	Sep 13 2006 2:42PM
0300076200 0300074415	Subsetter1	< .5	1	FtpPull	Operator Intervention	MOD11A1.004	ECSGuest	0	Sep 13 2006 2:32PM	Sep 13 2006 2:34PM
0300076195 0300074410	Subsetter1	3	1	FtpPush	Operator Intervention	MOD11A1.004	dd7c89526a35ad	0	Sep 13 2006 2:26PM	Sep 13 2006 2:29PM

Frame B: Historical Processing Requests Filters

Individual Filters
 Enter only one of the individual filters
 Order ID: Request ID: E-Mail: First Name: Last Name: Clear Apply Individual Filter

Combined Filters
 Request Creation Date Filters
 Start Time: Month Day Year Hour Min (01 11 2006 16 54)
 End Time: Month Day Year Hour Min (02 11 2006 16 54)
 Status Select: All None (Abort, Aborted, Active, Being processed, Canceled)
 MediaType Select: All None (FtpPull, FtpPush)
 ProcessService Select: All None (HEG)
 User ID: Parent EP Request ID: Apply Combined Filters
 Set Defaults Apply Defaults Close Window

Figure 15.8-3. Historical Processing Requests Page (A) and Filter (B)

15.8.2.1 Filtering Historical Processing Requests

- 1 Click **Historical Processing Requests [filter]** submenu option to display the **Historical Distribution Requests** page.
 - The **Historical Processing Requests** page (Figure 15.8-3, Frame A) displays.
- 2 Observe the historical information displayed in the three working parts of the **Historical Processing Requests** page and its options (Figure 15.8-4).

1	Current Filters	2	Options	3	Listing
	Display		Options		Fields
	Order ID		Change Filter		<u>OrderID</u>
	Creation Time: Start (date & time) End (date & time)				RequestID
	Status				Processor
	Request ID				Request Size (MB)
	E-Mail				Gran Cnt
	First Name				Media
	Last Name				Request Status
	Order Type				ESDT
	User ID				UserID
					Resub Cnt
					Created
					Last Update

Figure 15.8-4. Historical Processing Requests Page – Fields and Options

- 3 Click on an underscored **column header** to sort page by that column.
 - 4 To filter the **Historical Processing Requests Listing** to display details of a desired request(s), perform the following:
 - ▶ Click the **Change Filter** button, in the Options section of the page, to define the filter criteria.
 - The **Historical Processing Requests Filters** window (Figure 15.8-3, Frame B) displays.
 - ▶ Define **filter criteria**:
 - Enter search data for any one field of the **Individual Filter**.
 - Select multiple options for one or more fields of the **Combined Filter**.
 - ▶ Click **Apply Combined Filter** (or Apply Individual Filter) button to apply filter criteria.
 - The **Historical Processing Requests** page displays.
 - 5 Observe results of the defined filter criteria on the **Historical Distribution Requests** page.
-

15.9 OM GUI – OM Status Pages

The Operator (full or limited capability) is provided summary information on current requests processing states, with the option of invoking queries to view the statuses on the on the OM Status pages. The parameters for these status pages are modifiable using the OM Configuration Server/Database submenu options.

NOTE: Use the Server/Database Configuration menu to set database and server parameters to "fine tune" the Order Manager Server and the database. These are general parameters that affect the entire system, but no particular media types.

The OM Status Pages submenu options will be examined using to the following checklist:

Table 15.9-1. OM Status Pages - Activity Checklist

Order	Role	Task	Section	Complete?
1	Distribution Technician	Viewing/Modifying OM Queue Status	(P) 15.9.1.1	
2	Distribution Technician	Viewing HEG Order Status	(P) 15.9.2.1	
3	Distribution Technician	Viewing Staging Status	(P) 15.9.3.1	
4	Distribution Technician	Viewing Pending HEG Granules	(P) 15.9.4.1	
5	Distributed Technician	Viewing Data Pool File System Status	(P) 15.9.5.1	

15.9.1 OM Status Pages Submenu Page – OM Queue Status

The **OM Queue Status** page (Figure 15.9-1) provides the full-capability operator with a means to monitor and modify the current status of request queues for all media as well as the request queues for OMS, 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.

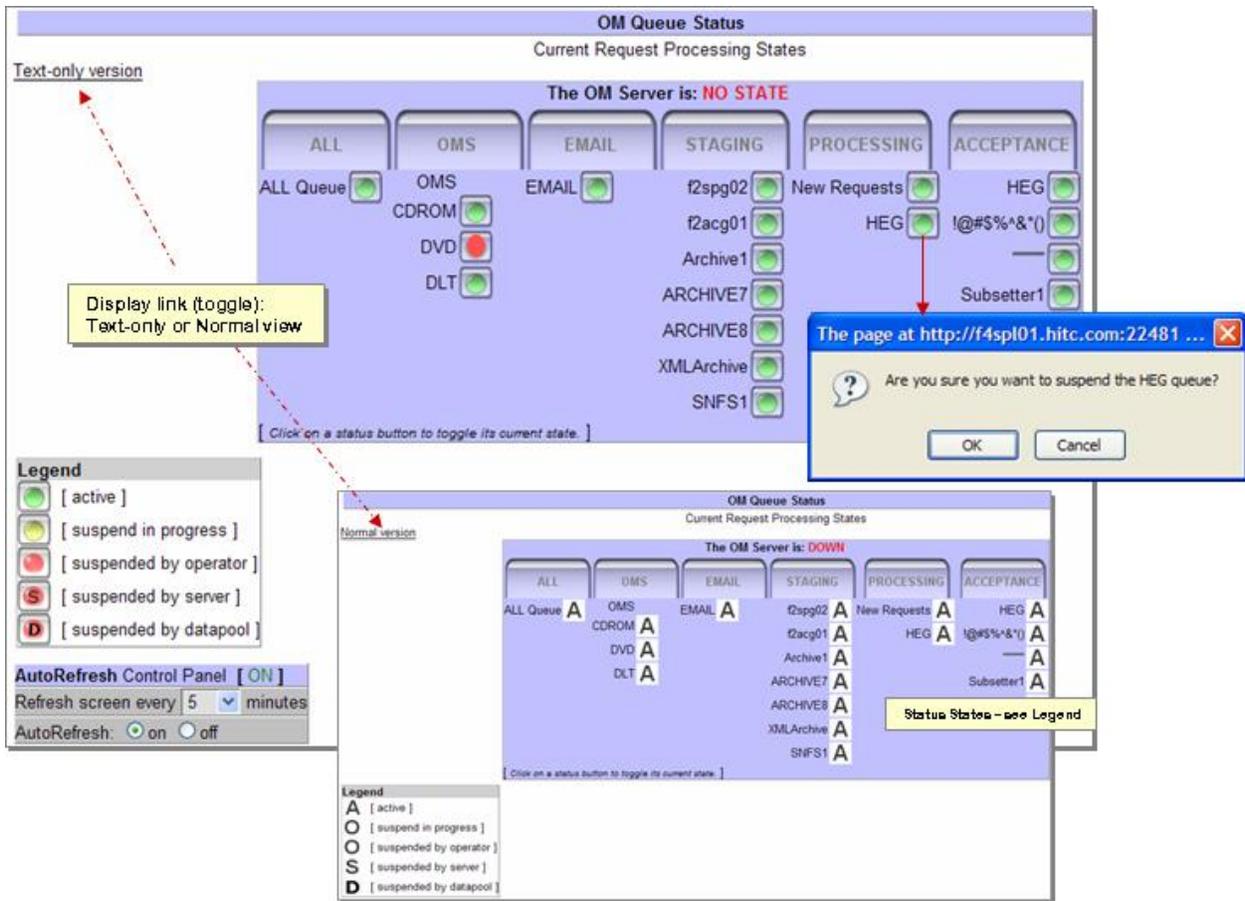


Figure 15.9-1. OM Queue Status Page

15.9.1.1 Viewing/Modifying OM Queue Status

- 1 Click **OM Status Pages** menu option to expand its submenu.
- 2 Click **OM Queue Status** submenu option to display its page (Figure 15.9-1).
 - 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.
 - The **OM Queue Status** page displays in **Text-only version**.
- 3 Observe displayed information in **Text-only version** (default) of the page.
 - ▶ Click the **Text-only** link to toggle the view to Normal.

NOTE: The Text-only version was intended for visually impaired Operators.

- 4 Observe information displayed in the **Current Request Processing States** table.
- The OM Server status is indicated by one of two states:
 - The OM Server is:** (green) **UP** [OM Server is currently operating].
 - The OM Server is:** (red) **DOWN** [OM Server is not currently operating].

The status indicators (legend colors or letters) on the **Current Request Processing States** page are labeled (by color circles or a letter, based on display version) to indicate the status of the request queues. If clicked, the Operator can toggle states from “activate” to “suspend” or vice versa. The Text-only versions indicators represents:

- Green (no letter or A)** – the queue is active (or resumed). The queue is currently active or was resumed by either Operator or Server (automatic) intervention.
- Red (no letter or O)** – indicates that the queue was manually suspended by Operator or if yellow, that the queue is suspend in progress.
- Red (S)** – indicates that the queue was automatically suspended by OM Server. This is a non-Operator controlled event.
- Red (D)** – indicates that the queue has been suspended by Datapool.

- 5 To toggle the queue state, click on the **queue status indicator/button**:
- A confirmation dialog box displays asking, **Are you sure you want to <state> the <queue type> queue?** (Figure 15.9-1)
 - Click **OK** to change the state of the queue and dismiss the dialog box.

15.9.2 OM Status Pages Submenu Page – HEG Order Status

The **HEG Order Status** page (Figure 15.9-2) allows the full-capability Operator to monitor the number of HEG requests and data volume currently in HEG processing. The information is displayed on the HEG Order Status page is as follows:

- Total HEG Requests Queued.**
- Total HEG Granules Queued.**
- Total Input Data (MB).**

HEG Order Status		
Total HEG Requests Queued	Total HEG Granules Queued	Total Input Data (MB)
0	0	0.000

Figure 15.9-2. HEG Order Status Page

15.9.2.1 Viewing HEG Order Status

- 1 Click OM Status Pages menu option to expand its submenu.
- 2 Click **HEG Order Status** submenu option to display its page (Figure 15.9-2).
 - The **HEG Order Status** page displays.
- 3 Observe information displayed 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 <number> minutes” window.

15.9.3 OM Status Pages Submenu Page – Staging Status (Media Type, FTP Push Destination and SCP Destination)

The **Staging Status** pages (three types), shown in Figure 15.9-3, allows the Operator (full or limited capability) to monitor the number of granules and data volume currently in staging states.

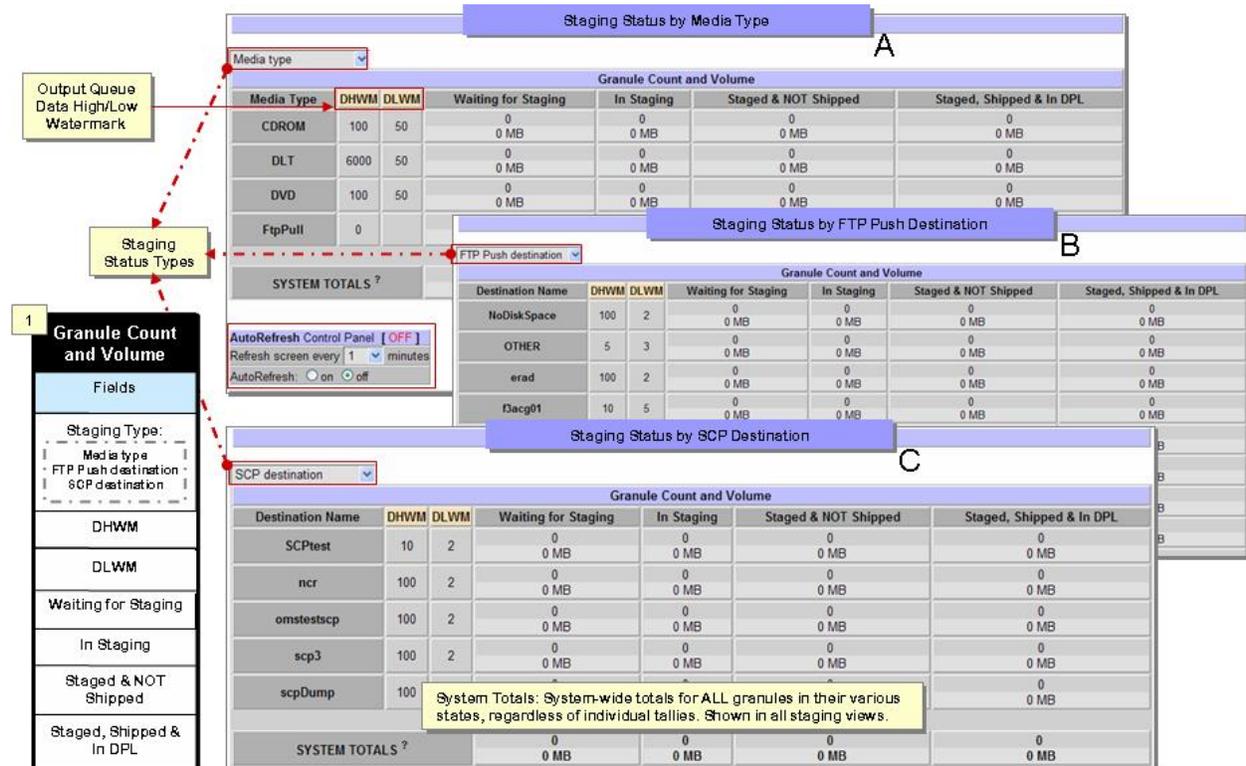


Figure 15.9-3. Staging Status Pages and Table (Fields)

Staging Status pages (Figures 15.9-3, Frames A, B, C) displays status in ALL or three ways:

- 1 - **Media Type** (Figures 15.9-3, Frames A).
- 2 - **FTP Push Destination** (Figures 15.9-3, Frames B).
- 3 - **SCP Destination** (Figures 15.9-3, Frames C).

The granules staging information (Figure 15.9-3 Staging Status Pages and Table (Fields) is arranged in four categories:

- 1 - Granules **Waiting for Staging**.
- 2 - Granules **In Staging**.
- 3 - Granules that have been **Staged and NOT Shipped**.
- 4 - Granules that have been **Staged, Shipped and In DPL**.

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

- **DHWM** – The Data High Watermark 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 Watermark 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, keeping the amount of work that is in staging or staged below the high watermark of each output queue will achieves a good balance among ftp output connections (or in the case of physical media, their various output devices). The data high watermarks 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 mainly used for dispatching high-priority work. Since it is a good idea to keep the queues at their high watermarks, 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 watermark, not affecting fast paced high-priority requests.

15.9.3.1 Viewing Staging Status

- 1 Click **OM Status Pages** menu option to expand its submenu.
 - 2 Click **one of three Staging Status** submenu options (Media Type, FTP Push Destination or SCP Destination) to display its page (Figure 15.9-3: Frame A-Media Type; Frame B-FTP Push Destination; Frame C-SCP Destination).
 - The **Staging Status by <staging type>** status page displays.
 - 3 To view another staging status page, select **staging type** from the list box on the currently displayed page.
 - 4 Observe displayed information (Figure 15.9-3) of the Granule Count and Volume section on the **Staging Status** page as follows:
 - The **Staging Status** pages, each displays same information columns, except that data is either media or destination generated.
 - **The System Totals** are system-wide totals for ALL granules in their various states, regardless of individual tallies.
 - If **AutoRefresh** is **ON**, the **Staging Status by <staging type>** page refreshes automatically as often as specified in the **Refresh screen every <n> minutes**.
-

15.9.4 OM Status Pages Submenu Page – Pending HEG Granules

The OM GUI displays pending HEG granules. The **Pending HEG Granules** (Figure 15.9-4, Frame A) page provides Operator (with either full or limited capability) with a means of viewing pending HEG granules.

15.9.4.1 Viewing Pending HEG Granules

- 1 Click **OM Status Pages** menu option to expand its submenu.
- 2 Click **Pending HEG Granules** submenu option to display its page (Figure 15.9-4, Frame A).
 - The **Pending HEG Granules** page displays.

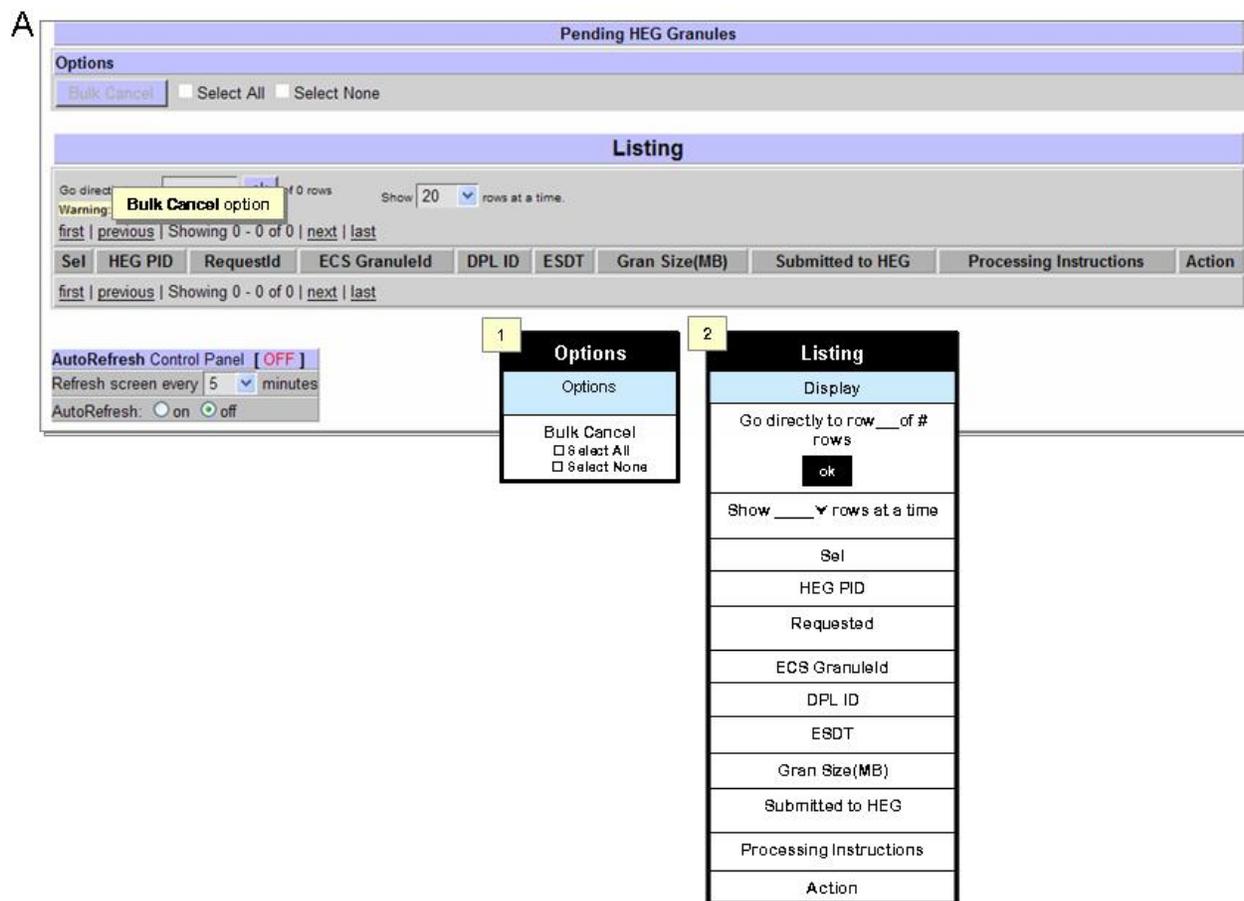


Figure 15.9-4. Pending HEG Granules Page (Frame A) and Tables (Frames 1-2)

- 3 Observe information displayed on the **Pending HEG Granules** page and its sections:
 - The **Options** section of the **Pending HEG Granules** page has the following button and selection boxes (Figure 15.9-4, Table 1):
 - **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**].
- 4 Observe the information displayed in the **Listing** section (Figure 15.9-4, Table 2) of the **Pending HEG Granules** page:
- ▶ 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.
 - ▶ To view the processing instructions for a particular granule, click on the **View...** link in the **Processing Instructions** column in the **Pending HEG Granules** page to bring up a **Processing Instructions** window to view the processing instructions for the line item.
 - ▶ Click the **Close Window** button to **close the Processing Instructions** window.
- 5 To **cancel pending** HEG granule(s):
- ▶ In the **Options** section, select either the **Select All** check box (if all pending HEG granules are to be failed) or the individual check boxes in the **Sel** column associated with the specific pending HEG granules.
 - ▶ Click the **Bulk Cancel** button in the **Options** section of the **Pending HEG Granules** page, to complete the cancel pending HEG granule(s) process.
 - The specified pending HEG granules are failed.
-

15.9.5 OM Status Pages Submenu Page – DPL File System Status

The OM Status menu option provides Operator (full or limited capability) the ability to view-only the ongoing activities of the Data Pool (DPL) File System (Figure 15.9-5). This status page displays the Data Pool File System Status in two categories:

- 1 - Data Pool File Systems
- 2 - Archive File Systems

The sections display activity for data pool files' data space (free or used) usage/availability; cache threshold (alerts and suspended); granules file size and processing status.

NOTE: This status page is Read-Only.

15.9.5.1 Viewing Data Pool File System Status

- 1 Click **OM Status Pages** menu option to expand its submenu.
- 2 Click **DPL file System Status** submenu option to display the **Data Pool File System Status** page (Figure 15.9-5).
 - The **DPL File System Status** page displays.

Read-Only view		Data Pool File System Status					
Data Pool File Systems							
Name	Status	Free Space	Used Space <small>(last checked)</small>	Cache Used Alert Threshold	Queued Granules	Granules Processing	
DEFAULT <small>(datapool/DEV08/user/FS1/)</small>	active	110 GB	69% <small>(Feb 14 2008 4:29PM)</small>	92%	0 <small>0.000 MB</small>	0 <small>0.000 MB</small>	
FS2 <small>(datapool/DEV08/user/FS2/)</small>	active	205 GB	44% <small>(Feb 14 2008 4:29PM)</small>	92%	0 <small>0.000 MB</small>	0 <small>0.000 MB</small>	
Archive File Systems							
Name	Status	Free Space	Used Space <small>(last checked)</small>	Cache Used Alert Threshold	Cache Used Suspend Threshold	Queued Granules	Granules Processing
AMFS1 <small>(stomext/amfs1/)</small>	active	62 GB	74% <small>(Feb 14 2008 4:24PM)</small>	95%	100%	MB	MB
BROWFS <small>(stomext/browfs/)</small>	active	199 GB	20% <small>(Feb 14 2008 4:24PM)</small>	95%	100%	MB	MB
SNFS1 <small>(stomext/snfs1/)</small>	active	60 GB	75% <small>(Feb 14 2008 4:24PM)</small>	80%	99%	MB	MB
XMLArchive <small>(stomext/smallfiles/)</small>	active	249 GB	2% <small>(Feb 14 2008 4:24PM)</small>	95%	100%	MB	MB

Figure 15.9-5. Data Pool File System Status Page

- 3 Observe both sections of the **Data Pool file System Status** page, noting that the Archive File Systems section provides an additional “Suspend Threshold” display.
- 4 Set the **AutoRefresh** to **ON**, the **Data Pool file System Status** page refreshes automatically as often as specified in the **Refresh screen every x minutes** window.

15.10 OM GUI – OM Configuration

The OM Configuration menu option provides Operator (full or limited capability) the ability to configure the OM GUI parameters values.

The **OM Configuration** submenu pages provide the full-capability Operator with features to check and modify (if necessary) the values assigned to the following types of OM configuration parameters:

- **Aging Parameters.**
- **[All] OM Server/Database Parameters:**
 - Queue.
 - Cleanup.
 - Email.
 - Media.
 - Staging.
 - Partition.
 - Misc.

– HEG.

- **Media Parameters.**
- **Media Creation.**
- **ODL Metadata Users**
- **External Processing**
- **FtpPush/SCP Policy**

The limited-capability Operator can use the **OM Configuration** page to view the values assigned to OM configuration parameters, but can not change any parameter values.

The OM Configuration submenu options will be examined using to the following checklist:

Table 15.10-1. OM Configuration - Activity Checklist

Order	Role	Task	Section	Complete?
1	Distribution Technician	Checking/Modifying Assigned Values of Aging Parameters	(P) 15.10.1.1	
2	Distribution Technician	Checking/Modifying the Configuration of the Assigned Values of OMS Server and Database Parameters	(P) 15.10.2.1	
3	Distribution Technician	Checking/Modifying Assigned Values of Media Parameters	(P) 15.10.3.1	
4	Distribution Technician	Checking/Modifying Assigned Values of Media Creation Parameters	(P) 15.10.4.1	
5	Distribution Technician	Adding/Deleting User Email Address that will receive ODL Metadata File <ul style="list-style-type: none"> • Adding User Email Address(es) • Deleting User Email Address(es) 	(P) 15.10.5.1	
6	Distribution Technician	Adding/Deleting User Email Address that will receive Checksum File <ul style="list-style-type: none"> • Adding User Email Address(es) • Deleting User Email Address(es) 	(P) 15.10.6.1	
7	Distribution Technician	Checking/Modifying External Processing Services Configurations <ul style="list-style-type: none"> • Add New (or Edit) External Processing Service • Delete an External Processing Service 	(P) 15.10.7.1	
8	Distribution Technician	Viewing/Modifying FTP Push/SCP Policy Configuration	(P) 15.10.8.1	

15.10.1 OM Configuration Submenu Page – Aging Parameters

The **Aging Parameters** submenu option allows the full-capability Operator to configure the aging parameter (rules) for each priority level using the **Aging Parameters Configuration** page (Figure 15.10-1).

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

- 1 - **Age Step** – is the aging rate (range is 0-255, including decimal fractions) by which the effective priority of a request increases for every hour it has been waiting. If the parameter is set to zero (0), waiting requests never increase in priority. However, the priority will not exceed the “Maximum 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

- 2 - **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].
- 3 - **Starting Priority** – is a non-configurable arbitrary value that represents the priority.

Aging Parameter Configuration	
XPRESS	
Age Step ?	0
Maximum Priority ?	255
Starting Priority ?	255
VHIGH	
Age Step	0
Maximum Priority	235
Starting Priority	235
HIGH	
Age Step	0
Maximum Priority	220
Starting Priority	220
NORMAL	
Age Step	0
Maximum Priority	150
Starting Priority	150
LOW	
Age Step	0
Maximum Priority	60
Starting Priority	60

Each priority level has a non-configurable "Starting Priority" value:

- XPRESS = 255
- VHIGH = 235
- HIGH = 220
- NORMAL = 150
- LOW = 60

Figure 15.10-1. Aging Parameters Page

15.10.1.1 Checking/Modifying Assigned Values of Aging Parameters

- 1 Click **OM Configuration** menu option to expand its submenu.
- 2 Click **Aging Parameters** submenu option to display the **Aging Parameters Configuration** page (Figure 15.10-1).
 - The **Aging Parameters Configuration** page displays.
- 3 Observe the **Aging Parameters Configuration** page aging steps and priority levels values.
 - 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).

