

## 12. Quality Assurance

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The Data Pool subsystem update utility for managing Quality Assurance (QA) metadata, the **QA Update Utility (QAUU)**, consolidates the QAMUT utility from the SDSRV subsystem into a single utility. This tool receives an input file which contains header information indicating the format of the data in the file and the flags that are being updated.

### 12.1 Using the QA Update Tool

The QA Update Utility is an operational support tool used for updating the values of the Quality Assurance (QA) flags in the inventory metadata. The QA Update Utility sets QA values for data granules containing one or more measured parameters after they have been assessed by Science Computing Facility (SCF) or DAAC staff to determine their quality.

Data granules have Operational and Science QA flags. Operational QA flags can have the following values:

- Passed.
- Failed.
- Being Investigated.
- Not Investigated.
- Inferred Passed.
- Inferred Failed.
- Suspect.

In addition to these Operational QA flag values, Science QA flags can also have the following value:

- Hold

Table 12.1-1 provides an Activity Checklist for Using the QA Update Tool.

**Table 12.1-1. Using the QA Update Tool - Activity Checklist**

Order	Role	Task	Section	Complete?
1	System Administrator/ Database Administrator	Configure the QA Update Tool	(P) 12.1.1.1	
2	System Administrator/ Database Administrator	Configure the QA Update Email script	(P) 12.1.2.1	
3	Production Monitor	Prepare QA Update Request File	(P) 12.1.4.1	
4	Production Monitor	Update QA Flags Using QA Update Utility	(P) 12.1.5.1	

During one run, the QA Update Utility can update the metadata QA flags for multiple granules. In fact, the strength of the tool derives from its ability to update batches of granules at a time. There is a configurable limit on the number of granules that may be specified for a run (MAX\_NUM\_GRANULES in Table 12.1-2). However, this limit may be overridden by the operator. In fact, depending on how frequently the originators of requests for QA flag updates submit their requests, the DAAC may receive requests for updates of thousands of granules at a time. However, this creates the potential for extreme database loading (e.g., requirements for temporary storage of granule information). Specific practical limits may depend on individual site capacities and requirements, and the DAAC may need to work with the originators of requests to formulate requests of appropriate size to minimize QA Update Utility processing times and associated database impacts. If a request is for significantly more than that, consideration should be given to breaking it up into multiple requests.

The granules with QA flags to be updated using the QA Update Utility may each contain several different measured parameters. The tool can update the QA flag associated with each parameter for each granule listed in a metadata update request. Updates for different measured parameters related to a particular granule may be grouped contiguously on separate lines in the request so that all the updates for the granule are accomplished at the same time.

The input needed to run the QA Update Utility is a uniformly formatted update request. Each update request contains an e-mail header (including the requester's return address) and an attachment request file containing a list of the granules to be updated, along with the new QA flag values for the specified parameters.

Requests sent via e-mail are automatically placed in the input request directory by the QA Update email script. Requests not sent by e-mail must be placed in the input request directory.

After the data has been copied to this input request directory, the metadata can be updated by using QA Update Utility.

The QA Update Utility retrieves a batch of granules to update from the processing table and is updated within the XML Archive. When all files listed in the batch are updated, the processing table is updated to record the work as completed. Additionally, the updates are recorded in a history file with the original and new values. When all batches are completed, the updates are recorded for BMGT to export. Finally, the files in the Data Pool file system are replaced by the newly updated files in the XML Archive. The QA Update Utility is accessible on the x4dpl01 server.

### 12.1.1 Configure QA Update Utility

The **EcDsAmQaUpdateUtility.properties** contains the QA Update configuration parameters and is used by the System Administrator/Database Administrator to manage the configuration of the QA Update Utility. The site installer or Database Administrator is responsible for maintaining this file. Table 12.1-2 contains a list and description of the QA Update Utility Configuration Parameters.

**Table 12.1-2. Configuration File Parameters for QA Update Utility (1 of 2)**

Parameter Name	Description
SYBASE_SQL_HOST	The host for the Inventory and Data Pool databases
SYBASE_SQL_SERVER	The name of the Sybase server for the Inventory and Data Pool databases
SYBASE_JDBC_DRIVER_CLASS	The java class used for connecting the QAUU java application to Sybase
SYB_DBNAME	The name of the Inventory database
SYB_DPL_DBNAME	The name of the Data Pool database
SYB_PORT	The port number used to connect to the Inventory and Data Pool databases
SYB_USER	The username used to connect to and perform queries for the Inventory and Data Pool databases
PGM_ID	The ECS Program ID for the QAUU user (SYB_USER)
DB_NUM_RETRIES	The number of times to retry failed DB operations
DB_SLEEP_SEC	The number of seconds between DB operation retries
EMAIL_SERVER_HOST	Host name where email server runs
EMAIL_SMTP_USER	Email SMTP user name
EMAIL_QAUU_FROM_ADDRESS	Email notification sender address
FILE_NUM_RETRIES	The number of times to retry failed file operations
FILE_SLEEP_SEC	The number of seconds between file operation retries
QA_REQUEST_DIR	Path of directory containing QA update requests
QA_ERROR_REQUEST_DIR	Path of directory containing QA update requests that have failed.
QA_COMPLETED_REQUEST_DIR	Path of directory containing successfully completed QA update requests
QA_TEMP_DIR	Path of directory containing temporary files
QA_HISTORY_DIR	Path of directory containing QA update history files
DAAC_EMAIL_ADDRESSES	List of valid DAAC email notification addresses
<SCFSite>_EMAIL_FROM_ADDRESSES	List of valid email notification from addresses for a <SCFSite>
<SCFSite>_EMAIL_REPLY_ADDRESSES	List of valid email notification reply addresses for a <SCFSite>
<SCFSite>_NOTIFICATION_ON_SUCCESS	Flag indicating (if = "Y") that email notification should be sent upon successfully processing QA update requests for a <SCFSite> or for requests that fail. If = 'N', email should only be sent for requests that fail.
VALID_SCIENCE_QA_FLAGS	List of valid science QA flag values
VALID_OPERATIONAL_QA_FLAGS	List of valid operational QA flag values

**Table 12.1-2. Configuration File Parameters for QA Update Utility (2 of 2)**

Parameter Name	Description
NUM_XML_THREADS	The number of threads to be used. One thread will operate upon an UPDATE_BATCH_SIZE of QA updates.
MAX_NUM_GRANULES	The maximum number of granules that can be updated per run
UPDATE_BATCH_SIZE	The number of QA updates to be performed at a time.
XML_ARCHIVE_DIRECTORY	Pathname of XML Archive file system
SOCKS_PROXY_HOST	SOCKS proxy hostname
SOCKS_PROXY_PORT	SOCKS proxy port
BCP_EXEC_PATH	Path to unix bcp executable
SHELL_PATH	Path to unix sh shell needed to perform unix commands
application.name	Name of this application
log.operations.level	Level of logging desired in operational log: NONE, INFORMATION, VERBOSE or XVERBOSE
log.debug.level	Level of logging desired in debug log: NONE, INFORMATION, VERBOSE or XVERBOSE
log.performance.level	Level of logging desired in performance log: NONE, INFORMATION, VERBOSE or XVERBOSE
log.overwrite	If true, log file will be overwritten for each run
log.threshold	Size of log files before new ones are created.
log.rotation.number	Number of log files that will be rotated through.

### 12.1.1.1 Configure the QA Update Utility

- 1 Log into the host for the QA Update Utility (e.g., x4dpl01).
- 2 Change to the directory for configuration files, and then press the **Return/Enter** key.  
**cd /usr/ecs/<MODE>/CUSTOM/cfg**
  - The working directory is changed to /usr/ecs/<MODE>/CUSTOM/cfg.
- 3 Type **ls** and then press the **Return/Enter** key.
  - Configuration files are displayed.
- 4 Find and highlight the **EcDsAmQaUpdateUtility.properties** file.
- 5 To start the vi editor and specify **EcDsAmQaUpdateUtility.properties** as the name of the file to be updated, type the following:  
**vi EcDsAmQaUpdateUtility.properties**
  - A new file is opened for editing and the cursor is displayed on the first character at the upper left corner of the file.
  - **Note:** This procedure assumes use of the vi editor. Other editors may be used.

- 6 Type **i** to put the **vi** editor into the insert mode.
    - The **vi** editor is in the insert mode, but no feedback is provided.
  - 7 Enter/Update data to specify how to connect to the Sybase database and provide necessary DAAC-specific configuration information (see Table 12.1-2).
  - 8 To leave the insert mode and return to the command mode, press the **Esc** key.
    - The cursor moves one character to the left and the **vi** editor is in the command mode.
  - 9 Type **ZZ** to save the file and exit the **vi** editor.
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## 12.1.2 Configure QA Email Script

A perl script allows remote sites to submit update request input files via email as attachments. The script (EcDsQAUUEmailScript.pl) parses the request, gets the attached request file and moves it to the QAUU request directory. It will reside on the central mail servers while the rest of the QAUU will reside on other boxes. The directories containing the email script output (/usr/ecs/<mode>/CUSTOM/data/DSS/QAUU/ and subdirectories) will be created on the boxes holding the QAUU and remote mounted on the central mail servers. Email aliases need to be set up in the /etc/aliases file on the central mail servers to direct email QAUU update request to the email script. One email alias is required for each mode supporting QAUU.

### 12.1.2.1 Configure QA Email Aliases

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- 1 Log into the host for the QA Update Utility (e.g., x4dpl01).
- 2 Change to the directory for utilities, and then press the **Return/Enter** key.  
**cd /usr/ecs/<MODE>/CUSTOM/utilities**
- 3 Type **ls** and then press the **Return/Enter** key.
- 4 Set up email aliases on the central mail servers (x4eil01) by entering the following:  
**QAUU\_<MODE>: “| /usr/ecs/<MODE>/CUSTOM/utilities/EcDsQAUUEmailScript.pl”**

Examples:

**QAUU\_<OPS>: “| /usr/ecs/<MODE>/CUSTOM/utilities/EcDsQAUUEmailScript.pl”**

**QAUU\_<TS1>: “| /usr/ecs/<MODE>/CUSTOM/utilities/EcDsQAUUEmailScript.pl”**

**QAUU\_<TS2>: “| /usr/ecs/<MODE>/CUSTOM/utilities/EcDsQAUUEmailScript.pl”**

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## 12.1.3 Input File Name Format

The input file name must adhere to the following:

**<MODE>\_<Site>\_QAUPDATE<description>.<YYYY><MM><DD><HH><MM><SS>**

The following example shows the filename from site LDOPE for OPS mode at 12:20:30 on Feb. 29, 2008:

**OPS\_LDOPE\_QAUPDATE.20080229122030**

Note: All the files in the request directory will be processed alphabetically by file name and stored in the Inventory Database. The timestamp in the filenames guarantee that all the requests coming from the same site will be processed in the right order.

#### 12.1.4 Request Format

The body of the request starts with the statement "begin QAMetadataUpdate <Science or Operational> <LGID, GranuleUR or ESDT>" and ends with an "end QAMetadataUpdate" statement. Each request can be based on 3 possible origins:

- **LGID**
- **GranuleUR**
- **ESDT with temporal range.**

In between the "begin QAMetadataUpdate" and "end QAMetadataUpdate" statements is at least one parameter/QA value statement with the following components (which must be separated by tabs):

- Short Name
- Version ID
- LGID, GranuleUR, or Range Beginning Date <tab> Range Ending date, depending on whether "LGID", "GranuleUR", or "ESDT" is specified, respectively, on the "begin" statement
- Measured Parameter Name or "ALL"
- QA Flag Value
- QA Flag Explanation Value

This information must be properly arranged and placed in the Inventory database (a designated directory or file). Figures 12.1-1 through Figure 12.1-3 contain examples the different requests.

```
From LaRC
begin QAMetadataUpdate Operational ESDT
MOD13A1 1Jul 18 2000 Jul 27 2000 ALL Being Investigated ESDT Update for Perf
MOD13A1 1 Jun 9 2000Jul 11 2000 ALL Being Investigated ESDT Update for Perf
MOD13A1 1 Oct 2 2000Oct 15 2000 ALL Being Investigated ESDT Update for Perf
end QAMetadataUpdate
```

**Figure 12.1-1. Sample Metadata QA Update Request ESDT with Temporal Range**

```
From LaRC
begin QAMetadataUpdate Science LGID
AIRHASCI 77 AIRHASCI.A2001181.2359.077.2003129185118.hdf RadianceCounts
Passed LGID EDC Syn IV
AIRHASCI 77 AIRHASCI.A2001181.2359.077.2003133150736.hdf RadianceCounts
Passed LGID EDC Syn IV
AIRHASCI 77 AIRHASCI.A2001181.2359.077.2003134164830.hdf RadianceCounts
Passed LGID EDC Syn IV
AIRHASCI 77 AIRHASCI.A2001181.2359.077.2003141142634.hdf RadianceCounts
Passed LGID EDC Syn IV
AIRHASCI 77 AIRHASCI.A2001181.2359.077.2003147145008.hdf RadianceCounts
Passed LGID EDC Syn IV
AIRHASCI 77 AIRHASCI.A2001181.2359.077.2003148174646.hdf RadianceCounts
Passed LGID EDC Syn IV
AIRHASCI 77 AIRHASCI.A2001181.2359.077.2003149211207.hdf RadianceCounts
Passed LGID EDC Syn IV
AIRHASCI 77 AIRHASCI.A2001181.2359.077.2003150132315.hdf RadianceCounts
Passed LGID EDC Syn IV
end QAMetadataUpdate
```

**Figure 12.1-2. Sample Metadata QA Update Request with LGID**

```
From LaRC
begin QAMetadataUpdate Science GranuleUR
AST_L1BUR:10:DsShESDTUR:UR:15:DsShSciServerUR:13:[PVC:DSSDSRV]:24:SC:AST_L1B.001:2007640312 ALL
Failed SynergyIV QA 2 Update
end QAMetadataUpdate
```

**Figure 12.1-3. Sample Metadata QA Update Request with GranuleUR**

### 12.1.4.1 Prepare QA Update Request File

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- 1 Log into the host for the **QA Update Request File** (e.g., x4dpl01).
  - 2 To change to the directory for **QA Update Request File**, type the following and then press the **Return/Enter** key:  
**cd /usr/ecs/<MODE>/CUSTOM/data/DSS/QAUU/QAUURequest**
    - The working directory is changed to  
**cd/usr/ecs/<MODE>/CUSTOM/data/DSS/QAUU/QAUURequest**
  - 3 To start the **vi** editor and specify **OPS\_<SITE> QAUPDATE.<yyyymmddhrminsec>** as the name of the Request file to be used by QA Update Utility, type the command:  
**vi OPS\_<SITE> QAUPDATE.< yyyymmddhrminsec >**
    - The Request file is opened for editing and the cursor is displayed on the first character at the upper left corner of the file.
    - **Note:** This procedure assumes use of the **vi** editor. Other editors may be used.
  - 4 Type **i** to put the **vi** editor into the insert mode.
    - The **vi** editor is in the insert mode, but no feedback is provided.
  - 5 Enter request data following the proper format.
  - 6 To leave the insert mode and return to the command mode, press the Esc key.
    - The cursor moves one character to the left and the **vi** editor is in the command mode.
  - 7 Type **ZZ** to save the file and exit the **vi** editor.
- 

### 12.1.5 Update QA Metadata Flags Using QA Update Utility

Access to the QA Update Utility must be gained through the use of UNIX commands. The QAUU is started by executing the following:

```
EcAmQAUUStart modename [ -file <filename>] [ -noprompt] [-noExitonError][-recoverOnly] [-abortRecovery] [ -skipRecovery ] [ -recoverInvestigated]
```

All parameters, except for **modename**, are optional.

- **modename:** The mode to run in
- **-file <filename>:** The name of the request file containing the QA updates to be applied. If omitted, all request files in the configured request directory are processed.
- **-noprompt:** if specified, the utility will not prompt the user for confirmations
- **-noExitonError:** if specified, the utility will not exit on the first error. This allows the operator to determine all errors that may occur during processing.
- **-recovery options:** These are all mutually exclusive; only one may be specified. Note that if none of these options are specified, the utility will recover, if necessary, and process new requests:
  - **-recoverOnly:** . recover and do NOT process new requests (assume we do NOT recover failures flagged as investigating )
  - **-abortRecovery:** delete all failures in working table and process new requests

- **-skipRecovery:** flag (don't process) failures for investigation (InvestigateFlag = 'Y') and process new requests
- **-recoverInvestigated:** set InvestigateFlag = null, recover (including formally investigated failures) and process new requests

The process of updating QA metadata flags using the QA Update Utility start-up script starts with the following assumptions:

- The applicable servers are running.
- The DAAC operator has logged in to the system.
- A request for metadata update has been received in an acceptable format.
- The update request has been saved with the appropriate file name **<MODE>\_<Site>\_QAUPDATE<description>.<year><month><day><hour><minute><second>** (i.e., **OPS\_<SITE>\_QAUPDATE.<yyyymmddhrminsec**) and placed in the **/usr/ecs/<MODE>/CUSTOM/data/DSS/QAUU/QAUURequest** directory found on.x4dpl01 machine.

#### **12.1.5.1 Update QA Flags Using the QA Update Utility**

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**1** Log into the host for the QA Update Utility (e.g., x4dpl01).

**2** Enter:

**Run EcAmQAUUSstart <MODE> -file <QAUpdate Request File> -noexitonerr**

- The QA Update Utility retrieves the batch of granules to update from the processing table. The files listed in the batch are updated within the XML Archive.
  - The history file is updated
  - The DIMeasuredParameter table within the Data Pool database is updated
  - The affected metadata files within the Data Pool file system are replaced by the newly updated files from the XML Archive.
  - The updates are recorded for BMGT to export.
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## 13. Data Pool Ingest

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### 13.1 Ingest Process

The Data Pool (DPL) Ingest Subsystem is a Science Data Processing component that allows the Ingest Technician to obtain data from external data providers and archive into the system. The ingest technician can configure and monitor the system via access through the DPL Ingest GUI (Graphic User Interface).

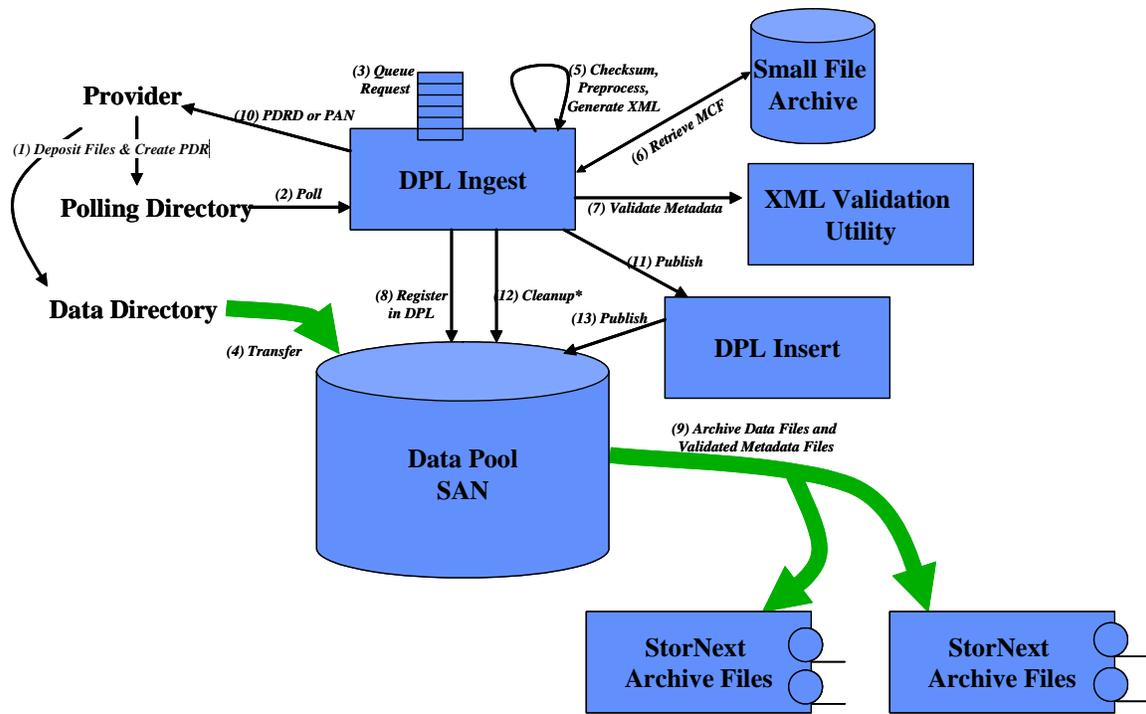
The DPL Ingest Service is used for Science Investigator-Led Processing Systems (SIPS), S4P, Secure Copy (SCP) and cross-DAAC ingest. This service supports the ingest protocol known as 'Polling with Delivery Record', and inserts the ingested data into the Data Pool Storage Area Network (SAN) and archive.

The DPL Ingest Service is also used for ingesting EMOS Detailed Activity Schedules and data type ActSched which is supported by the ingest protocol known as 'Polling without Delivery Record', and inserts the ingested data into the Data Pool SAN and archive. Data Pool Ingest does not send Product Acceptance Notifications (PANS) or Product Deliver Records (PDRs) to the EMOS data provider. EMOS data files do not contain checksum values and it is assumed that processed data files in the EMOS polling directory are periodically cleaned out by a DUE (DAAC Unique Extension).

Figure 13.1-1 provides an illustration of the Data Pool Ingest Polling with Delivery Record and archiving processes which are described in the following steps:

1. SIPS providers place their data and PDRs into a polling directory. The directory can be local, e.g., accessible via a mount point; or remote, i.e., accessible via FTP or SCP.
2. The DPL Ingest Service will poll these directories as configured by the DAAC and retrieve all new PDR files in those directories.
3. The DPL Ingest Service queues ingest requests for all PDRs that it finds. To decide which validated PDR will be processed next, it checks available resources and DAAC configured priorities.
4. The granule files are copied into the Data Pool SAN, using hidden directories for that purpose unless the DAAC requested that the data be published on insert.
5. Preprocessing events include checksum verification and translation of ODL files to XML if needed.
6. For non-SIPS ESDTs, Ingest will retrieve the MCF from a configured location in the Small File Archive.
7. Ingest validates the incoming granule metadata using the XML Validation Utility. The validated science xml metadata will be copied to a location in the StorNext Archive.