- 4 If aging parameter value(s) is modified (and is authorized):
- ▶ Type the **new value(s)** in the text entry box(s) for the relevant parameter(s).
 - ▶ Click the appropriate button:
 - **Apply** - to apply the new value(s) to the parameter(s).
 - **Reset** - to clear the new value(s) from the text entry box(s) without changing the current value(s). The original value(s) is retained.
-

15.10.2 OM Configuration Submenu Page – Server/Database

The **OMS Server and Database Configuration** page (Figure 15.10-2) provides the full-capability operator with the capability to check and modify OMS server or database parameter values.

OMS server and database parameters affect functionality of the OM server and database. 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.

OMS Server and Database Configuration: All parameters			
Parameter	Description	Units	Value
Num Of Allowed Email Submissions	Max Number of concurrent submissions to PDS		111 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Child Process Time Limit	Amount of time to wait to kill child process before retrying action	seconds	30 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Delete Complete Interventions After	Time in hours Completed Interventions are maintained	hours	10 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Delete Complete Actions After	Time in hours Completed Actions are maintained	hours	10 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Max Request Granules	Maximum number of granules a request may contain		3000 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Max Subset Granules	Maximum number of granules a request may contain if it specifies subsetting		3 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Delay Partition	Time delay in hours each successive partition is supposed to be dispatched	hours	24.0 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Max Action Retries	Maximum number of times an action can be retried before the request is FAILED		20 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Idle Sleep Time	Length of time between OM Server checks for config parameters	seconds	10 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Action Retry Wait	Time in seconds the OmServer waits before attempting to re-dispatch an action	seconds	10 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Num Of Allowed Validations	Number of threads the OMServer uses for performing request validations action	threads	100 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Action Check Interval	Time in seconds the OmServer waits before checking on actions	seconds	30 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Cleanup Check Interval	Time in seconds the OmServer waits before performing cleanup activities	seconds	300 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Suspend Check Interval	Time in seconds the OmServer waits before performing checking suspended queues	seconds	30 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Max Concurrent Requests Processed	Number of concurrent requests the Om Server will process at one time	integer	100 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Notify User For Partition Requests	Whether or not user want to recieve notification when partition happens yes or no	none	Y (Yes) <input type="button" value="↓"/> <input type="button" value="✓"/>
Global Staging Status	Synergy IV Staging Mode Status	none	A (Active) <input type="button" value="↓"/> <input type="button" value="✓"/>
Min Moderate Request	min number of tape mounts classified Moderate	number	500 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Min Expensive Request	min number of tape mounts classified Expensive	number	100 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Max Cheap Requests	Max number of Concurrent requests classified as Cheap that can be promoted to staging	number	500 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Max Moderate Requests	Max number of Concurrent requests classified as Moderate that can be promoted to staging	number	500 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Staging Action Retries	No of Retries for Staging Action	number	1 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Staging Action Retry Interval	Interval for Retry of Staging Actions	seconds	601 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Fsstat Interval	Minimum amount of time allowed between fsstat calls	seconds	6 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>
Fsstat Timeout	The maximum time fsstat is allowed to run before timing out	seconds	122 <input type="text"/> <input type="button" value="←"/> <input type="button" value="✓"/>

Figure 15.10-2. OMS Server and Database Configuration Page

15.10.2.1 Checking/Modifying the Configuration of the Assigned Values of OMS Server and Database Parameters

- 1 Click **OM Configuration** menu option to expand its submenu.
- 2 Click **[All]** submenu option, listed under the **Server/Database** header, to display its page (Figure 15.10-2). To view individual parameter's page click on its associated link:
 - To display the **OMS Server and Database Configuration: <name> parameters** page (Figure 15.10-2), click on one of the links listed under the **Server/Database** header of the **OM Configuration** submenu (Example: **[All]**, **[queue parms]**, etc...)

- Links under the **Server/Database** header in the navigation frame of the **OM Configuration** submenu includes the following categories of parameters:
 - **[All]**
 - **[queue parms]**
 - **[cleanup parms]**
 - **[email parms]**
 - **[media 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: <name> parameters** page:

- The table on the **OMS Server and Database Configuration: <name> parameters** page has the following columns:
 - **Parameter**
 - **Description**
 - **Units**
 - **Value.**
- The rows in the table indicate the parameter's current values (Figure 15.10-3) and descriptions of the following types of parameters:

Parameters		Parameters (cont)		Parameters (cont)	
Type	Name	Type	Name	Type	Name
queue	Num Of Allowed Email Submissions	staging	Global Staging Status	media	Due Date for Media Request
queue	Child Process Time Limit	staging	Min Moderate Request	email	Global Configured Operator Actions Email
cleanup	Delete Complete Interventions After	staging	Min Expensive Request	media	Qc Timeout
cleanup	Delete Complete Actions After	staging	Max Cheap Requests	media	Production Timeout
partition	Max Request Granules	staging	Max Moderate Requests	media	Media Prep Timeout
partition	Max Subset Granules	staging	Max Expensive Requests	media	Rimage Order Pull Time
partition	Delay Partition	misc.	Max Failure Archive	misc.	Max Order History Days
misc.	Max Action Retries	email	Global Configured Email	media	Luminex Timeout
misc.	Idle Sleep Time	cleanup	Max Orphan Req Age	media	Media Device Check Interval
misc.	Action Retry Wait	cleanup	Cleanup Orphan Req Period	staging	Staging Action Retries
queue	Num of Allowed Validations	email	Forward Dn Email	staging	Staging Action Retry Interval
misc.	Action Check Interval	cleanup	Unsuccess Req Ret Time	staging	Fsstat Interval
misc.	Cleanup Check Interval	HEG	Max Num of Concurrent HEG Process	staging	Fsstat Timeout
misc.	Suspend Check Interval	HEG	Max Num of Concur HEG Proc Per Req	staging	Max No Cost Requests
queue	Max Concurrent Requests Processed	HEG	HEG Process Retry Interval		
email	Notify User for Partition Requests	cleanup	Cleanup Delay Interval		

Figure 15.10-3. OM Server/Database Configuration - Parameters

- To manually update (refresh) the data on the screen, click on the **reload**  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), 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 Once all desired parameters are updated, click on the **Apply** button to apply new value(s) to the modified parameter(s):
- The **OMS Server and Database Configuration** page refreshes and displays the modified value(s).
 - To retain the original value, click the **Reset** button. The new value(s) from the text entry box(es) will be reset to the current value(s).

15.10.3 OM Configuration Submenu Page – Media

The **Media** submenu Media Configuration page option (Figure 15.10-4) provides the full-capability Operator the ability to check and modify media parameters.

Media parameters are specific to each kind of distribution medium and affect such things as limit checking against standard media capacity (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 variables.

The screenshot displays the Media Configuration page with a table of parameters and their values for various media types. The parameters are organized into sections for FtpPull, FtpPush, CDROM, DVD, DLT, and scp. Each parameter has a value field and a reset button. At the bottom, there are buttons for 'Apply' and 'Reset', and a summary box with instructions.

Parameter Name	Value
FtpPull [rule]	
MediaCapacity (GB)	40.0000
PartitionGranuleLimit	3000
PartitionSizeLimit (GB)	60.0000
MinRequestSize (GB)	0.0000
MaxRequestSize (GB)	90.0000
MinBundleSize (GB)	54.0000
Request High Water Mark	100
Data High Water Mark (MB)	2000
Pull Gran Dpl Time (days) [...]	1
Pull Gran Dpl Ret Pri (number) [...]	6
Min Pri To Preempt (number) [...]	5
FtpPush [rule]	
MediaCapacity (GB)	150.0000
PartitionGranuleLimit	3
PartitionSizeLimit (GB)	400.0000
MinRequestSize (GB)	0.0000
MaxRequestSize (GB)	450.0000
MinBundleSize (GB)	40.0000
CDROM [rule]	
MediaCapacity (GB)	0.3000
PartitionGranuleLimit	1000
PartitionSizeLimit (GB)	55.0000
MinRequestSize (GB)	0.0000
MaxRequestSize (GB)	60.0000
MinBundleSize (GB)	0.1000
Request High Water Mark	1000000
Data High Water Mark (MB)	10000000000
Request Low Water Mark	10
Data Low Water Mark (MB)	10
DVD [rule]	
MediaCapacity (GB)	2.0070
PartitionGranuleLimit	3000
PartitionSizeLimit (GB)	12.7000
MinRequestSize (GB)	0.0000
MaxRequestSize (GB)	14.1000
MinBundleSize (GB)	12.0000
Request High Water Mark	200
Data High Water Mark (MB)	300
Request Low Water Mark	10
Data Low Water Mark (MB)	10
DLT [rule]	
MediaCapacity (GB)	4.0070
PartitionGranuleLimit	3000
PartitionSizeLimit (GB)	94.0000
MinRequestSize (GB)	0.0000
MaxRequestSize (GB)	105.0000
MinBundleSize (GB)	94.0000
Request High Water Mark	50
Data High Water Mark (MB)	3000
Request Low Water Mark	0
Data Low Water Mark (MB)	1
scp [rule]	
MediaCapacity (GB)	50.0000
PartitionGranuleLimit	3000
PartitionSizeLimit (GB)	60.0000
MinRequestSize (GB)	0.0000
MaxRequestSize (GB)	65.0000
MinBundleSize (GB)	40.0000

Apply Reset

Submit Media Configuration Changes Rest Media Configuration Changes

Apply Changes to all parameters.

Reset this parameter back to its original value.

Rule for configuring medial types. [rule]

Figure 15.10-4. Media Configuration Page

15.10.3.1 Checking/Modifying Assigned Values of Media Parameters

- 1 Click **OM Configuration** menu option to expand its submenu.
- 2 Click **Media** submenu option to display its page (Figure 15.10-4).

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 on the **Media Configuration** page.
 - The **Media Configuration** page has the following columns:
 - **Parameter Name.**
 - **Value.**
 - Each of the parameters applies to the following distribution media:
 - **FtpPull.**
 - **FtpPush.**
 - **CDROM.**
 - **DLT.**
 - **DVD.**
 - **scp.**
 - The rows in the table indicate the current assigned values to the following types of parameters for each type of distribution 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.
 - **PartitionGranuleLimit** – is the maximum number of granules that may be partitioned for the type of medium.
 - **PartitionSizeLimit (GB)** – should be the size (in GB) at which point partitioning of a request can occur.
 - **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.

- **Request High Water Mark** – The Request High Watermark [RHWM] 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 (MB)** – The Data High Watermark [DHWM] 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.
 - **Request Low Water Mark** – The Request Low Watermark [RLWM] 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 (MB)** – The Data Low Watermark [DLWM] 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.
 - **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.
- To manually update (refresh) the data on the screen, click on the **reload**  icon on 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, type the **new value(s)** in the text entry box(es) for the relevant parameter(s).
- 5 After all desired parameters have been updated; select the **Apply** button to submit the media configuration changes.
- Select the **Reset** button to clear the new value(s) from the text entry box(es) and reset the parameter(s) back to its original value(s).
 - The value(s) displayed in the text entry boxes return to the original value(s).
-

15.10.4 OM Configuration Submenu Page – Media Creation

The **Media Creation Configuration** page (Figure 15.10-5) 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.

15.10.4.1 Checking/Modifying Assigned Values of Media Creation Parameters

- 1 Click **OM Configuration** menu option to expand its submenu
- 2 Click **Media Creation** submenu option to display the **Media Creation Configuration** page (Figure 15.10-5).
 - The **Media Creation Configuration** page displays.

The screenshot shows the 'Media Creation Configuration' page with three sections: CDROM, DLT, and DVD. Each section has three rows of configuration parameters. The DVD section's 'DispatchMode' dropdown menu is open, showing a list of options: 'Manual', 'Automatic', and 'Manual'. A yellow callout box points to the dropdown menu with the text 'DispatchMode Options list box'. At the bottom of the page are 'Apply' and 'Reset' buttons.

Media Creation Configuration	
CDROM	
DispatchMode	Manual
Max number of QC devices per Request (Automatic Mode)	2
Default QC Volume Selection	<input type="radio"/> All <input checked="" type="radio"/> None
DLT	
DispatchMode	Manual
Max number of Production devices per Request (Automatic Mode)	2
Max number of QC devices per Request (Automatic Mode)	2
Default QC Volume Selection	<input checked="" type="radio"/> All <input type="radio"/> None
DVD	
DispatchMode	Manual
Max number of QC devices per Request (Automatic Mode)	2
Default QC Volume Selection	<input type="radio"/> All <input type="radio"/> None

Figure 15.10-5. 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 on the **Media Creation Configuration** page.
 - The **Media Creation Configuration** has two columns that shows 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.**
 - **Max number of QC devices per Request (Automatic Mode).**
 - **Max number of Production devices per Request (Automatic Mode).**
 - **Default QC Volume Selection.**
 - Each of the preceding parameters applies to each of the following distribution media:
 - **CDROM**
 - **DLT**
 - **DVD.**
- 4 To modify the media creation parameter value(s):
- ▶ Highlight and delete **current value.**
 - ▶ Enter **new value.**

NOTE: The **DispatchMode** can be set to either **Automatic** or **Manual** by the full-capability Operator.

- ▶ Click on the appropriate button from the following selections:
 - **Apply** - to submit the configuration changes with the parameter(s) new value(s).
 - **Reset** - to reset the value(s) back to original value(s).
-

15.10.5 OM Configuration Submenu Page – ODL Metadata Users

Limited-capability Operator is limited to viewing Metadata File Users configuration only. The Operator cannot add, or delete email addresses.

The **ODL Metadata File Users Configuration** page (Figure 15.10-6) allows the full-capability Operator to configure a list of Email addresses that signifies users that need to receive metadata in ODL .met file format.

NOTE: 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.

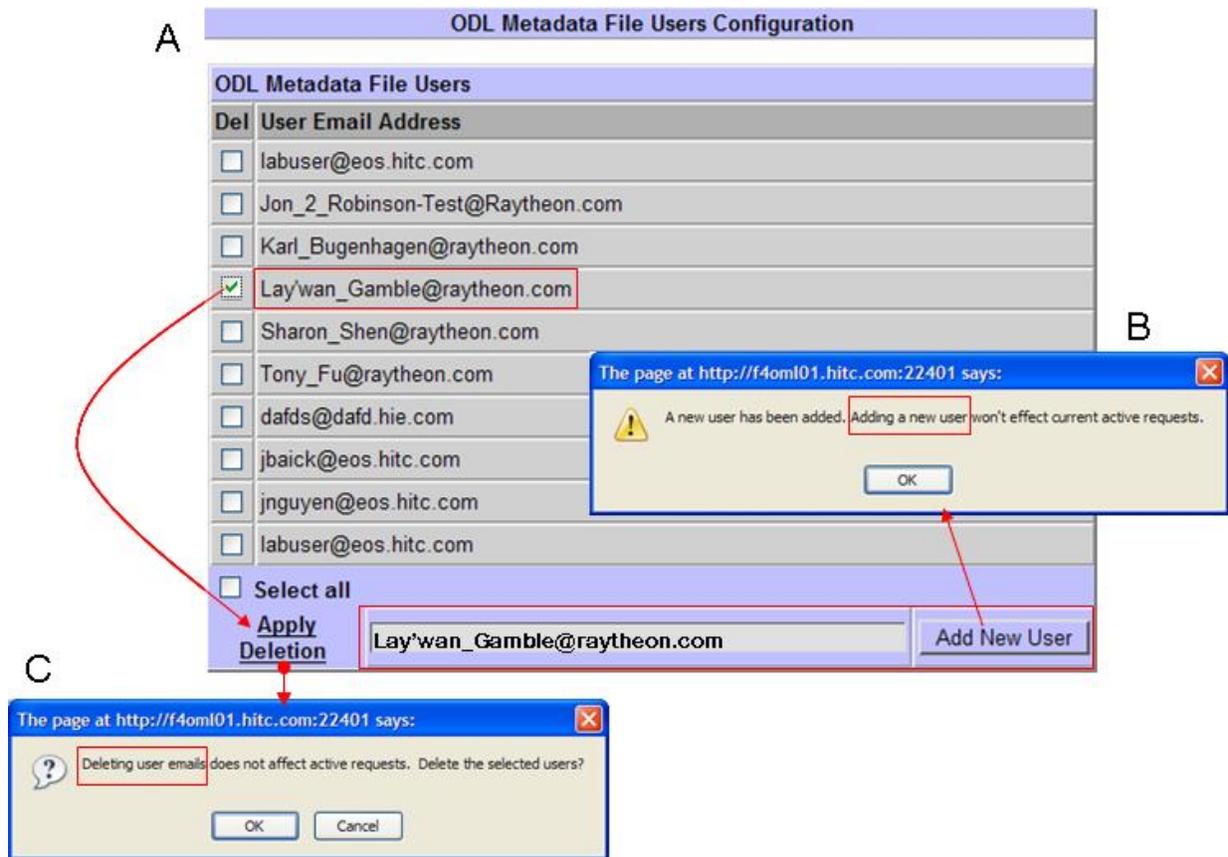


Figure 15.10-6. ODL Metadata File Users Configuration Page

15.10.5.1 Adding/Deleting User Email Address that will receive ODL Metadata File

- 1 Click **OM Configuration** menu option to expand its submenu.
- 2 Click **ODL Metadata Users** submenu option to display the **ODL Metadata File Users Configuration** page (Figure 15.10-6, Frame A).
 - The **ODL Metadata File Users Configuration** page displays.

Adding User Email Address(es)

- 3 Enter the new user's **email address** to the **add new user textbox**.
- 4 Click the **Add New User** button to submit the change to the database.
 - The confirmation dialog box (Figure 15.10-6, Frame B) confirming the change displays.
- 5 Click **OK** to acknowledge the change.

Deleting User Email Address(es)

- 6 To delete User email address(es), click on the **Del** (or **Select all**) check box next to the user(s) to be deleted.

- A green check mark displays in the box(es).
- 7 Select the **Apply Deletion** link to submit change(s) to the database.
- The confirmation dialog box (Figure 15.10-6, Frame C) confirming the change displays.
- 8 Click **OK** acknowledge the deletion.
-

15.10.6 OM Configuration Submenu Page – Checksum Users

A **checksum** is a computed value associated with a data file, which can be used to verify data validity on files distributed by OMS. This will allow Users to perform data validity tests on the granule files they receive. Limited-capability Operator is limited to viewing Checksum Users configuration only. The Operator cannot add, or delete email addresses.

The **Checksum Users Configuration** page (Figure 15.10-7) allows the full-capability Operator to configure a list of email addresses of users that will receive a checksum in the for a request. If the email address for a Distribution Notice (DN) contain one of these addresses, the distribution notice will contain checksum values for each of the distributed files.

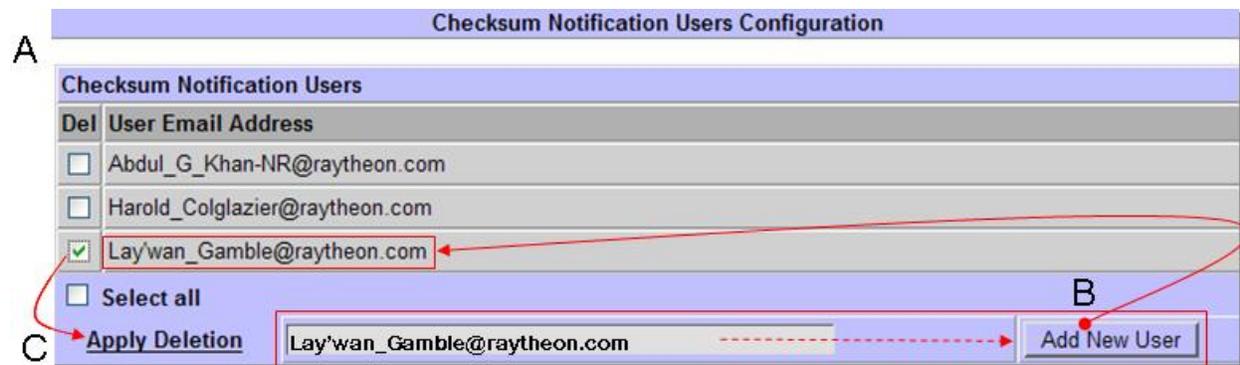


Figure 15.10-7. Checksum Notification Users Configuration Page

15.10.6.1 Adding/Deleting User Email Address that will receive Checksum File

- 1 Click **OM Configuration** menu option to expand its submenu.
- 2 Click **Checksum Users** submenu option to display the **Checksum Notification Users Configuration** page (Figure 15.10-7, Frame A).
 - The **Checksum Notification Users Configuration** page displays.

Adding User Email Address(es)

- 3 Enter the new user's **email address** to the **add new user textbox**.
- 4 Click the **Add New User** button to submit the change to the database.
 - The new user email address (Figure 15.10-7, Frame B) displays on the page.

Deleting User Email Address(es)

- 5 To delete User Email Address(es), click on the **Del** (or **Select all**) check box next to the User(s) Email Address(es) to be deleted.
 - A green check mark displays in the selected box(es).
 - 6 Select the **Apply Deletion** link (Figure 15.10-7, Frame C) to make change(s) and remove the User Email Address(es).
-

15.10.7 OM Configuration Submenu Page – External Processing

Limited-capability Operator is limited to only viewing External Processing Configuration. The Operator cannot edit, add, or delete destinations. This page allows the full-capability Operator to define and configure the parameters of an external processing service as follows:

- View the external processing services parameters.
- Delete a selected external processing service that has no pending requests for an external processing service.
- Add a new external processing service.
- Edit existing processing service configuration.

Special configuration parameters that control external processing requests are displayed on the **External Processing Services Policy Configuration** page (Figure 15.10-8, Frame A).

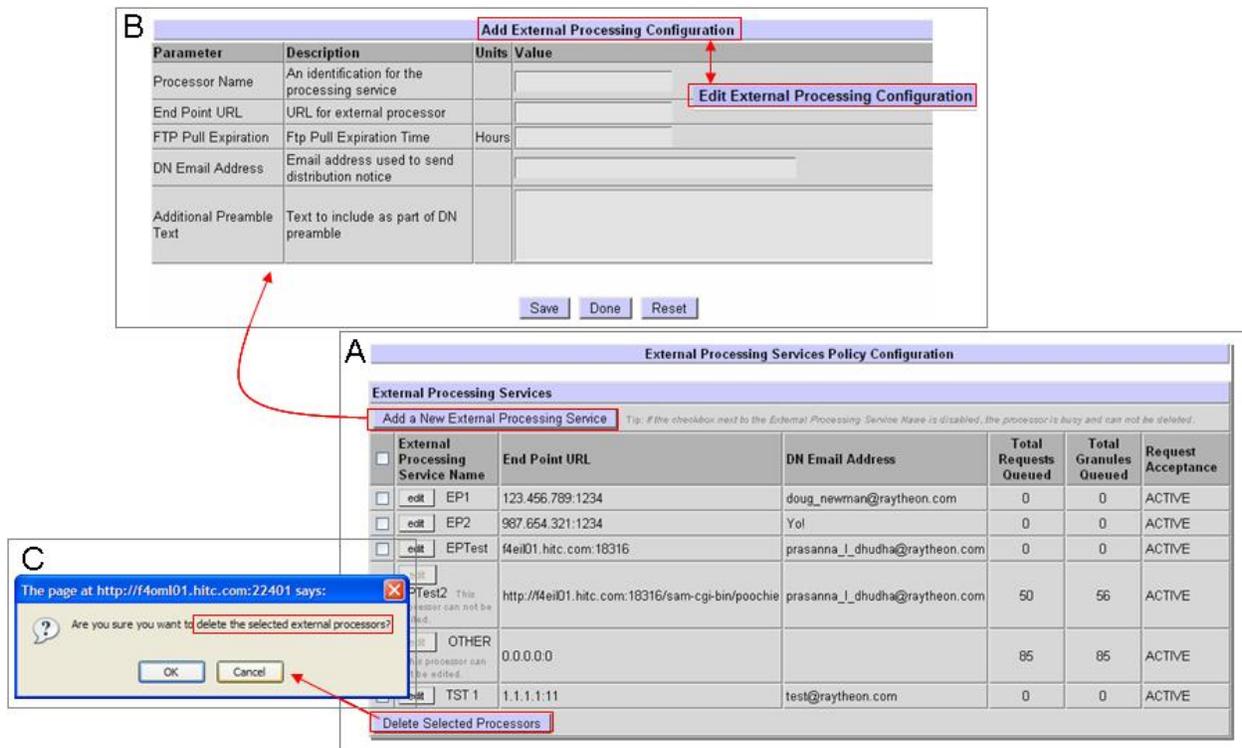


Figure 15.10-8. External Processing Services Policy Configuration Page

The descriptive listing for External Processing Services parameters are described in the following table (Table 15.10-2):

Table 15.10-2. External Processing Services Parameters

PARAMETER	DESCRIPTION
External Processor Service Name	A unique name for the external processing service.
End Point URL	Host URL address for external processing service as configured in the ECS registry.
DN Email Address	DN Email Address used by the external processing service.
Total Requests Queued	Total number of queued requests.
Total Granules Queued	Total number of queued granules.
Request Acceptance	The acceptance of the request.

15.10.7.1 Checking/Modifying External Processing Services Configurations

- 1 Click **OM Configuration** menu option to expand its submenu.

2 Click **External Processing** submenu option to display its **External Processing Services Policy Configuration** page (Figure 15.10-8, Frame A).

3 Observe the **External Processing Services Policy Configuration** page:

Add New (or Edit) External Processing Service

4 Select the **Add a New External Processing Service** button, (or if editing, select the **edit** button next to the processing service to be edited).

- The **Add External Processing Configuration** page (Figure 15.10-8, Frame B) displays (if editing, the **Edit External Processing Configuration** page displays).

5 Add/Edit required data of the **External Processing Configuration parameters**, as needed.

6 Click **Save** to submit the input.

7 Click **Done** to return to the **External Processing Services Policy Configuration** page

Delete an External Processing Service

8 To delete and external processing service, select the **checkbox** of the **External Processing Service** to be deleted.

9 Click the **Delete Selected Processors** button at bottom of the page.

10 Click **OK** to confirm deletion, at the deletion prompt (Figure 15.10-8, Frame C) dialog box and to delete selected external processors.

15.10.8 OM Configuration Submenu Page – FtpPush/SCP Policy

The **FtpPush/SCP Policy Configuration** page (Figure 15.10-9, Frame A) provides the full-capability Operator the ability to define, configure and fine-tune parameter values of FtpPush/SCP destinations.