8. The Data Pool Ingest Utility (DPIU) registers the granule in the DPL database
9. The DPIU then copies the granules to the StorNext Archive. This may involve a copy to both a primary and backup archive depending on how the ESDT is configured for archiving.
10. Once all granules within the PDR are completed, the provider is notified of the outcome, which could be immediately via Product Delivery Discrepancy Report (PDRD) if PDR validation failed, or later via a short or long Product Acceptance Notification (PAN).
11. If the ESDT is configured for public Data Pool insert, granule made public in the Data Pool and populates the warehouse tables using the XML version of the metadata.
12. If the ESDT is not configured for public DPL Ingest, the granule will be cleaned up when it expires



**Figure 13.1-1. Data Pool Ingest High Level Architecture**

The DPL Ingest Service is comprised of three distinct, contiguous components:

1. Polling (Figure 13.1-1, Step 2) will be responsible for the provision of work to the service via transferring Product Delivery Records (PDRs) into the system and registering them.
2. Processing (Figure 13.1-1, Steps 3-9) will pick up registered PDRs and attempt to ingest the inventory they describe into the Data Pool, perform any additional processing required for specific inventory (for example inventory may relate to a pending order

3. Notification (Figure 13.1-1, Step 10) will detect the queued notification and notify the provider associated with that PDR with details of its completion state. Terminal states are Successful, Partially Failed and Failed. Terminal states are conveyed to the provider by means of a Product Acceptance Notification (PAN) or Product Delivery Discrepancy Report (PDRD).

Subsequent sections related to Ingest address the following topics:

- **Section 13.2** Contains procedures for logging in to Data Pool Ingest System Hosts.
- **Section 13.3** Contains procedures for Monitoring Data Pool Ingest System.
- **Section 13.4** Contains procedures for resolving ingest requests with open interventions and Data Pool System alerts.
- **Section 13.5** Contains procedures for modifying DPL Ingest configuration parameters.
- **Section 13.6** Contains procedures for reviewing and generating reports.
- **Section 13.7** Contains procedures accessing Help Pages.
- **Section 13.8** Contains procedures for monitoring Data Pool Collections from the Data Pool Maintenance GUI.

## 13.2 Logging in to System Hosts

The following procedure presents the steps required to log in to system hosts.

Table 13.2-1 contains the activity checklist for Login to the Systems Hosts.

**Table 13.2-1. Login to System Hosts - Activity Checklist**

Order	Role	Task	Section	Complete?
1	Ingest Technician	Log in to System Hosts	(P) 13.2.1	

### 13.2.1 Log in to System Hosts

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- 1 At the UNIX command line prompt enter: **setenv DISPLAY <client name>:0.0**
    - Use either the X terminal/workstation IP address or the machine-name for the client name.
    - When using secure shell, the DISPLAY variable is set just once, before logging in to remote hosts. If it were to be reset after logging in to a remote host, the security features would be compromised.
  - 2 In the terminal window (at the command line prompt) log-in to the appropriate host by entering:  
**ssh <host name>**
    - Examples of Data Pool Ingest Server host names include **e4dpl01, e4eil01, e4lil01, e4spl01** at the LP DAAC; **n4dpl01, n4eil01, n4lil01, n4spl01** at NSIDC; **l4dpl01, l4eil01, l4lil01, l4spl01** at ASDC
    - If you receive the message, “Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?” Enter **yes** (“y” alone will not work).
    - If you have previously set up a secure shell passphrase and executed sshremote, a prompt to Enter passphrase for RSA key '<user@localhost>' appears; continue with Step 3.
    - If you have not previously set up a secure shell passphrase, go to Step 4.
  - 3 If a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears, enter:  
**<passphrase>**
    - If a command line prompt is displayed, log-in is complete.
    - If the passphrase is unknown, press **Return/Enter**, which should cause a **<user@remotehost>'s password:** prompt to appear (after the second or third try if not after the first one), then go to Step 4.
    - If the passphrase is entered improperly, a **<user@remotehost>'s password:** prompt should appear (after the second or third try if not after the first one); go to Step 4.
  - 4 If a prompt for **<user@remotehost>'s password:** appears, enter:  
**<password>**
    - A command line prompt is displayed.
    - Log-in is complete.
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## 13.3 Monitoring the Ingest System

The central feature for monitoring the Ingest System is accessible to the operator through the web-based Data Pool (DPL) Ingest Graphic User Interface (GUI). The DPL Ingest GUI allows operators to access and manipulate the DPL Ingest system from virtually anywhere there is accessible internal network from a qualified web browser. Using this GUI, an operator can monitor and fix Ingest requests, view system alerts, and at a glance view the status of the DPL Ingest system, either in part or whole. The DPL Ingest GUI also allows in-depth configuration of the entire DPL Ingest system eliminating manual configuration of the DPL Ingest database. It provides a fast and secure way to easily manage the entire DPL Ingest system, complete with full operator permission configuration and management so that only authorized persons may perform actions or change configuration settings.

Data Pool Ingest servers are initiated by the following three scripts:

1. EcDIInProcessingService
2. EcDIInPollingService
3. EcDIInNotificationService.

Since the DPL Ingest GUI is a web-based interface, it can be accessed from virtually anywhere there is access to the internal network. No custom software installation is required – all that is needed is a web browser (Firefox is recommended and supported) running on a Windows 2000/XP PC or a compatible Linux OS (e.g., Red Hat) that can run Firefox.

### 13.3.1 DPL Ingest GUI

The ECS Data Pool Ingest GUI, illustrated in Figure 13.3-3, has six functional areas accessible through an Explorer-like menu of the Navigation Panel (located in the left pane of its home page). These functions menu selections provide the following:

1. Home - Displays General System Statistics, DPL Ingest Status, Email Service Status, Notification Service Status, Polling Service Status and Processing Service Status.
2. Monitoring - Allows operators to monitor currently active Ingest Requests, History of Ingest Request, Provider Status, File System Status, Transfer Host Status, ECS Service Status, and PDR List.
3. Interventions & Alerts - Allows operator to review, resume, cancel and process ingests requests that have Open Interventions.
4. Configuration - Allows operator to alter configuration parameters for Data Providers, Data Types, Transfer Hosts, File Systems, ECS Service Hosts, Global Tuning, Volume Groups and Operators.
5. Reports - Displays information across several data providers or data types.
6. Help - Provides General help topics and Context Help Information.

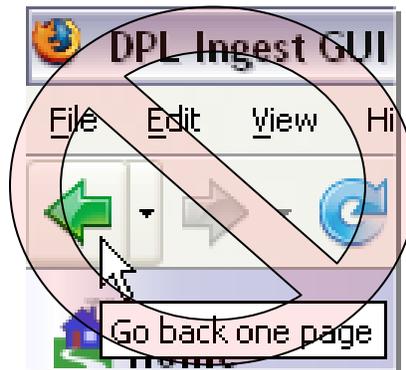
The Navigation Panel also contains an operator information panel (Figure 13.3-1) below it's menus that displays a synopsis of the current/active operator and provides several menu options to perform the following actions:

- Log out – allows user to log out of the current session (without closing the browser).
- Change your password – current user can change current password on screen.
- Show all of your permissions – allows the user to view or hide current permissions.



**Figure 13.3-1. Operator Information Panel**

**NOTE:** In order to properly navigate the application, **do not use the built-in back/forward browser buttons** (Figure 13.3-2 Built-in Back/Forward Browsers Buttons), to avoid errors to occur in the application. All navigation should be performed using the navigation panel and/or list navigators (e.g., custom back/forward buttons for lists of requests and granules). The occurrence of errors on pages will display in “red” text.



**Figure 13.3-2. Built-in Back/Forward Browser Buttons**

Operator GUI security standards require the following multiple levels of permissions to be assigned to each operator that has access to the DPL Ingest GUI:

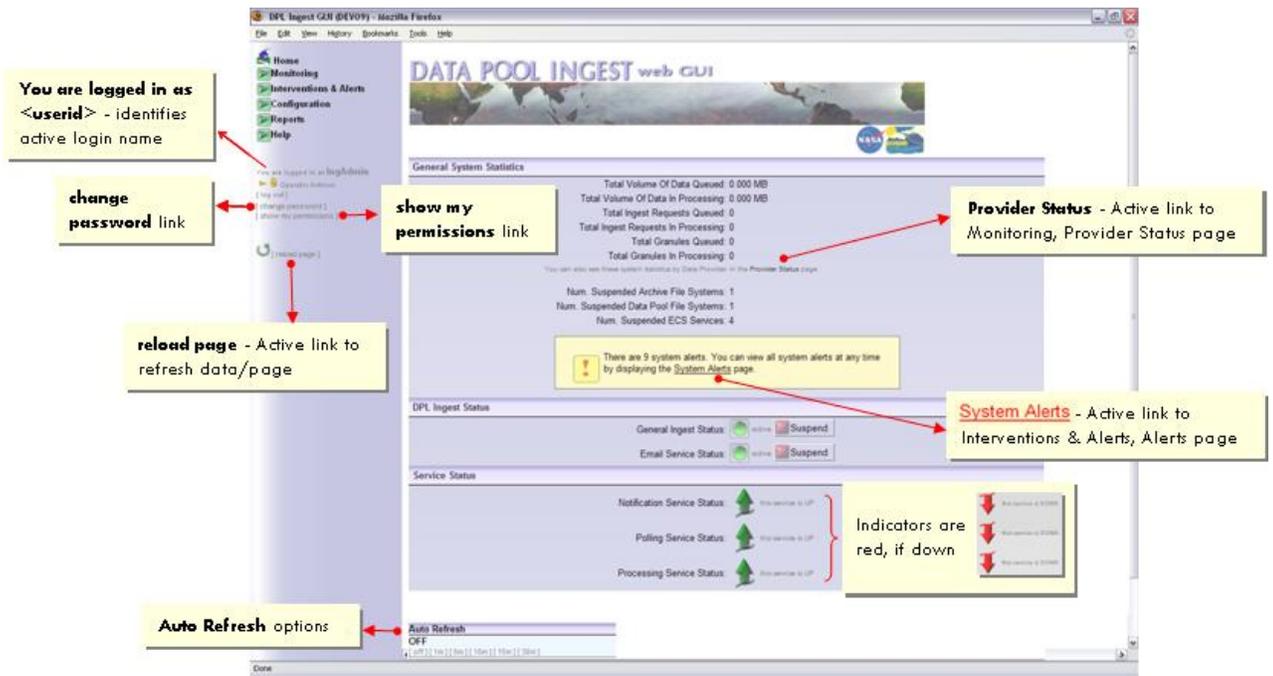
- View Only
- Ingest Admin
- Ingest Control
- Security Admin
- Tuning Control.

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

The DPL Ingest GUI is certified for use with any browser supporting the Mozilla Firefox 3.0+ standard. Launching the DPL Ingest GUI, it is assumed that the Ingest Technician has logged into the system. Table 13.3-1 provides an activity checklist for Monitoring DPL Ingest.

**Table 13.3-1. Monitoring DPL Ingest**

Order	Role	Task	Section
1	Ingest Technician	Launching the DPL Ingest GUI	(P) 13.3.1.1
2	Ingest Technician	Changing Requests Status Filters	(P) 13.3.2.1
3	Ingest Technician	Monitoring Request Status	(P) 13.3.2.2
4	Ingest Technician	Cancel, Suspend, Resume or Change Requests Priority	(P) 13.3.2.3
5	Ingest Technician	Changing Suspended Granules Status	(P) 13.3.2.4
6	Ingest Technician	Viewing Historical Requests	(P) 13.3.3.1
7	Ingest Technician	Viewing Provider Status	(P) 13.3.4.1
8	Ingest Technician	Suspend or Resume Data Providers	(P) 13.3.4.2
9	Ingest Technician	Suspend or Resume Individual Polling Locations	(P) 13.3.4.3
10	Ingest Technician	Viewing File System Status	(P) 13.3.5.1
11	Ingest Technician	Suspend or Resume File System	(P) 13.3.5.2
12	Ingest Technician	Viewing Transfer Host Status	(P) 13.3.6.1
13	Ingest Technician	Suspend or Resume Transfer Host	(P) 13.3.6.2
14	Ingest Technician	Viewing ECS Service Status	(P) 13.3.7.1
15	Ingest Technician	Suspend or Resume ECS Service(s)	(P) 13.3.7.2
16	Ingest Technician	Re-Ingesting a PDR	(P) 13.3.8.1



**Figure 13.3-3. Data Pool Ingest GUI Home Page**

The DPL Ingest GUI Home Page (Figure 13.3-3) provides a general overview of the Data Pool Ingest system status. The home page has three working sections:

1. **General System Statistics** - provides general information about current requests and granules in the system, as well as the various services and file systems used in processing. The Operator selects active links to the Provider Status and Alerts pages, from this section.

Detail descriptions of the data found in this section are listed in Table 13.3-2.

**Table 13.3-2. Home Page Field Descriptions (1 of 2)**

Field Name	Description
Total Volume of Date Queued	Sum of the size of all files of all granules that have not yet been activated
Total Volume of Data In Processing	Sum of the size of all files of all granules that are currently active, and not suspended or in a terminal state
Total Ingest Requests Queued	Total number of requests that have not yet been activated
Total Ingest Requests In Processing	Total number of requests that are currently active, and not suspended or in a terminal state

**Table 13.3-2. Home Page Field Descriptions (2 of 2)**

Field Name	Description
Total Granules Queued	Sum of all granules in active or queued requests that have not yet been activated
Total Granules In Processing	Sum of all granules in active or queued requests that are currently active, and not suspended or in a terminal state
Num. Suspended Archive File Systems	Total archive file systems that have been suspended, either automatically by the server or manually by operator
Num. Suspended Data Pool File Systems	Total data pool file systems that have been suspended, either automatically by the server or manually by operator
Num. Suspended ECS Services	Total ECS service hosts that have been suspended, either automatically by the server or manually by operator

2. **DPL Ingest Status** - consists of two status options that enables the user to suspend or resume various actions throughout the data pool ingest system:

- **General Ingest Status** – allows the Operator to stop polling from all polling locations and prevent any new granules from being activated. Any granules that are already active will complete ingest. These actions can easily be suspended/resumed by pressing/toggling the Suspend/Resume button (Figure 13.3-4).



**Figure 13.3-4. General Ingest Status/Resume Button**

- **Email Service Status options** – allows the Operator to stop any further email notifications to the external data providers (i.e. completed, cancelled, failed, or terminated requests). Once the button is depressed/toggled, email notifications will resume (Figure 13.3-5).



**Figure 13.3-5. General Ingest Status/Resume Buttons**

3. **Service Status** - provides status for several primary services that make up the Data Pool Ingest system. Ingest services cannot be started and stopped via the Data Pool Ingest GUI. Instead, they are managed using start and stop scripts found in the utilities directory of the given mode. For the status of these services to be accurate, the IngestServiceMonitor script must also be running. This script is installed in the utilities directory (i.e., /usr/ecs/<MODE>/CUSTOM/utilities) of each mode and can be started with the command: `EcDIIngestServiceMonitorStart [MODE]`. The status services which cannot be changed by the operator are as follows:

- **Notification Service Status** - Indicates whether the notification service is active (up) or suspended (down). If suspended, no notifications will be sent, but a queue of notifications will be collected and distributed once the service is restarted (not done via the DPL Ingest GUI).
- **Polling Service Status** - Indicates whether the polling service is active or suspended. If suspended, PDRs will not arrive from any configured polling location, but any PDRs that remain in the directories will be added once the service is restarted (not done via the DPL Ingest GUI).
- **Processing Service Status** - Indicates whether the processing service is active or suspended. If suspended, no actions on any requests or granules will start, continue, or complete. Granules will “hang” in whatever state they are in (not done via the DPL Ingest GUI).

### **13.3.1.1 Launching the DPL Ingest GUI**

---

- 1 Access a terminal window logged in to a host (e.g., the Operations Workstation or Sun external server) that has access to the **Firefox** web browser.
  - Examples of Linux external server host names include “e4spl01” or “n4spl01”.
- 2 Type **firefox &** then press **Return/Enter**.
  - It may be necessary to respond to dialogue boxes, especially if the browser is already being used by someone else who has logged in with the same user ID.
  - The Mozilla Firefox web browser is displayed.
- 3 If a bookmark has been created for the **DPL Ingest GUI**, select the appropriate bookmark from those listed on the browser’s Bookmarks pull-down window.
  - The **Login:** prompt is displayed.

- 4 If no bookmark has been created for the **DPL Ingest GUI**, type **http://host:port** in the browser's **Location (Go To)** field then press **Return/Enter**.
  - For example: <http://n4dpl01.nsidc.ecs.nasa.gov:25000/Ingest>
  - For example: <http://p4dpl01.pvc.nasa.gov:25000/Ingest>.
  - For example: [http://f4dpl01.hitc.com:25010/Ingest\\_DEV01](http://f4dpl01.hitc.com:25010/Ingest_DEV01)
  - The Data Pool Ingest web GUI **Login Screen** (Figure 13.3-6) displays.



**Figure 13.3-6. Ingest GUI Login Screen**

- 5 Type the appropriate **User** name in the textbox of the security **Login** prompt.
  - 6 Type the appropriate **Password** in the textbox of the security **Login** prompt.
  - 7 Click **Login**:
    - The dialogue box is dismissed.
    - The **DPL Ingest GUI** Home Page (Figure 13.3-3) is displayed.
- 

### 13.3.2 Monitoring Requests Status

The DPL Ingest Request Status screen is used to check the status of current active Ingest requests. Table 13.3-3 provides descriptions of the information available for each request. Table 13.3-4 lists actions allowed for different status types.

This page displays the current active Ingest requests. The limited-capability operator can use the Request Status page to filter and view Ingest request information.

**Table 13.3-3. Request Status Page Column Descriptions**

Field Name	Description
Request ID	Unique ID for an ingest request
Status	Status of the request (Table 13.3.4 for list of possible statuses)
Priority	The precedence which a request will have for activation and various processing actions (i.e., XPRESS, VHIGH, HIGH, LOW or NORMAL).
Provider Name	Name of the provider from which the request was obtained
Size [MB]	Sum of the size of all granules in the request
Granules	Total granules included in the request
Granules Completed Processing	Total granules that have reached a successful state
When Queued	Time the request was encountered by the polling service
Last Update	Time of the last change made by the ingest services to the status of the request or its granules

**Table 13.3-4. Ingest Request Status Allowed Actions**

Request Status	Request Actions				
	Suspend	Change Priority	Resume	Cancel	No Actions Allowed
New		X		X	
Validated		X		X	
Active	X	X		X	
Partially_Suspended	X	X		X	
Suspending / Suspended		X	X	X	
Resuming	X	X			
Failed					X
Partial_Failure					X
Canceling					X
Partially_Cancelled					X
Successful					X

The operator may change the filters for the Ingest Requests screen to meet a specific need, which alters the contents of the Ingest Requests screen. Filter settings will remain unchanged until altered again. Filter settings are associated with an operator's profile and are always remembered, including when logged-out of session.

### 13.3.2.1 Changing Requests Status Filters

- 1 Click on the **Monitoring** link in the navigation frame of the DPL Ingest GUI to expand its menu.
- 2 Click on the **Requests Status** link to display the **Ingest Requests** page (Figure 13.3-8).
- 3 Click the **Show/Hide Filters** button at top-left of the Ingest Requests page to show the current filter settings.
  - The **Active Ingest Request List Filter Panel** (Figure 13.3-7) displays.

The screenshot shows the 'Active Ingest Request List Filter Panel' with the following settings:

- Criteria Based Filtering** (selected)
- Filter By Request ID** (selected)
- Data Providers:** MODAPS\_TERRA\_FPROC
- Request Detail Criteria:** Validated (selected)
- Target Archives:** amfs1, snfs1, browfs
- Date Range Criteria:** Last Updated
- FROM:** month 10, day 25, yr 2006, hr 1, min 0
- TO:** month 10, day 26, yr 2006, hr 23, min 59
- Buttons:** Apply Filter, Save As Default Settings, Load Default Settings

**Figure 13.3-7. Active Ingest Request List Filter Panel**

- 4 Click on the **Criteria Based Filtering** button to show filter options based upon the attributes of various requests (Figure 13.3-7).
  - Or to filter only a single request ID select **Filter By Request ID**.
- 5 Select the **Data Provider** from the drop-down list to display those associated with request.
- 6 Select one or multiple (hold CTRL key, then select) **Request Detail Criteria:**
  - **Error Type** – select the state to filter only requests in intervention with at least one granule currently in that error state. Only one error type may be selected.
  - **Request States** – select the state to filter requests in the selected states. Multiple states may be included in the filter (hold CTRL key, then select).
- 7 Select the **Target Archives** criteria to query requests with granules from data types configured to be sent to the selected archives.
- 8 Select the **Date Range Criteria:**

- To view entries for a particular **Date/Time Criteria**, click and hold the option button, move the mouse cursor to the desired selection (i.e., **SHOW ALL, Last Update, Queued, Queued Within Last Hour**), then release the mouse button.
  - If selected **Last Updated or Queued**, select the appropriate **FROM** Date/Time range (Month, Day, Year, Hour, Minute) and **TO** Date/Time range (Month, Day, Year, Hour, Minute),
    - Use the 24-hour format to designate the hour (e.g., type **14** to designate 2 p.m.) in the **hour** fields.
  - Use the **Tab** key to advance from one field to the next.
- 9** If the selected filters are to be the desired default filters, click in the **checkbox** next to **Save As Default Settings**.
- 10** Click the **Apply Filter** button.
- The **Ingest Requests** screen displays the new filters criteria data.
- 

### **13.3.2.2 Monitoring Requests Status**

---

- 1** Click on the **Monitoring** link in the navigation frame of the **DPL Ingest GUI**.
- The **Monitoring** menu is expanded.

- 2 Click on the **Requests Status** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Ingest Requests** page (Figure 13.3-8) is displayed.

The screenshot shows the 'Ingest Requests' page in the DPL Ingest GUI. The page title is 'Ingest Requests' and the date/time is 'Tue Sep 11 2007 13:39:09'. The page displays a table of ingest requests with columns for Request ID, Status, Priority, Provider Name, Size [MB], Granules, Granules Completed Processing, When Queued, and Last Update. Below the table are action buttons: Cancel Requests, Suspend Requests, Resume Requests, and Change Priority. At the bottom, there is an 'Auto Refresh' control panel set to 'OFF' with options for 20s, 30s, 1m, 5m, 10m, 15m, and 30m. Callouts provide additional information: 'Dynamic Auto-Refresh Clock' indicates the next refresh time, 'Pagination Arrows' allow moving between pages, 'Action Buttons' are for eligible requests, and the 'Auto Refresh Control Panel' reloads page information.

Request ID	Status	Priority	Provider Name	Size [MB]	Granules	Granules Completed Processing	When Queued	Last Update
20523	Active	VHIGH	JPL	0.252	2	0	2007-09-10 12:54:01	2007-09-10 12:54:03
20515	Active	VHIGH	JPL	330.337	2	1	2007-09-10 12:54:01	2007-09-11 13:20:50
20513	Active	VHIGH	JPL	330.337	2	0	2007-09-10 12:54:01	2007-09-10 12:54:17
20511	Active	VHIGH	JPL	330.337	2	1	2007-09-10 12:54:01	2007-09-11 13:21:05
20509	Active	VHIGH	JPL	330.337	2	0	2007-09-10 12:54:01	2007-09-10 12:54:16
20507	Active	VHIGH	JPL	1.523	1	0	2007-09-10 12:54:01	2007-09-10 12:54:04
20503	Active	VHIGH	JPL	1.523	1	0	2007-09-10 12:54:01	2007-09-10 12:54:04
	Active	VHIGH	JPL	1.523	1	0	2007-09-10 12:54:01	2007-09-10 12:54:03
	Active	VHIGH	JPL	1.523	1	0	2007-09-10 12:54:00	2007-09-11 13:20:38
	Active	VHIGH	JPL	1.523	1	0	2007-09-10 12:54:00	2007-09-11 13:20:38

**Figure 13.3-8. Ingest Requests Page**

- The **Ingest Requests** status page has the following columns:
  - **Request ID** which displays a unique ID for each ingest request.
  - **Status** which provides status of a request (i.e., New, Validated, Active, Partially\_Suspended, Suspended, Canceling, Resuming, Successful, Cancelled, Partially\_Cancelled, Failed, Partial\_Failure or Terminated).
  - **Priority** is the precedence which a request will have for activation and various processing actions (i.e., **XPRESS, VHIGH, HIGH, LOW** or **NORMAL**).
  - **Provider Name** identifies the provider from which the request was originated.
  - **Size [MB]** is the sum of the size of all granules in the request.
  - **Granules** list the total granules included in the request.
  - **Granules Completed Processing** displays total granules that have reached a terminal state.
  - **When Queued** is the time the Request was encountered by the polling service.
  - **Last Update** is the time of the last change made by the ingest services to the status of the request or its granules.

**3** Click the desired **Request ID**, to view the results of ingest request. The data is displayed on the Ingest Request Detail Page (Figure 13.3-9).

### Ingest Request Detail

**Request Info** [ Show / Hide ]

<b>Request ID:</b> 20515	<b>Status:</b> Active	<b>Priority:</b> VHIGH
<b>Polling Location:</b> JPL Local Polling	<b>Mission:</b>	<b>Size:</b> 330.337 MB
<b>Data Provider:</b> JPL		

**PDR Path and file name:** /datapool/DEV09/user/FS1//pdrs/1000191/500174/Criteria\_0260\_1\_1188918087.83048\_RGEN.PDR

**Last Update:** 2007-09-11 13:20:50  
**When Queued:** 2007-09-10 12:54:01  
**When Activated:** 2007-09-10 12:54:07  
**When Completed:**  
**Expiration Date/Time:**

Granule Statistics:					
Total Granules	Granules Preprocessed	Granules Inserted	Granules Transferred	Granules Archived	No. Files
2	50%	50%	50%	50%	8

**Status Change History**

Status Changed to New	2007-09-07 14:46:23
Status Changed to Validated	2007-09-10 12:54:01
Status Changed to Active	2007-09-10 12:54:07

**Request Notes**

Added 2006-10-26 17:23:33 by **IngAdmin**  
GranuleID: 10000000019387 Failed granule.

Added 2006-10-26 17:24:24 by **IngAdmin**  
Failed granule after verifying that the metadata was corrupt and could not be processed after retrying the granule.

[ Add annotation... ] [ Cancel ]

Annotation text:  
After failing the granule, the metadata was corrected and the granule will be reingested through a later request

[ Add This Annotation ]

[ Add annotation... ]

Request Info details specific to current request, including dates of major changes.

Granule Statistics details overall statistics of all granules associated with request.

Scrollable table of complete records of status changes.

Annotations, useful in tracking changes to the request – add automatically by server or manually by operator. All notations are time stamped on entry.

**Figure 13.3-9. Ingest Request Detail Page**

- The **Ingest Request Detail** page (Figure 13.3-9) is divided into several parts:
  1. **Request Info** which contains summarized data from the **Ingest Request** status page and is located at the top of the page. The following information (Table 13.3-5) highlights the fields that are found this page:

**Table 13.3-5. Ingest Request Detail Page –Request Info Field Descriptions**

Field Name	Description
Request ID	Unique ID for an ingest request
Polling Location	Unique name assigned to the polling location from where the request was obtained
Data Provider	Unique name assigned to the provider associated with the polling location where the request was found
Status	The current state of the request (Table 4.6.1-3 for possible request states)
Mission	Satellite mission defined in the PDR associated with this request (this is not defined in most PDRs)
Priority	The precedence which a request will have for activation and various processing actions.
Size	Sum of the size of all granules in the request
PDR Path and file name	Temporary location and file name of the PDR after it was copied from the polling location. The PDR can be found in this location until the request completes ingest.
Last Update	The last time the status of the request or an associated granule changed
When Queued	The time the request was added to the request list
When Activated	The time the request was moved into the “Active” state
When Completed	The time all the granules in the request reached a terminal state
Expiration Date/Time	The date and time by which the corresponding ingest request must be completed

2. The **Granule Statistics** contains the following information (Table 13.3-6) for all the granules associated with this request:

**Table 13.3-6. Ingest Request Detail Page – Granule Statistics Field Descriptions**

Field Name	Description
Total Granules	Total number of granules included in the request
Granules Preprocessed	Percentage of granules that have moved from the preprocessing state to the archiving state
Granules Inserted	Percentage of granules that have been inserted into the Science Data Server
Granules Transferred	Percentage of granules transferred from the provider to the temp directories
Granules Archived	Percentage of granules that have been archived
No. Files	Total number of files associated with granules in the request

3. **Status Change History** is displayed for the selected Request ID.
4. **Request Notes**, annotations that can be useful in tracking changes to a request, are either added by the operator or automatically added by the server. Automatic annotations are generated when operator performs an action on the request or granules in the request.
5. The **Granule List** (Figure 13.3-12) for the selected Request ID, details (at the bottom of the Ingest Request Detail Page) contains the following associated status information (Table 13.3-7):

**Table 13.3-7. Ingest Request Detail Page – Granule List Field Descriptions**

Field Name	Description
Checkbox column	This column may contain a checkbox next to the granule, <u>if the granule is not in a terminal state</u> . This allows an action to be processed for the selected granule(s). The checkbox at the top of the column selects or de-selects all the granules in the list that have checkboxes.
File Detail	The column holds a link to display the detailed file information for each granule – this information appears for each granule at the top of the table when clicked. The associated granule file information details, when displayed, includes the following: <ul style="list-style-type: none"> <li>• <b>Path</b> for the directory identified in the PDR of the file location.</li> <li>• <b>Name</b> of the file.</li> <li>• <b>Type</b> of the internal file of the file translated from the file type to PDR according to a predefined table (i.e., SCIENCE, METADA, BROWSE)</li> <li>• <b>Status</b> of the last action performed on file or the most recent, unresolved, error encountered during file processing.</li> </ul>
Seq. Number	The order in which a granule was found in the PDR
Ingest Gran ID	Unique Identifier assigned to the granule
Data Type	Data Type found in the PDR describing the granule
Version	Version found in the PDR describing the granule. The version will be extracted from the database if none is in the PDR
Status	Current granule status (Table 4.6.1-7) and detailed error information
Granule Size (MB)	Sum of the size of all files associated with the granule
No. Files	Number of files found associated with the granule in the PDR
Last Status Change	Date and time the granule's status was last updated

- Any granule(s) encountering problems during any point in their processing are initially flagged as “suspended”. The only exception is if a granule fails checksum verification during each of the configured number of tries. Granules are not failed until the operator explicitly invokes a “fail suspended granules” action – this is an exception of failed checksum verification or a PDR validation failure. The following actions (Table 13.3-8. Granule List - Granule Allowable Actions) can be performed on granules (in the granule list) depending on the granule state:

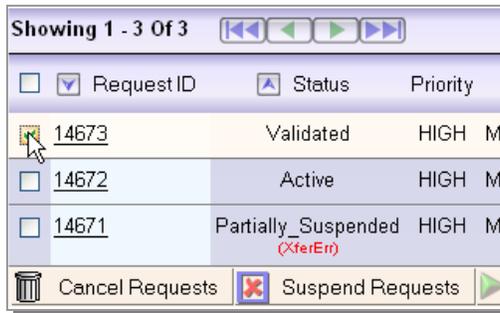
**Table 13.3-8. Granule List – Granule Allowable Actions**

Granule Status	Status Type	Fail / Retry / Retry From Start	Cancel	No Actions Allowed
New	Queued		✓	
Transferring / Transferred	Active		✓	
Checksumming / Checksummed	Active		✓	
Preprocessing / Preprocessed	Active		✓	
Archiving / Archived	Active		✓	
Inserting	Active		✓	
Inserted	Active			✓
Suspending / Suspended	Error	✓	✓	
Resuming	Active		✓	
Canceling	Active			✓
Cancelled	Terminal			✓
Successful	Terminal			✓
Failed	Terminal			✓
Publishing / Published	Terminal			✓

Sometimes it may be necessary to cancel, suspend or resume the processing of one or more ingest request. The procedure for canceling, suspending or resuming granule processing starts with the assumption that all applicable servers and the DPL Ingest GUI are currently running.

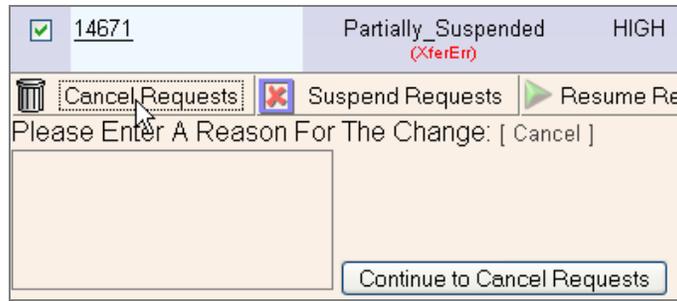
### 13.3.2.3 Cancel, Suspend, Resume or Change Requests Priority

- Click on the **Monitoring** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Monitoring** menu is expanded.
- Click on the **Requests Status** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Ingest Requests** page is displayed.
- To change one or more Request Statuses (cancel, suspend or resume) (Figure 13.3-10), select the desired request(s) by checking the checkboxes on the left side of the request list.



**Figure 13.3-10. Cancel Request/Suspend Requests Buttons**

- Click on the **desired action button** at the bottom of the list:
  - **Cancel Requests:** This is an irreversible action; there is no way to ‘un-cancel’ a request.
  - **Suspend Requests:** This action may be performed only if the selected request(s) are not already suspended or cancelled and is used to stop new granules from being activated. Active granules in suspended requests will continue through processing.
  - **Resume Requests:** This action may be performed only if the selected requests are suspended.
  - **Change Priority:** To change the priority of an ingest request, select the desired requests and click on the Change Priority button at the bottom of the list. A dropdown lists appears to select the new priority.
  - The **Change Priority dialog box** (Figure 13.3-11) will appear to enter a reason for the status change.



**Figure 13.3-11. Change Priority Dialog Box**

- Enter the reason for the change in the **Reason For Change** textbox.
- To cancel this action click on the **Cancel** button.
- Select the **Continue to [Cancel or Resume]** button.
- Or, Select the **OK** button.

Any granule(s) encountering problems during any point in their processing are initially flagged as “suspended”. They are not failed until the operator explicitly takes an action to fail such granules. The following actions may be performed on granules that have been initially suspended:

- **Retry selected granules:** This applies only to granules that are currently suspended and retries them from the last known good state of processing.
- **Retry from START selected granules:** This applies only to granules that are currently suspended and retries them from the beginning of processing.
- **Fail selected granules:** This applies only to granules that are currently suspended and transitions the granule into the failed state, with the status indicating the type of error that originally caused the suspensions
- **Cancel selected granules:** This applies to granules that are in the New state, Active state, or Suspended state and can be cancelled by selecting this icon. If the state is Successful, Failed or any Terminal state, the granule may not be cancelled. This action manually fails the granules, marking them ‘canceled.’

#### 13.3.2.4 Changing Suspended Granules Status

- 1 Click on the **Monitoring** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Monitoring** menu is expanded.
- 2 Click on the **Requests Status** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Ingest Requests** page is displayed.

- 3 Click on the desired **Request ID**.
  - **Request Detail Page** displayed for the selected Request ID.
  - At the bottom of the **Request Detail Page – Granule List** (Figure 13.3-12), listed, are the granules for selected request(s).

File Detail	Seq. Number	Ingest Gran. ID	Data Type	Version	Status	Granule Size (MB)	No. Files	Last Status Change
[show/hide]	4	1000000008387	MOD29P1D	86	Successful	6.144	2	2006-10-27 11:37:52
[show/hide]	3	1000000008386	MOD29P1D	86	Cancelling	6.148	2	2006-10-27 11:42:17
[show/hide]	1	1000000008384	MOD29P1D	86	<b>XferErr</b> Error executing the following copy command: /usr/ecs/OPS/CUSTOM/bin/DPL/EcDICopyExec /home/cmshared/PDRS/scripts/TEMP/OPS//Criteria_1420_MOD_r1.1161963070.11622.RGEN.hdf /datapool/OPS/user/FS1/temp/ingest/14679/1000000008384/ 4096 3, Failed by Operator	6.148	2	2006-10-27 11:42:02
[show/hide]	2	1000000008385	MOD29P1D	86	Resuming	6.144	2	2006-10-27 11:42:39

**Figure 13.3-12. Request Detail Page – Granule List**

- Any granule(s) that encountered problems during any point in their processing are initially flagged as “suspended”.
- 4 Click on the checkbox next to the granule you want to change the status.
  - A checkmark is displayed.
- 5 Select one of the following appropriate actions:
  - **Retry Selected Granules:** This applies only to granules that are currently suspended and will retry them from the last known good state of processing.
  - **Retry Selected Granules From Start:** This applies only to granules that are currently suspended and will retry them from the beginning of processing.

- **Fail Selected Granules.**
    - This applies only to granules that are currently suspended and transitions the granule into the failed state, with the status indicating the type of error that originally caused the suspensions. Error types are determined by the state granule is in when failed:
      - **XferErr** – transferring.
      - **ChecksumErr** – checksumming.
      - **PreprocErr** – preprocessing.
      - **ArchErr** – archiving.
      - **InsertErr** – inserting.
      - **PubErr** – publishing.

**NOTE:** Post-failure of granules, an annotation is generated identifying time-stamp with operator ID and action.
  - **Cancel Selected Granules:** This applies only to granules that are not yet in a terminal state. It manually fails the granules, marking them ‘canceled.’
  - A selected action is executed and status is updated.
- 

### 13.3.3 Viewing Historical Requests

When an ingest transaction has been completed, several things happen:

- A notice is automatically sent to the data provider indicating the status of the ingested data.
- The data provider sends an acknowledgment of that notice.
- Receipt of the acknowledgment is logged by Ingest.
- The **Request ID** of that ingest request is removed from the list of active requests.
- The DPL Ingest History receives statistics on the completed transaction.

The DPL Ingest Historical Requests provides the following information:

- A summary of ingest requests that have been processed.
- Historical Requests Detail gives detailed information about each completed ingest request.
- Request Timings provides ingest request processing statistics to include time required to perform Transfer, Checksum, Preprocess DPL Insert and Archive.
- Granule List provides detailed information about each granule.

Since the Historical Requests are completed requests, no action can be processed from these pages.

- The operator can configure the length of time Historical Request Related Configuration information (Figure 13.3-13) is kept on a page. These historical ingest requests column descriptions can be modified on the Global Tuning Configuration page by the operator.

### 13.3.3.1 Viewing Historical Requests

---

- 1 Click on the **Monitoring** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Monitoring** menu is expanded.
- 2 Click on the **Historical Request** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Historical Ingest Requests** (Figure 13.3-13) page is displayed with the following fields.
    - **Request ID:** Unique ID for an ingest request, which displays a request detail page similar to that for an Active Ingest Request.
    - **Status:** Terminal state reached by the request.
    - **Priority:** The final priority assigned to the request during processing.
    - **Provider Name:** Name of the provider from which the request was obtained.
    - **Size [MB]:** Sum of the size of all granules in the request.
    - **No. Granules:** Total number of successful granules included in the request.
    - **Ingest Method:** Whether the request was processed by “CLASSIC” Ingest, or the new “DPL” (DataPool Ingest) system.
    - **When Queued:** Time the request was encountered by the polling service.
    - **When Proc. Started:** Time the request was activated by processing.
    - **When Processing Completed:** Time the request reached a terminal state.

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**Historical Ingest Requests**

Show / Hide Filters

[ HELP ] Showing 1 - 20 of 707 Page size: 20

RequestId	Status	Priority	Provider Name	Size	No. Granules (no. Successful)	Ingest Method	When Queued	When Proc. Started	When Proc. Completed
20427	Cancelled (Prepared)	HIGH	1@2.3	111.125	2(0)	DPL	2007-09-01 16:30:26	2007-09-01 16:30:29	
18573	Failed	HIGH	1@2.3	-0.000	1(0)	DPL	2007-08-31 00:56:58		2007-08-31 00:56:58
18563	Failed	HIGH	1@2.3	-0.000	1(0)	DPL	2007-08-31 00:56:57		2007-08-31 00:56:59
18565	Failed	HIGH	1@2.3	-0.000	1(0)	DPL	2007-08-31 00:57:07		2007-08-31 00:57:15
18575	Failed	HIGH	1@2.3	0.006	1(0)	DPL	2007-08-31 00:57:08		2007-08-31 00:57:15
18567	Failed	HIGH	1@2.3	-0.000	1(0)	DPL	2007-08-31 00:56:58		2007-08-31 00:57:15
18569	Failed	HIGH	1@2.3	-0.000	1(0)	DPL	2007-08-31 00:57:07		2007-08-31 00:57:15
18571	Failed	HIGH	1@2.3	-0.000	1(0)	DPL	2007-08-31 00:57:08		2007-08-31 00:57:22
18555	Failed	HIGH	1@2.3	-0.000	1(0)	DPL	2007-08-31 00:57:08		2007-08-31 00:57:22

**Historical Request Related Configuration**

Parameter Name	Parameter Description	Parameter Value
MONTHS_TO_KEEP_HIST_STATS_ALERTS	The retention time in months for keeping historic information for requests, alerts and throughput statistics	2

Apply Changes Cancel Changes

**Figure 13.3-13. Historical Ingest Requests Page**

- 3 Click on the **Show/Hide Filters** button.
  - The following filters are displayed.
    - **Provider** (i.e., SHOW ALL, EDOS, ASTER, MODAPS, MISR).
    - **Request States** (i.e., SHOW ALL, Resuming, Successful, Cancelled, Partially\_Cancelled, Failed, Partial\_Failure, Terminated).
    - **Date/Time Range Filter** (i.e., SHOW ALL, When Completed, When Queued, Queued Within 24 Hours, Start Date and Stop Date).
    - **Data Type** (e.g., SHOW ALL, AST\_L1B, MOD021KM.003, MISL0CA).
- 4 Select the desired **Provider** (e.g., **EDOS**) by highlighting the desired provider from the pull-down window.
- 5 Select the desired **Request State** ( i.e., **SHOW ALL, Resuming, Successful, Cancelled, Partially\_Cancelled, Failed, Partial\_Failure, Terminated**) by highlighting the desired request state from the window.
- 6 Select **Date/Time Range Filter** ( i.e., **When Completed, When Queued, Queued Within 24 Hours, Start Date and Stop Date**), by highlighting the desired Date/Time Range Filter from the pull-down window.

- If you selected **When Completed** or **When Queued** select the appropriate **From Date/Time Range (Month, Day, Year, Hour, Minute)** and **To Date/Time range (Month, Day, Year, Hour, Minute)**.
  - Use the 24-hour format to designate the hour (e.g., type **14** to designate 2 p.m.) in the **hour** fields.
- 7** Select a particular **Data Type** (e.g., AST\_L1B) by highlighting the desired data type from the pull-down window.
- 8** Select the **Apply Filter** button.
- **The Historical Ingest Request** page is displayed with the new filters.
  - This page shows all of the ingest requests that have been processed. The DPL database keeps a persistent record of all requests that have undergone ingest processing and can thus be viewed on this page.
- 9** To view the **Historical Ingest Request Detail** for a given **Request ID**, click on the desired **Request ID**.
- The **Historical Ingest Request Detail** page (Figure 13.3-14) is displayed.
    - The layout of the request detail page for historical requests consist of **Request Info** (top section), **Request Timings** and **Status Change History** (middle section) and **Granule List** (bottom section) and are very similar to the data contained on the **Active Ingest Request** page.
    - The details on this page pertain to historical data only and can not be changed.