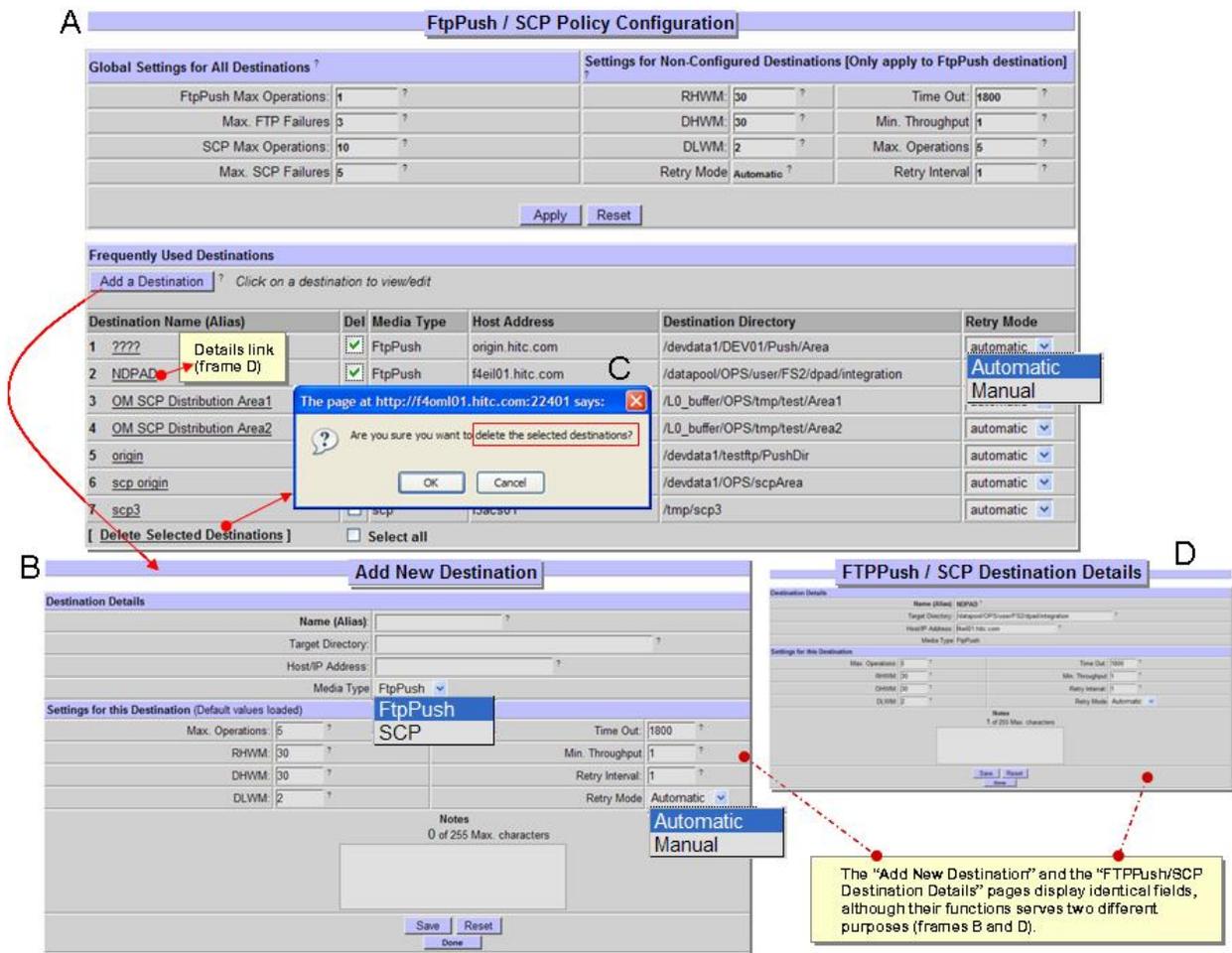


Figure 15.10-9. FtpPush/SCP Policy Configuration Page

Configuration parameters on the **FtpPush/SCP Policy Configuration** page are grouped in the following three working parts (Figure 15.10-10, Frames 1, 2, 3):

- 1 - **Global Settings for All Destinations** (Figure 15.10-10, Frame 1).
- 2 - **Non-Configured Destinations [Only apply to FtpPush destinations]** (Figure 15.10-10, Frame 2).
- 3 - **Frequently Used Destinations** (Figure 15.10-10, Frame 3).

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** (Figure 15.10-10, Frame 3) are considered “non-configured”. Non-configured groups use the parameter values in the **Settings for Non-Configured Destinations [Only apply to FtpPush destinations]** section (Figure 15.10-10, Frame 2). All “new” destinations use the Settings for Non-Configured Destinations [Only apply to FtpPush destinations] as their default values until other values are specifically assigned.

Global Settings for All Destinations (Figure 15.10-10, Frame 1) are parameters that apply to all destinations (both frequently used and non-configured), regardless of their individual settings.

1	2	3
Global Settings for All Destinations?	Settings for Non-Configured Destinations [Only apply to FtpPush destination]	Frequently Used Destinations
Fields	Fields	Fields
FtpPush Max Operations	RHWM	Destination Name (Alias)
Max. FTP Failures	DHWM	Del
SCP Max Operations	DLWM	Media Type: <input type="checkbox"/> FtpPush <input type="checkbox"/> SCP
Max. SCP Failures	Retry Mode: <input type="checkbox"/> Automatic <input type="checkbox"/> Manual	Host Address
Options	Time Out	Destination Directory
Apply	Min. Throughput	Retry Mode
Reset	Max. Operations	Options
	Retry Interval	Add a Destination
	Options	Delete Selected Destinations
	Apply	Select all (Del)
	Reset	

Figure 15.10-10. FtpPush/SCP Policy Configuration Page – Fields and Options

15.10.8.1 Viewing/Modifying FtpPush/SCP Policy Configuration

- 1 Click **OM Configuration** menu option to expand its submenu.
- 2 Click **FtpPush/SCP Policy** submenu option to display the **FtpPush/SCP Policy Configuration** page (Figure 15.10-9).

- 3 Observe/Modify settings displayed on the **FtpPush/SCP Policy Configuration** page:
- ▶ If parameter value(s) in either the **Global Settings for All Destinations** section or **Settings for Non-Configured Destinations** section is (are) to be modified, click the Apply button to submit the change.
 - ▶ Click the **Reset** button to reset values back original entry.
 - ▶ If the retry mode for a destination in the **Frequently Used Destinations** section should be changed, click on the **option button** (in the **Retry Mode** column) associated with the destination to display a menu of retry modes, then click the **mode**:
 - **Automatic.**
 - **Manual.**
 - Selected mode displays in the **Retry Mode** column.
- NOTE:** The Retry Mode for the “OTHER” FTPPush Destination group is always “Automatic”.
- 4 Click the **context-sensitive help** icon (?) of the **Retry Interval parameter** label, to review the information and description about the Retry Interval parameter.
- The parameter description dialog box displays (Figure 15.10-11).

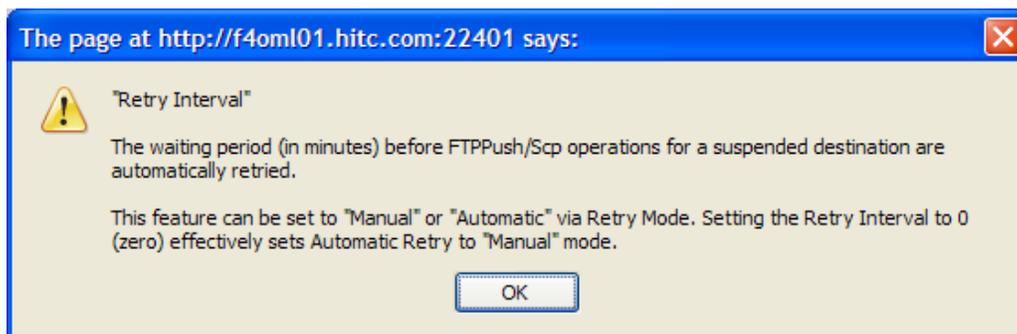


Figure 15.10-11. Context-Sensitive Help for Retry Interval Parameter

- 5 To review **details of a destination**, click the underscored **Destination Name (Alias)**.
- The **FTPPush/SCP Destination Details** page displays (Figure 15.10-9, Frame D).
 - ▶ Observe the **detailed information** of the selected alias.
 - ▶ Click the **Done** button to return to the **FTPPush/SCP Policy Configuration** page without saving any possible changes.
- 6 To **Delete (remove) destination(s)** from the **Frequently Used Destinations** section:
- ▶ Click the Del checkbox next the destination(s) (or select the Select all destinations checkbox to select all listed destinations).
 - ▶ Click the Delete Selected Destinations link near the bottom of the Frequently Used Destinations section.
 - The “**Are you sure you want to delete the selected destinations?**” dialog box displays (Figure 15.10-9, Frame C).
 - ▶ Click **OK** to confirm deletion(s).

NOTE: Removing a destination from the Frequently Used Destinations section does not actually delete the destination; it moves the destination(s) to the non-configured group and erases its individual configuration parameter values.

- 7 To **Add a new destination** to the **Frequently Used Destinations** section:
- ▶ Click the **Add a Destination** button.
 - The **Add New Destination** page displays (Figure 15.10-9, Frame B).
 - ▶ Enter appropriate **values/data** to the fields/parameters (Figure 15.10-10, Frame 1, 2, 3) as follows:
 - The **Destination Name (Alias)** is a unique descriptive name which easily identified the destination. For example: **Norford University**
 - The **Target Directory** is the directory path of the remote host to which data is to be pushed by ftp. For example: **/sci/data/push**
 - The **Host/IP Address** text box is the remote host machine name or IP address where data are to be pushed by ftp. For example: **dsc@nu.edu**.
 - The **Max. Operations** value is the maximum number of concurrent FtpPush operations for a particular destination (exclusive of but subject to the global Max Operations). For example: **2**.
 - The **RHWM** (Request High Watermark) value is the maximum number of requests that may be in the Staging state or that has completed Staging, but is not in a terminal state (e.g., Shipped). For example: **10**.
 - The **DHWM** (Data High Watermark) value is the maximum volume of data (in GB) in Staging or has been staged, but not yet pushed. For example: **10**.
 - The **DLWM** (Data Low Watermark) value is the minimum volume of data (in GB) in Staging or has been staged, but not yet pushed. For example: **2**.

- The **Time Out** (extra time allotment (in minutes) is applied to the expected throughput; such expected throughput equals minimum throughput plus timeout. For example: **60**.
 - The **Min. Throughput** value (megabytes per second) represents the minimum data throughput (in MB/sec) for a particular destination. For example: **100**.
 - The **Retry Interval** value (in minutes) represents the waiting period before FtpPush operations for a suspended destination are automatically retried. For example: **60**.
 - The **Notes** is general information about the destination (e.g., the justification for adding the new destination, etc.)
 - Use the listboxes to select the available options for **Media Type** and **Retry Mode**.
 - ▶ Click the **Save** button to submit the new destination and to **refresh the FTP Push/SCP Policy Configuration** page.
 - The **new destination** displays on the FTP Push/SCP Policy Configuration page.
-

15.11 OM GUI – Help

There are several ways to get access to help in using the **OM GUI**:

- **HelpOnDemand** – features context-sensitive help for each page, particularly for controls or parameters that may not be entirely self-descriptive. Depicted by a question mark (?) located next to a button or text field on an **OM GUI** page, whenever clicked, a dialog box (Figure 15.11-1, Frame B) opens that describes the item in question.
- **Help** – features help on various topics covering usage of the Order Manager GUI. The **Help** submenu option is access from the **OM GUI** menu home page. (Figure 15.11-1, Frame A) to be displayed.

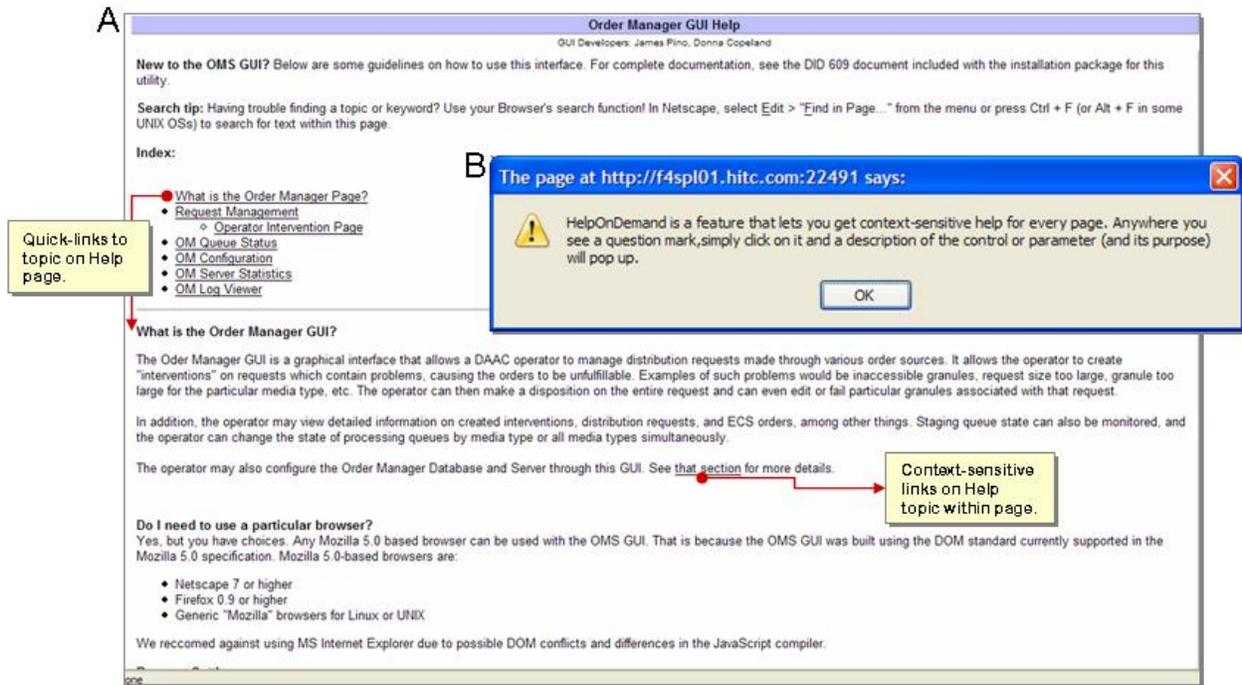


Figure 15.11-1. Help Page (A) and HelpOnDemand Example (B)

15.11.1 Help Submenu Page – About HelpOnDemand...

The **About HelpOnDemand...** allow Operator to get context-sensitive help on every OM GUI page. Signified by a question mark (?), the Operator simply clicks the question mark to get descriptive context of the control or parameter in a pop-up window (Figure 15.11-1, Frame B).

15.11.2 Help Submenu Page – Help

The Order Manager GUI **Help** (Figure 15.11-1, Frame A) submenu feature provides Operator with several guidelines on how to use the OMS GUI. Complete documentation can be found in the DID 609 document which was included with the installation package for the OMS utility.

The submenu features active search function using the current browser (i.e., using Netscape, select Edit > "Find in Page..." from the menu or press Ctrl + F (or Alt + F in some UNIX OSs) from within the OM GUI page).

The Help submenu (Figure 15.11-1, Figure A) hypertext-index features the following topics:

- **What is the Order Manager Page?**
- **Request Management**
 - Operator Intervention Page
- **OM Queue Status**
- **OM Configuration**
- **OM Server Statistics**
- **OM Log Viewer**

15.12 OM GUI – Physical Media Distribution

The OM GUI Physical Media Distribution (PMD) feature provides the Operator the tool to perform media distribution of OM GUI requests.

Errors with Physical Media Distribution 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 Physical Media Distribution submenu options will be examined using to the following checklist:

Table 15.12-1. Physical Media Distribution - Activity Checklist

Order	Role	Task	Section	Complete?
1	Distribution Technician	Monitoring/Controlling PMD Media Creation Console	(P) 15.12.1.1	
2	Distribution Technician	Confirming Media Collection Complete for PMD	(P) 15.12.1.2.1	
3	Distribution Technician	Failing PMD Media Collection	(P) 15.12.1.3.1	
4	Distribution Technician	Marking PMD Request Shipped	(P) 15.12.1.4.1	
5	Distribution Technician	Confirming PMD Package Assembled	(P) 15.12.1.5.1	
6	Distribution Technician	Marking PMD Package Not Assembled	(P) 15.12.1.6.1	
7	Distribution Technician	Printing PMD Outputs	(P) 15.12.1.7.1	
8	Distribution Technician	Filtering/Modifying PMD Device Configuration	(P) 15.12.2.1	
9	Distribution Technician	Viewing/Responding to PMD Open Intervention	(P) 15.12.3.1	
10	Distribution Technician	Checking/Modifying PMD Printer Configuration	(P) 15.12.4.1	
11	Distribution Technician	Adding/Modifying PMD Production Module Configuration	(P) 15.12.5.1	
12	Distribution Technician	Printing PMD Reports	(P) 15.12.6.1	
13	Distribution Technician	Handling Compressed Format ESDTs	(P) 15.12.7.1	

15.12.1 Physical Media Distribution Submenu Page – Media Creation Console

The **Media Creation Console** page (Figure 15.12-1, Frames A-A3) provides the full-capability Operator with the ability to perform various types of media creation actions from one interactive console.

The screenshot displays the **Media Creation Console** interface. It is divided into several sections:

- Request Actions (A1):** A table listing media creation requests. Columns include OrderID, RequestID, Media Type, Vol Cnt, Request Status, Due Date, Note, Action Type, and Options. A dropdown menu is open over the 'Options' column for the first row, showing 'Activate Request', 'Fail Request', and 'Annotate Action'.
- Device Actions (A2):** A table listing media devices. Columns include Media Type, Device, Production, QC, and Status. A dropdown menu is open over the 'Device' column, showing options like 'CDROM', 'CDROM, DVD', 'DiscQC', etc. A callout points to the 'MADEUP' device with the text: 'Click to activate the PMD: Device Configuration page.' Another callout points to the 'Status' column with the text: 'Device on-line status.'
- Filter (A3):** A section for filtering actions. It includes a dropdown for 'Action Type' (with options: Activate Media for QC, Activate Request, Assemble Package, Collect Media For QC) and a 'Select' dropdown (with options: All, None). A callout points to the 'Select' dropdown with the text: 'Click to change the specified volume of the selected device to Assign or to Mount.'
- Legend:** A section at the bottom right explaining the actions: 'Assign' (Assign a volume to this device), 'Mount' (Confirm mount of the specified volume on this device), 'Dismount' (Confirm dismount of the specified volume from this device), and 'Click Dismount to fail dismount'.

Figure 15.12-1. Media Creation Console 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 (Figure 15.12-2, Frames 1, 2, 3).

The PMD Disk and Tape (Table 15.12-2, Frame 1) displays the activities that occur during disk (CD/DVD) and tape (DLT) preparation; Table 15.12-2, Frame 2 displays the disk and tape creation activities; and Table 15.12-2, Frame 3 displays the disk and tape QC/Verification activities:

1	Preparation Activities	2	Creation Activities	3	QC/Verification Activities
	Disk (CD/DVD)		Disk (CD/DVD)		Disk (CD/DVD) and Tape (DLT)
	HDF and metadata file are read		Merge (label data) file is created		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)
	Data is staged		Luminex interface file is created		The operator starts QC from the OM GUI
	Summary file is created		Luminex writes data to media		QC compares the summary file and the "tar -tvf" (tape) or "ls" (disk) of the medium
	Summary file is copied		Jewel case insert is printed		
	Jewel case insert is created		ISO image and interface file are cleaned up		
	ISO image file is created		Staging directory is cleaned up		
	Tape (DLT)		Tape (DLT)		
	HDF and metadata file are read		Data written to tape		
	Data is staged		Tape label is printed		
	Summary file is created		Staging directory cleaned up		
	Summary file is copied				
	Tape label is created				

Figure 15.12-2. PMD Disk and Tape – Activity List

15.12.1.1 Monitoring/Controlling PMD Media Creation Console

- 1 Click **Physical Media Distribution** menu option to expand its submenu.
- 2 Click **Media Creation Actions** submenu option to display its page.
 - The **Media Creation Console** page (Figure 15.12-1, Frame A) displays.
- 3 Observe information displayed in the sections of the **Media Creation Console** page:
 - The **Request Actions** section (Frame A1) displays the following columns:
 - **OrderID** – details ECS Order <number> information.
 - **RequestID** – details Distribution Request <number> information and Volume List data.
 - **Media Type**.
 - **Volume Count (Vol Cnt)**.
 - **Request Status** – The 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.
 - **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).
- The **Device Actions** section (Frame A2) displays the following columns:
 - **Media Type Device** – are active links that displays PMD Device Configuration page details.
 - **Production** – options to change device status to Assign and/or Mount.
 - **QC.**
 - **Status** – indicates whether the device in on-line (green) or off-line (red).
- The **Filter** section (Frame A3) allows the operator to select the type(s) of action(s) to display on the page. The following **Action Types** can be selected:
 - **Activate Media for QC.**
 - **Activate Request.**
 - **Assemble Package.**
 - **Collect Media for QC.**

4 The **Action Type** column entries of the **Media Creation Console** page indicate to the next action to be administered by the Operator. The Operator can select the appropriate choice from the corresponding list in the **Options** column:

- If **Activate Media for QC** is displayed, the full-capability Operator can activate QC for a request by allocating distribution requests to a device (tape or drives). 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. 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 following actions can be performed:
 - ▶ In **Filter** section, select **Activate Media for QC** from the **Action Type**.
 - ▶ Click the **Apply** button to display all active requests.
 - ▶ In the **Request Actions** section, click the Options button for the associated request to **Activate QC**.
- The **Activate QC for RequestID** dialog box displays (Figure 15.12-3).

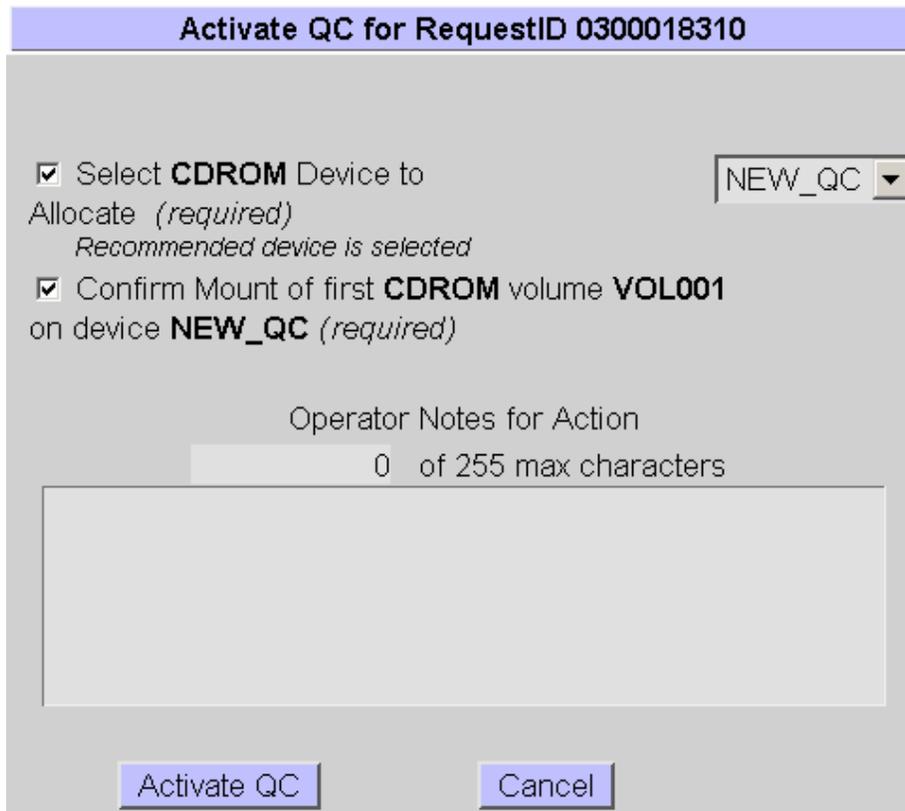


Figure 15.12-3. Activate QC Dialog Box

- ▶ Select checkbox to **Allocate Device**.
- ▶ Put **first volume tape or disk** of the request into the drive to be used for QC.
- ▶ Wait for the **drive to come on-line** before confirming media mounting using the Activate QC dialog box.
- ▶ Wait for light to **stop flashing**.
- ▶ Select checkbox to **Confirm Mount** of first <media> volume <vol#>on device.
- ▶ Input text **Operator Notes for Action** textbox, as necessary.
- ▶ Click the **Activate QC** button to complete the process.
- If **Activate Request** is displayed, the full-capability Operator can activate a distribution request by allocating it to a device for creating the volume, confirming tape mounting (if applicable), and/or annotating the action:
 - ▶ In Filter section, select Activate Request from the Action Type.
 - ▶ Click the Apply button to display all active requests.
 - ▶ In the Request Actions section, select one of the three Options for a request:
 - 1 - **Activate Request**

2 - Fail Request

3 - Annotate Action

- One of several **dialog boxes will appear** requesting input/confirmation.
 - ▶ Input notes or make changes into appropriate dialog box.
 - ▶ Select button to Activate (Figure 15.12-4, Frame A, A1) or Annotate (Figure 15.12-4, Frame B) or Fail (Figure 15.12-4, Frame C) Actions.