- Table 13.3-9. Historical Ingest Request Page describes the information on the Historical Ingest Request Detail page sections:

**Table 13.3-9. Historical Ingest Request Detail Page –Field and Column Descriptions**

<b>Field Name: Request Info</b>	<b>Description</b>
Request ID	Unique ID for an ingest request
Status	The final state of the request (Table 4.6.1-3 for a list of possible request states)
Priority	The precedence which a request will have for activation and various processing actions.
Provider	Unique name assigned to the provider associated with the polling location where the request was found
Size	Sum of the size of all granules in the request
No. Granules	Total number of granules in the PDR
Ingest Method	Whether the request was processed by Classic Ingest, or the new DataPool Ingest system
No. Files	Number of files found associated with the granule in the PDR
<b>Field Name: Request Timings</b>	<b>Description</b>
Time to Xfer	Total seconds of time that passed during all granule transfers
Time to Checksum	Total seconds of time that passed during all granule checksum operations
Time to Preprocess	Total seconds of time that passed during all granule preprocessing operations
Time to Insert	Total seconds of time that passed to insert all granules into AIM
Time to Archive	Total seconds of time that passed to copy all granules into the archive
<b>Field Name: Granule List</b>	<b>Description</b>
Seq Number	The order in which a granule was found in the PDR
Ingest Gran ID	Unique Identifier assigned to the granule by the DPL Ingest System
ECS Gran ID	Unique Identifier assigned to the granule for insert into AIM
DPL Gran ID	Unique Identifier assigned to the granule for registration in the Data Pool
Data Type	Data Type found in the PDR describing the granule
Version	Version found in the PDR describing the granule
Status	Terminal state reached by the granule
Granule Size (MB)	Sum of the size of all files associated with the granule
No. Files	Number of files found associated with the granule in the PDR
Proc. Start	Time of granule activation
Proc. End	Time granule reached a terminal state
Total Proc. Time	Total seconds that lapsed in between granule activation and completion
Time to Checksum	Total seconds that passed during granule checksum across all files
Retry Count	Number of times the granule was retried (or retried from start)

Historical Ingest Request Detail for RequestId 18565													
<b>Request Info</b> [ Show / Hide ]													
RequestID: 18565				Status: Failed				Priority: HIGH					
Provider: 1@2.3				Size: 0.000 MB				No. Granules: 1 (0 successful)					
Ingest Method: DPL								No. Files: 2					
<b>When Queued:</b> 2007-08-31 00:57:07 <b>When Processing Started:</b> <b>When Processing Ended:</b> 2007-08-31 00:57:15													
<b>Request Timings</b>													
Time To Xfer	Time To Checksum	Time To Preprocess	Time To DPL Insert	Time To Archive									
0	-	0	-	0									
<b>Status Change History</b>													
Status Changed to New 2007-08-31 00:41:59													
Status Changed to Validated 2007-08-31 00:57:07													
Status Changed to Failed 2007-08-31 00:57:15													
<b>Request Notes</b>													
There are no Request Notes for this request.													
<b>Granule List</b> Showing 1 - 1 Of 1													
Seq. Number	Ingest Gran. ID	ECS Gran. ID	DPL Gran. ID	Data Type	Version	Status	Granule Size (MB)	No. Files	Proc. Start	Proc. End	Total Proc. Time	Time To Checksum	Retry Count
1	5000000021393			AE_RnGd	1	InitErr	0.085	0					

**Figure 13.3-14. Historical Ingest Request Detail Page**

### 13.3.4 Provider Status

The Provider Status link provides access to the status and information about each configured data provider in the ingest system. This page provides the following:

- List of all configured providers along with general statistics for each provider.
- Provides the status of the provider ( i.e., Active, Suspended by Server, or Suspended by Operator). This is the only changeable field on this page. From this page a provider can be Resumed or Suspended.
- Provides individual status for polling locations (e.g., total number of active or suspended polling location).
- Provides access to detailed provider status that shows individual status of each polling location associated with a provider. From this page, an individual polling location can be suspended or resumed accordingly.

### 13.3.4.1 Viewing Provider Status

---

- 1 Click on the **Monitoring** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Monitoring** menu is expanded.
- 2 Click on the **Provider Status** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Provider Status** page (Figure 13.3-15) is displayed with the following fields.
    - **Provider:** Provider name configured to identify an External Data Provider.
    - **Status:** Whether the provider is active, suspended by server, or suspended by operator.
    - **Polling Locations:** Total number of active polling locations on the provider, or the number of polling locations that are suspended out of the total number configured.
    - **Request Queued:** Total Number and Volume of requests waiting for activation.
    - **Request In Process:** Total Number and Volume of requests that are active and not suspended.
    - **Granules Queued:** Total number of granules waiting for activation in requests from the provider.
    - **Granules In Process:** Total number of granules waiting for activation in requests from the provider.

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**Provider Status**

[HELP]

<input type="checkbox"/>	Provider	Status	Polling Locations	Requests Queued	Requests In Process	Granules Queued	Granules In Process
<input type="checkbox"/>	0270	active	No Polling Locations	0	0	0 (0.000 MB)	0 (0.000 MB)
<input type="checkbox"/>	0310	active	No Polling Locations	0	0	0 (0.000 MB)	0 (0.000 MB)
<input type="checkbox"/>	1@23	active	1 of 1 active	0	0	0 (0.000 MB)	0 (0.000 MB)
<input type="checkbox"/>	1Lisa_Amsar	suspended by operator	No Polling Locations	0	0	0 (0.000 MB)	0 (0.000 MB)
<input type="checkbox"/>	1Lisa_Modaps_Aqua	suspended by operator	No Polling Locations	0	0	0 (0.000 MB)	0 (0.000 MB)
<input type="checkbox"/>	1Lisa_Modaps_Terra	suspended by operator	No Polling Locations	0	0	0 (0.000 MB)	0 (0.000 MB)
<input type="checkbox"/>	4010_Connection_Prob	suspended by operator	No Polling Locations	0	0	0 (0.000 MB)	0 (0.000 MB)
<input type="checkbox"/>	ACRIM	suspended by operator	1 of 1 suspended	0	0	0 (0.000 MB)	0 (0.000 MB)
<input type="checkbox"/>	AMSR_E_SIPS	active	1 of 2 suspended	0	0	0 (0.000 MB)	0 (0.000 MB)
<input type="checkbox"/>	ASTER_GDS	suspended by operator	1 of 2 disabled	0	0	0 (0.000 MB)	0 (0.000 MB)
<input type="checkbox"/>	ASTER_OSF	suspended by operator	1 of 1 suspended	0	0	0 (0.000 MB)	0 (0.000 MB)
<input type="checkbox"/>	DAP	suspended by operator	1 of 1 suspended	0	0	0 (0.000 MB)	0 (0.000 MB)
<input type="checkbox"/>	DOIST	suspended by operator	1 of 1 suspended	0	0	0 (0.000 MB)	0 (0.000 MB)
<input type="checkbox"/>	EDOS	suspended by operator	No Polling Locations	0	0	0 (0.000 MB)	0 (0.000 MB)
<input type="checkbox"/>	FtpProvider	suspended by operator	No Polling Locations	0	0	0 (0.000 MB)	0 (0.000 MB)
<input type="checkbox"/>	ICESAT	suspended by operator	1 of 1 suspended	0	0	0 (0.000 MB)	0 (0.000 MB)
<b>TOTALS:</b>				0	9	5 (21.529 MB)	9 (659.067 MB)

**Status Indicators**

active      At least one active polling location

suspended by operator      Operator manually suspended polling location via GUI .

suspended by server      Server automatically suspended polling location.

**Figure 13.3-15. Provider Status Page**

- 3 To view the individual status of each polling location associated with a given provider, Click on the desired **Provider** (e.g., ASTER.OSF, JPL, etc.)
  - The **Provider Status Detail** page (Figure 13.3-16) is displayed.

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**Provider Status Detail**

---

**General Status**

Provider: NSIDC\_DAAC

General Status: ● suspended by operator ▶ Resume

Requests Queued: 0 (0.000 MB)

Requests In Process: 0 (0.000 MB)

---

**Configured Notification Types**

Email: Yes FTP: No SCP: No

---

**Polling Locations**

	Status	Source Polling Path	Host Type	Host Name	Host Status	Address
<input type="checkbox"/>	<span style="color: red;">●</span> suspended by operator	/net/origin/devdata1/DEV09INGEST/poll/NSIDC	local	LOCAL	<span style="color: green;">●</span> active	LOCAL
<span style="color: red;">■</span> Suspend <span style="margin-left: 20px;">▶ Resume</span>						

**Figure 13.3-16. Provider Status Detail Page**

- Displayed in the **General Status** section, information for a given Provider:
  - **Provider:** Unique name for that identifies the selected external data provider.
  - **General Status:** Identifies status of the provider (i.e., Active or Suspend).
  - **Requests Queued:** Total Number and Volume of requests waiting for activation from the Provider.
  - **Request In Process:** Total Number and Volume of requests that are active and not suspended from the Provider.
- Listed in the **Configured Notification Types** section, related information.
  - Status of each notification method (i.e. Email: No, or FTP: Yes).
- Listed in the **Polling Locations** section, related information:

- **Status:** Whether the polling location is Active, Suspended by Server, or Suspended by Operator.
  - **Source Polling Path:** Full path of the directory being polled.
  - **Host Type:** Method being used for polling – Local, FTP, or SCP.
  - **Host Name:** Label assigned to the host on which the polling location is found.
  - **Host Status:** Whether the host where the polling location is found is active or suspended – Polling location can be suspended, which will not affect the host state.
  - **Address:** IP Address or DNS name where the polling directory can be found.
- 

A Data Provider may be suspended or resumed from the Provider Status page. Suspending a Data Provider will stop the activation of Ingest Requests from that Provider, but Ingest Requests that are already active will be completed. Ingest will also stop polling any of the Polling Locations associated with that Data Provider. This means that no new Requests from that suspended Data Provider will be queued except if a polling cycle is in progress, in which case the polling cycle will be completed.

#### 13.3.4.2 Suspend or Resume Data Providers

---

- 1 Click on the **Monitoring** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Monitoring** menu is expanded.
  - 2 Click on the **Provider Status** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Provider Status** page is displayed.
  - 3 Select the desired **provider(s)** (e.g., ASTER.OSE, JPL, etc.) by clicking in the **checkbox** next to the name of the provider.
    - A checkmark is displayed.
  - 4 Select either the **Suspend** or **Resume** button located at the bottom of the page.
    - You will be prompted for confirmation before the action is carried out.
    - If you selected **Suspend**, the activation of Ingest Requests from that Provider will be stopped, but Ingest Requests that are already active will be completed. Ingest will also stop polling any of the Polling Locations associated with that Data Provider.
    - If you selected **Resume**, the activation of Ingest Requests from that Provider will be resumed.
    - The **Status** field will be updated accordingly when the requested action is completed.
-

Polling Locations for a Data Provider may be suspended or resumed from the Provider Status Detail page. Each Data Provider has a list of associated Polling Locations, which are directories on SCP, FTP or local Hosts. Polling locations can be suspended or resumed in order to halt or resume data to be sent through these providers, without impacting the status of the Host on which that polling location resides.

#### 13.3.4.3 Suspend or Resume Individual Polling Locations

---

- 1 Click on the **Monitoring** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Monitoring** menu is expanded.
  - 2 Click on the **Provider Status** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Provider Status** page is displayed.
  - 3 Click on the desired **Provider** (e.g., ASTER.OSF, JPL, etc.).
    - The **Provider Status Detail** page is displayed.
    - At the bottom of the **Provider Status Detail**, the list of **Polling Locations** for the selected Provider displays.
  - 4 Select the desired **Polling Locations** to be suspended or resumed by clicking in the **checkbox** associated with the **Source Polling Path**.
    - A checkmark is displayed in the checkbox.
  - 5 Select either the **Suspend** or **Resume** button located at the bottom of the page.
    - You will be prompted for confirmation before the action is carried out.
    - If you selected **Suspend**, the Polling Path(s) will be stopped but Ingest Requests that are already active will be completed.
    - If you selected **Resume**, the activation of Ingest Requests from that Polling Location will be resumed.
    - The **Status** field will be updated accordingly when the requested action is completed.
- 

#### 13.3.5 File System Status

The **File System Status** page displays the following status information for each of the Archive File Systems and Data Pool File Systems:

- Name(s) and directory paths for **Archive** and **Data Pool File Systems**.
- Provides the statuses of the Archive and Data Pool File Systems (i.e., **Active**, **Suspended by Operator** or **Suspended by Server**). This is the only changeable field on this page. From this page Archive and Data Pool File Systems can be **Resumed** or **Suspended**.
- Provides File System space threshold metrics.

### 13.3.5.1 Viewing File System Status

- 1 Click on the **Monitoring** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Monitoring** menu is expanded.
- 2 Click on the **File System Status** link in the navigation frame of the **DPL Ingest GUI**.
  - The **File System Status** page (Figure 13.3-17) is displayed with the following fields for **Data Pool** and **Archive File Systems**:

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**File System Status**

[ HELP ]

**Data Pool File Systems**

<input type="checkbox"/>	Name Path	Status	Free Space	Used Space Updated	Cache Used Alert Threshold	Queued Granules Volume	Granules Processing Volume
<input type="checkbox"/>	DEFAULT /datapool/DEV09/usedFS1/	active	175GB	52% 2007-09-11 13:49:20.586	92%	5 21.529 MB	9 659.087 MB
<input type="checkbox"/>	FS2 /datapool/DEV09/usedFS2/	active	232GB	36% 2007-09-11 13:49:20.593	92%	0 0.000 MB	0 0.000 MB

**Archive File Systems**

<input type="checkbox"/>	Name Path	Status	Free Space	Used Space Updated	Cache Used Alert Threshold	Cache Used Suspend Threshold	Queued Granules (Min-Max) Volume (Min-Max)	Granules Processing (Min-Max) Volume (Min-Max)
<input type="checkbox"/>	ARCHIVE5 /atomex2/browsf/	active	203GB	18% 2007-09-11 13:49:20.66	95%	100%	0 - 0 0.000 - 0.000MB	0 - 0 0.000 - 0.000MB
<input type="checkbox"/>	ARCHIVE8 /atomex2/amts1/	active	62GB	74% 2007-09-11 13:49:20.853	95%	100%	0 - 0 0.000 - 0.000MB	0 - 0 0.000 - 0.000MB
<input type="checkbox"/>	Archive1 /atomex2/ants1/	active	60GB	75% 2007-09-11 13:49:20.856	80%	99%	5 - 5 21.529 - 21.529MB	9 - 9 659.087 - 659.087MB
<input type="checkbox"/>	XMLArchive /atomex2/mal/mes/	active	231GB	9% 2007-09-11 13:49:20.866	95%	100%	0 - 0 0.000 - 0.000MB	0 - 0 0.000 - 0.000MB

**Auto Refresh**  
OFF  
[ Off ] [ 1m ] [ 5m ] [ 10m ] [ 15m ] [ 30m ]

**Figure 13.3-17. File System Status Page**

- **Name:** Unique name assigned to the file system and the directory which the file system is located.
- **Status:** Whether the file system is active, suspended by operator, or suspended by server.
- **Free Space:** Space (GB) remaining on the file system.
- **Used Space:** Percentage of used space and the time this information was last checked.
- **Cache Used Alert Threshold:** The percentage of used space in the cache at which point an alert would be raised. For example, if the threshold was set to 80%, an alert would be raised as soon as more than 80% of the cache was used.

- **Cache Used Suspend Threshold** (Archive File System only): The percentage of used space in the cache at which point the Archive File System or Data Pool File System would be suspended. For example, if the threshold was set to 90%, the Archive File System would be suspended as soon as more than 90% of the cache was used.
  - **Queued Granules:** Total granules waiting for activation set to ingest on the file system and the sum of the size (MB) of those granules.
  - **Granules Processing:** Total granules active set to ingest on the file system and the sum of the size (MB) of those granules.
- 

Each of these archives (Data Pool File System and Archive File System) can also be suspended or resumed from the File System Status page. Suspending a File System will prevent the occurrence of any activity on the selected File System. Conversely, resuming a File System will allow activity on a File System to resume.

### 13.3.5.2 Suspend or Resume File Systems

---

- 1 Click on the **Monitoring** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Monitoring** menu is expanded.
  - 2 Click on the **File System Status** link in the navigation frame of the **DPL Ingest GUI**.
    - The **File System Status** page is displayed.
  - 3 Click on the **checkbox** next to the desired **Data Pool File System** (or **Archive File System**).
    - A checkmark is displayed in the checkbox.
    - Multiple selections may be made.
  - 4 Select either the **Suspend** or **Resume** button located at the bottom of the page.
    - You will be prompted for confirmation.
    - The page will reload with the status of the selected archives changed.
    - The application will not allow the same action to be taken twice on an Archive File System. For example, an already active status can not be resumed. However, an Archive File system that was suspended by the server may be manually suspended by the operator.
-

### 13.3.6 Transfer Host Status

The Transfer Host Status page shows the status of each configured FTP and SCP host, including the status of Local Host Transfers. The statuses are divided into individual polling processing, and notification status for each active host provider. The hosts and provider statuses can be suspended or resumed manually, or by the Data Pool Ingest Service

When an operator suspends a host status, the Data Pool Ingest Service will complete any ongoing transfers, polling cycles, or notifications with that host, but not start any new ones. When an operator resumes a host status, this will resume all traffic with that host whose state was not “suspended by operator”. This includes polling for any previously suspended polling locations, that is, resuming a host status will resume all Polling Locations on that host that may have been suspended automatically by the Ingest Service.

#### 13.3.6.1 Viewing Transfer Host Status

---

- 1 Click on the **Monitoring** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Monitoring** menu is expanded.
- 2 Click on the **Transfer Host Status** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Transfer Host Status** page (Figure 13.3-18) is displays fields for all existing FTP and SCP Hosts, including Local Host Transfers.

**HOST IDENTIFICATION:**  
 Hostname, IP Address or  
 Canonical Name, Port

Host ID	Provider Name	Polling Status	Processing Status	Notification Status
11801 (4e01)	AMSR	suspended by server	not applicable	not applicable
11801 (4e01)	chls	not applicable	not applicable	active
11801 (4e01)	EMOS	suspended by server	active	not applicable
11801 (4e01)	EMOS2	suspended by server	not applicable	not applicable
11801 (4e01)	ICESAT	not applicable	active	not applicable
11801 (4e01)	MODAPS_COMBINE	suspended by server	not applicable	active
11801 (84e01)	EDOS	active	not applicable	suspended by server
11801 (84e01)	EDOS-ANC	not applicable	not applicable	active
UNDEFHOST_ECSBulkExport_9429 (4e01)				
UNDEFHOST_ED05_118077 (4e01) htc.com	EDOS	not applicable	active	not applicable
scp_host (4e01)	Provider_scp	active	not applicable	not applicable
Local Host Transfers	Provider Name	Polling Status	Processing Status	
	AMSR	not applicable	active	
	AMSR_E_SPS	active	active	
	ART_Provider_SPS	not applicable	active	
	ASTER_GOS	active	active	
	bmgt_110	active	not applicable	
	S4PM	active	active	
	TES	active	not applicable	
	TOMR Provider	active	not applicable	

**Figure 13.3-18. Transfer Host Status Page**

- **Host Identification:** Within the each configured host status section, display **name** assigned to the host on which the polling location is found. Possible

– **Status By Provider:**

- **Provider Name** - Name of the provider with a polling location configured on the host (non-changeable from this page).
  - **Polling Status** - Whether or not polling actions are active, suspended or non-applicable for a specific provider (non-changeable from this page). Possible statuses are “active”, “suspended by operator”, “suspended by server”, or “not applicable.”
  - **Processing Status** - Whether or not file transfer actions are active, suspended, or non-applicable for a specific provider. Possible statuses are “active”, “suspended by operator”, “suspended by server”, or “not applicable.”
  - **Notification Status** – Whether or not active host notifications for the provider actions are active. Possible statuses are “active”, “suspended by operator”, “suspended by server”, or “not applicable.”
- 

Each of the SCP/FTP hosts, as well as Local Host Transfers, can be suspended or resumed. The status columns show a green (active) or red (suspended by server or operator) icon and indicate which provider operations (polling, processing, notification) are suspended on each host.

### 13.3.6.2 Suspend or Resume Transfer Host

---

- 1 Click on the **Monitoring** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Monitoring** menu is expanded.
- 2 Click on the **Transfer Host Status** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Transfer Host Status** page is displayed.
- 3 Click on the **checkbox(es)** next to the desired **FTP (or SCP) Host**.
  - A checkmark is displayed in the checkbox.
  - Multiple selections are optional.
- 4 Click either the **Suspend** or **Resume** button located at the bottom of the page.
  - You will be prompted for a confirmation.
  - The page will reload and display host status changes of the selected host(s).
  - All provider operations will suspend as a result of suspending the host, if the “Suspend” option is executed. Polling stops on these hosts’ transfer polling locations. A notification to the host(s) is halted until the host is later resumed.

- If the status is suspended, the GUI indicates whether it was suspended by an operator or by the server.
  - If a PDR is sent through processing with a host configured in the PDR that does not show up on the GUI, a new host will automatically be added to the list of SCP and FTP Hosts with the name UNDEFHOST\_[Provider]\_[RequestID]. No provider status on a host will be displayed until the operator manually configures a polling location for the provider to use on that host, a PDR for the provider references the host, or the provider has configured notifications to be delivered to that host. It is possible that a host is not used for all three servers in which case the status for that particular server(s) will be displayed as not applicable. If more than one polling location is configured for a provider on the host, the number of polling locations will also be displayed next to the polling status.
- 

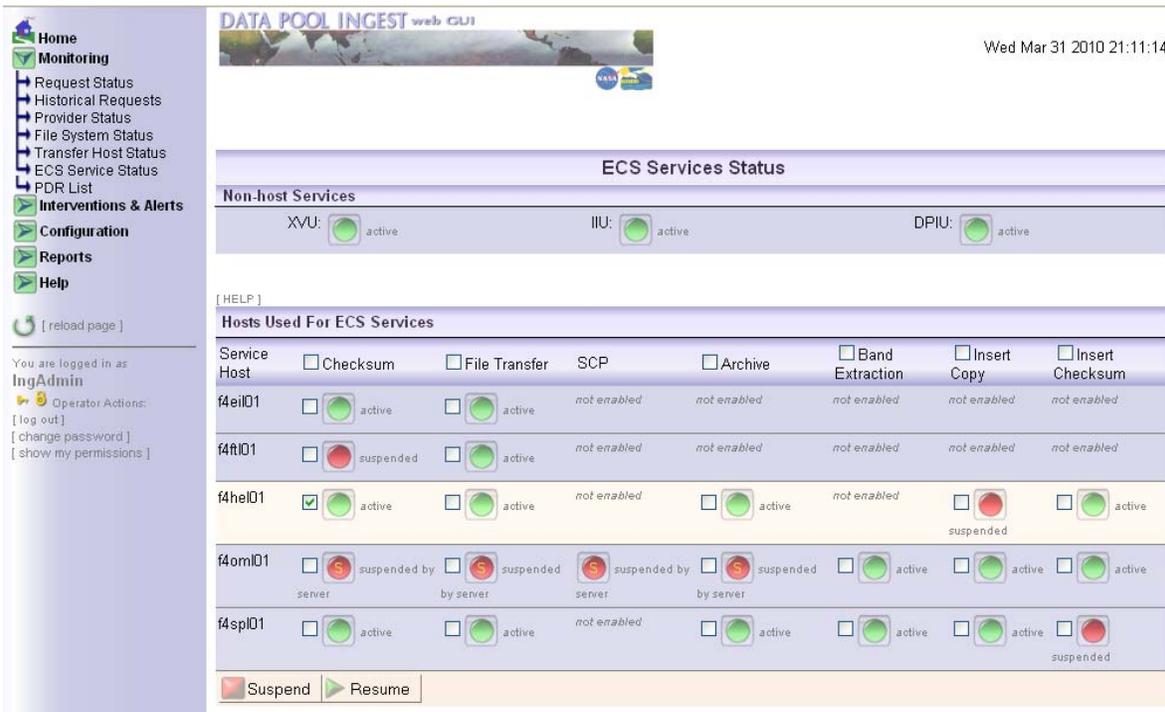
### 13.3.7 Viewing ECS Service Status

The ECS Service Status page shows the status of each of the various ECS Services. There are two types of ECS Services:

1. Non-host Services – are services that run on the same host as the Ingest processing service. These services cannot be suspended or resumed by the operator because every granule requires these services to be active. If the service is suspended it means there is an alert open against that service. The Data Pool Ingest GUI only displays service status as either up or down.
  2. Hosts Used For ECS Services – are services that can run on any number of hosts that have been configured for that purpose. Examples are checksumming, archiving, and transfers. The service on each host is independent of the same type of service on the other hosts, in that its configuration and status is host specific. For example, checksumming on one host may be suspended but may be operating just fine on the other. As a result, the GUI shows the status information for that service separately for each host.
- The status columns show a green (active) or red (suspended) icon.
  - Some services exist only once and run on the host on which they were installed. An example is the XML Validation Service (XVU) – Host-specific ECS Services. These services can be individually suspended and resumed for a particular host. The XVU, IIU, and DPIU services are listed separately and can only be resumed.

### 13.3.7.1 Viewing ECS Services Status

- 1 Click on the **Monitoring** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Monitoring** menu is expanded.
- 2 Click on the **ECS Service Status** link (Figure 13.3-19) of the **DPL Ingest GUI**.



**Figure 13.3-19. ECS Services Status Page**

- The **ECS Service Status** page (Figure 13.3-19) displays the status for all **Non-Host Services**:
  - **XVU**: The XML Validation Utility (XVU) is used to validate the incoming granule metadata files.
    - Status: **Active, Suspended by Server** or **Suspended by Operator**.
  - **IIU**: The Inventory Insert Utility (IIU) service is used to insert granule metadata information into the AIM database
    - Status: **Active, Suspended by Server** or **Suspended by Operator**.
  - **DPIU**: The Data Pool Insert Utility (DPIU) is used to register granule metadata into the DPL database.
    - Status: **Active, Suspended by Server** or **Suspended by Operator**.

- **If any of the services is suspended, any ingest will be prevented from completing, because every granule requires these services.**
- The **Host Used For ECS Services** displays the following services that are tied to a specific host. Each of these services can be suspended or resumed on that particular host:
  - **Checksum:** Status of the Checksum Service
  - **File Transfer:** Status of the File Transfer Service
  - **Archive:** Status of the Archive Service
  - **Band Extraction:** Status of the Band Extraction Service
  - **Insert Copy :** Status of the Insert Copy Service
  - **Insert Checksum:** Status of the Insert Checksum Service

Non-Host services are not tied to a particular host. These services can be suspended or resumed by simply clicking on the button next to the indicated service status.

Suspending a service on a host specific location, will let all service operations of that type that are currently executing on that host complete, but no new requests for that service will be dispatched to that host. For example, if the Checksum service is suspended for HOST\_A, ongoing checksumming operations will complete, but then no more checksumming operations will be dispatched on that host (regardless of the type of checksum involved).

As a rule, checksum operations must take place on a different host than the one on which a granule was transferred. If all but one checksum host is suspended, all granules transferred on that same host will go into a suspended state until another checksum host is activated.

### 13.3.7.2 Suspend or Resume ECS Service(s)

---

- 1 Click on the **Monitoring** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Monitoring** menu is expanded.
- 2 Click the **ECS Service Status** link of the **DPL Ingest GUI**.
  - The **ECS Services** page is displayed.
- 3 In the **Non-Host Service**, click on the button next to the indicated SDSVR **Non-Host Service status, to Suspend or Resume** the SDSVR service.
  - The service will respond accordingly.
- 4 In the **Hosts Used For ECS Services**, click the **checkbox** next to the desired **Service Host**.
  - A checkmark is displayed in the checkbox.
  - Multiple selections may be made.
- 5 Select either the **Suspend** or **Resume** button located at the bottom of the page.

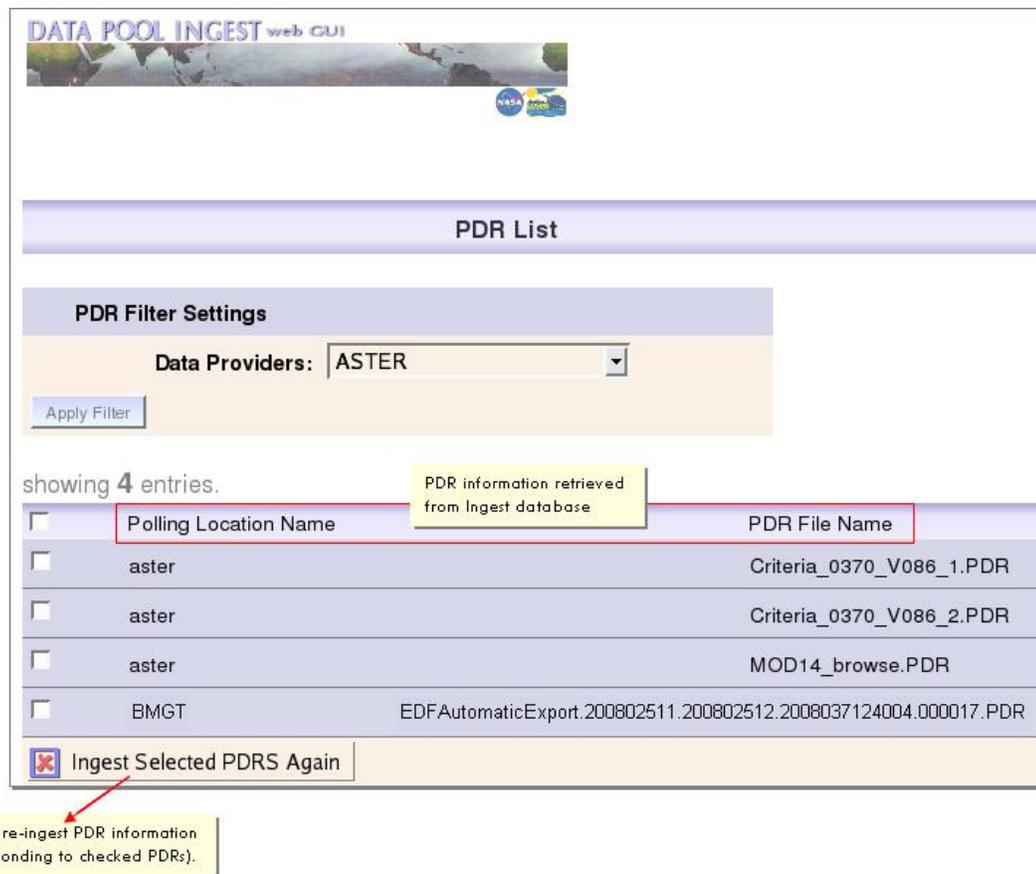
- The page will reload with the status of the selected Service Host changed.

### 13.3.8 Monitoring PDR List

The PDR List page displays the PDR information retrieved from the Ingest database. The PDRs are listed by Polling Location Name and PDR File Name. Selecting a PDR from the PDR List allows the operator to re-ingest the data from the selected polling location.

#### 13.3.8.1 Re-Ingesting a PDR

- 1 Click on the **Monitoring** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Monitoring** menu is expanded.
- 2 Click on the **PDR List** link of the **DPL Ingest GUI**.



**Figure 13.3-20. PDR List Page**

- The **PDR List** page (Figure 13.3-20) displays a list of Polling Locations and File Name for filtered PDRs.
- 3** Click the checkbox next to the desired PDR/Polling location name.
- A checkmark is placed in the checkbox.
- 4** Select **Ingest Selected PDRS Again**
- The data is re-ingested.
- 

## 13.4 Interventions & Alerts

The Interventions & Alerts link provides the operator access to **Active Ingest Requests** with open interventions. The operator may select any eligible request and perform either a cancel request(s), resume request(s) or restart actions. Additionally, the **Interventions & Alerts** link displays Data Pool System Alerts as they are raised in the DPL database. These warn the operator when the Ingest Service runs into a problem that it believes is associated with a resource or service it is using. After raising an alert, the Ingest Service will check in regular intervals whether the problem has been resolved and clear the alert, if that is the case. An alert may also be cleared manually once the operator determined that the problem has been resolved. An operator might do that to avoid waiting until the next auto-retry of the resource. Table 13.4-1 provides an activity Checklist for Interventions & Alerts.

**Table 13.4-1. Interventions & Alerts**

Order	Role	Task	Section
1	Ingest Technician	Viewing Open Intervention Ingest Requests	(P) 13.4.1.1
2	Ingest Technician	Changing Request EMail Configuration	(P) 13.4.1.2
3	Ingest Technician	Changing Open Interventions Ingest Requests	(P) 13.4.1.3
4	Ingest Technician	Viewing Open Intervention Detail Page	(P) 13.4.1.4
5	Ingest Technician	Changing Suspended Granules Status	(P) 13.4.1.5
6	Ingest Technician	Viewing System Alerts	(P) 13.4.2.1
7	Ingest Technician	Changing EMail Recipient Configuration	(P) 13.4.2.2
8	Ingest Technician	Viewing Detailed System Alert Information	(P) 13.4.2.3
9	Ingest Technician	Clearing An Alert	(P) 13.4.2.4

### 13.4.1 Open Intervention

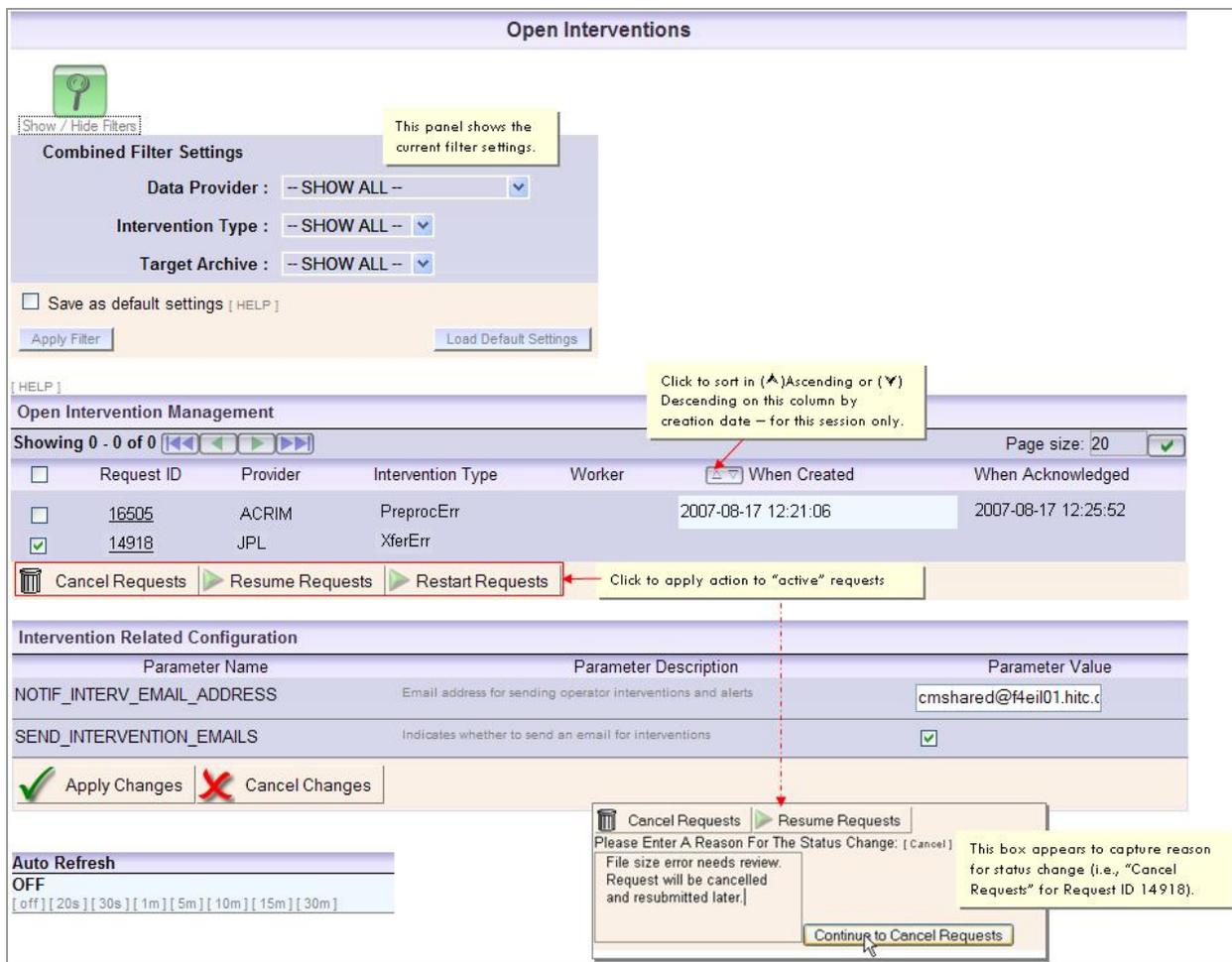
The **Interventions & Alerts** link provides the operator access to **Active Ingest Requests** with open interventions. The operator may select any eligible request and perform one of three actions:

- **Cancel (Active Ingest) Request(s)** – *This is an irreversible action with no way to ‘un-cancel’ a request.* Processing for this ingest request will be terminated and any granules that did not complete processing, at this point, will be considered failed. A PAN will be sent to the provider that will report failed or cancelled granules and the failure reasons.
- **Resume (Active Ingest) Request(s)** – *Used only if the selected requests are suspended or cancelled – cancelled requests can not be resumed.* Resuming a request will resume processing for all granules that are currently suspended, restarting each from the last known good state. To disposition individual granules differently, the operator needs to access the intervention detail page.
- **Restart (Active Ingest) Request(s)** – an operator invoked action to re-activate/re-start eligible granules from their beginning state.

#### 13.4.1.1 Viewing Open Intervention Ingest Requests

---

- 1 Click on the **Interventions & Alerts** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Interventions & Alerts** menu is expanded.
- 2 Click on the **Interventions** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Open Interventions** page (Figure 13.4-1) is displayed and contains the following **Open Information Management** information for all interventions:



**Figure 13.4-1. Open Interventions Page**

- **Request ID.**
  - Unique Data Pool Ingest identifier assigned to the request in intervention.
- **Provider.**
  - Name of the provider from which the request was obtained.
- **Intervention Type.**
  - Type of error encountered during processing of at least one of the request granules: (i.e., XferErr, ChecksumErr, PreProcErr, ArchErr, InsertErr, PubErr, InitErr, Multiple).
- **Worker.**
  - Name of a worker assigned to address the intervention.

- **When Created.**
  - Time the intervention was generated (which may have been after several retries after the error was first encountered).
- **When Acknowledged.**
  - Time the intervention was first viewed by an operator.
- The **Intervention Related Configuration** fields are as follows and can be changed:
  - **Parameter Name.**
    - **SEND\_INTERVENTION\_EMAIL.** Indicates whether to send an Email for Intervention.
    - **NOTIFY\_INTERV\_EMAIL\_ADDRESS.** Email address for sending operator interventions and alerts.
  - **Parameter Description.**
    - Indicates whether to send an Email for Intervention.
    - Email address for sending operator interventions and alerts.
  - **Parameter Value.**
    - **SEND\_INTERVENTION\_EMAIL.** Contains a checkbox to apply or change this parameter.
    - **NOTIFY\_INTERV\_EMAIL\_ADDRESS.** Contains a textbox to enter an Email address for sending operator interventions and alerts.

The **Interventions & Alerts** link provides the operator access to **Ingest Requests** with open interventions. The operator may set and/or change the email recipient configuration from within the Intervention Related Configuration section of the Open Interventions page (Figure 13.4-2).

Intervention Related Configuration		
Parameter Name	Parameter Description	Parameter Value
NOTIF_INTERV_EMAIL_ADDRESS	Email address for sending operator interventions and alerts	cmops_edf@yahoo.com
SEND_INTERVENTION_EMAILS	Indicates whether to send an email for interventions	<input checked="" type="checkbox"/>

Apply Changes
  Cancel Changes

**Figure 13.4-2. Interventions Related Configuration Section**

### 13.4.1.2 Changing E-Mail Recipient Configuration

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- 1 Click on the **Interventions & Alerts** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Interventions & Alerts** menu is expanded.
  - 2 Click on the **Interventions** link of the **DPL Ingest GUI**.
    - Displays the **Open Interventions** page.
  - 3 To set or change the intervention email address parameter: In the **Intervention Related Configuration** section, enter an **email address** in the **NOTIFY\_INTERV\_EMAIL\_ADDRESS Parameter Value** textbox (Figure 13.4-2).
  - 4 To set the email address and permit mail notification of Interventions for available addressee(s): Click on the **checkbox** next to the **SEND\_INTERVENTION\_EMAIL Parameter Value** column (Figure 13.4-2).
    - A checkmark is displayed in the checkbox.
  - 5 Click on **Apply Changes** button displayed at the bottom of the **Intervention Related Configuration** section.
    - A confirmation window is displayed. To confirm, click OK.
    - The page will reload with the new e-mail address.
    - The configured email address(es) will receive notifications for all interventions as they are opened.
- 

When a request completes its processing, a review is made to determine the status of each granule. If at least one granule from a request is suspended because it ran into some error, the entire request is suspended and goes into Operator Intervention Status as Suspended.

From the **Open Intervention Ingest Requests** an operator can resume suspended requests regardless of the reason for a failure.

### 13.4.1.3 Changing Open Intervention Ingest Requests

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- 1 Click on the **Interventions & Alerts** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Interventions & Alerts** menu is expanded.
  - 2 Click on the **Interventions** link in the navigation frame of the **DPL Ingest GUI**.
    - Displays the **Open Interventions** page.
  - 3 In the **Open Intervention Management** section of the Open Intervention page, click the checkbox next to the desired **Request ID**.
    - A checkmark is displayed in the checkbox.
    - Multiple selections may be made.
  - 4 Select either the **Cancel Requests** or **Resume Requests** button located at the bottom of the page as appropriate.
    - Selecting **Cancel Requests** is an irreversible action. There is no way to ‘un-cancel’ a request. Processing for this ingest request will be terminated and any granules that did not complete processing will be considered failed. A PAN will be sent to the provider that will report the failed granules and the failure reasons.
    - Selecting **Resume Requests** will resume a request if the selected requests are suspended or not cancelled. Resuming a request will resume processing for all granules that are currently suspended, restarting each from the last known good state. To disposition individual granules differently, the operator needs to access the intervention detail page.
    - The page will reload with the status of the selected Request ID changed.
- 

The **Open Interventions Detail** page allows the operator (who has Ingest Control permissions) to invoke actions on specific granules that have been intervened. Information related to the Ingest Request, contained in the Open Intervention page, is displayed at the page top, in the Intervention Info section of the Open Intervention Detail page. Related granule(s) listing(s) with detailed information is displayed at the bottom of the page. An Operator Intervention for an Ingest Request remains open as long as there are suspended granules in the Request. The operator can take one of several actions to ‘close’ the intervention (i.e., take the request out of suspension and allow the Ingest Request to be processed normally). Furthermore, any granule(s) encountering problems during any point in processing are initially flagged as “suspended”. The following actions can be performed depending on the granule state:

- **Fail Selected Granules.**
  - Applicable to granule(s) currently in the suspended state, then will transition granule(s) into a failed state. This is a permanent action and cannot be reversed. The type of suspension error the granule originally encountered will be stasured. Errors types are determined by the granules’

- **Retry Selected Granules.**
  - Applicable to granule(s) that are currently suspended and retries from the last known good state of processing (e.g., checksum), at which point an annotation is added identifying the time, operator and action taken. This is effective for most cases and requires the least amount of time to reprocess.
- **Retry From START Selected Granules.**
  - The granule is retried from the start of processing, no matter where in the processing chain it failed. An annotation is added identifying the time, operator and action taken.
- **Cancel Selected Granules.**
  - Applicable only to those granules not yet in a terminal state. The granule is manually cancelled and the operator is expected to re-ingest the granule.