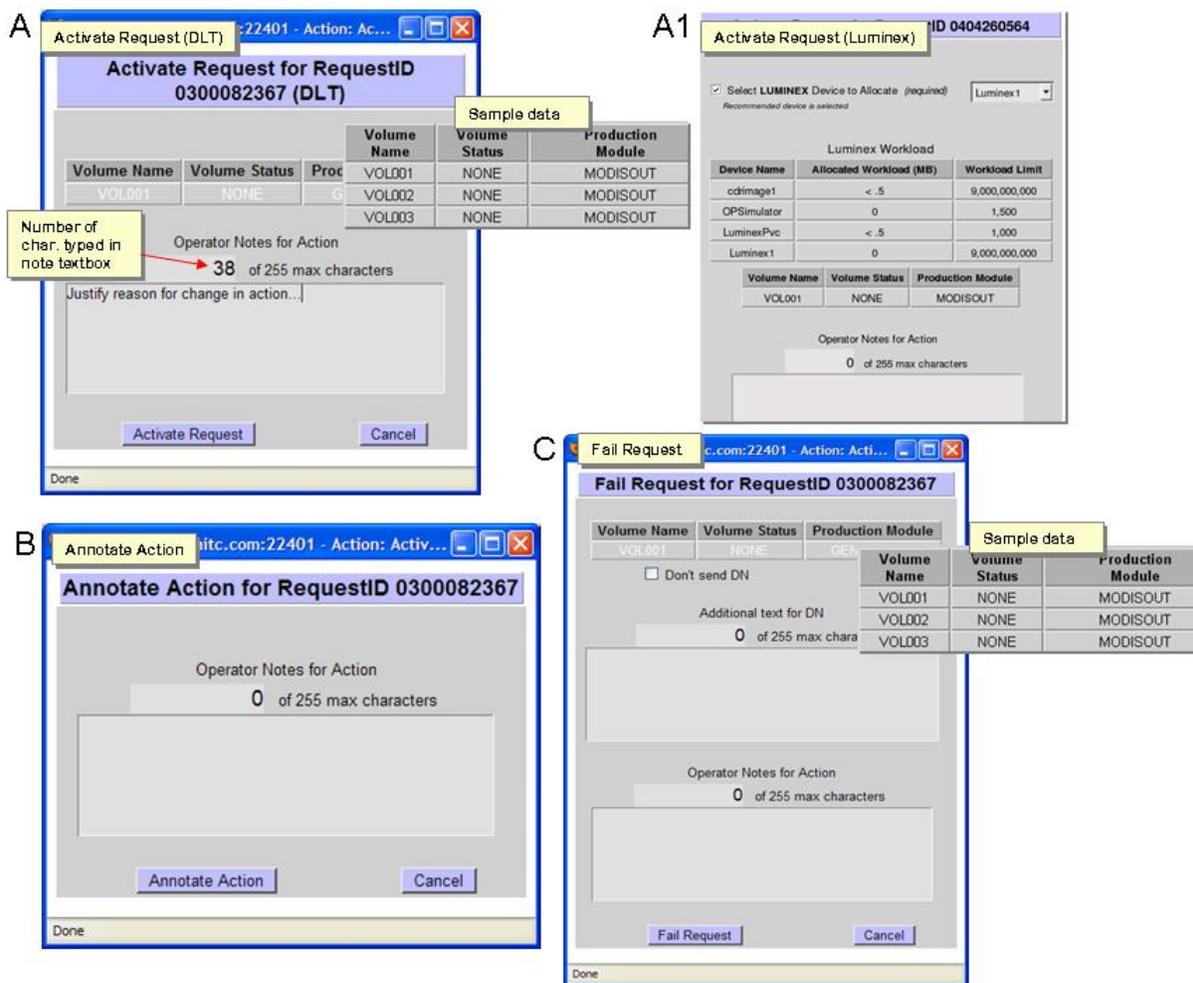


Figure 15.12-4. Activate (A, A1); Annotate (B); Fail (C) Requests Dialog Boxes

- If **Assemble Package** is displayed, the full-capability Operator can confirm (notify OMS) the assembly of the PMD package for shipment (i.e., the last volume of a request passed QC and has been dismantled). In addition, the full-capability Operator has the option of annotating the action. The following is performed in response to an Assemble Package action:
 - ▶ In Filter section, select Assemble Package from the Action Type.

- ▶ Click the Apply button to display all assemble package requests.
- ▶ In the Options column of the Request Actions section, select Confirm Package Assembled from the option list.
- The **Confirm Package Assembled for RequestID** dialog box displays (Figure 15.12-5).

Confirm Package Assembled for RequestID
 0400000848

Confirm Dismount of last DLT volume VOL001 from device *(required)*

Volumes Created

Volume Name	Volume Status	Production Module
VOL001	VERIFIED	MODISOUT

Printed Outputs

Output Name	Printer
Packing List (DN)	marlin
QC Reports	marlin
Shipping Labels	f2dp108
Tape Labels	f2dp107

Operator Notes for Action

0 of 255 max characters

Confirm Package Assembled
Cancel

Figure 15.12-5. Confirm Package Assembled for RequestID Dialog Box

- **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).
- 5 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).
-

15.12.1.2 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).]
- Annotate action [Refer to the **Annotating a PMD Action** procedure (previous section of this lesson).]

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 15.12-6) 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.

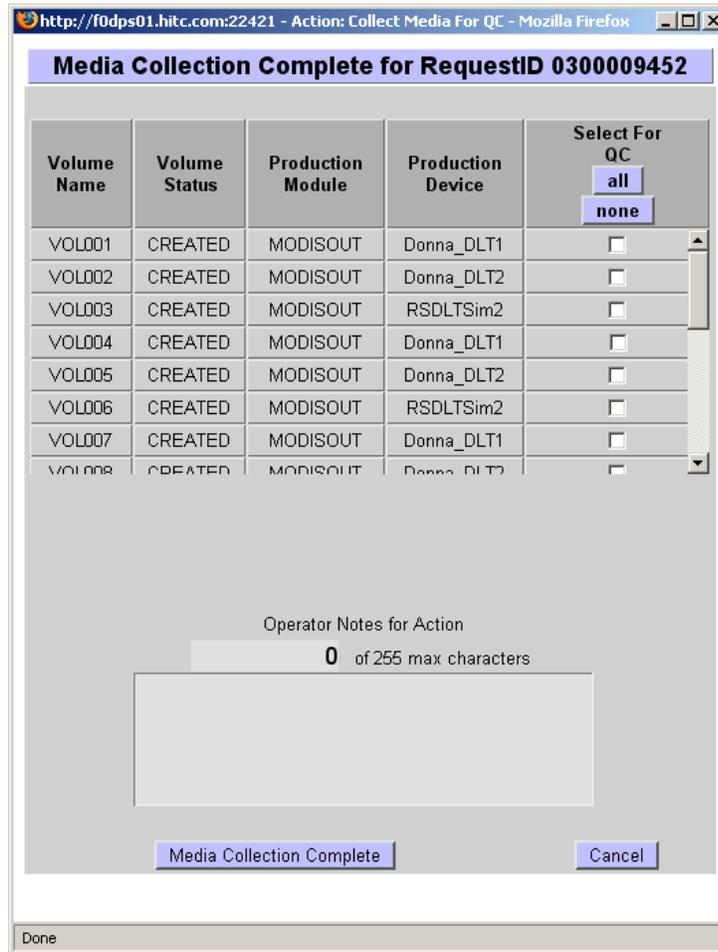


Figure 15.12-6. Media Collection Complete Page

15.12.1.2.1 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.
 - 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** dialog box is displayed.
 - The **Media Collection Complete** dialog 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** dialog 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** dialog box.
- Text is displayed in the **Operator Notes for Action** text box of the **Media Collection Complete** dialog 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 dialog box and confirm media collection complete.
 - The dialog box is dismissed.
 - The **Media Creation Console page** is displayed.
 - **Cancel** - to dismiss the dialog box without confirming media collection complete.
 - The dialog 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 dialog box.
 - The **Media Creation Console page** is displayed.
-

15.12.1.3 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 15.12-7) 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.

15.12.1.3.1 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.
- 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** dialog box is displayed (Figure 15.12-7).

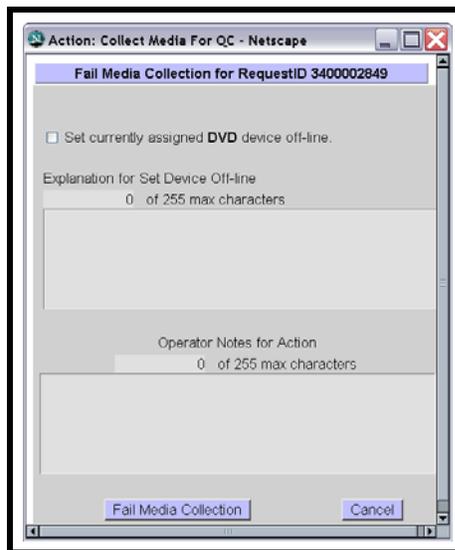


Figure 15.12-7. Fail Media Collection Page

- 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** dialog box.
 - Text is displayed in the **Explanation for Set Device Off-line** text box of the **Fail Media Collection** dialog 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** dialog box.
 - Text is displayed in the **Operator Notes for Action** text box of the **Fail Media Collection** dialog 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 dialog box and fail media collection.
 - The dialog 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 dialog box without failing media collection.
 - The dialog 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 dialog box.
 - The Media Creation Console page is displayed.
-

15.12.1.4 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).]

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 15.12-8) 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.

15.12.1.4.1 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.
- 3 Observe information displayed in the **Listing** table of the **Media Creation Console page**.

NOTE: In order to 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** dialog box is displayed (Figure 15.12-8).



Figure 15.12-8. Mark Request Shipped Page

- The **Mark Request Shipped** dialog box displays the following information concerning each volume created for the request:
 - **Volume Name.**
 - **Volume Status.**
 - **Production Module.**
 - In addition, the **Mark Request Shipped** dialog 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** dialog 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** dialog box.
 - Text is displayed in the **Operator Notes for Action** text box of the **Mark Request Shipped** dialog 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 dialog box and confirm PMD package assembled.
 - The dialog box is dismissed.
 - The **Media Creation Console page** is displayed.
 - **Cancel** - to dismiss the dialog box without confirming PMD package assembly.
 - The dialog 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 dialog box.
 - The **Media Creation Console page** is displayed.
-

15.12.1.5 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 15.12-9) 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.

15.12.1.5.1 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.
- 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** dialog box is displayed (Figure 15.12-9).

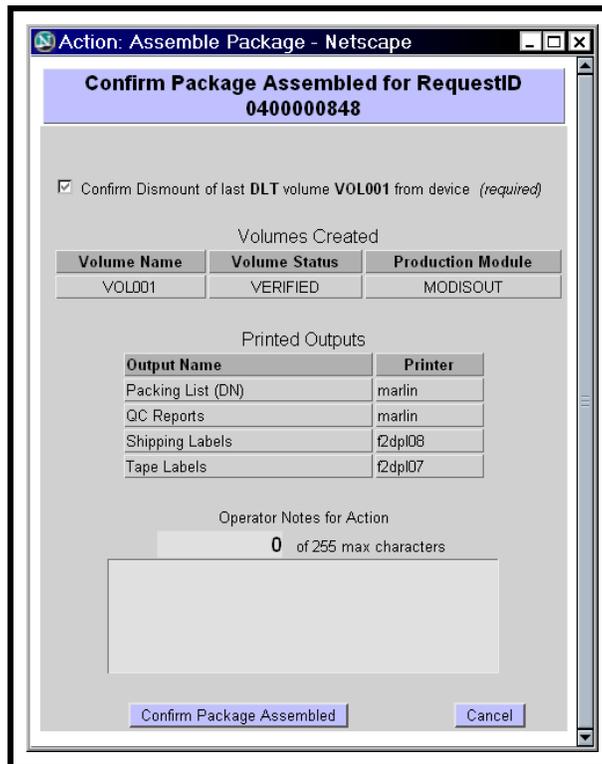


Figure 15.12-9. Confirm Package Assembled Page

- The **Confirm Package Assembled** dialog box displays the following information concerning each volume created for the request:
 - **Volume Name.**
 - **Volume Status.**
 - **Production Module.**
 - In addition, the **Confirm Package Assembled** dialog 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** dialog 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** dialog box.
- Text is displayed in the **Operator Notes for Action** text box of the **Confirm Package Assembled** dialog 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 dialog box and confirm PMD package assembled.
 - The dialog box is dismissed.
 - The Media Creation Console page is displayed.
 - **Cancel** - to dismiss the dialog box without confirming PMD package assembly.
 - The dialog 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 dialog box.
 - The Media Creation Console page is displayed.
-

15.12.1.6 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 15.12-10) 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.

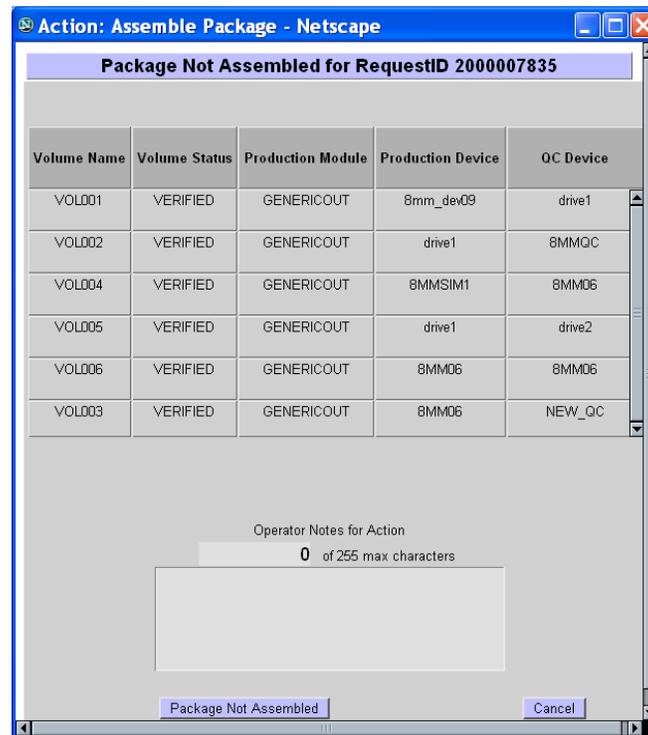


Figure 15.12-10. Package Not Assembled Page

15.12.1.6.1 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.
 - 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** dialog box is displayed (Figure 15.12-10).

- 5 If possible, dismount the volume identified in the **Confirm dismount of last ... volume ... from device** statement on the **Package Not Assembled** dialog 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** dialog box.
 - Text is displayed in the **Explanation for Set Device Off-line** text box of the **Fail Mount Media** dialog 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** dialog box.
 - Text is displayed in the **Operator Notes for Action** text box of the **Package Not Assembled** dialog 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 dialog box and mark the PMD package “not assembled.”
 - The dialog 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 dialog box without marking the PMD package “not assembled.”
 - The dialog 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 dialog box.
 - The Media Creation Console page is displayed.
-

15.12.1.7 Printing PMD Outputs

The procedure for **Printing PMD Outputs** (Figure 15.12-11) 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.

15.12.1.7.1 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.
 - 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** dialog box is displayed. (Figure 15.12-11).

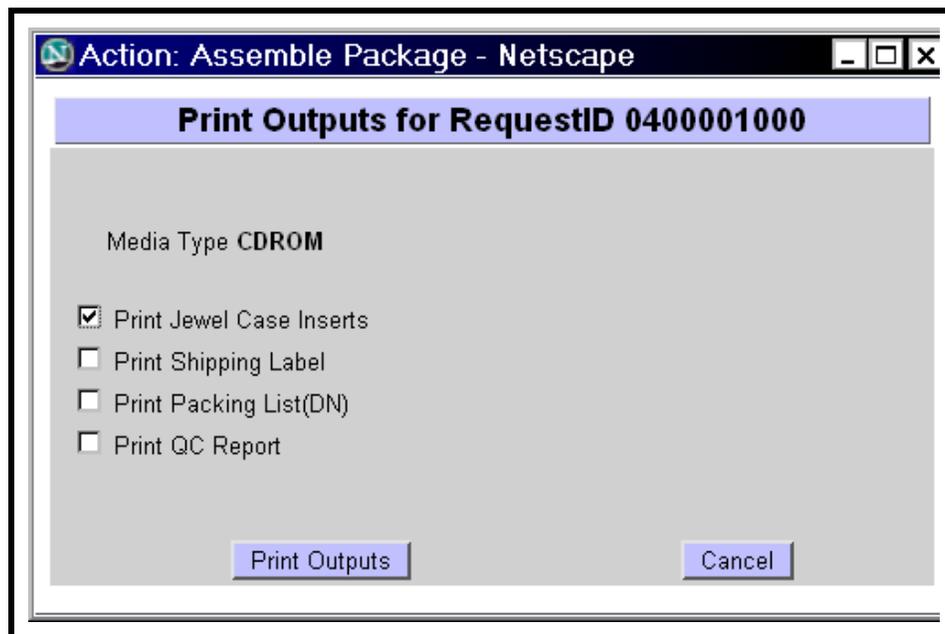


Figure 15.12-11. Print Outputs Page

- The **Print Outputs** dialog 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** dialog 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** dialog 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** dialog 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** dialog 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 dialog box and reprint the selected document(s).
 - The dialog 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 dialog box without reprinting any documents.
 - The dialog box is dismissed.
 - The **Media Creation Console page** is displayed.
-

15.12.2 Physical Media Distribution Submenu Page – Device Configuration

The Device Configuration page (Figure 15.12-12, Frame A) displays the configuration of devices used in the Physical Media Creation Console. Additional devices can be “added.” It provides the Operator with 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 Physical Media Distribution: Device Configuration page displays its device information in five sections:

- 1 - **Production devices**
- 2 - **QC devices**
- 3 - **Production/QC devices**
- 4 - **Unclassified devices**
- 5 - **LUMINEX Device Loads**

The Device Configuration page displays the following information (columns) for all the currently configured devices:

- **Device label** – name given to the device
- **Current Request [Volume]** – current volume occupying the device. This is only applicable to tape and QC devices. The current request for a CD/DVD production device is not depicted.
- **Media Type** – describes media type (CDROM, DVD, DLT or combinations) of the device.
- **Reserved For Mode** – describes the mode the device is being used or is reserved to use. A device can be used by one or all modes.
- **Used By Mode** – describes the actual mode the device is being used. This mode is applicable to a device that is available for all modes.
- **Device Status (FREE or BUSY):**
 - A tape device (DLT) is considered (red) **BUSY**, if it is occupied by a Media Distribution request.
 - A tape device is considered (green) **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**.
 - A CD/DVD production device is **NOT** marked **FREE** or **BUSY**. It can however, reach its Allocated and/or Actual Workload Limit, on which no requests can be allocated to the device.
- **Online Status (off-line or on-line)** – If the device is (red) **off-line**, the reason is displayed in the Off-Line Reason column. Otherwise, the device is (green) **on-line**.
- **Offline Reason** – justification for taking the device off-line. Text that is captured in the dialog box when processing the off-line action.

A

Physical Media Distribution: Device Configuration

Add New Device...

Filter: -- media type -- -- online status -- -- device status -- Apply Clear

B

Device Label	Current Request [Volume]	Media Type	Reserved For Mode	Used By Mode	Device Status	Online Status	Offline Reason
Production devices							
① sdf - sfsdf		CDROM				on-line	
① FAKECDROM-DELETE		CDROM				on-line	
Physical Media Distribution: Add New Device							
[Back to Device List]							
① cdrom m1						on-line	
① sdfg						on-line	
① Luminex7100		QC	NEX			on-line	
QC devices							
① fgh		CDROM			FREE	on-line	
① fg		CDROM			FREE	on-line	
① DiscQC		CDROM_DVD			FREE	on-line	
① DiscQC2		CDROM_DVD			FREE	on-line	
① DiscQC2Sim		CDROM_DVD			FREE	on-line	
① UnixDiscQC		CDROM_DVD			FREE	on-line	
① MADEUP - Made up device for t		DLT			FREE	off-line	
Production/QC devices							
① 720DLT1		DLT	DEV04	TS2	BUSY	on-line	
① 720DLT2		DLT			FREE	on-line	
① CHECKOUT_DLT_SIMULAT		DLT		TS2	FREE	on-line	
① DEV02_SIM		DLT	DEV02		FREE	on-line	
① DEV06_DLT_SIM - It's a test drive fo...		DLT	DEV06	DEV06	BUSY	on-line	
① DEV06_DLT_SIM1		DLT	DEV06		FREE	on-line	
① DEV06_DLT_SIM2		DLT	DEV07		FREE	on-line	
unclassified devices							
- no devices -							
LUMINEX Device Loads							
0% 50% 100%							
ES_TEST							
located Work Load	(73.0 of 4 max MB)	1824.8%					
Actual Work Load	(0.0 of 6 max MB)	0.0%					
m1							
located Work Load	(0.2 of 20 max MB)	1.0%					
Actual Work Load	(0.0 of 10 max MB)	0.0%					
nex7100							
located Work Load	(-691.6 of 800000 max MB)	-0.1%					
Actual Work Load	(1789.9 of 800000 max MB)	0.2%					

Figure 15.12-12. PMD Device Configuration Page

15.12.2.1 Filtering/Modifying PMD Device Configurations

- 1 Click **Physical Media Distribution (PMD)** menu option to expand its submenu.
- 2 Click **Device Configuration** submenu option to display the **Physical Media Distribution: Device Configuration** page.
 - The **PMD: Device Configuration** page displays.
- 3 Observe the information displayed on the **PMD: Device Configuration** page:
 - The **Filter** section of the page features filtering by media type, online status and/or device status. To view this options and filter the page:
 - ▶ Click the **Filter** listbox (media type, online status and/or device).
 - ▶ Click **Apply** button to filter the page with the selected criteria.
 - The **PMD: Device Configuration** page refreshes with specified criteria data.
 - The **LUMINEX Device Loads** section, located at the bottom of the page, shows the following types of information (Read-only) for each LUMINEX device:
 - Allocated Work Load (displays percentage of each limit 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 of each limit based on the maximum number of jobs that device has been configured to handle and provides a corresponding bar graph).
- 4 To **change on-line or off-line status** of a device:
 - ▶ Click the **Device Label** (Figure 15.12-13, Frame A or B) of the device on the **PMD: Device Configuration** page.
 - The **PMD: Device Configuration Details** page (Figure 15.13-13, Frame A1-offline or B1-online) displays for the device.
 - ▶ Click the **Online Status** status button (green or red).
 - A dialog box displays **confirmation to place device on-line** (Figure 15.12-13, Frame A2) or displays a **request for taking this device off-line** (Figure 15.12-13, Frame B2).

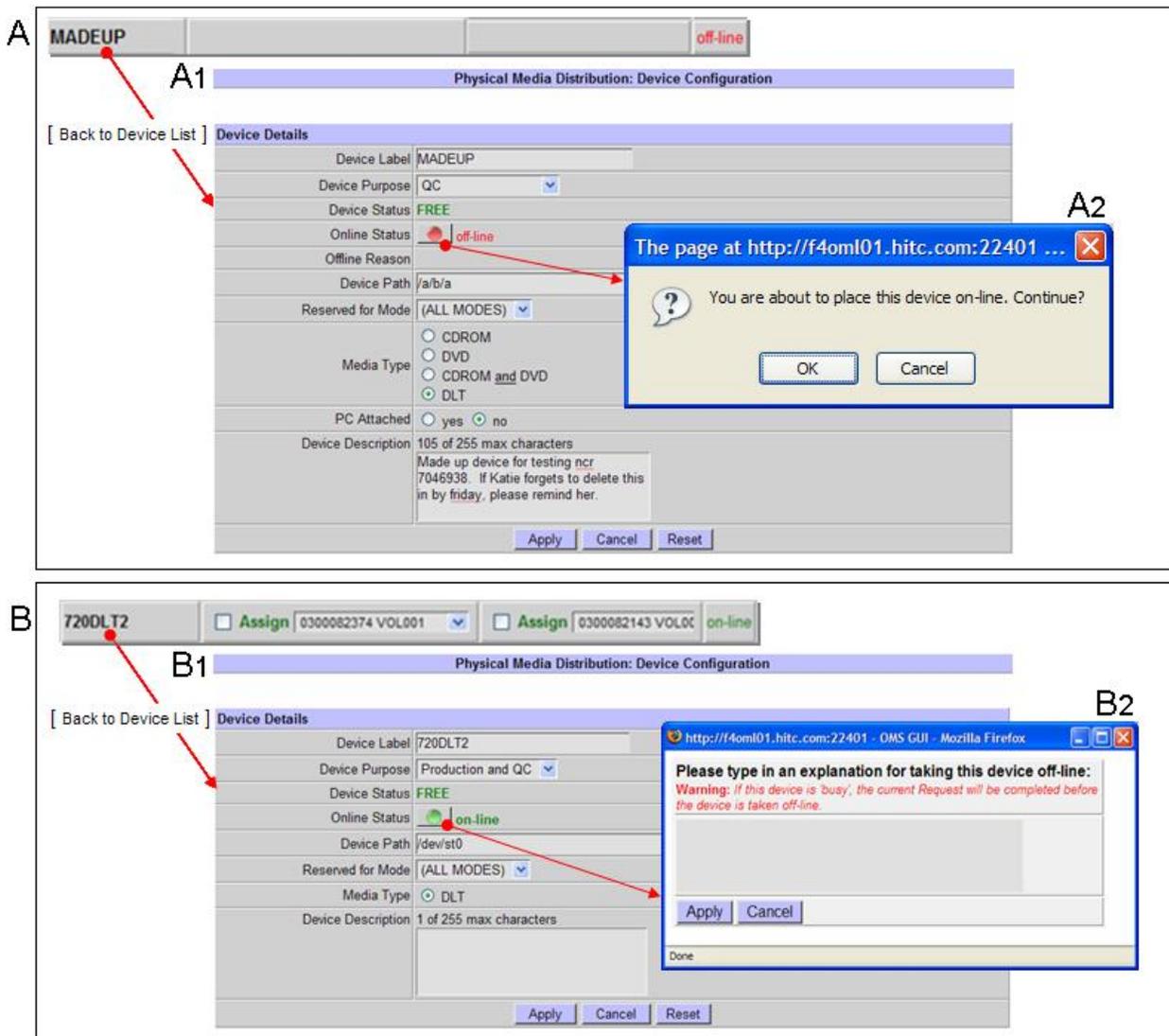


Figure 15.12-13. PMD Device Details Page

- If **taking device off-line**, type **justification for taking device off-line** in the textbox:
- If the device is not busy and is to be taken off line, the dialog 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 completes; thereafter, the device will be taken off-line.
- Click **Apply** - to change the off-line status and dismiss the dialog box.
 - ▶ If **placing device on-line**:
- Click **OK** to dismiss the dialog box.
 - ▶ Click **Apply** button to return back to the **PMD: Device Configuration** page.

- 5 To **add a new device** to the PMD: Device Configuration page:
- Click the **Add New Device...** button, at top of the **PMD: Device Configuration** page (Figure 15.12-14, Frame A).
 - The **PMD: Add New Device** page (Figure 15.12-14, Frame B) displays.
 - Click the **Device Purpose** listbox to display its options:
 - **Production**
 - **QC**
 - **Production and QC**
 - Click desired **Device Purpose** options from the listbox:
 - If **Production** selected, the **Device Type** options (Figure 15.12-14, Frame B1) are available for selection:
 - CD/DVD
 - Tape
 - If **QC** selected, several options and input fields (Figure 15.12-14, Frame B2) are available:
 - **Media Type** (CDROM, DVD, CDROM and DVD, DLT)
 - **PC Attached** (yes/no)
 - **Device Label**
 - **Reserve for Mode** (optional)
 - **Device Description**
 - If **Production and QC** selected, several options and input fields (Figure 15.12-14, Frame B3) are available:
 - **Media Type** (DLT)
 - **Device Label**
 - **Device Path**
 - **Reserve for Mode** (optional)
 - **Device Description**

- Click **OK**, to add the new device.