Once all granules issues have been resolved, the Operator Intervention status will automatically be removed. No explicit action on the part of the operator is required to do this.

If an Operator Intervention is not resolved after being viewed, it will remain in the intervention list and can be worked on at any time after navigating to a different page or even logging out of the session.

#### **13.4.1.4 Viewing Open Intervention Detail Page**

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- 1 Click on the **Interventions & Alerts** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Interventions & Alerts** menu is expanded.
- 2 Click on the **Interventions** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Open Interventions** page is displayed.

- 3 Click on the specific **Request ID**.
  - The **Open Intervention Detail** page (Figure 13.4-3) is displayed.

**Open Intervention Detail**

**Intervention Info** [ Show / Hide ]

RequestID: 14921 [ view details ] Status: Suspended Size: 24.586 MB Priority: NORMAL  
 Provider: JPL Intervention Type: MULTIPLE No. Granules: 4 (0% complete)  
 Worked By: James Pino [ ok ] Update Worker

**Intervention Creation Date/Time:** 2006-10-30 11:53:51  
**Intervention Acknowledgement Date/Time:** 2006-10-30 11:54:58  
**When Queued:** 2006-10-30 11:53:42  
**When Processing Started:** 2006-10-30 11:53:44

**Operator Notes**

Added 2006-10-30 11:56:05 by **IngAdmin**  
 Multiple errors encountered during request processing. Assigned to James Pino for analysis. Granules will be cancelled and resubmitted pending approval by supervisor.

Added 2006-10-30 12:06:20 by **IngAdmin**  
 It has been decided that the granules cannot be processed and will be failed instead of cancelled.

[ Add annotation... ]

**Request Notes** [ help ] [ Add annotation... ] link to display a time stamped (with OperatorID) annotation textbox for Notes.  
 There are no Request Notes for this request.

**Ingest Request Detail**

Request ID: 14921 Status: Suspended Priority: NORMAL  
 Pulling Location: JPL  
 Data Provider: Provider\_0mg  
 Open Intervention: view details  
 PDR Path and file name: /datapool/OPS/user/FS1/temp/ingest/14921/15000000008388/40963/40963.mf  
 Last Update: 2009-02-03 17:12:45  
 When Queued: 2009-02-03 17:04:38  
 When Acknowledged: 2009-02-03 17:04:38  
 When Completed: 2009-02-03 17:04:38  
 Expiration Date/Time: 2010-02-01 18:00:00

**Granule Statistics:**

Total Granules	Granules Processed	Granules Failed	Granules Transferred	Granules Archived	No. Files
2	0%	0%	100%	0%	1

**Granule Action buttons:** [ Retry Selected Granules ] [ Retry From START Selected Granules ] [ Fail Selected Granules ] [ Cancel Selected Granules ]

**Granule List** Showing 1 - 4 Of 4

File Detail	Seq Number	Ingest Gran. ID	Data Type	Version	Status	Granule Size (MB)	No. Files	Processing Start	Processing End
[ show/hide ]	1	15000000008388	MOD29P1D	86	Suspended (PreprocErr) Error executing the following copy command: /usr/ecs/OPS/CUSTOM/bin/DPL/ECDCopyExec /home/cmshare/PDRS/scripts/TEMP/OPS/Criteria_1420_MOD_r1.1162227188.55036.RGEN.hdf.met /datapool/OPS/user/FS1/temp/ingest/14921/15000000008388/40963	6.148	2	2009-02-03 17:04:38	2009-02-03 17:04:45
[ show/hide ]	3	15000000008390	MOD29P1D	86	Successful	6.148	2		
[ show/hide ]	4	15000000008391	MOD29P1D	86	Successful	6.144	2		
[ show/hide ]	2	15000000008389	MOD29P1D	86	PreprocErr Metadata validation failed with error: Metadata validation failed with reason: Failure reason: Error obtaining INVENTORYMETADATA from the descriptor, Failed by Operator	6.144	2	2009-02-03 17:12:46	

[ show/hide ] link to display or hide details of granules that have not reached terminal state for action.

**Figure 13.4-3. Open Interventions Detail Page**

- The following detailed information is displayed in the Open Interventions Detail – Intervention Info section (Table 13.4-2):

**Table 13.4-2. Open Interventions Detail – Intervention Info**

<b>Field Name</b>	<b>Description</b>
Request ID	Unique Data Pool Ingest identifier assigned to the request in intervention.
Provider	Name of the provider from which the request was originated.
Intervention Type	Type of error encountered during processing of at least one of the request granules (if there are multiple error types encountered in a single request, the type will be “MULTIPLE”). Other types of errors: XferErr, ChecksumErr, PreProcErr, ArchErr, InsertErr, PubErr, InitErr.
Worked By	Name of a worker assigned to address the intervention.
Status	Provides status of a request (i.e. New, Validated, Active, Partially_Suspended, Suspended, Cancelling, Resuming, Successful, Cancelled, Partially_Cancelled, Failed, Partial_Failure or Terminated).
Size	Sum of the size of all granules in the request.
Priority	The precedence which a request will have for activation and various processing actions (i.e., <b>XPRESS, VHIGH, HIGH, LOW</b> or <b>NORMAL</b> ).
No. Granules	Total Granules included in the request.
Intervention Creation Date/Time	Time the intervention was generated (which may have been after several retries after the error was first encountered).
Intervention Acknowledgement Date/Time	Time the intervention was first viewed by an operator.
When Queued	Time request was queued.
When Processing Started	Time when request processing started.
Operator Notes	Displays all notes along with the name of the operator who added the annotation.
Request Notes	Displays Request related annotations by the operator included a time stamp with OperatorID.
<b>Granule List</b>	The section contains the following information for all the granules associated with this request.

- The following detailed information is displayed in the Open Interventions Detail – Granule List section (Table 13.4-3) which provides detailed file information about each granule:

**Table 13.4-3. Open Interventions Detail – Granule List**

Field Name	Description
File Detail (show/hide)	A link that displays/toggles the following details for a Granule: <ul style="list-style-type: none"> <li>• <i>Path</i>: Directory identified in the PDR where the file can be found</li> <li>• <i>Name</i>. Name of file.</li> <li>• <i>Type</i>: Type of file, as identified by the file extension (e.g., SCIENCE or METADATA).</li> <li>• <i>Status</i>: Last action performed on the file or the most recent, unresolved, error encountered while processing the file.</li> </ul>
Seq. Number	The order in which a granule was found in the PDR.
Ingest Gran. ID	Unique Identifier assigned to the granule.
Data Type	Data Type found in the PDR describing the granule.
Version	Version found in the PDR describing the granule.
Status	Current granule status (whether the granule is queued, its stage in processing, an error status, or its terminal state) and detailed error information.
Granule Size (MB)	Sum of the size of all files associated with the granule.
No. Files	Number of files found associated with the granule in the PDR.
Processing Start	Time the granule’s processing started.
Processing End	Time the granule’s processing ended.

The **Open Interventions Detail** page is the operator’s link to taking action on specific granules that have been intervened. The **Request** information contained in the Open Intervention page is listed at the top of the page. A list of granule(s) along with detailed information is displayed at the bottom of the page.

An Operator Intervention remains open as long as there are suspended granules. The operator can take one of several actions to ‘close’ the intervention (i.e., take the request out of suspension and allow the Ingest Request to be processed normally):

- The suspended granules can be failed. This is a permanent action and cannot be reversed. The granule transitions into one of the ingest granule error states that indicates the type of error the granule encountered.
- The suspended granules can be retried in one of two ways:

– **Retry Selected Granules**

- The suspended granule is retried from the last known point of processing (For example: Checksum), at which point it was suspended. This is effective for most cases and requires the least amount of time to reprocess. Every retry, an annotation is appended identifying the time, operator, and action taken.

– **Retry From START Selected Granules**

- The suspended granule is retried from the start of processing, no matter where in the processing chain it failed. Every retry, an annotation is appended identifying the time, operator, and action taken.

### 13.4.1.5 Changing Suspended Granules Status

---

- 1 Click on the **Interventions & Alerts** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Interventions & Alerts** menu is expanded.
  - 2 Click on the **Interventions** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Open Interventions** page is displayed.
  - 3 Click on the specific **Request ID**.
    - **The Open Interventions Detail** page is displayed.
  - 4 In **Granule List** section of the Open Intervention Detail page, click on the checkbox next to the desired **Granule ID**.
    - A checkmark is displayed in the checkbox.
    - Multiple selections may be made.
  - 5 Any granule(s) encountering problems during any point in their processing are initially flagged as “suspended”. **To modify**, click one of the **appropriate buttons**:
    - **Fail Selected Granules.**
      - Suspended granules can be failed. This is a permanent action and cannot be reversed. The granule transitions into one of the ingest granule error states that indicates the type of error the granule encountered.
    - **Retry Selected Granules.**
      - This applies only to granules that are currently suspended. The granule is retried from the last point of. This is effective for most cases and requires the least amount of time to reprocess.
    - **Retry Selected Granules From Start.**
      - This applies only to granules that are currently suspended. The granule is retried from the start of processing, no matter where in the processing chain it failed.
    - **Cancel Selected Granules.**
      - The granule is cancelled.
    - Once the suspended granule retry is successful, the system will automatically close the Operator Intervention.
- 

### 13.4.2 Viewing System Alerts

The Ingest operator is able to monitor Data Pool System Alerts as they are raised in the Ingest database. These alerts warn the operator when the Ingest Service runs into a problem that is believed to be associated with a resource or service being used. Ingest Service checks in regular

intervals whether the problem has been resolved and clear the alert if that is the case. An alert may also be cleared manually once the operator determines that the problem has been resolved.

### 13.4.2.1 Viewing System Alerts

1 If the **DPL Ingest GUI Home** page is displayed, and an alert has been generated, the General System Statistics section will contain a link to **System Alerts**. Clicking on this link will take you to the **Alerts** page.

- The Alerts page is displayed.

OR

2 Click on the **Interventions & Alerts** link in the navigation frame of the **DPL Ingest GUI**.

- The **Interventions & Alerts** menu is expanded.

3 Click on the **Alerts** link in the navigation frame of the **DPL Ingest GUI**.

- The **Alerts** page ( Figure 13.4-4) containing the following **Alert Management** information for the Data Pool is displayed:

The screenshot shows the Alerts page in the DPL Ingest GUI. At the top, it displays the title 'DATA POOL INGEST web GUI' and the date 'Thu Feb 5 2009 13:21:56'. The main heading is 'Alerts'. Below this is a 'Combined Filter Settings' panel with dropdown menus for 'Alert Type' (set to 'SHOW ALL') and 'Resource Type' (set to 'SHOW ALL'), and buttons for 'Apply Filter' and 'Load Default Settings'. A callout box indicates that this panel shows the current filter settings. Below the filter settings is an 'Alert Management' table with columns: Alert Details, Alert Description, Alert Type, Resource, Resource Type, Server Name, and Creation Time. One alert is listed: 'Failure to connect with an ECS service' with Alert Type 'SRVC\_CANNOT\_CONNECT', Resource 'H1001', Resource Type 'FILE\_TRANSFER', Server Name 'Processing', and Creation Time '2007-01-30 16:21:54'. A 'Close Alerts' button is located below the table. Below the table is an 'Alert Related Configuration' section with parameters: 'ALERT\_EMAIL\_ADDRESS' (cmshared@44e101.hitc.c) and 'SEND\_ALERT\_EMAILS' (checked). There are 'Apply Changes' and 'Reset' buttons. At the bottom left is an 'Auto Refresh' section set to 'OFF'. At the bottom right is an expanded alert details panel for 'DPL\_FS\_DOWN' with a 'Show / Hide' link. The details include: 'The error response indicates that the file system is down', 'Symptom: Error DPL file system: /datapool/DEV01/user/FS3/ is down', and 'Impact: Data Providers affected: None, Number of PDRs: 0, Number of granules: 0, Total amount of data queued: 0.000 MB, Total amount of data processing: 0.000 MB'. A callout box states: 'If Resource Type is an archive or file system, link displays/toggles additional details related by the alert condition.'

Figure 13.4-4. Alerts Page

- **Alert Details.**
    - The **Show/Hide** link will display expanded detailed alert information to include **Symptom** and **Solutions** of the alert.
  - **Alert Description.**
    - Basic description of the error that generated the alert.
  - **Alert Type.**
    - Unique name for the type of error that was encountered.
  - **Resource.**
    - The name of the resource affected by the alert.
  - **Resource Type.**
    - The type of resource affected by the alert, such as SCP/FTP Host, Polling Location or Archive.
  - **Server Name.**
    - .The name of the server affected by the alert.
  - **Creation Time.**
    - The time by the alert was generated (which may have recorded after several retries after the error was first encountered).
  - The **Alert Related Configuration** fields displayed as follows:
    - **Parameter Name.**
      - **ALERT\_EMAIL\_ADDRESS.**
      - **SEND\_ALERT\_EMAIL**
    - **Parameter Description.**
      - Email address to which alert emails will be sent.
      - Indicates whether sending alert emails is active.
    - **Parameter Value.**
      - Contains a place to enter an email address for sending alerts notification.
      - Contains a checkbox to select this parameter.
      - Contains a place to enter an email address for sending operator interventions and alerts.
- 

In addition to being displayed on this page, alerts can also be sent as email to a specified address. Use the following procedure to set the email address and permit email notification.

### 13.4.2.2 Changing EMail Recipient Configuration

---

- 1 Click on the **Interventions & Alerts** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Interventions & Alerts** menu is expanded.
  - 2 Click on the **Alerts** link in the navigation frame of the **DPL Ingest GUI**.
    - Displays the **Alerts** page.
  - 3 In the **Alert Related Configuration** section, enter an address in the **Parameter Value** field for the **ALERT\_EMAIL\_ADDRESS** parameter.
  - 4 Click on the checkbox in the **SEND\_ALERTS\_EMAIL** Parameter Value checkbox.
    - A checkmark is displayed in the checkbox.
  - 5 Click on **Apply Changes** button displayed at the bottom of the **Alert Related Configuration** section.
    - The page will reload with the new email address.
- 

The Ingest operator is able to monitor Data Pool System Alerts as they are raised in the DPL database. Additional details can be viewed by using the Show/Hide button and will include **Symptoms** of the alert. If the **Resource Type** is an **archive** or **file system** the Alert Details will contain **Symptoms, Data Provider, Request Status** information. These alerts warn the operator when the Ingest Service runs into a problem that is believed to be associated with a resource or service it is using. The Ingest Services test in regular intervals whether the problem has been resolved and if so, automatically clears the alert. An alert may also be cleared manually once the operator determined that the problem has been resolved.

### 13.4.2.3 Viewing Detailed System Alert Information

---

- 1 Click on the **Interventions & Alerts** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Interventions & Alerts** menu is expanded.
  - 2 Click on the **Alerts** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Alerts** page is displayed.
  - 3 In the **Alert Management** section of the screen, click on the **Show/Hide** button to display the following Detailed Alert information:
    - **Symptom**
      - Information about the specific action or item that caused the alert.
    - If the Resource Type is an Archive or File System, the following alert details are displayed:
      - **Symptom:** Information pertaining to the specific action or item that generated the alert.
      - **Impact:** The resource affected by the Alert (if applicable). Data is displayed only if the Alert could potentially impact a Resource.
      - **Data Providers affected:** List of providers that will be suspended as a result of the alert.
      - **Number of PDRs:** Total number of PDRs “stuck” in a particular state as a result of the alert.
      - **Number of granules:** Total number of granules “stuck” as a result of the alert.
      - **Total amount of data queued:** Sum of the size of the files in the granules that require the file system and will not be activated while it is suspended.
      - **Total amount of data processing:** Sum of the size of the files in the granules that require the file system, but will get “stuck” in an active state as a result of the alert.
- 

An alert may be cleared manually once the operator determines that the problem has been resolved. In response, the Ingest Service will resume using that resource and all the associated resources. The Ingest Service may find that it is still unable to use the resource (e.g., still cannot connect), in which case the alert will be raised again. However, it may be appropriate to manually clear an alert, e.g., if the operator took steps to manually resolve the reported problem (restarting an ECS Host) and then expects the Ingest Service to immediately try using that resource.

#### 13.4.2.4 Clearing an Alert

---

- 1 Click on the **Interventions & Alerts** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Interventions & Alerts** menu is expanded.
  - 2 Click on the **Alerts** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Alerts** page is displayed.
  - 3 In **Alert Management** section of the **Alerts** page, click on the checkbox next to the Alert(s) to be cleared.
    - A checkmark is displayed in the checkbox.
    - Multiple selections may be made.
  - 4 After selecting all alerts to be cleared, click on the **Close Alerts** button.
    - A confirmation prompt is displayed. Select **OK** or **Cancel**.
    - If you selected **OK**, the page will be reloaded with the selected alerts no longer appearing on the list.
- 

### 13.5 DPL Ingest Configuration

This section contains descriptions of how to modify DPL Ingest configuration values.

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

- Providers
- Data Types
- Transfer Hosts
- File Systems
- ECS Services
- Global Tuning
- Volume Groups
- Operators.

Table 13.5-1 provides an activity Checklist for Modifying DPL Ingest Configuration.

**Table 13.5-1. Modifying DPL Ingest Configuration**

Order	Role	Task	Section
1	Ingest Technician	Edit a Data Provider	(P) 13.5.1.1
2	Ingest Technician	Edit a Polling Location	(P) 13.5.1.2
3	Ingest Technician	Remove a Data Provider	(P) 13.5.1.3
4	Ingest Technician	Remove a Polling Location	(P) 13.5.1.4
5	Ingest Technician	Add a Data Provider	(P) 13.5.1.5
6	Ingest Technician	Changing Data Types	(P) 13.5.2.1
7	Ingest Technician	Changing Data Types Attributes	(P) 13.5.2.2
8	Ingest Technician	Remove FTP or SCPTransfer Host	(P) 13.5.3.1
9	Ingest Technician	Add FTP or SCP Transfer Host	(P) 13.5.3.2
10	Ingest Technician	Edit FTP or SCP Transfer Host	(P) 13.5.3.3
11	Ingest Technician	Edit Local and Default Host Configuration	(P) 13.5.3.4
12	Ingest Technician	Change File System Threshold	(P) 13.5.4.1
13	Ingest Technician	Remove Checksum Type	(P) 13.5.5.1
14	Ingest Technician	Add Checksum Type	(P) 13.5.5.2
15	Ingest Technician	Add an ECS Service Host Type	(P) 13.5.5.3
16	Ingest Technician	Edit an ECS Service Host Type	(P) 13.5.5.4
17	Ingest Technician	Change Global Tuning Parameters	(P) 13.5.6.1
18	Ingest Technician	Add a Volume Group For a New Versioned Data Type	(P) 13.5.7.1
19	Ingest Technician	Add a Volume Group For an Existing Versioned Data Type	(P) 13.5.7.2
20	Ingest Technician	Modify Volume Groups	(P) 13.5.7.3
21	Ingest Technician	Modify Operator Permission Settings	(P) 13.5.8.1
22	Ingest Technician	Add Operator Permissions	(P) 13.5.8.2
23	Ingest Technician	Remove Operator Permission Settings	(P) 13.5.8.3

### 13.5.1 Data Provider Configuration

The Provider Configuration page (Figure 13.5-1) lists all of the Data Providers for the DPL Ingest System along with the following selected attributes for each **Provider**:

- **Checksum Mandatory.**
- **% Files To Checksum.**
- **Default Priority.**
- **Notification Method.**

Provider	Checksum Mandatory	% Files To Checksum	Default Priority	Notification Method
<input type="checkbox"/> <u>AMSR_E_SIPS</u>	<input checked="" type="checkbox"/>	100%	NORMAL	FTP
<input type="checkbox"/> <u>ASTER_GDS</u>	<input checked="" type="checkbox"/>	100%	VHIGH	EMAIL
<input type="checkbox"/> <u>ASTER_OSF</u>	<input checked="" type="checkbox"/>	100%	NORMAL	FTP
<input type="checkbox"/> <u>DDIST</u>	<input checked="" type="checkbox"/>	100%	NORMAL	EMAIL
<input type="checkbox"/> <u>ECSBulkExport</u>	<input checked="" type="checkbox"/>	0%	VHIGH	EMAIL
<input type="checkbox"/> <u>EDOS</u>	<input checked="" type="checkbox"/>	100%	VHIGH	EMAIL
<input type="checkbox"/> <u>ICESAT</u>	<input checked="" type="checkbox"/>	100%	NORMAL	FTP
<input type="checkbox"/> <u>JPL</u>	<input checked="" type="checkbox"/>	100%	NORMAL	FTP
<input type="checkbox"/> <u>MODAPS_AQUA_FPROC</u>	<input checked="" type="checkbox"/>	100%	NORMAL	EMAILFTP
<input type="checkbox"/> <u>MODAPS_COMBINE_FPROC</u>	<input checked="" type="checkbox"/>	100%	NORMAL	FTP
<input type="checkbox"/> <u>MODAPS_TERRA_FPROC</u>	<input checked="" type="checkbox"/>	100%	NORMAL	EMAIL
<input type="checkbox"/> <u>NSIDC_DAAC</u>	<input checked="" type="checkbox"/>	100%	NORMAL	EMAIL
<input type="checkbox"/> <u>S4P00</u>	<input checked="" type="checkbox"/>	100%	NORMAL	EMAIL

**Figure 13.5-1. Provider Configuration Page**

By clicking on the underscored Provider name, the operator can view/change configuration parameters for a data provider. Table 13.5-2 contains a list of changeable Data Provider parameters and their descriptions.

**Table 13.5-2. Edit a Data Provider Configuration Parameter Descriptions (1 of 2)**

Field Name	Entry	Description
Name	Required	Name for an external data provider
ProviderType	Required	Indicates the type of the provider (such as Polling with DR, Polling without DR, EDOS)
Checksum Mandatory	Optional	Indicates that the Data Provider <i>must</i> provide checksum information in the PDR.
% Files to Checksum	Required	Percent of requests to checksum for this provider
Default Priority	Required	Default priority for ingest requests for this provider

**Table 13.5-2. Edit a Data Provider Configuration Parameter Descriptions (2 of 2)**

<b>Field Name</b>	<b>Entry</b>	<b>Description</b>
Preprocessing Type	Required	Type of ingest processing to occur (such as SIPS or DDIST)
Max Active Data Volume	Required	Maximum total active data volume that will be allocated to a provider if requests for other providers are pending
Max Active Granules	Required	Maximum total active granules that will be allocated to a provider (if requests for other providers are pending)
Transfer Type	Required	Method used for obtaining files from the external data provider (local, FTP, or SCP with various cipher types)
Notification Method	Required	Method for providing notifications to the provider (email, SCP, FTP, or combination of SCP/FTP and email)
Email Address	Required if email is the notification method	Address to which to send notifications after a granule on the provider completes ingest
Write Login User ID	Required if FTP or SCP is the notification method	User Id for getting write permissions on the provider's notification directory
Write Info: Password	Required if FTP or SCP is the notification method	Checkbox displays a password and verify password field that are used to provide access to the provider's notification directory
Path	Required if FTP or SCP is the notification method	Directory where notifications will be sent on the provider
Choose Host	Required if FTP or SCP is the notification method	Host where the notification path can be found (list is generated from hosts configured on the Host Configuration page)
Read Login Id	Required if a polling location uses FTP or SCP	User Id for getting read permissions on the provider's polling directories
Read Info: Edit Password	Required if a polling location uses FTP or SCP	Checkbox displays a password and verify password field that are used to provide access to the provider's polling directories

### 13.5.1.1 Edit a Data Provider

- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Configuration** menu is expanded.
- 2 Click on the **Providers** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Provider Configuration** page is displayed. (Figure 13.5-1.)
- 3 Click on the underscored **Provider** link (under the name column) to be modified.
  - The **Provider Configuration Detail - Edit a Provider** page ( Figure 13.5.2) is displayed.
  - **NOTE:** Trailing and leading white space will be removed from values entered into text fields on this page and all related sub-pages.

**Edit a Provider**

Name: MODAPS\_AQUA\_FPROC

Provider Type: Polling with DR

Checksum Mandatory:

% Files to Checksum: 100 [0-100]

Default Priority: VHIGH(235)

Preprocessing Type: SIPS

Max Active Data Volume: 3750.000 MB [help]

Max Active Granules: 30 [help]

Transfer Type: Ftp [help]

Read Info

Read Login ID: ins

Edit Password:

FTP Mode: Passive

Notification Method: Email And Ftp

E-Mail Info

E-Mail address: cmdex08@yahoo.com

Write Info

Write Login User ID: ins

Edit Password:

Path: /usr/ecs/OPS/CUSTOM/data/dplngest/amrs/P

Choose Host: NSIDC [help]

Name	NSIDC
Address	4ei01
Max FTP Operations	7
Timeout	yes (30s)
Auto Retry	yes (15s)

Apply Changes  Reset

Existing Polling Locations

<input type="checkbox"/>	Name	Address	Source Polling Path	Polling Freq
<input type="checkbox"/>	OLA_Test	LOCAL	/usr/ecs/OPS/CUSTOM/data/INS/pollAMSR/	120
<input type="checkbox"/>	pollAMSR	4ei01	/usr/ecs/OPS/CUSTOM/data/dplngest/amrs/pollAMSR_E_SIPS	120

Remove Selected Polling Locations

Figure 13.5-2. Edit a Provider Page

- 4 Select the fields to be modified.
    - Certain fields are required and must be populated.
  - 5 To apply changes, click the **Apply Changes** button.
    - A Confirmation prompt is displayed. Click **OK**
    - Changes are accepted.
- 

Table 13.5-3 describes the changeable Polling Location fields. The following procedure contains the steps required to Edit a polling location.

**Table 13.5-3. Polling Location Page Field Descriptions**

Field Name	Entry	Description
Parent Provider	Not Editable	Name of the provider with which this polling location is associated
Polling Location Name	Required	Name used to uniquely identify the polling location
Source Polling Path	Required	Source Directory that will be polled
Polling Frequency	Required	Number of seconds the ingest service will wait between scanning the polling path for new PDRs (must be greater than 120 seconds)
DPL Ingest Enabled	Optional	Indicates whether this polling location is enabled for ingest via DPL
Polling Method	Required	Transfer method used for obtaining PDRs from the polling location (Local Disk or Ftp Host)
Host Name	Required if using a remote transfer method	Host where the polling directory is found

### 13.5.1.2 Edit a Polling Location

- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Configuration** menu is expanded.
- 2 Click on the **Providers** link in the navigation frame of the **DPL Ingest GUI**.
  - The Provider Configuration page is displayed.
- 3 Click on the **Provider** to be modified.
  - The **Edit a Provider** page is displayed (Figure 13.5-2).
- 4 Locate the Existing Polling Locations section (at page bottom).
- 5 Click the **underscored Polling Location** name link in the name column.
  - The **Edit a Polling Location Details** page (Figure 13.5-3) is displayed.

The screenshot displays the 'Edit a Polling Location' page. The main form includes fields for Parent Provider (AMSR\_E\_SIPS), Polling Location Name (OLA\_Test), Source Polling Path (/usr/ecs/OPS/CUSTOM/data/NS/p), Polling Frequency (120 seconds), DPL Ingest Enabled (checked), and Polling Method (FTP Host). A 'Host Name' dropdown is set to 'Define New Host...'. Below this is the 'New Host Parameters' section with fields for Label, Address, Max. Operations (5), Timeout (checked), Expected Throughput (3,000 MB/s), Pad Time (30 seconds), Auto Retry (checked), and Retry Interval (120 seconds). At the bottom are 'Apply Changes' and 'Reset' buttons.

An inset window titled 'Existing Host Parameters' shows details for a host named 'NSIDC':

Existing Host Parameters	
Name	NSIDC
Address	f4eil01
Max FTP Operations	7
Timeout	yes (30s)
Auto Retry	yes (15s)

**Figure 13.5-3. Edit a Polling Location Details Page**

- 6 Update the desired information.
- 7 Click the **Apply Changes** button.
  - A Confirmation prompt is displayed. Click **OK** to accept updates.
  - Changes are accepted.

### 13.5.1.3 Remove a Data Provider

---

- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Configuration** menu is expanded.
  - 2 Click on the **Providers** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Provider Configuration** page is displayed.
  - 3 Click on the **checkbox** next to the Provider to be removed.
    - A checkmark is placed in the checkbox.
    - Multiple selections are accepted.
  - 4 At the bottom of the screen, click the **Remove Selected Providers** button.
  - 5 A Confirmation screen is displayed. Click **OK**
    - Changes are accepted.
- 

### 13.5.1.4 Remove a Polling Location

---

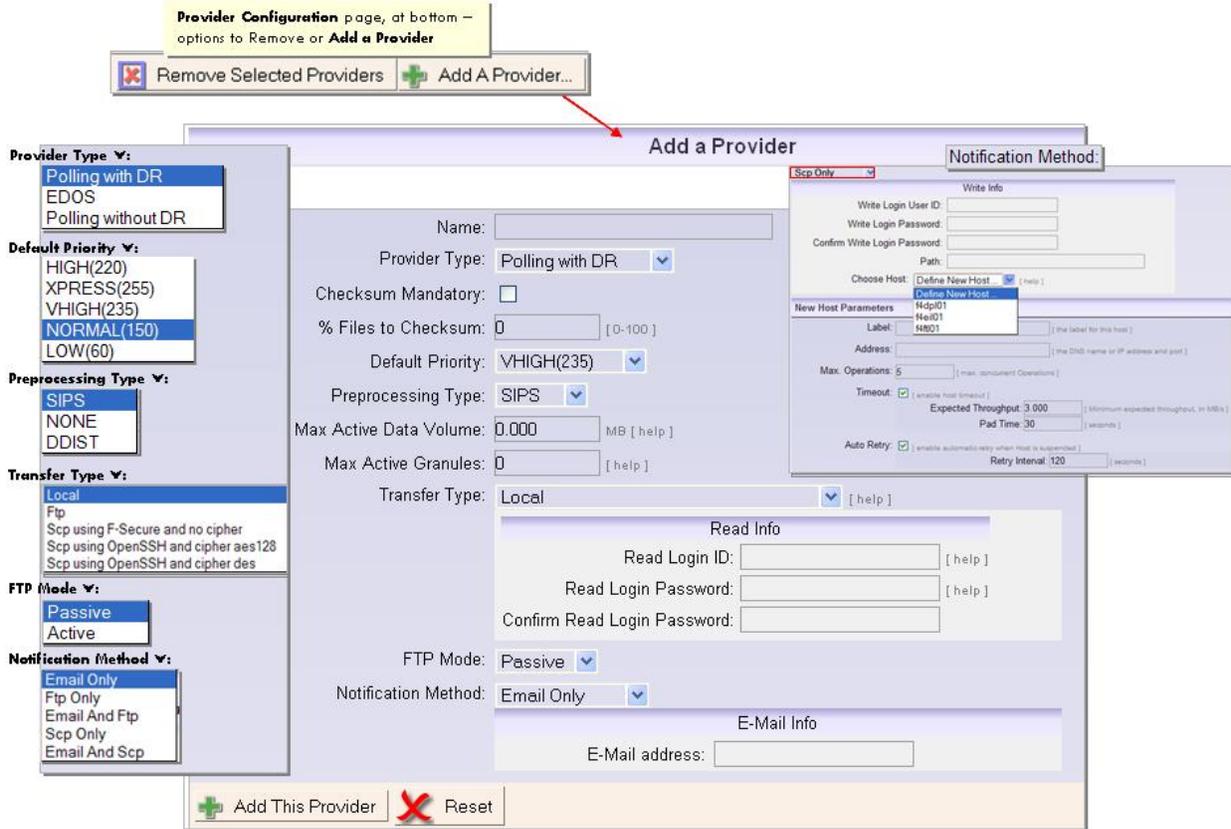
- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Configuration** menu is expanded.
  - 2 Click on the **Providers** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Provider Configuration** page is displayed.
  - 3 Click on the **Provider** name.
    - **The Edit a Provider** Configuration page is displayed.
  - 4 Locate the **Existing Polling Locations** section (at page bottom).
  - 5 Click on the checkbox next to the polling location name to be removed.
    - A checkmark is placed in the checkbox.
    - Multiple selections are accepted.
  - 6 At the bottom of the screen, click the **Remove Selected Polling Locations** button.
  - 7 A Confirmation screen is displayed. Select **OK**
    - Changes are accepted
- 

### 13.5.1.5 Add a Data Provider

---

- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
  - The Configuration menu is expanded.
- 2 Click on the **Providers** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Provider Configuration** page is displayed.
- 3 On the **Provider Configuration** page, click on the **Add A Provider** button at the bottom of the existing provider list.

- The **Add a Provider** (Figure 13.5-4) page is displayed.



**Figure 13.5-4. Add a Provider Page**

**NOTE:** EDOS Providers have several special rules:

- A Processing Type is not allowed – automatically set to “NONE” and is enforced when adding the Provider.
- FTP Transfer Type and FTP Notification methods can only be used – automatically enforced within the GUI.

**4** In the **Name** field enter a unique provider name for this provider.

- Already existing names will be rejected by the database.

**5** Select the **Provider Type** from the pull-down window.

- If you select...
  - **EDOS, Preprocessing Type** will become **NONE**;
  - **Transfer Type** will become **FTP**;
  - **Notification** method will become **FTP Only**.
- If you select...

- **Polling without DR**, a **VersionedDataType** drop-down list will appear on the page for operator to select the ESDT this provider will ingest from a predefined list of polling without DR ESDTs;
  - the **Checksum Mandatory** checkbox will be unchecked and disabled, the **% Files to Checksum** will be set to 0 and disabled;
  - the **Preprocessing Type** will become **NONE** and
  - **Notification Method** will become **NONE**.
- These Provider Type options cannot be changed.
- 6** If applicable, click the checkbox for **Checksum Mandatory**:
- If this checkbox is checked, the Data Provider must provide **checksum** information in the PDR, regardless of the “% of Checksum Files” entered.
  - If you would like to **checksum at less than 100%, disable checksum mandatory and enter the desired percent** in the textbox.
- 7** Select one of the following default priorities from the **Default Priority** pull-down window:
- **LOW (60), NORMAL (150), HIGH (220), VHIGH (235), XPRESS (255)**.
- 8** Select **Preprocessing Type** from the pull-down window.
- **NONE, SIPS, DDIST**
- 9** Enter the maximum active data volume (in MB) in the **Max Active Data Volume** field that can be processed at the same time on this provider.
- The Ingest Service uses the maximum data volume and number of granules to limit the amount of the work which it will activate for a provider.
  - Ingest will activate a new granule for an active ingest request when the amount of work for the provider that is currently in progress reaches one of the configured limits.
  - New granules will be activated as granules complete and slots are opened up.
- 10** Enter the maximum number of granules in the **Max Active Granules** field that can be processed at the same time.
- New granules will be activated as granules complete and slots are opened up.
  - Note: There are overall limits on the total amount of work in progress, across all providers, which may further limit how much work is activated.
- 11** Select the **Transfer Type** from the pull-down window.
- a.** If data transfer will be **FTP (or SCP)**, the operator must enter **Read Info** parameters in the area just below the Transfer Type listbox.

- If this information is not filled out, when a polling location is added, the operator will not be able to select ftp as the transfer method.
- 12** Select **FTP Mode** (FTP Host only) from the listbox.
- **Active** or **Passive**.
- 13** Select the **Notification Method** from the listbox. Depending on your selection, the appropriate parameter related box(es) will appear (Figure 13.5-4) below the drop-down list:
- **Email Only**: enter a valid Email address in the **E-Mail Info** field.
  - **FTP only or SCP only**: enter the Write Info login information (Write Login User ID, Write Login Password, Write Login Password Confirmation, the directory Path and then Choose Host information.
    - Pick an existing, pre-configured **FTP host** as defined in the FTP Host Configuration page from the pull-down window: When you select the desired host, an information box is displayed, showing the host's login information, IP address, and other details:
  - **Local**: Enter the **local disk directory**. NOTE: no path or Read Info entry is required.
  - **Email and FTP, or Email and SCP**: enter the **E-Mail information** and **write login information (Write Login User ID, Write Login Password and Write Login Password Confirmation)**, the directory **Path** and the **Choose Host** information.
- 14** Click the **Add This Provider** button, at bottom of the Add a Provider page.  
Note: Polling locations can not be added until the provider has been added.
- A confirmation screen is displayed. Select **OK**
  - The Provider Configuration page is displayed.
- 15** Select the new provider just entered.
- **Edit a Provider** detail page is displayed.
- 16** At the bottom of the page, click **Add a Polling Location** button.  
Note: The provider will not become active until at least one polling location is added.
- **Add a Polling Location** page is displayed.
- 17** Enter a unique name for the **Polling Location Name**.
- Names that already exist for this polling location will be rejected by the database.
- 18** Enter the **Source Polling Path**.
- This is the pathname from which to transfer the PDR files.
- 19** Enter the **Polling Frequency** in seconds.
- The minimum value is 120 seconds.
- 20** Select whether or not this Polling Location is **DPL Ingest Enabled**.

- A checkmark is placed in the checkbox.
- 21** Choose the **Polling Method** from the pull-down list of pre-configured hosts.
- Selecting **FTP Host** will cause an information box to be displayed, showing the host’s login information, IP address, and other details.
  - Selecting **Local Disk** will not require additional (the directory path is already provided at the top of the page).
- 22** Click the **Add Polling Location** button at the bottom of the screen.
- 

### 13.5.2 Data Type Configuration

Any ECS collection is eligible for DPL ingest. ECS collections are added via the DataPool Maintenance GUI. Using this GUI, the DAAC user is allowed to configure whether to publish the granules for the collection and/or whether to ignore XML metadata validation warnings during ingest.

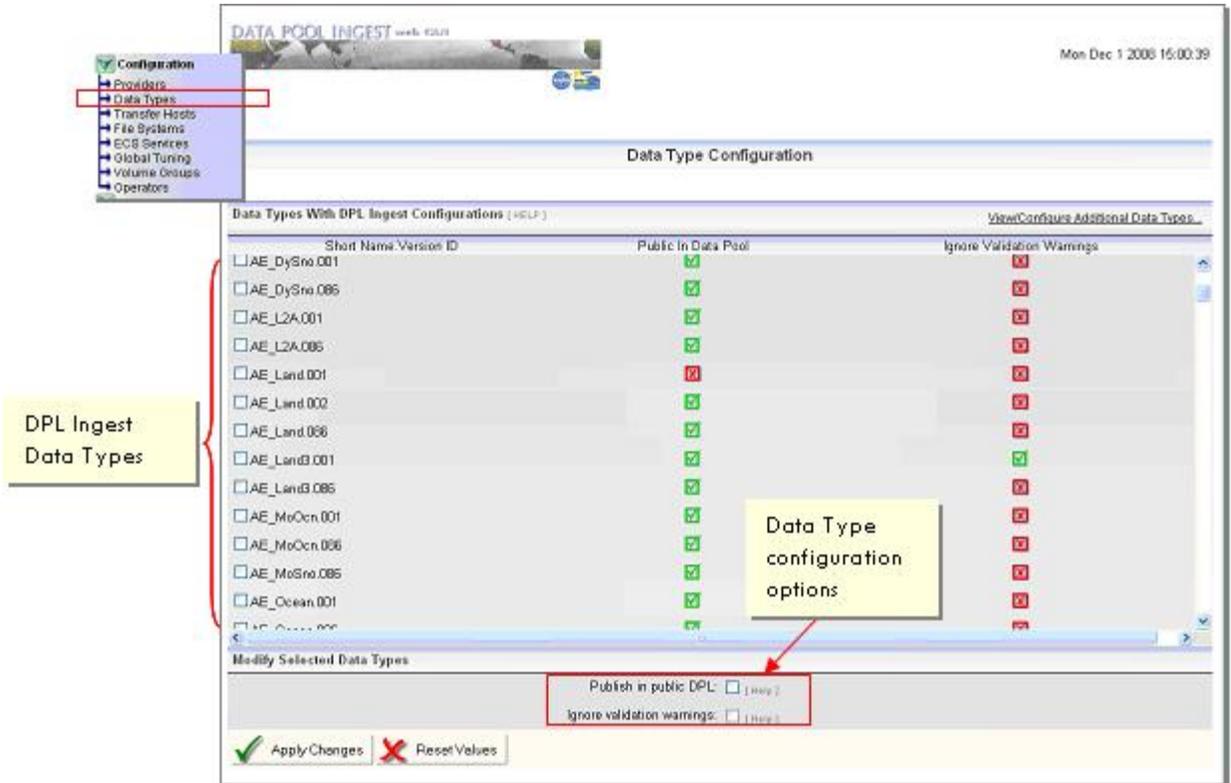
The Data Type Configuration page, Data Types With DPL Ingest Configurations options allows the DAAC users to change the default attributes. Table 13.5-4 describes the available fields on the Data Type Configuration page.

**Table 13.5-4. Data Type Configuration Page Field Descriptions**

Field Name	Entry	Description
Short Name.Version ID	Not Editable	Data Type identifier or name. Version number of the data type (identifier and version id is separated by a period)
Public In Data Pool	Editable	Indicates whether or not to “publish data” for this data type in the public Data Pool following successful Ingest.
Ignore Validation Warnings	Editable	If a granule of a given data type has metadata validation warnings, indicates whether or not to send email notifications and save metadata file to a holding directory.

### 13.5.2.1 Changing Data Types

- 1 Click the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Configuration** menu is expanded.
- 2 Click the **Data Types** link to display the **Data Type Configuration** page (Figure 13.5-5).



**Figure 13.5-5. Data Type Configuration Page**

- Displayed, is the last defined **Data Type Configurations** in the **Data Types With DPL Ingest Configurations** section, whose configurations have been altered to support non-default options. **To configure data types in the list:**
    - ▶ Click the **checkbox** of the desired **data type(s)**.
    - ▶ Enter **new parameters**
- 3 Click on the **Apply Changes** button to **Modify Selected Data Types**.
    - A Confirmation prompt is displayed. Select **OK**.

### 13.5.2.2 Changing Data Types Attributes

---

- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Configuration** menu is expanded.
  - 2 Click the **Data Types** link to display the Data Type Configuration page (Figure 13.5-5).
    - The Data Types With DPL Ingest Configurations whose configurations have been altered to support non-default options displays.
    - If the Data Type you want to change is not listed, select the View/Configure Additional Data Types link. This will display the list of Data Types without DPL Ingest Configurations.
  - 3 Select each **Data Type** by clicking on the checkbox next to the **Short Name Version ID**.
  - 4 Scroll to the bottom of the screen until the Modify Selected Data Types or the Configure selected Data Types section appears.
  - 5 Make the desired changes for the following parameters.
    - **Publish in Public DPL.** Indicates whether or not to “publish data” for this data type in the public Data Pool following successful Ingest. Place a checkmark to select this option by clicking on the checkbox.
    - **Ignore Validation warnings.** Selection of this parameter will allow ingest to ignore warnings received from the XML Validation Utility for the selected ESDT. Place a checkmark to select this option by clicking on the checkbox.
  - 6 Click on the **Apply Changes** button.
    - A Confirmation prompt is displayed. Select **OK**.
    - Parameters for the selected **Data Types** are change to the new settings.
- 

### 13.5.3 Transfer Host Configuration

The **Transfer Host** link allows the operator to manage SCP, FTP, and Local hosts for general use in the Data Pool Ingest system. These hosts can be referenced when defining polling locations or notification hosts. Table 13.5-5 provides a list of the SCP and FTP related filed descriptors.