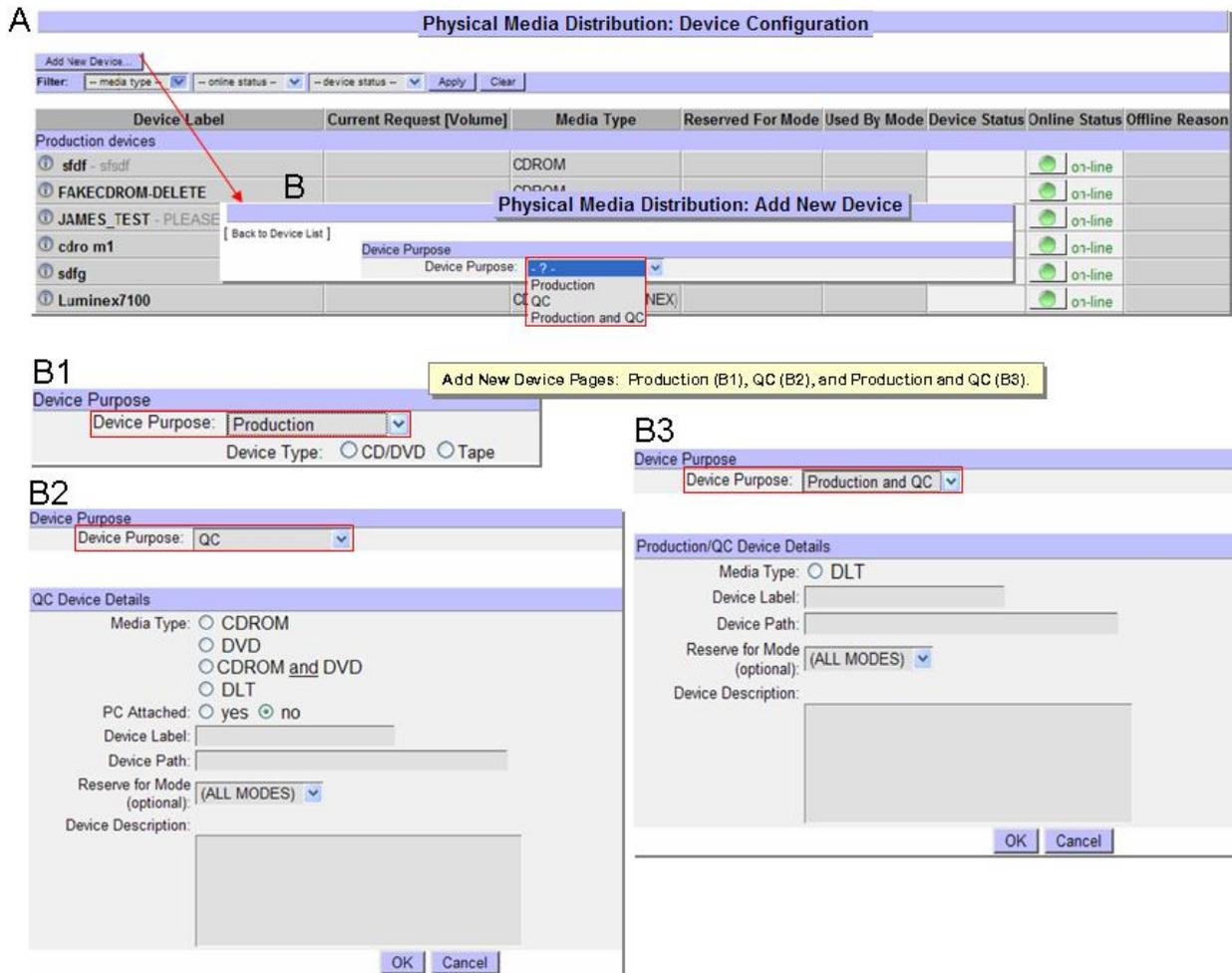


Figure 15.12-14. Frames B-B3 Add New Device Pages

15.12.3 Physical Media Distribution Submenu Page – Open Interventions

The Open Physical Media (PM) Interventions page (Figure 15.12-15, Frame A) allows the full-capability Operator to view and respond to Open PM Interventions. There are several kinds of interventions that the Operator can perform:

- 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.

A

Open Physical Media Interventions

Current Filters
 Order ID: None Request ID: None Worked By: None
 Creation Time: Start: Mar 31 2007 05:09PM End: Mar 31 2008 05:09PM

Media Type: **Explanation:** ALL **Explanation:** ALL

Options

Change Filter Bulk Fail Bulk Submit

All None All None

Click on a request ID to view more details.

Listing

Go directly to row: of 13 rows Show 50 rows at a time.

first | previous | Showing 1 - 13 of 13 | next | last

Sel Fail Sub	Order ID	Request ID	Media Type	Request Size(MB)	Status	Worked By	Created	Acknowledged	Explanation(s)
<input checked="" type="checkbox"/>	0300084004	0300082263	CDROM	933	PENDING		Jan 28 2008 11:39AM		File not found in Archive Media Collection Failed
<input type="checkbox"/>	0300084003	0300082262	CDROM	933	PENDING		Jan 28 2008 11:38AM		Media Collection Failed
<input checked="" type="checkbox"/>	0300084002	0300082261	CDROM	933	PENDING		Jan 28 2008 11:38AM		Media Collection Failed
<input type="checkbox"/>	0300083964	0300082222	CDROM	< .5	PENDING		Jan 28 2008 11:38AM		Media Collection Failed
<input type="checkbox"/>	0300084069	0300082328	CDROM	< .5	PENDING		Jan 18 2008 9:37AM		Media Creation Error
<input type="checkbox"/>	0300084009	0300082268	CDROM	933	PENDING		Jul 20 2007 2:08PM		File not found in Archive Media Creation Error
<input type="checkbox"/>	0300084006	0300082265	CDROM	933	PENDING		Jul 20 2007 1:59PM		File not found in Archive Media Creation Error
<input type="checkbox"/>	0300084005	0300082264	CDROM	933	PENDING		Jul 20 2007 1:59PM		File not found in Archive Media Creation Error
<input type="checkbox"/>	0300083974	0300082233	DLT	75	PENDING		May 11 2007 11:46AM		Media Creation Error
<input checked="" type="checkbox"/>	0300083973	0300082232	DLT	75	PENDING		May 11 2007 11:41AM		Media Creation Error
<input type="checkbox"/>	0300083442	0300081700	DLT	18	PENDING		Apr 30 2007 12:51PM		Media Creation Stopped
<input type="checkbox"/>	0300083883	0300082141	CDROM	< .5	PENDING		Apr 18 2007 3:45PM		Media Creation Error
<input type="checkbox"/>	0300083492	0300081750	DLT	6	PENDING		Apr 17 2007 10:24AM		Granule files missing Media Creation Error

B

http://f4oml01.hitc.com:22401 - Bulk Fail Request - Mozilla FI...

Confirm Bulk Fail Action

Worker: jmsadmin

Operator Notes:

Additional e-mail text:

Send email to users whose requests are being failed?
 Send email
 Don't send email

Apply "Bulk Fail" Cancel "Bulk Fail"

Figure 15.12-15. Open Physical Media Interventions Page (A) and Bulk Action (B)

The **Open PM Interventions** page has three working parts:

- 1 - **Current Filters** – describes the set of pre-defined criteria (Figure 15.12-16, Frame 1) on which the list of distribution requests are to display.
- 2 - **Options** – has three features (Figure 15.12-16, Frame 2) to allow Operator to:
 - **Change Filter** – define or redefine the criteria for displaying the list of distribution request on a page.

- **Bulk Fail** – provides capability to fail “All” or “None” (checkbox) of the eligible selected intervention(s) requests on a page.
 - **Bulk Submit** – provides capability to submit “All” or “None” (checkbox) of the eligible selected intervention(s) requests on a page.
- 3 - **Listing** – captures the requested distribution output (Figure 15.12-16, Frame 3) of what is being filter.
- The **Sel Fail Sub** column provides checkboxes to mark a single request to be submitted or failed.
 - It displays several underscored **column headings** that if clicked, will display additional information regarding the request.

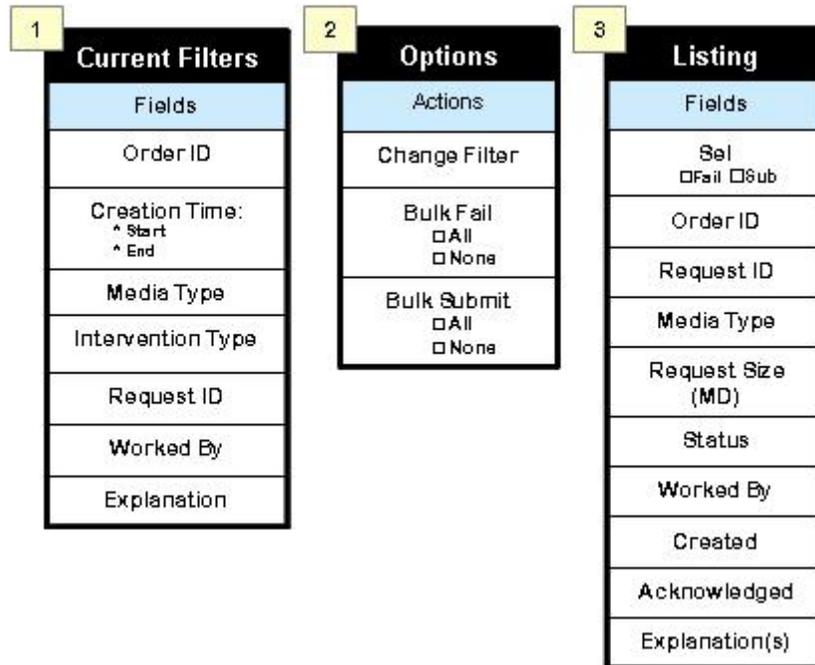


Figure 15.12-16. Open PM Interventions Page – Fields and Options

15.12.3.1 Viewing/Responding to PMD Open Intervention

- 1 Click **Physical Media Distribution** menu option to expand its submenu.
- 2 Click **Open Interventions** submenu option to display the **Open Physical Media Interventions** page (Figure 15.12-15, Frame A).
- 3 Observe information displayed on the **Open Physical Media Interventions** page. Under the **Listing** section of the page, additional pages of detailed information (Figure 15.12-17, Frames A, B, C) are available as options are selected:
 - To **set the number of rows** to display on the page, modify the **Show <number>** rows at a time option:
 - ▶ Select 20 (to specify number of rows to display).
 - ▶ Click on a specific underscored Order ID<number> to examine more detailed data (Figure 15.12-17, Frame B) concerning that particular order.
 - ▶ Click the navigation tool Previous Page (◀) button, to return to the Open Physical Media Interventions page.
 - ▶ Click on a specific underscored Request ID<number> to examine more detailed data (Figure 15.12-17, Frame A) concerning the intervention for that particular request.
- 4 Observe the information displayed in the **Worked by:** field of the **Intervention For Request <number>** details page:
 - If someone is working on the intervention, that user is identified in the **Worked by:** field.

NOTE: In general, working on an intervention is left to the person who has already been assigned to work it, unless the change is coordinated with that assignee or due to other circumstances (e.g., due to illness or vacation).

- 5 To **assign/reassign** User to work on the intervention:

NOTE: 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.

- ▶ Click the [assign] or [change] link in the Worked by: field on the Intervention For Request <number> details page.
 - ▶ Click the assign (or change) link to display assign text box.
 - ▶ Type the appropriate User ID in the textbox of the Worked by: field.
 - ▶ Click the green check mark button next to the text.
- User has been assigned/reassigned
- 6 Click the navigation tool **Previous Page** (◀) button, to return to the **Open Physical Media Interventions** page.

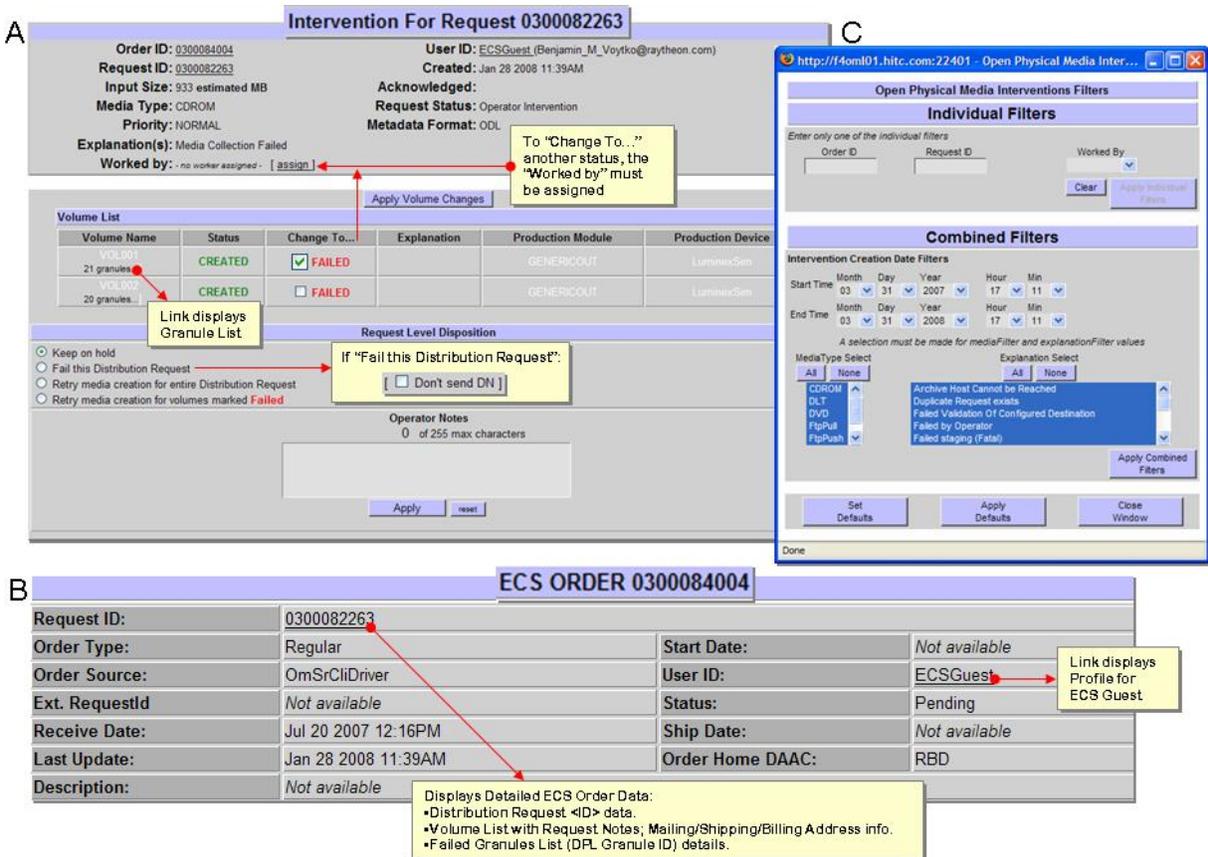


Figure 15.12-17. Open PM Interventions For Request ID Details (A), Order ID Details (B), and Filters (C)

- 7 To fail intervention(s), under the **Options** section of the **Interventions For Request ID** details page (Figure 15.12-15, Frame A), perform the following:
- ▶ Click either the All check box, under the Bulk Fail button (if all interventions are to be bulk failed) or the individual checkbox(es) in the Sel column associated with specific intervention(s).
 - ▶ Click the Bulk Fail button.
 - The **Confirm Bulk Fail Action** dialog box (Figure 15.12-15, Frame B) displays
 - ▶ Enter Operator Notes (up to 255 characters) in textbox, stating reason for failing interventions, as necessary.
 - ▶ Enter Additional e-mail text (up to 255 characters), as necessary.
 - ▶ Select Send email to users... options.
 - ▶ Click Apply "Bulk Fail" button.
 - The selected intervention(s) is/are failed.

8 To **submit intervention(s)**, under the **Options** section of the **Interventions For Request ID** details page (Figure 15.12-15, Frame A), perform the following:

- ▶ Click either the All checkbox, under the Bulk Submit button (if all interventions are to be submitted) or the individual checkbox(es) in the Sel column associated with specific intervention(s).
- ▶ Click the Bulk Submit.
- The selected intervention(s) is/are submitted.

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

9 If there is a device listed in the **Production Device** field of the **Interventions For Request ID** details page (Figure 15.12-17), the device should be made available for processing other requests, while the current request is in Intervention. To free up the device:

- ▶ Click **deallocate this device...** link, adjacent to the **Current Device** entry.
- A **confirmation dialog box** is displayed with the message **“WARNING: This will deallocate device ... from Media Distribution request Do you want to continue?”**
- ▶ Click **OK** (or **Cancel** to dismiss the dialog box without freeing up the device.)
- The **Interventions For Request ID** detail page reloads and “none” is displayed for Current Device.

10 View/Check the **granules in a volume**:

- ▶ Click on the [**<number> granule...**] link associated with the Volume Name under the **Volume List** section (Interventions For Request ID, Figure 15.12-18, Frame A).
- The **Granule List for Volume <VOLnumber> of Request<ID>** window (Figure 15.12-18) displays.

GranuleID	DPL ID	ESDT	Type	In Size (MB)	Out Size (MB)	Status	Explanation	Action
124378	158041	AE_PMSCI.001	SC	75.002		STAGED		Fail <input type="checkbox"/>
124389	158052	AE_PMSCI.001	SC	75.002		STAGED		Fail <input type="checkbox"/>
124388	158051	AE_PMSCI.001	SC	75.002		STAGED		Fail <input type="checkbox"/>
124428	158122	MOD29P1D.004	SC	6.117		STAGED		Fail <input type="checkbox"/>
124444	158128	MOD29P1D.004	SC	6.117		STAGED		Fail <input type="checkbox"/>
124425	158089	MOD11A1.086	SC	0.104		STAGED		Fail <input type="checkbox"/>

Figure 15.12-18. Granule List for Volume <VolNumber> of Request <ID>

- 11** 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):
- ▶ Type the Database ID (DBID) of the replacement granule in the DBID text box.
 - ▶ Click on the Apply button associated with the DBID.
 - A dialog box displays to confirm the change to the granule.
 - ▶ Click **OK** to confirm the specification of a replacement granule and dismiss the dialog box.
 - The **Granule List for Volume <VOLnumber> of Request <ID>** window displays.
- 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 Fail check box in the Action column of associated granule in the Granule List.
 - ▶ Click Submit Actions button, to fail the granule.

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

- The **Granule List for Volume <VOLnumber> of Request<ID>** window refreshes.
 - ▶ Click red **X close window** button, to close the Granule List... window.
 - The **Intervention For Request <ID>** details page displays.
- 13** 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 the corresponding check box.
 - ▶ Type the applicable text in the Operator Notes text box, as needed concerning the request (e.g., the reason for making a particular type of intervention).
 - ▶ Select Request Level Disposition option for the request:
 - **Keep on hold** – Saves the Operator Notes and keeps the intervention in its current state. No dispositions are applied.
 - **Fail this Distribution Request** - to fail the entire request (including all volumes).
 - **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 <Status>, [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 <Status>, [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 **Intervention For Request <ID>** details 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.

- ▶ Click **Apply** button.
- A **Close Confirmation** page displays the actions to be taken. The following actions types may be listed/available:
 - **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 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.
 - A **Don't send e-mail** box to suppress the sending of an e-mail message.
 - ▶ Type the appropriate text in the **Additional e-mail** text text box on the **Close Confirmation** page.
 - 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.

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

- ▶ Click **OK** to apply the specified intervention actions (if any) and to **dismiss the Close Confirmation page**.

NOTE: If a warning dialog 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.

15.12.4 Physical Media Distribution Submenu Page – Printer Configuration

The Printer Configuration page handles the configuration of printers used in physical media distribution. Printer can be “added” and their parameter can be “edited” on this page. The **PMD Printer Configuration** page (Figure 15.12-19) displays the following information for all currently configured printers:

- **Name** – assigned name of printer
- **Type** – type of functions (packing, case, label or QC) printer support.
- **Network Info** – attributes associated with the printer make and/or model.
- **Status** – printer status.
- **Options** – “Always print” options is allowed for “Packing List” and “QC” printers, otherwise an error message displays.

15.12.4.1 Checking/Modifying PMD Printer Configuration

- 1 Click **Production Media Distribution** menu option to expand its submenu.
- 2 Click **Printer Configuration** submenu option to display the **Physical Media Distribution: Printer Configuration** page (Figure 15.12-19).

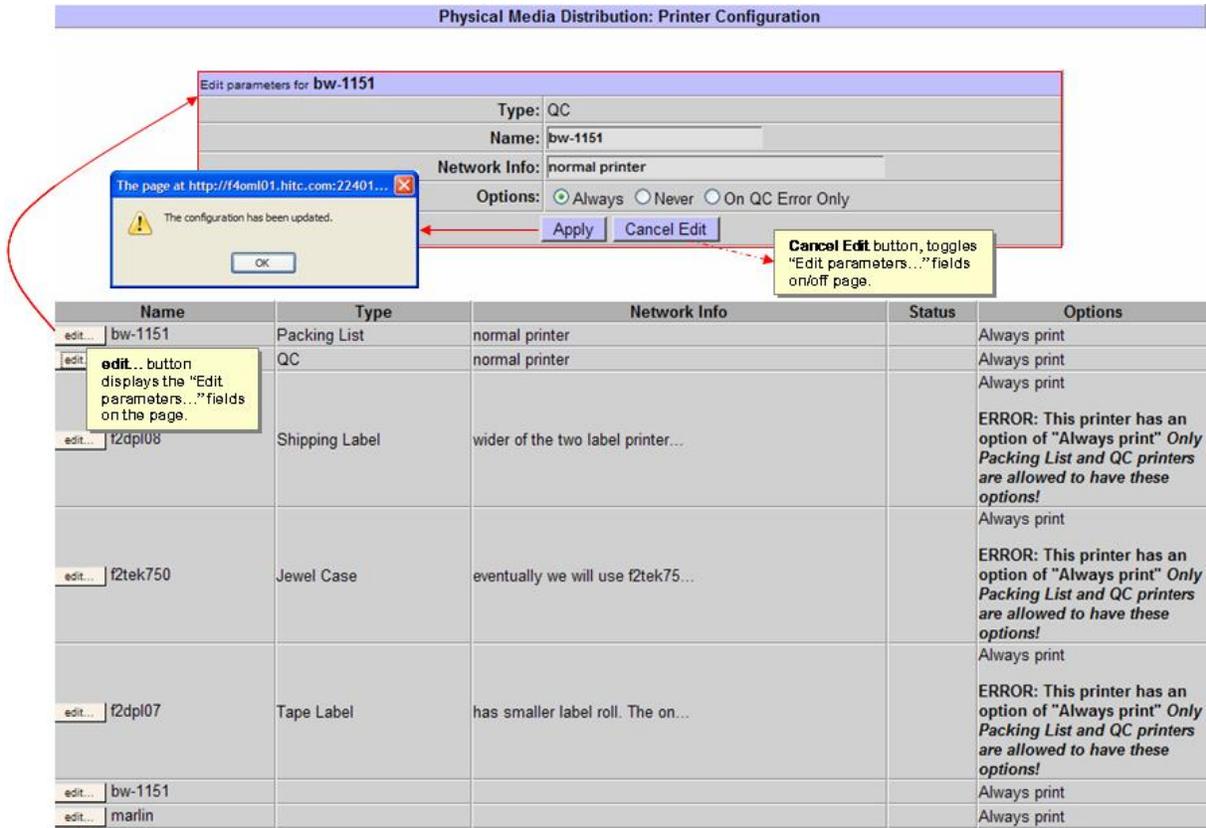


Figure 15.12-19. PMD Printer Configuration Page

- 3 Observe the information displayed on the **PMD: Printer Configuration** page.
- 4 To **edit the values assigned to parameters** for a particular printer:
 - ▶ Click the **edit...** button
 - The Edit parameters for <printer name> entry fields displays at top of page.
- 5 **Change the values** for the following parameters:
 - ▶ Type the new value for the printer **Name** in the corresponding textbox.
 - ▶ Type the new value for the **Network Info** in the corresponding textbox.
 - ▶ Click appropriate **Options**:
 - **Always** - to designate a production module as the default module.
 - **Never** - to designate a production module as not being the default module.

- **On QC Error Only** – whenever
 - ▶ To implement the changes, click the **Apply** button.
 - The prompt, “The configuration has been updated.” displays,
 - ▶ Click **OK**.
 - The **printer configuration** is updated and displays on the page.
 - Toggle the “Edit parameters for <printer name>” entry fields on/off the page, click the **Cancel Edit** button.
-

15.12.5 Physical Media Distribution Submenu Page – PM 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 15.12-20) displays the following information for all currently configured production modules:

- **Name** – assigned name of module.
- **Created – Date/time module was created.**
- **Last Updated – Date/time of current update.**
- **Image File Path** – Path of image files.
- **Text File Path** – Path to text files.
- **Executable** – Name of the executable module.
- **Default Module** – options (yes or no) indicating whether or not the production module is the default module.

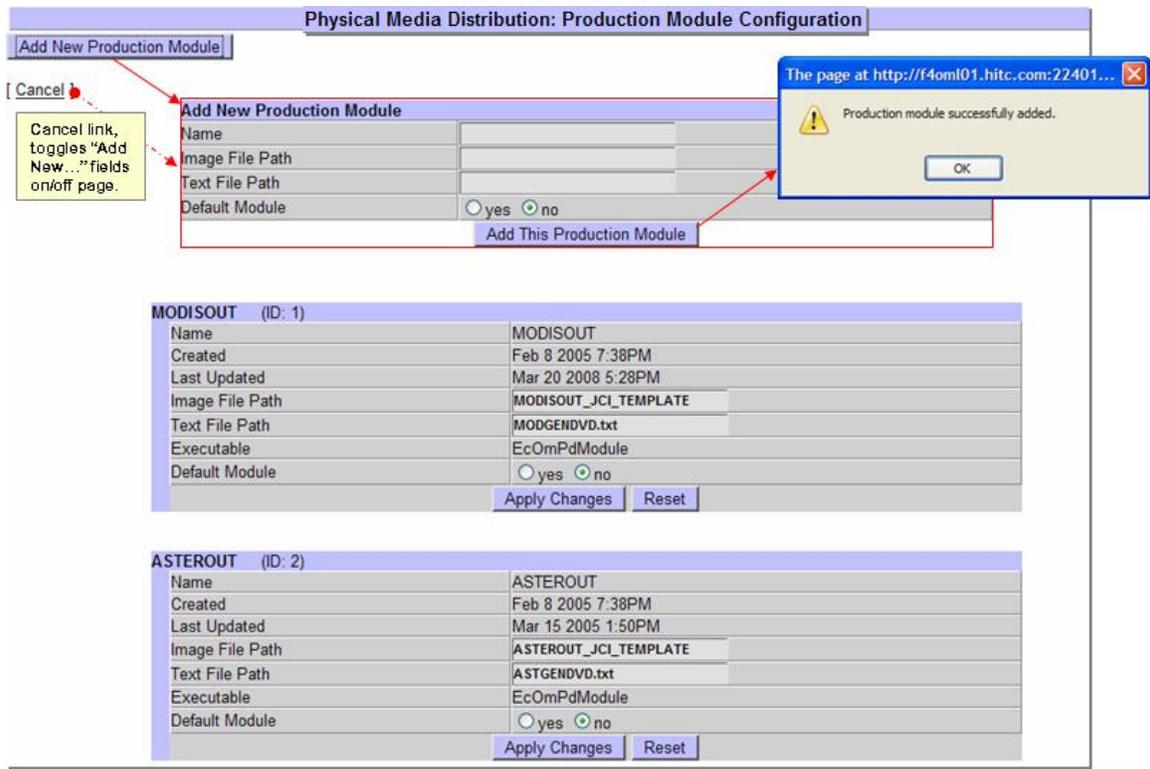


Figure 15.12-20. PMD Production Module Configuration Page

15.12.5.1 Adding/Modifying PMD Production Module Configuration

- 1 Click **Production Media Distribution** menu option to expand its submenu.
- 2 Click **PM Configuration** submenu option to display the **Physical Media Distribution: Production Module Configuration** page (Figure 15.12-20).
- 3 Observe the information displayed in the **Production Modules** listed on the page.
- 4 To edit the values assigned to parameters for a particular production module, change the values for the following parameters:
 - ▶ Type the new value for the **Image File Path** in the corresponding textbox.
 - ▶ Type the new value for the **Text File Path** in the corresponding textbox.
 - ▶ To change production module default, click appropriate option:
 - **yes** - to designate a production module as the default module.
 - **no** - to designate a production module as not being the default module.
 - ▶ To implement the changes, click the **Apply Changes** button.

NOTE: The process of adding a new production module to the PMD configuration assumes that the production module is currently/properly installed.

- 5 To add a **new production module**:
- ▶ Click the **Add New Production Module** button on the **PMD Production Module Configuration** page (Figure 15.12-20).
 - The blank **Add New Production Module** entry fields displays at top of page.
 - ▶ Add **appropriate information/values** in textboxes.
 - ▶ Select **appropriate default** option.
 - ▶ Click the **Add This Production Module** button to add the new production module.
 - The prompt, “Production module successfully added.” displays,
 - ▶ Click **OK**.
 - The **New Production Module** is added and displays at the bottom of the page.
 - Toggle the Add New Production Module from the page, click the Cancel link.
-

15.12.6 Physical Media Distribution Submenu Page – Reports

The **PMD Report Summary** page (Figure 15.12-21) is displayed in HTML using the web browser print menu function. By using the browser's built-in and convenient print function, the reports can be printed with the formatting intact.

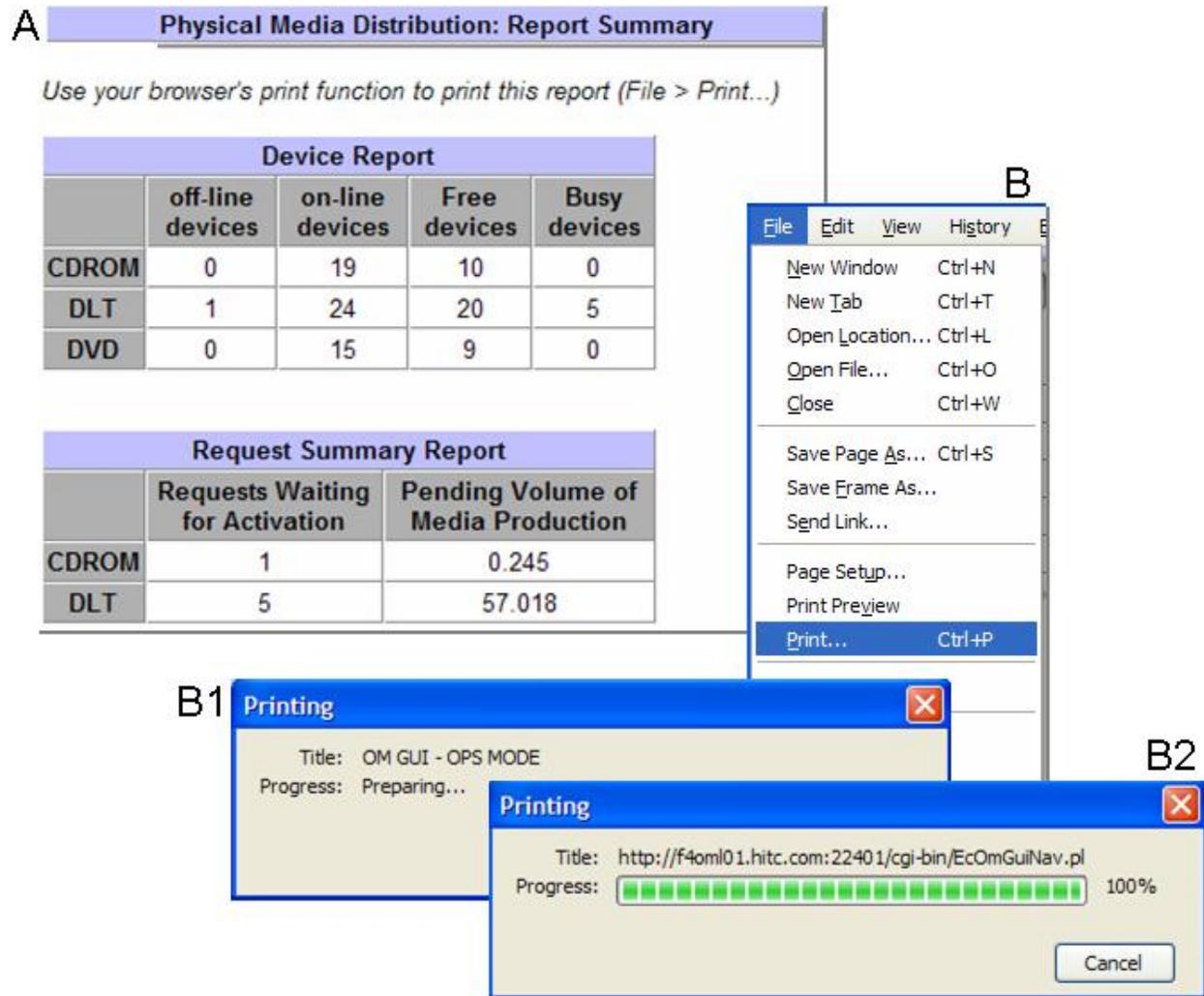


Figure 15.12-21. PMD Report Summary Page

The following two types of reports are available:

- 1 - **Device Report** - Shows, by media type, the summary of device statuses: on-line/off-line and free/busy.
- 2 - **Request Summary Report** - A quick summary of the PMD requests in their various states from waiting for a device to waiting for shipment.

15.12.6.1 Printing PMD Reports

- 1 Click **Physical Media Distribution** menu option to expand its submenu.
 - 2 Click **Reports** submenu option to display the **PMD: Report Summary** page (Figure 15.12-21, Frame A).
 - The **Physical Media Distribution: Report Summary** page displays.
 - 3 Observe information displayed in the **PMD: Report Summary** table.
 - **Device Report** table displays the following format:
 - **Rows** – names the type of devices and associated status values.
 - **Columns** – describes the characteristics of the devices.
 - **Request Summary Report** table displays the following format:
 - **Rows** – names the type of devices and associated status values.
 - **Columns** – describes the characteristics of the devices.
 - To manually update (refresh) the data on the screen, click on the ↻ icon in the **OM GUI** navigation frame.
- 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** using the web browser:
 - ▶ Select **File, Print** (or Ctrl+P) from the menu (Figure 15.12-21, Frame B).
 - A Print dialog box displays.
 - ▶ Select **printer** (and **set printer properties**, as needed).
 - ▶ Click **OK** to print
 - Prompt indicating printing in queuing to print displays (Figure 15.12-21, Frames B1, B2)
-

15.12.7 Physical Media Distribution Submenu Page – ESDT Configuration

The “ESDT Configuration” page allows the full-capacity Operator to add or remove names of ESDTs, which are stored in compressed format, to/from the PMD ESDTs page.

15.12.7.1 Handling Compressed Format ESDTs

- 1 Click **Physical Media Distribution** menu option to expand its submenu.
- 2 Click **ESDT Configuration** submenu option to display its page (Figure 15.12-22, Frame A).
 - The **Physical Media Distribution: Compressed Format ESDTs** page displays.

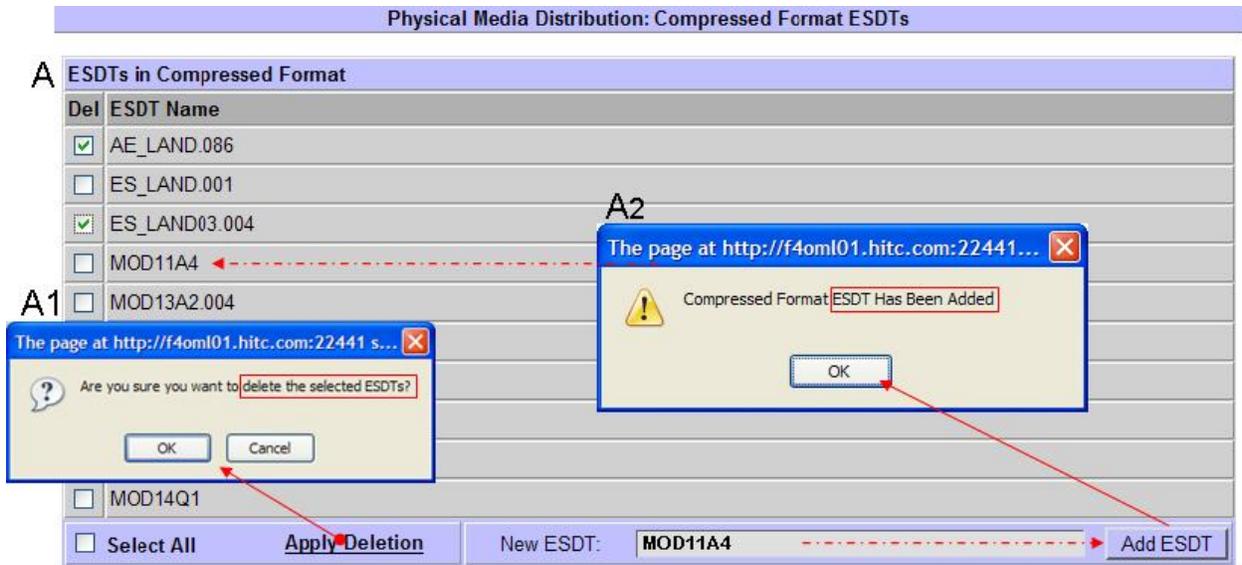


Figure 15.12-22. PMD Compressed Format ESDTs Page

Adding ESDTs

- 3 To **add ESDT** to the PMD ESDT list:
 - ▶ Enter the <new_ESDT_name> in New ESDT textbox.
 - ▶ Click the **Add ESDT** button.
 - The “**Compressed Format ESDT Has Been Added**” dialog box (Figure 15.12-22, Frame A2) appears.
 - ▶ Click the **OK** button to acknowledge the update.
 - The new compressed format ESDT is added to the list.

Deleting ESDTs

- 4 To **delete ESDT** from the PMD ESDT list:
 - ▶ Check the checkbox(es) of one or more ESDTs on the list.
 - ▶ Click the **Apply Deletion** link.
 - The “**Are you sure....delete the selected ESDT?**” dialog box (Figure 15.12-22, Frame A1) appears.
 - ▶ Click the **OK** button to acknowledge the update.
 - The compressed format ESDT is deleted from the list.

15.13 OM GUI – View Order Status

The OM GUI Order Status page, Get Order Status (Figure 15.13-1) allows the Operators (full-capacity or limited-capacity) the ability to monitor and/or view the status of orders submitted via the OM GUI.

The screenshot shows the 'Get Order Status' page with the following elements and callouts:

- Get Order Status** (Page Title)
- Enter the Order ID** (Text input field)
- GetOrderStatus** (Submit button) and **Reset** (Reset button) buttons.
- Clears entry/fields.** (Callout box pointing to the Reset button)
- Get current status of pending and/or current orders.** (Callout box pointing to the GetOrderStatus button)
- To get an order history (a listing of past orders with status), select either the number of days to look back (from today) OR select the date range* (Instructional text)
- Enter The Email Id** (Text input field)
- NOTE: Use email Id associated with order.** (Callout box pointing to the Enter The Email Id field)
- Number of Days** (Dropdown menu)
- OR --** (Separator text)
- BeginningDate** (Text input field) with format **(MM/DD/YYYY)**
- EndDate** (Text input field) with format **(MM/DD/YYYY)**
- GetRangeofOrderStatus** (Submit button) and **Reset** (Reset button) buttons.
- Clears entry/fields.** (Callout box pointing to the Reset button)
- Get historical status of past and/or completed orders.** (Callout box pointing to the GetRangeofOrderStatus button)
- Generates search (of current or historical status) on specified field entry.** (Callout box pointing to the GetOrderStatus and GetRangeofOrderStatus buttons)

Figure 15.13-1. Get Order Status Page

15.13.1 View Order Status Submenu Page – OM GUI Order Status

The **OM GUI Order Status** provides a visual display of viewing multiple levels of a particular order status. As the Operator search through to the lower levels of the order, the status path is capture as a navigation bar at top of each displayed status page (Figure 15.13-1, Figures A1-A3). The Operator can view the following details at these status levels:

- Order Status (Figure 15.13-1, Frame 1):
- Request Status (Figure 15.13-1, Frame 2)
- Granule Status (Figure 15.13-1, Frame 3).

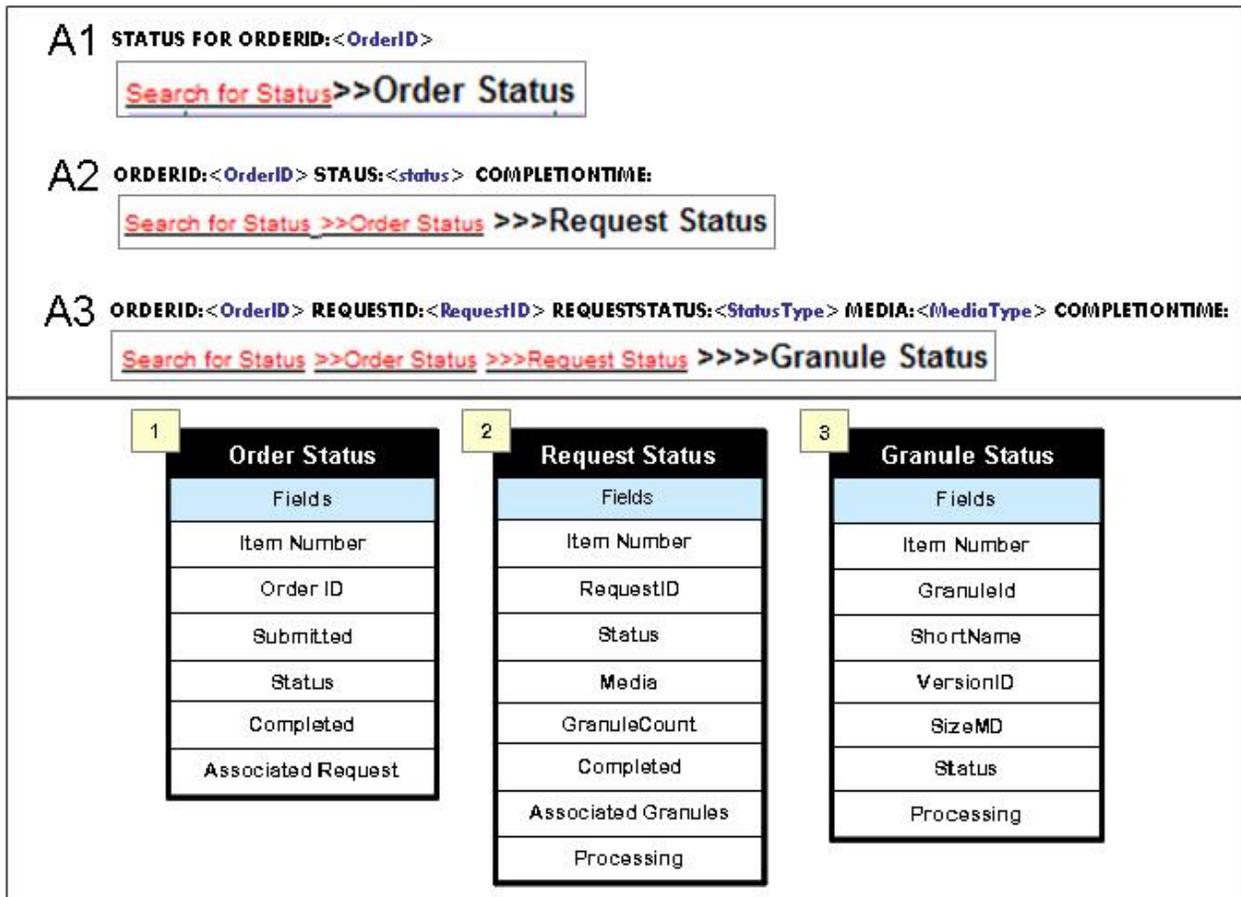


Figure 15.13-2. Get Order Status Pages Navigation Bars and Fields

The OM GUI Order Status submenu options will be examined using to the following checklist:

Table 15.13-1. OM GUI Order Status - Activity Checklist

Order	Role	Task	Section	Complete?
1	Distribution Technician	Viewing Distribution Requests Order Status Pages.	(P) 15.13.1.1	

15.13.1.1 Viewing Distribution Requests Order Status Pages

- 1 Click **View Order Status** menu option to expand its submenu.
- 2 Click **OM GUI Order Status** submenu option to display its page.
 - The **Get Order Status** (Figure 15.13-1) page displays.
- 3 To retrieve the status of a current order:

- ▶ **Enter the Order ID** number (the complete 10-digit order id).
- ▶ Click the **GetOrderStatus** button to retrieve the most current status.
- The **STATUS FOR ORDERID:<OrderID>** page displays. (Figure 15.13-3, Frame B1 current)

The figure illustrates the 'Get Order Status' application interface. Frame A shows the main form with fields for Order ID, Email ID, Number of Days, Beginning Date, and End Date, along with buttons for 'GetOrderStatus' and 'GetRangeofOrderStatus'. Frame B1 (current) displays the 'STATUS FOR ORDERID:0300084004' page with a table of order details. Frame B2 (historical) displays the 'Order List' page with a table of historical orders. Frame C shows a series of error prompts that occur when values do not meet entry criteria.

STATUS FOR ORDERID:0300084004

#	Orderid	Submitted	Status	Completed	Associated Request
1	0300084004	Jul 20 2007 12:16PM	Pending		0300082263

Order List

Listing

#	Orderid	Submitted	status	completed	Associated Requests
1	0300083992	Jul 20 2007 11:42AM	Canceled		0300082250
2	0300083993	Jul 20 2007 11:42AM	Canceled		0300082251
3	0300083991	Jul 20 2007 11:42AM	Canceled		0300082252
4	0300083994	Jul 20 2007 11:42AM	Canceled		0300082253
5	0300083996	Jul 20 2007 11:42AM	Canceled		0300082254

Error Prompts (C):

- The page at http://f4oml01.hitc.com:22401...
Order ID Can not be Null>Please Enter the OrderId
- The page at http://f4oml01.hitc.com:22401...
Email ID Can not be Null>Please Enter the EmailId
- The page at http://f4oml01.hitc.com:22401 says:
Please Select Number of Days OR Enter start and End date time!
To find the Range of Orders
- The page at http://f4oml01.hitc.com:22401...
Invalid Range for the User Email., Please Check

Figure 15.13-3. Order Status Pages (A-B2) and Error Prompts (C)

- 4 Observe the detailed information listed in Figure 15.13-3, Frame B1 current. The Status fields display the most current activity or status of the order.
- 5 Using the navigation bar, click the **Search for Status** link to return to the **Get Order Status** page (Figure 15.13-3, Frame A).
- 6 To retrieve the **status of a historical order**:
 - ▶ **Enter The Email Id** address (id must be associated with an historical order).
 - ▶ Select the **Number of Days** from the list box: **30**
 - ▶ Or enter a valid range using the **BeginningDate** (MM/DD/YYYY) and **EndDate** (MM/DD/YYYY) text fields.
 - ▶ Click the **GetRangeofOrderStatus** button to retrieve the most current status.

- The Order List page displays a Listing of related historical status(es). (Figure 15.13-3, Frame B2 historical).
- 7 Using the navigation bar, click the **Search for Status** link to return to the **Get Order Status** page (Figure 15.13-3, Frame A).
- 8 To clear the input fields, click the **Reset** button.

NOTE: If the data criteria entered do not match any current or historical orders, an Order List, ERROR (more ERROR Details...) page will display (Figure 15.13-3, Frame C). Click on the **more ERROR Displays...** linke to review any one of the following associated error prompts:

- Order ID Can not be Null. Please Enter the Order Id.
 - Email ID Can not be Null. Please Enter the Emailid.
 - Please Select Number of Days OR Enter start and End datetime. To find the Range of Orders.
 - Invalid Range for User Email..., Please Check.
- 9 To retrieve the **status of a current order details**:
- ▶ From the **Get Order Status** page (Figure 15.13-4, Frame A), **Enter the Order ID** number (the complete 10-digit order id). Example: 03000084004 given.
 - ▶ Click the **GetOrderStatus** button to retrieve the most current **STATUS FOR ORDERID:<OrderID>** page (Figure 15.13-4, Frame B).
 - ▶ Click the **OrderId <number>** under the OrderId column of the page to display the **Listing** details of the **Request Status** (Figure 15.13-4, Frame C).
 - ▶ Click the **RequestId <number>** under the **RequestId** column to display the details of the **Granule Status** (Figure 15.13-4, Frame D).
- 10 Using the navigation bar, click the **Search for Status** link to return to the **Get Order Status** page (Figure 15.13-4, Frame A) and to continue seaching other order statuses.

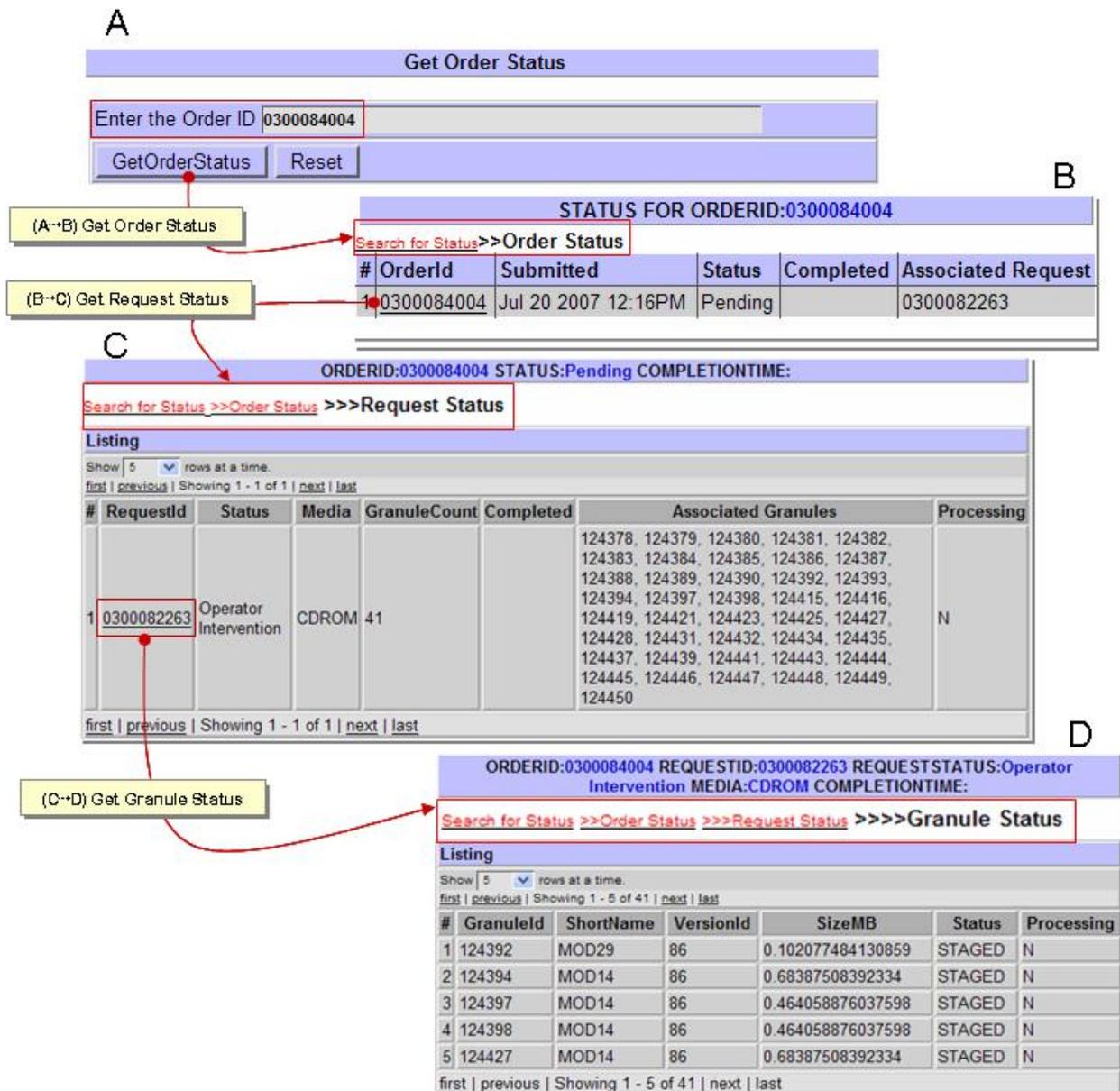


Figure 15.13-4. Order Status Details Pages (A-D)

- 11 On the OM GUI left pane menu options, click the **Home** link to return to the **Order Manager Home** page.
- The **Order Manager Home** page (Figure 15.4-2) display.

15.14 OM GUI – Logs

The **OM GUI Log** keeps a record of every page that runs and every stored procedure that is called within those pages. It is proven helpful when encountering an error and can aid the System Administrator in fixing the problem.

- 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) where the OM GUI is installed.

The **OM GUI Log Viewer** page (Figure 15.14-1, Frame A) provides the Operator the capability to view entries captured in the OM GUI log file.

15.14.1 Logs Submenu Page – OM GUI Log Viewer

The **OM GUI Log Viewer** log file is located under the “cgi-bin/logs” install directory of the OM GUI. It is neither the web server log nor SYSLOG, but a log specifically generated by/for the OM GUI. It works similar to the UNIX <tail> command. If preferred, the log file can be viewed with any UNIX editor or visualizing command (e.g., **pg, vi, view, more**).

The OM GUI Log Viewer submenu options will be examined using to the following checklist (Table 15.14-1):

Table 15.14-1. OM GUI Log Viewer - Activity Checklist

Order	Role	Task	Section	Complete?
1	Distribution Technician	Viewing the OM GUI Log	(P) 15.14.1.1	

15.14.1.1 Viewing the OM GUI Log

- 1 Click **Logs** menu option to expand its submenu.
- 2 Click **OM GUI Log Viewer** submenu option to display its page.
 - The **OM GUI Log Viewer** (Figure 15.14-1, Frame A) page displays.

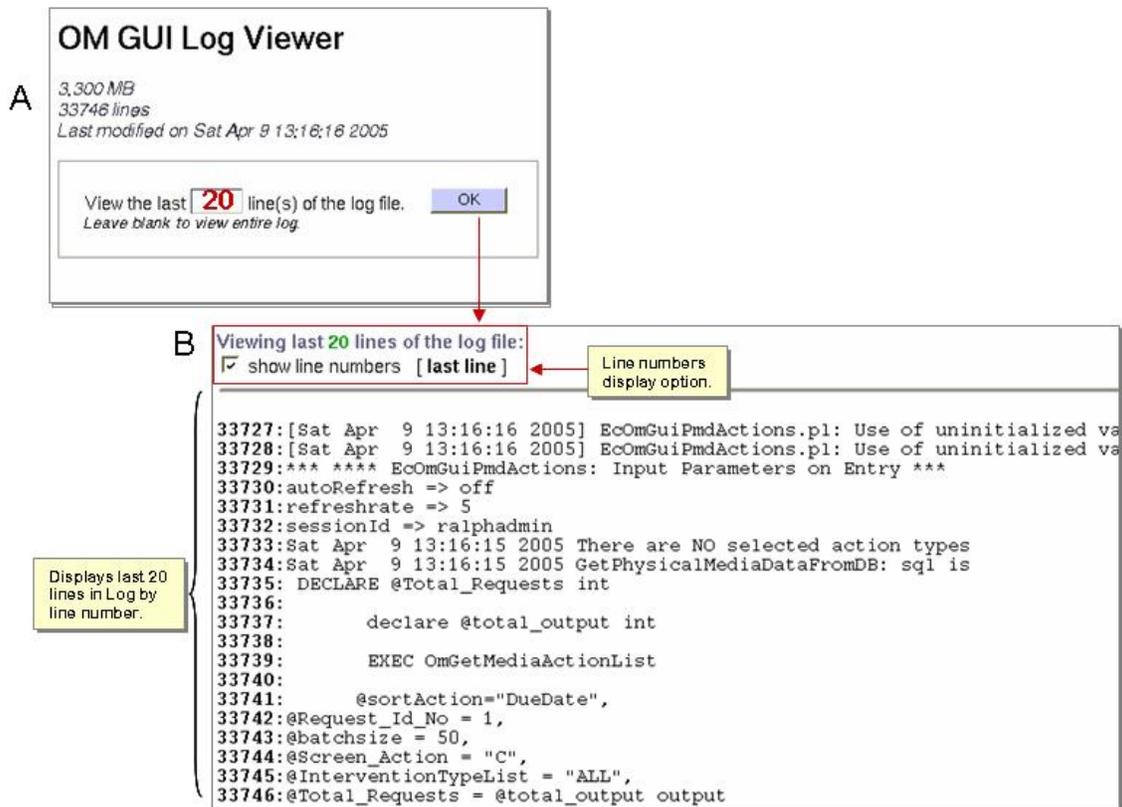


Figure 15.14-1. OM GUI Log Viewer Page

- 3 To view the log file:
 - ▶ Enter **20** in the **View the last ___ line(s) of the log file** text box.
 - ▶ Click **OK**.
 - The OM GUI Log Viewer 20 line “log file” (Figure 15.14-1, Frame B) displays.
- 4 Observe information displayed in the **Log File** such as:
 - Size (size of the log file).
 - Lines (number of lines in the log file).
 - Last Modified (when the log file was last modified).
 - Action Taken within the OM GUI.
 - 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.
 - After long periods of usage, the log file may grow to considerable size and it may take some time to load the entire log into the **OM GUI Log Viewer** page.
 - In most cases, viewing the last 100 - 500 lines would be adequate to assess recent activity and would greatly decrease the amount of time to load the file.
- 5 On the OM GUI left pane menu options, click the **Home** link to return to the **Order Manager Home** page.
- The **Order Manager Home** page (Figure 15.4-2) display.
-

15.15 OM GUI – Admin Tools

The Admin (Administrator) Tools page controls Operators’ profiles and configurations for every field, on every page that is generated within the OMS GUI. This tool is restricted for use by the site Administrator only, as it can substantially change the functionality of data generated within the OMS GUI.

The OM GUI Admin Tools submenu options will be examined using the following checklist:

Table 15.15-1. Admin Tools - Activity Checklist

Order	Role	Task	Section	Complete?
1	Distribution Technician	Setting Permissions for OM GUI Action Pages	(P) 15.15.5.1	
2	Distribution Technician	Setting Operator Profile	(P) 15.15.6.1	

15.15.1 Admin Tools Submenu Page – Server/Database Parameters

Reference 15.10.2 OM Configuration Submenu Page – Server/Database to check and modify server/database parameters values.

15.15.2 Admin Tools Submenu Page – Media Parameters

Reference 15.10.3 OM Configuration Submenu Page – Media to check and modify media parameters values.

15.15.3 Admin Tools Submenu Page – Aging Parameters

Reference 15.10.1 OM Configuration Submenu Page – Aging Parameters to configure aging parameters (rules) values.

15.15.4 Admin Tools Submenu Page – FtpPush Policy

Reference 15.10.8 OM Configuration Submenu Page – FtpPush/SCP Policy to set permissions for FTP Push Policy Configuration Pages. These Global Settings (for all destinations) includes Non-Configured Destinations and Actions for Frequently Used destinations.

15.15.5 Admin Tools Submenu Page – Action Pages

Provides the Administrator with a set of predefined permissions to set, remove, suspend or resume any/all related actions and/or related configurations on any/all related OM GUI pages.

These predefined set of permissions for the OM GUI action pages are identified in Figure 15.15-1, OM GUI Admin Tools Action (Permissions) Pages.

Admin Tools: Set Permissions for Action Pages	
Set Operator Permissions for	--select-- <input type="button" value="Apply Changes"/> <input type="button" value="Reset"/>
	yes <input type="checkbox"/> no <input type="checkbox"/>
Interventions	
Operator can Fail or Change Granules	yes <input type="checkbox"/> no <input type="checkbox"/>
Operator can Process a Request (change Media Type/Priority, submit/fail a Request, etc.)	yes <input type="checkbox"/> no <input type="checkbox"/>
Operator can Resume or Cancel Interventions in bulk	yes <input type="checkbox"/> no <input type="checkbox"/>
Operator can Change Volume Statuses	yes <input type="checkbox"/> no <input type="checkbox"/>
Media Creation Configuration	
Operator can configure DispatchMode and MediaCreationType for any media type	yes <input type="checkbox"/> no <input type="checkbox"/>
Distribution Request Actions	
Operator can Suspend or Resume New Request Processing	yes <input type="checkbox"/> no <input type="checkbox"/>
Operator can Change Priority for a Distribution Request	yes <input type="checkbox"/> no <input type="checkbox"/>
Operator can Cancel, Resubmit, Suspend, or Fail Distribution Requests	yes <input type="checkbox"/> no <input type="checkbox"/>
Operator can edit FTP Push parameters for Distribution Requests	yes <input type="checkbox"/> no <input type="checkbox"/>
Operator can Suspend active destinations or Resume suspended destinations	yes <input type="checkbox"/> no <input type="checkbox"/>
Operator can Stop Distribution Requests	yes <input type="checkbox"/> no <input type="checkbox"/>
Operator can Stop Volumes in a Media Distribution Requests	yes <input type="checkbox"/> no <input type="checkbox"/>
Operator can edit Address Information for a Distribution Request	yes <input type="checkbox"/> no <input type="checkbox"/>
Queue Actions	
Operator can Suspend/Resume Queues	yes <input type="checkbox"/> no <input type="checkbox"/>
Device/Printer/Production Module Configuration	
Operator can Add or Update a device	yes <input type="checkbox"/> no <input type="checkbox"/>
Operator can set a device on-line or off-line	yes <input type="checkbox"/> no <input type="checkbox"/>
Operator can Configure Printers	yes <input type="checkbox"/> no <input type="checkbox"/>
Operator can Configure Production Modules	yes <input type="checkbox"/> no <input type="checkbox"/>
Physical Media Actions	
Operator can Process Actions for Physical Media Distribution	yes <input type="checkbox"/> no <input type="checkbox"/>
Operator can Fail a Physical Media Distribution Request	yes <input type="checkbox"/> no <input type="checkbox"/>

Figure 15.15-1. OM GUI Admin Tools Action (Permissions) Pages

15.15.5.1 Setting Permissions for OM GUI Action Pages

- 1 Click **Admin Tools** menu option to expand its submenu.
 - 2 Click **Action Pages** submenu option to display its page.
 - The **OM GUI Admin Tools Action (Permissions) Pages** page displays.
 - 3 Observe information displayed on the **Action Pages** page.
 - 4 To **Set Operator Permissions** for a User, select the <Userid> from the list box:
 - ▶ Click the appropriate **checkboxes (yes or no)** to define the User's permissions.
 - ▶ Click the **Apply Changes** button (or the **Reset** button to cancel actions and reset to original).
-

15.15.6 Admin Tools Submenu Page – Profile Management

Provide the Administrator with the ability to manually remove an Operator's profile. The tool can automatically search and remove obsolete profiles and/or remove permission settings of profiles.

15.15.6.1 Setting Operator Profile

- 1 Click **Admin Tools** menu option to expand its submenu.
- 2 Click **Profile Management** submenu option to display its page (Figure 15.15-2, OM GUI Admin Tools Profile Management Page).
 - The **OM GUI Admin Tools Profile Management** page displays.



Figure 15.15-2. OM GUI Admin Tools Profile Management Page

- 3 Observe information displayed on the **Profile Management** page.
- 4 To **Manually select an Operator Profile to remove:**
 - ▶ Select the <Userid> from the list box.
 - ▶ Click the **Remove Profile** button.
 - The profile is removed.

- 5 Click the **Cleanup All Profiles** button to automatically remove obsolete Operator IDs.
 - 6 Click the **Remove All Profiles** button to completely remove all profiles from the configuration file, including related permission settings.
 - 7 On the OM GUI left pane menu options, click the **Home** link to return to the **Order Manager Home** page.
 - The **Order Manager Home** page (Figure 15.4-2) display.
-

15.16 Using the Order Manager Command Line Utility

15.16.1 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).

15.16.2 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. Limited-capability operators should not be able to access the **OMS Configuration CI**.

Each input file represents a separate request for data. If such input files are used, the operator references the input file(s) in the command-line arguments when starting the **OM Command Line Utility**.

Table 15.16-1. 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 Utility	(P) 15.16.2.1	
2	Distribution Technician	Run the Order Manager from the Command Line Interface/Command Line Utility	(P) 15.16.2.2	
3	Distribution Technician	Preparing Input Files for Use with the OMS Configuration CI	(P) 15.16.3.1	
4	Distribution Technician	Starting the OMS Configuration CI	(P) 15.16.3.2	
5	Distribution Technician	Configuring How Long Order-Tracking Information is Kept in the OMS Database	(P) 15.16.4.1	
6	Distribution Technician	Getting OMS Configuration CI Help	(P) 15.16.5.1	
7	Distribution Technician	Prepare Input Files for Use with the SCLI	(P) 15.16.6.1	
8	Distribution Technician	Run the OMS SCLI	(P) 15.16.6.2	

15.16.2.1 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:request id" which you retrieve from the 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).
- **ndd** (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.
-

15.16.2.2 Run 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
- 3** 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.
-

15.16.3 OMS Configuration Script (OMS Configuration CI) Activities

The 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 **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 processed.

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).

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)].
- 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.

15.16.3.1 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 file. For example:
X4oml01{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_OZF.001
GDAS_OZF.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”
- 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.
-

15.16.3.2 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 15.16-1) is displayed.

```
OMS Configuration CI v1.0

MENU:
-----
1) Synergy III Mode Exceptions
2) Configure MSS/OMS Order Tracking
3) Switch Server Mode
4) Help

Type "x" to exit

=>
```

Figure 15.16-1. 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.
-

15.16.4 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)].

15.16.4.1 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 15.16-2) 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 15.16-2. 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 be used to update the OMS database, where the new order-tracking retention time values would be applied.
 - If the file specified in the confirmation message is not the proper file, go to Step 8.
 - If the file specified in the confirmation message is the proper file, go to Step 12.
 - Enter **3** - to view the current configuration.
 - The current order-tracking retention time configuration (from the OMS database) is displayed.
 - Each line of the order-tracking retention time configuration contains the following three items:
 - Order source code [e.g., “D” (Data Pool), “S” (Spatial Subscription Server)]
 - 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.
-

15.16.5 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.

15.16.5.1 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.
 - 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.
 - A UNIX command line prompt is displayed.
-

15.16.6 Science Command Line Interface (SCLI) in OMS

The Science Command Line Interface (OmSCLI) allows the operator to acquire products by sending orders to the Order Manager Server given a operator’s file of granule identifiers and a file of media options. The operator can request products by FtpPush, FtpPull, and secure copies specified in the media parameter file. The OmSCLI will not generate Metadata Control Files (MCFs) since that functionality is performed by the ESDT Maintenance GUI.

The OmSCLI is installed on the same host as the Order Manager Server. It includes a wrapper script acquire, a perl module containing database connection functionality, and a C++ -based executable which interfaces with the OrderManager client. It has its own configuration file

containing database environment parameters. It is invoked with arguments that are described in the following section.

There are four/five command line parameters and they are used in combination with each other. Table 15.16-2 describes these parameters.

Table 15.16-2. Command Line Parameters of the SCLI Tool

Parameter Name	Description
mode	The mode in which the tool runs (i.e. OPS, TS1)
parameterfile	A file containing all of the information required to acquire and distribute the request submitted.
file	A file that can contain up to 100 granules to be acquired.
tag	Unique request identification, used to track request in system.
decrypt	An optional flag to indicate that the password passed in is encrypted and needs to be decrypted in SCLI.

15.16.6.1 Preparing Input Files for Use with the SCLI

- 1 Access a terminal window logged into the host where Order Manager is installed x4oml01.
- 2 Create the Parameter File using **vi** editor commands.
 - 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.

Sample Parameter File:

Example 1: PullMediaParameterFile:

```
ECSUSERPROFILE = ECSGuest
PRIORITY = NORMAL
DDISTMEDIATYPE = FtpPull
DDISTMEDIAFMT = FILEFORMAT
USERSTRING = JoeUser_PULL
DDISTNOTIFYTYPE = MAIL
NOTIFY = email@raytheon.com
```

Example 2: PushMediaParameterFile.input is:

```
ECSUSERPROFILE = labuser
FTPUSER = labuser
FTPPASSWORD = Feb7A02
FTPHOST = f4eil01
FTPPUSHDEST = /usr/ecs/formal/<MODE>/CUSTOM/scli/PushArea
PRIORITY = HIGH
DDISTMEDIATYPE = FtpPush
```

DDISTMEDIAFMT = FILEFORMAT
USERSTRING = TomRoegner_Push
DDISTNOTIFYTYPE = MAIL
NOTIFY = user@eos.hitc.com

Example 3: SCPMediaParameterFile.input is:

PRIORITY=VHIGH
DDISTMEDIATYPE=scp
DDISTNOTIFYTYPE=MAIL
DDISTMEDIAFMT=FILEFORMAT
ECSUSERPROFILE=labuser
FTPUSER=labuser
FTPHOST=f4spl01
USERSTRING=scp_Request_by_User_XXXX
FTPPUSHDEST=/home/labuser/tomr/scp
FTPPASSWORD=<password>
NOTIFY=email@raytheon.com

3 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.

4 Create the Granule File using vi editor commands. This file can contain up to 100 granules and should adhere to the following format:

- **The ListOfGranules can be include one granule per line in the file. There are two types:**
 - 1) **geoid - a specific granule <data type>:<ShortName>.<VersionId>:<dbID>**
 - 2) **LocalGranuleId - looks like the file name of the data before it was ingested in ECS**

Sample Granule File:

SC:MOD02HKM.002:2020633145 (a geoID)
MYD29P1N.A2007266.h10v08.005.2007267221028.hdf (a Local Granule Id)
Etc....

5 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**.
-

15.16.6.2 Run the OMS SCLI

- 1 Access a terminal window logged in a host.
- 2 Type `cd /usr/ecs/MODE/CUSTOM/utilities` then press **Return/Enter**.
 - The *MODE* will most likely be one of the following operating modes:
 - OPS
 - TS1
 - TS2

- 3 Enter the following command:

acquire <mode> -p <parameterfile> -f <file> -t <tag> [-decrypt]

- The -p parameter file is the file containing media options.
- The -f <file> is the file containing the granule identifiers.
- The -t <tag> is the unique request identification to the Order Manager.

Note: For each LocalGranuleId listed in the file, the OmSCLI will invoke a search for that LocalGranuleId in the AIM inventory database (via a EcOmDb stored procedure) and return all rows in a format that is a geoID.

15.17 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.

15.17.1 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 Watermark) parameters on the **OM GUI**.
- **DHWM** (Data Volume High Watermark) 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).

15.17.2 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 **DIagingConfig** 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.

15.17.3 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 Watermark) parameters on the **OM GUI**.
- **DLWM** (Data Volume Low Watermark) 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).

15.18 OMS Database Cleanup Guidelines

From the perspective of system performance it is very important to clean up the OMS database 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 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.

15.18.1 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).

15.18.2 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),.
- 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.

15.18.3 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.

15.19 Troubleshooting a Order Manager GUI Failure

Table 15.19-1 contains the activity checklist for Troubleshooting the Order Manager. Actions to be taken in response to some common OM GUI problems are described in Table 15.19-2 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 15.19-1. Troubleshooting Order Manager - Activity Checklist

Order	Role	Task	Section	Complete?
1	Distribution Technician	Checking Log Files	(P) 15.19.1.1	
2	Distribution Technician	Checking Database Connections	(P) 15.19.2.1	
3	Distribution Technician	Recovering from Order Manager Failures	(P) 15.19.3	
3	Distribution Technician	Determining the Permissions for Creating an FTP Pull Subdirectory	(P) 15.19.4.1	
4	Distribution Technician	Troubleshooting a HEG Failure	(P) 15.19.5.1	
5	Distribution Technician	Checking HEG Server Log Files	(P) 15.19.6.1	
6	Distribution Technician	Checking Files in the HEG Tempfiles Directory	(P) 15.19.7.1	

Table 15.19-2. Order Manager GUI User Messages (1 of 12)

Message Text	Impact	Cause and Corrective Action
<p>!!! ERROR: It appears that all granules have been failed. You can not submit or partition a request with all FAILED granules. This request should be failed. To do this, Select "Fail Request" from the Request Disposition section and try again. [Displayed in a dialog box]</p>	<p>Intervention cannot be resolved.</p>	<p>The message appears on the Open Intervention Detail page. If all the granules in a request have been failed, the request can no longer be submitted or partitioned. The only corrective action is to fail the entire request or place it on hold. 1. Click on the OK button to dismiss the dialog box. 2. Either fail the entire request or place it on hold. [For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>
<p>All of the granules for this request have been failed. You can not submit or partition the request because the submission will fail and another operator intervention will be created for it. This request should be failed. Return to the previous page and select "Fail Request" under the Request Disposition section.</p>	<p>Intervention cannot be resolved.</p>	<p>The operator failed all the granules for a particular request and tried to submit or partition it. Since there are no granules, there is nothing to submit or partition. The entire request should be failed. 1. Click on the  icon in the OM GUI navigation frame to redisplay the Open Intervention Detail (Intervention for Request x) page. 2. Fail the entire request. [For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>
<p>An error has occurred with the page you are requesting. Error Message: <message></p>	<p>Various.</p>	<p>The message appears on the Error page and is displayed in response to a stored procedure or system fault. Although the previously attempted operation can be retried, in most cases the error is a fatal one (e.g., a binary was installed incorrectly or is missing). 1. If feasible, retry the operation that resulted in the error message. 2. If repeated attempts to perform the operation fail, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.</p>

Table 15.19-2. 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. 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). 1. Resubmit the changes for the intervention. [For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).] 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. 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." [Displayed in a dialog 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. 1. Click on the OK button to dismiss the dialog box. 2. Enter a valid value for the parameter. [For detailed instructions refer to the procedure for Checking/Modifying OM Configuration Parameters (previous section of this lesson).]

Table 15.19-2. Order Manager GUI User Messages (3 of 12)

Message Text	Impact	Cause and Corrective Action
<p>Error: A worker must be assigned to this intervention before any actions may be taken. [Displayed in a dialog box]</p>	<p>Actions cannot be taken on an intervention.</p>	<p>The message appears on the Open Intervention Detail page if the operator attempted to take an action on an open intervention before assigning a name in the Worked by: text box. (No worker name is required to view the intervention without taking any action.) A real name or a user ID must be entered in the field. Numbers and spaces are allowed.</p> <ol style="list-style-type: none"> 1. Click on the OK button to dismiss the dialog box. 2. Enter a valid name in the Worked by: text entry box on the Open Intervention Detail page. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>
<p>ERROR: An [sic] database error was encountered: deadlock could not be resolved after <NUMBER> tries</p>	<p>An action requiring a call to a stored procedure or access to a database table is not taken.</p>	<p>The message appears on the Error page after a stored procedure could not be executed due to a database (or table) deadlock. The command is retried a number of times (depending on the DEADLOCK_RETRIES parameter in the configuration file) before the message is displayed. Retrying later may be successful. However, it may be that the OMS database is experiencing a heavy load or is corrupt in some way. If the problem cannot be quickly resolved, there might be a performance issue or the stored procedure may contain an error.</p> <ol style="list-style-type: none"> 1. At a later time retry the operation that resulted in the error message. 2. If the operation fails again, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.
<p>ERROR: Can't open session file: <message></p>	<p>Requested page does not display.</p>	<p>This error message can occur on any page. The session file is like a cookie – it can expire or become corrupt. For this reason, bookmarks should not be saved for specific OM GUI pages. If a session is more than five (5) days old, and the GUI has not been restarted in that amount of time, the error is certain to occur.</p> <ol style="list-style-type: none"> 1. Reload the GUI by starting it from a bookmark or manually typing the base URL (without a session ID). <p>[For detailed instructions refer to the procedure for Launching the Order Manager GUI (previous section of this lesson).]</p>

Table 15.19-2. Order Manager GUI User Messages (4 of 12)

Message Text	Impact	Cause and Corrective Action
<p>ERROR: Invalid name entered into Worked by field. You must enter a name into this field before proceeding. [Displayed in a dialog box]</p>	<p>Actions cannot be taken on an intervention.</p>	<p>The message appears on the Open Intervention Detail page when the operator attempts to enter non-alphanumeric characters, nothing, or just white space into the Worked by: field. A real name or a user ID must be entered in the field. Numbers and spaces are allowed.</p> <ol style="list-style-type: none"> 1. Click on the OK button to dismiss the dialog box. 2. Enter a valid name in the Worked by: text entry box on the Open Intervention Detail page. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>
<p>ERROR: It appears that all granules have been failed. You can not submit or partition a request with all FAILED granules. This request should be failed. To do this, Select "Fail Request" from the Request Disposition section and try again. [Displayed in a dialog box]</p>	<p>Intervention cannot be resolved.</p>	<p>The message appears on the Open Intervention Detail page.</p> <p>If all the granules in a request have been failed, the request can no longer be submitted or partitioned. The only corrective action is to fail the entire request or place it on hold.</p> <ol style="list-style-type: none"> 1. Click on the OK button to dismiss the dialog box. 2. Either fail the entire request or place it on hold. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>
<p>Error: Not that many rows or invalid row number. [Displayed in a dialog box]</p>	<p>The Operator is unable to navigate through rows (on various pages).</p>	<p>An invalid row number was entered in the navigation box at the top of a listing. The error can appear on any page with the navigation feature.</p> <ol style="list-style-type: none"> 1. Click on the OK button to dismiss the dialog box. 2. In the navigation box type a row number within the range of rows displayed on the GUI screen. 3. Click on the ok button.
<p>ERROR: Partition days must be an integer. [Displayed in a dialog box]</p>	<p>Intervention cannot be resolved.</p>	<p>The message appears on the Open Intervention Detail page if the operator was partitioning the request and entered a fractional number (or some garbage characters) in the days field. The number of days should be entered as a whole number only.</p> <ol style="list-style-type: none"> 1. Click on the OK button to dismiss the dialog box. 2. Verify that the Partition (current size is x MB) button has been selected (click on the button if necessary). 3. Type the appropriate value (as a whole number) in the days text box to specify the time period. 4. Complete the intervention. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>

Table 15.19-2. Order Manager GUI User Messages (5 of 12)

Message Text	Impact	Cause and Corrective Action
<p>ERROR: Partition hours must be an integer. [Displayed in a dialog box]</p>	<p>Intervention cannot be resolved.</p>	<p>The message appears on the Open Intervention Detail page if the operator was partitioning the request and entered a fractional number (or some garbage characters) in the hours field. The number of hours should be entered as a whole number only.</p> <ol style="list-style-type: none"> 1. Click on the OK button to dismiss the dialog box. 2. Verify that the Partition (current size is x MB) box has been selected (click on the box if necessary). 3. Type the appropriate value (as a whole number) in the hours text box to specify the time period. 4. Complete the intervention. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>
<p>ERROR: You can not change the media type and update the FTP Push parameters. [Displayed in a dialog box]</p>	<p>Intervention cannot be resolved.</p>	<p>The message appears on the Open Intervention Detail page, probably due to inadvertently checking the Update FtpPush Parameters box. Either the button should be un-checked or the distribution medium should be changed the proper way.</p> <ol style="list-style-type: none"> 1. Click on the OK button to dismiss the dialog box. 2. If the Update FtpPush Parameters box was inadvertently checked, click on the box to uncheck it. 3. If the Update FtpPush Parameters box was checked on purpose, verify that the Change Media to: box is not checked. (Click on it if necessary). 4. If the Update FtpPush Parameters box was checked on purpose, verify that the New Medium option button is displaying "-". [If necessary, click and hold the New Medium option button to display a menu of media, move the mouse cursor to the desired selection (highlighting it), then release the mouse button.] 5. Complete the intervention. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>

Table 15.19-2. Order Manager GUI User Messages (6 of 12)

Message Text	Impact	Cause and Corrective Action
<p>ERROR: You can not change the media type from <MEDIA> to <MEDIA> - the media types are the same. [Displayed in a dialog box]</p>	<p>Intervention cannot be resolved.</p>	<p>The message appears on the Open Intervention Detail page if the operator tried to change the media type to whatever it already is. If the media type should not be changed, the New Medium option button should be set to "- -".</p> <ol style="list-style-type: none"> 1. Click on the OK button to dismiss the dialog box. 2. Verify that the Change Media to: box is not checked. (Click on it if necessary). 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.] 4. Complete the intervention. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>
<p>ERROR: You can not modify request-level attributes and place the intervention on hold. [Displayed in a dialog box]</p>	<p>Intervention cannot be resolved.</p>	<p>The message appears on the Open Intervention Detail page if the operator attempted to modify request-level attributes (e.g., change the media type, update ftp push parameters, or disable limit checking) and then tried to place the intervention on hold. If the selected request-level attribute(s) should be implemented, the request should either be submitted or partitioned. If the selected request-level attribute(s) should not be implemented, the intervention may be placed on hold.</p> <ol style="list-style-type: none"> 1. Click on the OK button to dismiss the dialog box. 2. If the selected request-level attribute(s) should be implemented, either submit or partition the request. 3. If the selected request-level attribute(s) should not be implemented, click on the Reset button, then place the intervention on hold. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>

Table 15.19-2. Order Manager GUI User Messages (7 of 12)

Message Text	Impact	Cause and Corrective Action
<p>ERROR: You can not modify request-level attributes if you are failing the request. [Displayed in a dialog box]</p>	<p>Intervention cannot be resolved.</p>	<p>The message appears on the Open Intervention Detail page if the operator attempted to modify request-level attributes (e.g., change the media type, update ftp push parameters, or disable limit checking), then tried to fail the entire request. If the request should be failed, the request-level attribute changes should be deselected, then the request can be failed.</p> <ol style="list-style-type: none"> 1. Click on the OK button to dismiss the dialog box. 2. If the selected request-level attribute(s) should be implemented, either submit or partition the request. 3. If the request should be failed, first deselect the request-level attribute(s), then fail the request. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>
<p>ERROR: You must assign a worker to this intervention before proceeding. [Displayed in a dialog box]</p>	<p>Actions cannot be taken on an intervention.</p>	<p>The message appears on the Open Intervention Detail page if the operator attempted to take an action on an open intervention before assigning a name in the Worked by: text box. (No worker name is required to view the intervention without taking any action.) A real name or a user ID must be entered in the field. Numbers and spaces are allowed.</p> <ol style="list-style-type: none"> 1. Click on the OK button to dismiss the dialog box. 2. Enter a valid name in the Worked by: text entry box on the Open Intervention Detail page. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>
<p>ERROR: You must enter a name into the Worked by field before proceeding. [Displayed in a dialog box]</p>	<p>Actions cannot be taken on an intervention.</p>	<p>The message appears on the Open Intervention Detail page if the operator attempted to take an action on an open intervention before assigning a name in the Worked by: text box. (No worker name is required to view the intervention without taking any action.) A real name or a user ID must be entered in the field. Numbers and spaces are allowed.</p> <ol style="list-style-type: none"> 1. Click on the OK button to dismiss the dialog box. 2. Enter a valid name in the Worked by: text entry box on the Open Intervention Detail page. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>

Table 15.19-2. Order Manager GUI User Messages (8 of 12)

Message Text	Impact	Cause and Corrective Action
<p>INPUT ERROR: There was a problem with the input parameter for a User Profile. Please contact your system's administrator to fix this problem.</p>	<p>Information about a User profile is not displayed.</p>	<p>The error message is rare; it appears when the UserId parameter (usually embedded in the URL) is empty. It indicates that the page was probably accessed directly (i.e., the operator did not arrive at the page via a link). If the operator did arrive at the page through a link, there could be a serious database error or a problem with the Perl code, since the User ID associated with the order was not passed to the page.</p> <ol style="list-style-type: none"> 1. Click on the  icon in the OM GUI navigation frame to redisplay the previous page. 2. Attempt to access the desired page by clicking on the appropriate link. 3. If the same error message is displayed again, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.
<p>INPUT ERROR: There was a problem with the input parameter for ECS Order. Please contact your system's administrator to fix this problem.</p>	<p>Information about an ECS Order does not get displayed.</p>	<p>The error message is rare; it appears when the ecs_order parameter (usually embedded in the URL) is empty. It indicates that the page was accessed directly (i.e., the operator did not arrive at the page via a link). If the operator did arrive at that page through a link, there could be a serious database error or a problem with the Perl code, since the ECS Order ID was not passed to the page.</p> <ol style="list-style-type: none"> 1. Click on the  icon in the OM GUI navigation frame to redisplay the previous page. 2. Attempt to access the desired page by clicking on the appropriate link. 3. If the same error message is displayed again, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.
<p>Please hit your browser's Back button and enter a valid name into the "worked by" field and click on "Override Current Worker</p>	<p>Intervention cannot be resolved.</p>	<p>No name has been entered in the Worked by: field on the Open Intervention Detail page . Before any action on the intervention will be accepted, a name must be entered.</p> <ol style="list-style-type: none"> 1. Click on the  icon in the OM GUI navigation frame to redisplay the Open Intervention Detail page. 2. Enter a valid name in the Worked by: text entry box on the Open Intervention Detail page. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>

Table 15.19-2. 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.	<p>No disposition was selected on the Open Intervention Detail page. Go to the previous page and select a disposition.</p> <ol style="list-style-type: none"> 1. Click on the  icon in the OM GUI navigation frame to redisplay the Open Intervention Detail page. 2. Select an appropriate disposition on the Open Intervention Detail page. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>
Sweeper error: <message>	Server Statistics or Queue Status page does not display correct information, or the affected pages do not display at all.	<p>The message appears either on the Error page, Queue Status page, or OM Server Statistics page. SweeperStart is a shell script that runs the Sweeper binary, which tells the system whether or not certain servers are up and running. If either the shell script or the Sweeper binary is corrupt, missing, not executable, or has the wrong permissions, the error message is displayed. The OM GUI must be reinstalled or the binary or shell script must be manually copied to its proper location and given the proper permissions. Call the help desk and submit a trouble ticket in accordance with site Problem Management policy.</p>
The e-mail text box is empty – it should contain a message to the user if you want e-mail sent out. [Displayed in a dialog box]	Intervention resolution cannot be submitted.	<p>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.</p> <ol style="list-style-type: none"> 1. Click on the OK button to dismiss the dialog box. 2. Enter appropriate text in the e-mail text box or click on the Don't send e-mail box (as applicable). 3. Complete the intervention. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>
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.	<p>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.</p> <ol style="list-style-type: none"> 1. Click on the  icon in the OM GUI navigation frame to redisplay the Open Intervention Detail page. 2. Click on the Update FtpPush Parameters box to uncheck it. 3. Complete the intervention. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>

Table 15.19-2. Order Manager GUI User Messages (10 of 12)

Message Text	Impact	Cause and Corrective Action
<p>You can not update the FTP Push parameters for this request because the media type is <old media>. Please hit your browser's Back button and correct this.</p>	<p>Intervention cannot be resolved.</p>	<p>This message appears if the operator inadvertently checked the Update FtpPush Parameters box, even though the media type for the request is not ftp push. The operator should go back and uncheck this box. The error message should be quite rare, because normally the Update FtpPush Parameters box does not appear if the media type is not ftp push.</p> <ol style="list-style-type: none"> 1. Click on the  icon in the OM GUI navigation frame to redisplay the Open Intervention Detail page. 2. Click on the Update FtpPush Parameters box to uncheck it. 3. Complete the intervention. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>
<p>You have entered partitioning days/hours, but have not indicated that you want to spread the request over this time period! (you probably forgot to check the AND box). Hit your browser's Back button to correct this.</p>	<p>Intervention cannot be resolved.</p>	<p>The operator probably intended to partition the request but forgot to check the "and" box. The redundancy is intended to ensure that the correct action is taken.</p> <ol style="list-style-type: none"> 1. Click on the  icon in the OM GUI navigation frame to redisplay the Open Intervention Detail page. 2. Click on the box in front of and spread request over. 3. Complete the intervention. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>

Table 15.19-2. Order Manager GUI User Messages (11 of 12)

Message Text	Impact	Cause and Corrective Action
<p>You have indicated you want to change the media, but did not select the media type. Hit your browser's Back button to correct this</p>	<p>Intervention cannot be resolved.</p>	<p>The operator checked the Change Media to: but did not select a different medium from the New Medium option button. The operator should go back to the previous page and either select a new medium or uncheck the Change Media to: box and ensure that the New Medium option button is set to "- -".</p> <ol style="list-style-type: none"> 1. Click on the  icon in the OM GUI navigation frame to redisplay the Open Intervention Detail page. 2. If a new distribution medium is being selected, verify that the Change Media to: box is checked. (Click on it if necessary). 3. If a new distribution medium is being selected, verify that the New Medium option button is displaying the appropriate medium. [If necessary, click and hold the New Medium option button to display a menu of media, move the mouse cursor to the desired selection (highlighting it), then release the mouse button.] 4. If the old distribution medium is being retained, verify that the Change Media to: box is not checked. (Click on it if necessary). 5. If the old distribution medium is being retained, verify that the New Medium option button is displaying "- -". [If necessary, click and hold the New Medium option button to display a menu of media, move the mouse cursor to the desired selection (highlighting it), then release the mouse button.] 6. Complete the intervention. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>

Table 15.19-2. Order Manager GUI User Messages (12 of 12)

Message Text	Impact	Cause and Corrective Action
<p>You have selected a new media type, but not did indicate you actually wanted the media changed. Hit your browser's Back button to correct this.</p>	<p>Intervention cannot be resolved.</p>	<p>The operator changed the distribution medium for the request on the Open Intervention Detail page but did not check the Change Media to: box. The redundancy is intended to ensure that the operator does indeed want to change the distribution medium. The operator should go back to the previous page and either check the Change Media to: box or ensure that the New Medium option button is set to "- -". (indicating no change).</p> <ol style="list-style-type: none"> 1. Click on the  icon in the OM GUI navigation frame to redisplay the Open Intervention Detail page. 2. If a new distribution medium is being selected, verify that the Change Media to: box is checked. (Click on it if necessary). 3. If a new distribution medium is being selected, verify that the New Medium option button is displaying the appropriate medium. [If necessary, click and hold the New Medium option button to display a menu of media, move the mouse cursor to the desired selection (highlighting it), then release the mouse button.] 4. If the old distribution medium is to be retained, verify that the Change Media to: box is not checked. (Click on it if necessary). 5. If the old distribution medium is to be retained, verify that the New Medium option button is displaying "- -". [If necessary, click and hold the New Medium option button to display a menu of media, move the mouse cursor to the desired selection (highlighting it), then release the mouse button.] 6. Complete the intervention. <p>[For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>

15.19.1 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.

15.19.1.1 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 and Order Manager ALOG files:
 - EcOmOrderManager.ALOG
 - Data Pool Server (e.g., x4dpl01) host has the following Data Pool and Spatial Subscription Server log files:
 - EcDIActionDriver.ALOG.
 - EcDIInsertUtility.log.
 - EcDINewInsertUtilityDPAD.log.
 - EcDIDpmDataPoolGUI.log.
 - WebAccess (e.g., x4eil01) host has the following log files:
 - EcDIWebaccess.DEBUGLOG.
 - EcDIRollupWebLogs.log.
 - ECDmEwoc.debug.log
- 2 Type `cd /usr/ecs/MODE/CUSTOM/logs` then press **Return/Enter**.
- 3 Type `pg filename` then press **Return/Enter**.
 - *filename* refers to the data distribution, 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:
 - 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.
-

15.19.2 Checking Database Connections

The data distribution 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.

15.19.2.1 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 data distribution shared database.
- 3 Type **isql -UserID -SDBServer** then press **Return/Enter**.
 - For example:


```
isql -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**.
 - 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**.
 - 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.
-

15.19.3 Recovering from Order Manager Failures

Actions to be taken when recovering from some common Order Manager problems are described in Table 15.19-3.

Table 15.19-3. 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." [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. [For detailed instructions refer to the procedure for Checking/Modifying OM Queue Status (previous section of this lesson).]

Table 15.19-3. Recovering from Order Manager Failures (2 of 6)

Symptom	Likely Cause(s)	Response
Request is hanging in Queued status (Cont.)	Media type specific staging parameter(s) set to 0.	<p>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.") [For detailed instructions refer to the procedure for Checking/Modifying Values Assigned to Media Parameters (previous section of this lesson).]</p> <p>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.) [For detailed instructions refer to the procedure for Checking/Modifying FTP Push/SCP Policy Configuration (previous section of this lesson).]</p>
	Number of requests in the request resource category hits the limit.	<p>1. On the Staging Distribution Requests page determine the request category for the request (in the "Resource Class" column). [For detailed instructions refer to the procedure for Monitoring/Controlling Distribution Request Information on the OM GUI (previous section of this lesson).]</p> <p>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. [For detailed instructions refer to the procedure for Checking/Modifying Values Assigned to OMS Server or Database Parameters (previous section of this lesson).]</p> <p>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.) [For detailed instructions refer to the procedure for Monitoring/Controlling Distribution Request Information on the OM GUI (previous section of this lesson).]</p>

Table 15.19-3. 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. [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.) [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.) [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.) [For detailed instructions refer to the procedure for Checking/Modifying OM Queue Status (previous section of this lesson).]

Table 15.19-3. 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."	<p>1. On the Distribution Requests page click on the request ID to bring up the Distribution Request Detail page. [For detailed instructions refer to the procedure for Monitoring/Controlling Distribution Request Information on the OM GUI (previous section of this lesson).]</p> <p>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.) [For detailed instructions refer to the procedure for Monitoring/Controlling Distribution Request Information on the OM GUI (previous section of this lesson).]</p> <p>3. If at least one of the granules in the request is still in "Staging," check the DPL DIActionDriver log and DIInsertUtility log to determine why the granule has not completed staging yet. [For detailed instructions refer to the procedure for Checking Log Files (previous section of this lesson).]</p>
	Global Staging Status Parameter flag is suspended while the request is in the middle of staging.	<p>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.) [For detailed instructions refer to the procedure for Checking/Modifying Values Assigned to OMS Server or Database Parameters (previous section of this lesson).]</p>
	Archive Sever queue is suspended while the request is in the middle of staging.	<p>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.) [For detailed instructions refer to the procedure for Checking/Modifying OM Queue Status (previous section of this lesson).]</p>
Request goes to Operator Intervention from Staging	There is a bad granule in the request.	<p>On the Open Interventions Detail page fail the bad granule (or replace it with a good one) then resubmit the request. [For detailed instructions refer to the procedure for Responding to an Open Intervention (previous section of this lesson).]</p>

Table 15.19-3. Recovering from Order Manager Failures (5 of 6)

Symptom	Likely Cause(s)	Response
Request is hanging in Transferring status	<p>A request usually stays in “Transferring” for one of the following reasons:</p> <ul style="list-style-type: none"> · Ftp Push login/password failure. · Destination host not reachable. · Destination disk space is full. · Ftp Push operation timed out. · Number consecutive failure for that destination exceeds configured maximum number. <p>If one of the preceding situations occurs, the destination of the request is suspended.</p>	<ol style="list-style-type: none"> 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.) [For detailed instructions refer to the procedure for Viewing Operator Alerts on the OM GUI (previous section of this lesson).] 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.) [For detailed instructions refer to the procedure for Checking/Modifying FTP Push/SCP Policy Configuration (previous section of this lesson).] 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.) [For detailed instructions refer to the procedure for Checking/Modifying FTP Push/SCP Policy Configuration (previous section of this lesson).] 4. If it is a request for the general group, check the Max Operations. [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	<p>A granule of the request failed ftp push for a reason other than those listed under “Request is hanging in Transferring status.”</p>	<ol style="list-style-type: none"> 1. On the Open Interventions Detail page fail the bad request (or replace it with a good one) then resubmit the request. [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	<p>Quick Server on the APC Server host (e.g., e0acg11, g0acg01, l0acg02, or n0acg01) is down.</p>	<p>On the APC Server host (e.g., x4oml01) determine the status (up or down) of the Quick Server. [For detailed instructions refer to the procedure for Checking Connections to Hosts/Servers (previous section of this lesson).]</p>

Table 15.19-3. 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. [For detailed instructions refer to the procedure for Determining the Permissions for Creating an FtpPull Subdirectory (subsequent section of this lesson).]

15.19.4 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.

15.19.4.1 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
[...]
```

15.19.5 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.

15.19.5.1 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 15.19-3.

- 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* are specified 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 15.19-4. Troubleshooting HEG Problems (1 of 17)

Error Code/String	Response
-3 ClientDown	Ensure that the client is up.
-2 Rejected	<p>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).]</p> <p>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.</p>
-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	<p>1. Verify that cmshared has write permission ("drwxrwxr-x") to the working directory (/datapool/MODE/user/FS#/HEGWorking).</p> <p>2. If the write permission is correct, call the help desk and submit a trouble ticket in accordance with site Problem Management policy.</p>
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	<p>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/OUTPUTSencrypted/HEGO UT.001 encrypted/HEG/requestID.granuleID).</p> <p>2. Ensure that cmshared has write permission ("drwxrwxr-x") to the destination directory (/datapool/MODE/user/FS#.orderdata/OUTPUTSencrypted/HEGO UT.001 encrypted/HEG/requestID.granuleID).</p> <p>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.</p>

Table 15.19-4. Troubleshooting HEG Problems (2 of 17)

Error Code/String	Response
205 CreateTempFilesDirErr	<ol style="list-style-type: none"> 1. Verify that cmshared has write permission ("drwxrwxr-x") to the temp files directory (/datapool/MODE/user/FS#/HEGTemp/datapool/MODE/user/FS#.orderdata/OUTPUTSencrypted/HEGOUT.001encrypted/HEG/requestID.granuleID/tempfiles). 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	<ol style="list-style-type: none"> 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). 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	<ol style="list-style-type: none"> 1. Verify that the output directory (/datapool/MODE/user/FS#.orderdata/OUTPUTSencrypted/HEGOUT.001encrypted/HEG/requestID.granuleID) is a directory. 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	<ol style="list-style-type: none"> 1. Verify that cmshared has write permission ("drwxrwxr-x") to the output directory (/datapool/MODE/user/FS#.orderdata/OUTPUTSencrypted/HEGOUT.001encrypted/HEG/requestID.granuleID). 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	<ol style="list-style-type: none"> 1. Verify that cmshared has permission ("drwxrwxr-x") to create the output directory (/datapool/MODE/user/FS#.orderdata/OUTPUTSencrypted/HEGOUT.001encrypted/HEG/requestID.granuleID). 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	<ol style="list-style-type: none"> 1. Verify that the working directory (/datapool/MODE/user/FS#/HEGWorking) is a directory. 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	<ol style="list-style-type: none"> 1. Verify that cmshared has write permission ("drwxrwxr-x") in the working directory (/datapool/MODE/user/FS#/HEGWorking). 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 15.19-4. Troubleshooting HEG Problems (3 of 17)

Error Code/String	Response
212 ConversionLogCreateErr	<ol style="list-style-type: none"> 1. Verify that cmshared has permission ("drwxrwxr-x") to create/write the EcHgHEGConversion.log file in the working directory (/datapool/MODE/user/FS#/HEGWorking). 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	<ol style="list-style-type: none"> 1. Verify that the hdfeos file exists in the datapool. 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	<ol style="list-style-type: none"> 1. Verify that cmshared has permission ("drwxrwxr-x") to delete the working directory (/datapool/MODE/user/FS#/HEGWorking). 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.) 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	<ol style="list-style-type: none"> 1. Verify that the hegtool executable exists in the correct location (/usr/ecs/MODE/CUSTOM/bin/HEG). 2. Check the /usr/ecs/MODE/CUSTOM/utilities/EcHgServerStart script to ensure that the environment variables MTDDATADIR, MRTDATADIR, PGSHOME 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 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	<ol style="list-style-type: none"> 1. Verify that the HEG Server properties file exists in the correct location (/usr/ecs/MODE/CUSTOM/cfg/EcHgServerConfig.properties). 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	<ol style="list-style-type: none"> 1. Verify that the hdfeos file exists in the datapool. 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 15.19-4. Troubleshooting HEG Problems (4 of 17)

Error Code/String	Response
503 InputFileNotHdfeos	<ol style="list-style-type: none"> 1. Verify that the input file is an hdfs file. 2. If the input file is an hdfs 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	<ol style="list-style-type: none"> 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). 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	<ol style="list-style-type: none"> 1. Verify that the compressed file exists in the datapool. 2. Verify that cmshred has write permission ("drwxrwxr-x") to the destination directory (/datapool/MODE/user/FS#.orderdata/OUTPUTSencrypted/HEGO UT.001encrypted/HEG/requestID.granuleID). 3. If the compressed file is in the datapool, cmshred 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	<ol style="list-style-type: none"> 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. 2. Verify that the compressed file exists in the datapool. 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	<ol style="list-style-type: none"> 1. Verify that the geographic extent of the spatial subset area entered by the user intersects the granule. 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 15.19-4. 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	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 1. Verify that the parameter file (.prm) exists in the working directory (/datapool/MODE/user/FS#/HEGWorking). 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	<ol style="list-style-type: none"> 1. Verify that the input parameter file (.prm) in the working directory (/datapool/MODE/user/FS#/HEGWorking) is a valid file. 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	<ol style="list-style-type: none"> 1. Verify that the input image file (hdfeos file) exists in the datapool. 2. If the input image file is in the datapool and the error still occurs, submit a trouble ticket.
615 ErrReadInputImageFile	<ol style="list-style-type: none"> 1. Verify that the input image file (hdfeos file) read in is valid. 2. If the input image file read in is valid and the error still occurs, submit a trouble ticket.

Table 15.19-4. 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	<ol style="list-style-type: none"> 1. Verify that cmshared has write permission ("drwxrwxr-x") in the working directory (/datapool/MODE/user/FS#/HEGWorking) 2. Verify that there is enough space to write the output image file to the working directory. 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	<ol style="list-style-type: none"> 1. Verify that the HegHdr.hdr file exists in the working directory (/datapool/MODE/user/FS#/HEGWorking). 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	<ol style="list-style-type: none"> 1. Verify that the HegHdr.hdr file [in the working directory (/datapool/MODE/user/FS#/HEGWorking)] is a valid file. 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	<ol style="list-style-type: none"> 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 hdf file with a .hdf extension. 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 15.19-4. Troubleshooting HEG Problems (7 of 17)

Error Code/String	Response
626 BadOrMissingOutputFileNameExtension	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 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 hdfs (granule) file. 2. If the value assigned to OUTPUT_PROJECTION_TYPE is one that works for that particular hdfs (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	<ol style="list-style-type: none"> 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 hdfs file from the datapool. 2. If the value assigned to INPUT_FILENAME specifies an hdfs 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	<ol style="list-style-type: none"> 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. 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 15.19-4. Troubleshooting HEG Problems (8 of 17)

Error Code/String	Response
632 BadOrMissingOutputFileNameField	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 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 hdfs (granule) file. 2. If the value assigned to OUTPUT_PROJECTION_TYPE is one that works for that particular hdfs (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	<ol style="list-style-type: none"> 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. 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 15.19-4. Troubleshooting HEG Problems (9 of 17)

Error Code/String	Response
637 BadOrMissingProjectionParameters Field	<ol style="list-style-type: none"> 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. 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. 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	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 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. 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.

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Error Code/String	Response
641 BadOrMissingNBANDSValue	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 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. 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.

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Error Code/String	Response
651 BadOrMissingPIXEL_SIZEValue	<ol style="list-style-type: none"> 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. 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.] 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 TotalBandsFoundInconsistentWithN 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	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 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. 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.

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Error Code/String	Response
662 BadOrMissingELLIPSOID_CODEField	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 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. 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.] 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	<ol style="list-style-type: none"> 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. 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.] 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 15.19-4. 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	<ol style="list-style-type: none"> 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. 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.

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Error Code/String	Response
703 OutputWindowFallsOutsideMapping Grid	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	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 1. Verify that the geographic extent of the spatial subset area entered by the user intersects the granule. 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.

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Error Code/String	Response
712 BadOrMissingSTPZoneField	<ol style="list-style-type: none"> 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. 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	<ol style="list-style-type: none"> 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. 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 GranuleOutsideUSCantFindDefaultStatePlaneZone	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	<ol style="list-style-type: none"> 1. Verify that the the input hdf (granule) file exists in the datapool. 2. Ensure that cmshred has read permission on the input hdf file. 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>.] [For detailed instructions refer to the procedure for Checking HEG Server Log Files (subsequent section of this lesson).] 4. If the input hdf file is in the datapool, cmshred 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	<ol style="list-style-type: none"> 1. Verify that the the input hdf (granule) file is in hdfs format. 2. Ensure that cmshred has read permission on the input hdf file. 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>.] [For detailed instructions refer to the procedure for Checking HEG Server Log Files (subsequent section of this lesson).] 4. If the input hdf file is in hdfs format, cmshred 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.

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Error Code/String	Response
722 UnableToOpenHeaderFile	1. Verify that there is a HegHdr.hdr file in the working directory (/datapool/MODE/user/FS#/HEGWorking). 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.

15.19.6 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.

15.19.6.1 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).
 - **nReturn/Enter** (go down *n* number of lines).
 - **nSpace bar** (go down *n* number of lines).
 - Space bar (go down one screenful).
 - **z** (go down one screenful).
 - **nz** (go down *n* number of screensful; *n* becomes the default for subsequent **z** commands).
 - **nb** (go back *n* number of screensful).
 - **nCTRL-B** (go back *n* number of screensful).
 - **nd** (go down *n* number of lines; *n* becomes the default for subsequent **d** commands).
 - **nCTRL-D** (go down *n* number of lines; *n* becomes the default for subsequent **d** commands).
 - **nf** (skip *n* screens full and then display a screenful).
 - **ns** (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).
- *nn* (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 output 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 output 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/OUTP
 UTSDDWmmfGD/HEGOUT.001hMEzILJI//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 /198.115.220.179
 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/HE
GOUT.001hMEzILJI//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/HE
GOUT.001hMEzILJI//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_2017250
970**

**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_37282773432
866145_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_37282773432
866145_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/OUTP
UTSDDWmmfGD/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_2017250
970|0|HegConversionSuccessful/datapool/OPS/user/FS1//.orderdata/OUTPUTS
DDWmmfGD/HEGOUT.001hMEzIIJI//HEG/0403300996.85000004172274//labt
est_2017250970_0403300996_ConverterSynopsis.txt

/datapool/OPS/user/FS1//.orderdata/OUTPUTSDDWmmfGD/HEGOUT.001hM
EzIIJI//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).
-

15.19.7 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.

15.19.7.1 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).
 - **nReturn/Enter** (go down **n** number of lines).
 - **nSpace bar** (go down **n** number of lines).
 - **Space bar** (go down one screenful).
 - **z** (go down one screenful).
 - **nz** (go down **n** number of screensful; **n** becomes the default for subsequent **z** commands).
 - **nb** (go back **n** number of screensful).

- **nCTRL-B** (go back *n* number of screensful).
- **nd** (go down *n* number of lines; *n* becomes the default for subsequent **d** commands).
- **nCTRL-D** (go down *n* number of lines; *n* becomes the default for subsequent **d** commands).
- **nf** (skip *n* screens full and then display a screenful).
- **ns** (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).
- **nn** (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* are specified 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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