In addition, if the host ip-addresses are referenced within PDRs as the source locations for granule files, DPL Ingest will automatically refer to their definition to obtain time out and retry parameters.

In cases where a host has not been explicitly defined, the ingest operator will be able to define default time-out and retry parameters for SCP or FTP hosts. If a request is sent through processing with a host configured in the PDR that does not show up on the GUI (as a configured host), a new host will automatically be added to the list of SCP/FTP Hosts with the name UNDEFHOST\_[Provider]\_[RequestID]. Default host configuration parameters will be applied to the new host until the operator chooses to modify them.

The Transfer Host, Host Configuration page has five working sections that allow the DAAC to add SCP or FTP hosts names and suitable configurations; ability to edit and/or remove hosts; change the default parameters for all SCP or FTP hosts including the LOCAL hosts. These sections are:

- Existing FTP Hosts.
- Existing SCP Hosts.
- Default FTP Host Configurations.
- Default SCP Host Configurations.
- Local Host Configurations.

The SCP or FTP Host related field descriptions are described in the Table 13.5-5:

**Table 13.5-5. SCP or FTP Host Page Related Field Descriptions**

Field Name	Entry	Description
Label	Required	A unique identifier for the host
Address	Required	An IP address or the canonical name and port (if needed) of an FTP host
FTP Mode	Required <i>For FTP only</i>	Whether the FTP host will be considered Active or Passive. This item does not appear on the form to Add a SCP Host.
Max Operations	Required	Total number of operations that can occur, simultaneously, on the host. If this field is left empty a default value will be supplied.
Timeout	Optional	Whether or not to allow a host to timeout if operations of a particular size take too much time to complete
Expected Throughput	Required if timeout is flagged	Expected amount of MBs of a granule to be processed during the configured pad time. If this field is left empty a default value will be supplied.
Pad Time	Required if timeout is flagged	Time (in seconds) a configured chunk of data should be processed before raising a timeout alert. If this field is left empty a default value will be supplied.
Auto Retry	Optional	Whether or not to retry an action that failed or generated an error on the host
Retry Interval	Required if Auto Retry is flagged	Time in between retries on the host. If this field is left empty a default value will be supplied.

### 13.5.3.1 Remove FTP or SCP Transfer Hosts

- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Configuration** menu is expanded.
- 2 Click on the **Transfer Hosts** link in the navigation frame of the **DPL Ingest GUI**.
  - **The Host Configuration** page (Figure 13.5-6) is displayed.

The screenshot shows the 'Host Configuration' page with the following sections:

- Existing FTP Hosts:** A table with columns: Label, Address, Max. FTP Operations, Timeout (Expected Throughput + Pad Time), and Auto Retry Interval. It lists three hosts: NSIDC, f4dpi01, and f4eil01.
- Existing SCP Hosts:** A table with columns: Label, Address, Max. SCP Operations, Timeout (Expected Throughput + Pad Time), and Auto Retry Interval. It lists three hosts: f4dpi01, f4eil01, and f4r01.
- Default FTP Host Configurations:** A summary of default settings for FTP hosts, including Max. FTP Operations: 5, Timeout: 3.000MB/s + 30s, and Auto Retry Interval: 120s.
- Default SCP Host Configurations:** A summary of default settings for SCP hosts, including Max. SCP Operations: 5, Timeout: 3.000MB/s + 30s, and Auto Retry Interval: 120s.
- Local Host Configurations:** A summary of default settings for local operations, including Max. Local Operations: 5, Timeout: 3.000MB/s + 30s, and Auto Retry Interval: 120s.

**Figure 13.5-6. Host Configuration Page**

- Displays five related **Host Configurations** sections.

- 3 Click the checkbox next to the **host name** of the existing FTP or SCP Host(s) to be removed (multiple selections are accepted).
    - A checkmark is placed in the checkbox.
  - 4 Click on the **Remove Selected Hosts** button.
    - A Confirmation prompt is displayed. Select **OK**
    - The selected hosts are removed.
- 

### 13.5.3.2 Add an FTP or SCP Transfer Host

---

- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Configuration** menu is expanded.
- 2 Click on the **Transfer Hosts** link in the navigation frame of the **DPL Ingest GUI**.
  - **The Host Configuration** page (Figure 13.5-6) is displayed.
  - Displays five related **Host Configurations** sections.
- 3 In the **Existing FTP Hosts** or **Existing SCP Hosts** sections click on the **Add a FTP Host** or **Add a SCP Host** button.
  - The **FTP Host Configuration-add a new host** (or **SCP Host Configuration-add a new host**) screen is (Figure 13.5-7) displayed.

**Figure 13.5-7. FTP (or SCP) Host Configuration Add a New Host Page**

- 4 Enter a unique name in the **Label** field.
  - Existing names will be rejected by the database.

- 5 Enter the **IP Address** (e.g., 192.168.2.1) or the **DNS** (canonical name (e.g., my.ftp.host). including the **Port** number (on the same line, separated by a colon) in the **Address** field.
  - 6 Enter the **Max. Operations** parameter.
    - This value represents the maximum number of concurrent FTP or SCP operations that this host may initiate.
  - 7 Click on the **Timeout** checkbox (optional field).
    - If this checkbox checked, text boxes will be displayed for the **Expected Throughput** (in mb/s) and **Fixed Overhead** (seconds) values: Enter these values.
  - 8 Click on the **Auto Retry flag** (optional field).
    - If this checkbox checked, a textbox will be displayed to set the **Retry Interval** value (the number of minutes to wait between retries of this host if it becomes suspended by the server. Enter this value.
  - 9 Select the **Add This Host** button at the bottom of the screen.
    - The new entry will be displayed on the **FTP Host Configuration** page.
- 

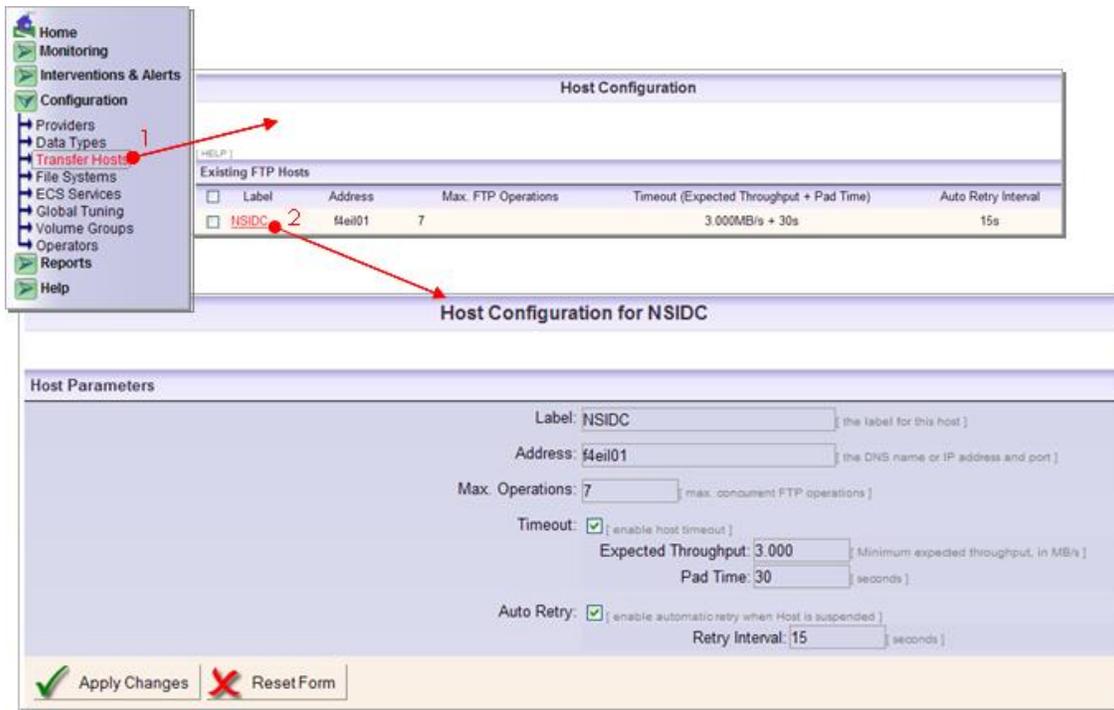
### 13.5.3.3 Edit SCP or FTP Transfer Host

---

- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Configuration** menu is expanded.
- 2 Click on the **Transfer Hosts** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Host Configuration** page displays its five related **Host Configurations** sections.

3 In the **Existing FTP Hosts** or **Existing SCP Hosts** section, click on the underscored Label (name) of the desired host.

- The **Host Configuration for [LabelName]** page (Figure 13.5-8) is displayed.



**Figure 13.5-8. Host Configuration for [LabelName] Page**

4 Edit the desired **fields**, then click the **Apply Changes** button at the bottom of the page.

- Changes will be implemented.

Local Host configuration parameters are used during any local transfer operations. The maximum Local operations limit how many local copies will occur concurrently. The timeout values apply to each individual local copy operation.

Default SCP and FTP Host configuration values are used to fill in default values whenever a new SCP or FTP host is added, or if a field is left empty when updating an existing SCP or FTP host.

### 13.5.3.4 Edit Local and Default Host Configuration

- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Configuration** menu is expanded.
- 2 Click on the **Transfer Hosts** link in the navigation frame of the **DPL Ingest GUI**.
  - **The Host Configuration** page is displayed.
- Displays five related **Host Configurations** sections.
- 3 In the **Default FTP Host Configurations** section, the **Default SCP Host Configurations** section or **Local Host Configurations** section, click the **Edit** button to display their detail pages.
  - The **Host Configuration Details Page** is displayed (Figure 13.5-9).

The screenshot displays the 'Host Configuration for FTPDEFAULT' page. At the top, there are two tabs: 'Host Configuration for SCPDEFAULT' and 'Host Configuration for FTPDEFAULT'. Below the tabs is the 'Host Parameters' section, which contains the following fields:

- Label: FTPDEFAULT [the label for this host]
- Address: FTPDEFAULT [the DNS name or IP address and port]
- Max. Operations: 5 [max. concurrent FTP operations]
- Timeout:  [enable host timeout]
- Expected Throughput: 3.000 [Minimum expected throughput, in MB/s]
- Pad Time: 30 [seconds]
- Auto Retry:  [enable automatic retry when Host is suspended]
- Retry Interval: 120 [seconds]

At the bottom of the 'Host Parameters' section, there are two buttons: 'Apply Changes' (with a green checkmark) and 'Reset Form' (with a red X).

Below the 'Host Parameters' section is the 'LOCAL Host Configurations' section, which contains the following fields:

- Max. Operations: 5 [max. concurrent local operations]
- Timeout:  [enable host timeout]
- Expected Throughput: 3.000 [Minimum expected throughput, in MB/s]
- Pad Time: 30 [seconds]
- Auto Retry:  [enable automatic retry when Host is suspended]
- Retry Interval: 120 [seconds]

A yellow box on the left side of the page contains the following text:

**Comparisons:**  
The **SCPDefault** and **FTPDefault** host parameters information displays the same fields. The **LOCAL** host configurations has no Label or IP Address data requirements

Two red arrows point from the yellow box to the 'Label' and 'Address' fields in the 'Host Parameters' section.

**Figure 13.5-9. Host Configuration Details Page**

- FTP and SCP Hosts details display is similar.
  - The LOCAL Host Configuration page is displayed with varying information.
- 4 Edit the desired fields, then click the **Apply Changes** button at the bottom of the screen.
    - Changes will be implemented.

### 13.5.4 File System Configuration

The File System Configuration page allows the operator to configure warning and suspension thresholds for any configured Archive or Data Pool File Systems. This page displays related information for both file systems, as illustrated in Figure 13.5-10:

File System Configuration			
[ HELP ]			
<b>XMLArchive</b> /stornext/smallfiles			
Cache Warning Threshold	The percentage of cache used which will trigger an operator alert.	<input type="text" value="88"/>	[percent]
Cache Full Threshold	The percentage of cache used which will trigger an operator alert and suspend the Archive File System	<input type="text" value="99"/>	[percent]
Cache Warning Low Watermark	The percentage of cache used that will clear the Archive Cache Warning Alert	<input type="text" value="85"/>	[percent]
Cache Full Low Watermark	The percentage of cache used that will clear the Archive Cache Full Alert	<input type="text" value="95"/>	[percent]
<b>Amfs1</b> /stornext/amfs1/			
Cache Warning Threshold	The percentage of cache used which will trigger an operator alert	<input type="text" value="76"/>	[percent]
Cache Full Threshold	The percentage of cache used which will trigger an operator alert and suspend the Archive File System	<input type="text" value="80"/>	[percent]
Cache Warning Low Watermark	The percentage of cache used that will clear the Archive Cache Warning Alert	<input type="text" value="60"/>	[percent]
Cache Full Low Watermark	The percentage of cache used that will clear the Archive Cache Full Alert	<input type="text" value="70"/>	[percent]
<b>Browfs</b> /stornext/browfs/			
Cache Warning Threshold	The percentage of cache used which will trigger an operator alert	<input type="text" value="90"/>	[percent]
Cache Full Threshold	The percentage of cache used which will trigger an operator alert and suspend the Archive File System	<input type="text" value="99"/>	[percent]
Cache Warning Low Watermark	The percentage of cache used that will clear the Archive Cache Warning Alert	<input type="text" value="88"/>	[percent]
Cache Full Low Watermark	The percentage of cache used that will clear the Archive Cache Full Alert	<input type="text" value="95"/>	[percent]
<b>Snfs1</b> /stornext/snfs1/			
Cache Warning Threshold	The percentage of cache used which will trigger an operator alert	<input type="text" value="90"/>	[percent]
Cache Full Threshold	The percentage of cache used which will trigger an operator alert and suspend the Archive File System	<input type="text" value="99"/>	[percent]
Cache Warning Low Watermark	The percentage of cache used that will clear the Archive Cache Warning Alert	<input type="text" value="88"/>	[percent]
Cache Full Low Watermark	The percentage of cache used that will clear the Archive Cache Full Alert	<input type="text" value="95"/>	[percent]
<input checked="" type="checkbox"/> Update <input checked="" type="checkbox"/> Reset			
[ HELP ]			
<b>DataPool File System</b>			
Warning Threshold	The percentage of cache used which will trigger an operator alert	<input type="text" value="90"/>	[percent]
Warning Low Watermark	The percentage of cache used that will clear the File System Warning Alert	<input type="text" value="81"/>	[percent]
<input checked="" type="checkbox"/> Update <input checked="" type="checkbox"/> Reset			

**Figure 13.5-10. File System Configuration**

The File System Configuration page display information is defined in the Table 13.5-6 for all fields shown on its page for the Archive and Data Pool File Systems:

**Table 13.5-6. File Systems Configuration Page – Field Descriptions**

<b>Field Name – Archive File System</b>	<b>Entry</b>	<b>Description</b>
Cache Warning Threshold	Required	The percentage of cache used which will trigger an operator alert. This must be below the Cache Full Threshold and above the Cache Warning Low Watermark.
Cache Full Threshold	Required	The percentage of cache used which will trigger an operator alert and suspend the Archive File System. This must be above the other threshold and watermarks.
Cache Warning Low Watermark	Required	The percentage of cache used that will clear the Archive Cache Warning Alert. This must be below the Cache Warning Threshold and the Cache Full Low Watermark.
Cache Full Low Watermark	Required	The percentage of cache used that will clear the Archive Cache Full Alert. This must be below the other watermark and thresholds.
Warning Threshold	Required	Warning Threshold the percentage of cache used which will trigger an operator alert.
Warning Low Watermark	Required	The percentage of cache used that will clear the File System Warning Alert.

#### **13.5.4.1 Change File System Threshold**

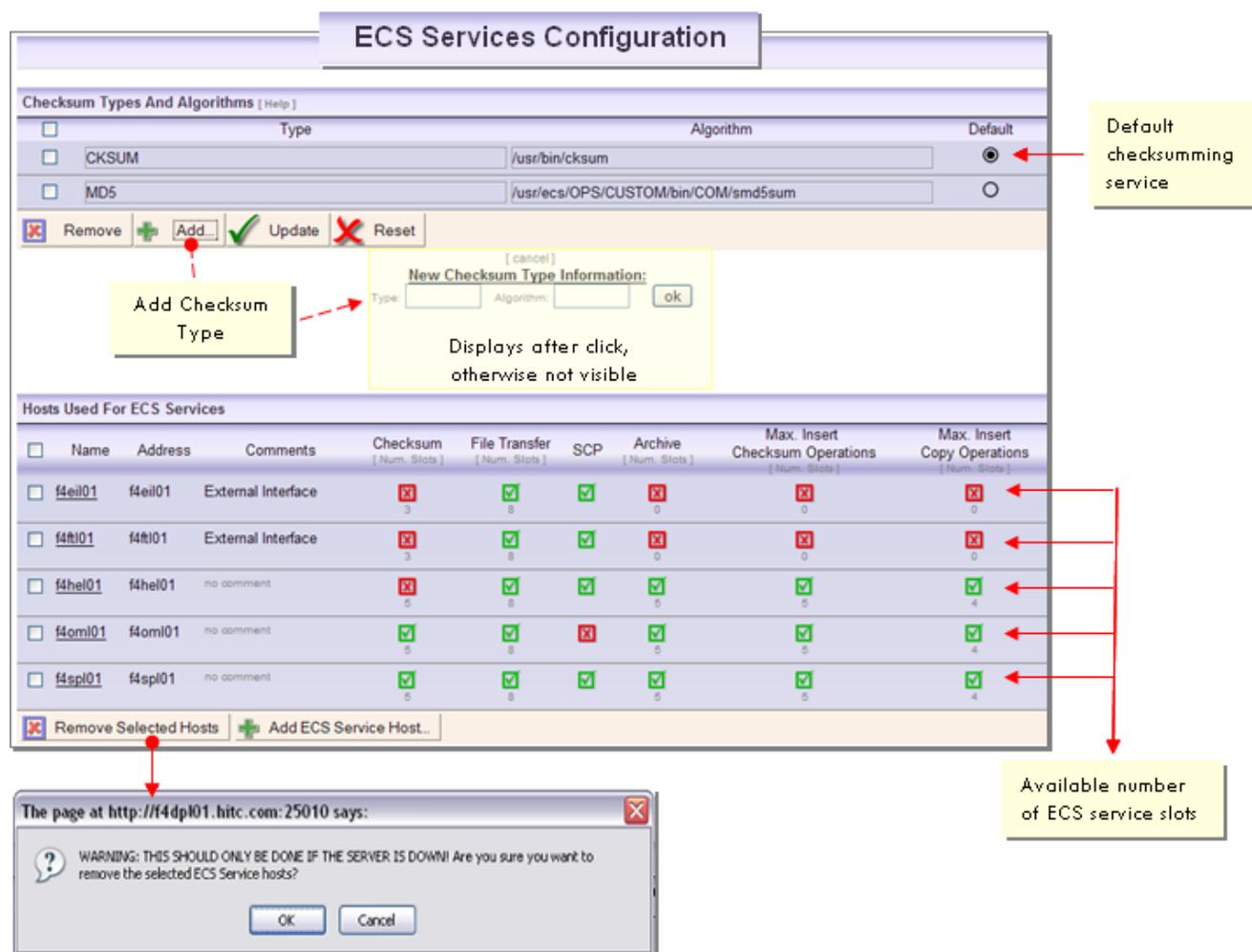
- 
- 1** Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Configuration** menu is expanded.
  - 2** Click on the **File Systems** link in the navigation frame of the **DPL Ingest GUI**.
    - The **File System Configuration** page (Figure 13.5-10) is displayed.
  - 3** Enter the **desired changes** in the configurable fields.
    - The change appears in the field.
  - 4** Click the **Update** button at the bottom of the page.
    - The change is accepted.
-

### 13.5.5 ECS Service Configuration

The operator can perform several activities from the ECS Services Configuration page (Figure 13.5-11):

- can configure parameters of ECS services (Tables 13.5-7 and 13.5-8), on a host-specific basis;
- can be set a default checksum type and algorithm for use by the checksumming service hosts;
- with proper functionality configuration, can allow the operator to select the host from which AIM will be run,

**NOTE:** The initial **ECS Services Configuration** page (Figure 13.5-11) is a listing (view) only page. Modifications cannot be made from this page unless by an authorized operator. The list shows which services are enabled for each host.



**Figure 13.5-11. ECS Services Configuration Page**

The **ECS Services Configuration** page contains the following two sections:

1. **Checksum Types and Algorithm Configuration.** The operator can add, edit, and delete checksum types and their specific algorithms, and specify if the checksum type will be used as the default type.
2. **Host Used For ECS Services.** The operator can view, add, and edit the attributes of the ECS Service host and can configure each of the services that run on that host.

Table 13.5-7 provides a detailed description of the Host Used for ECS Services:

**Table 13.5-7. ECS Services Configuration Field Description**

Field Name	Description
Name	The unique name given for this ECS Service Host
Address	The IP address or DNS name and port of the host
Comments	Any descriptive comment text given for this host.
Checksum	Each of these ECS Services is indicated by checkmark as enabled (green <input checked="" type="checkbox"/> ) or disabled (red <input type="checkbox"/> ) for each host. The number associated with each indicator represents the number of available service slots.
File Transfer	
SCP	
Archive	
Band Extractions	
Max. Insert Checksum Operations	The maximum number of Insert Checksum Operations that will be performed by this host (checksum performed before archiving)
Max. Insert Copy Operations	The maximum Insert Copy operations that will be performed by this host.

The ECS Services Configuration page allows the Full-Capability Operator the ability to configure other attributes of the ECS Service Hosts from the ECS Service Configuration: Add Service Host details page (Figure 13.5-12). Table 13.5-8 provides a detailed description of the Add Service Host details page.

**ECS Service Configuration: Add Service Host**

Global Parameters

Label:

Address:

Port:  number

Auto Retry:

Comments:

Checksum

Enable this service:

Max. Concurrent Checksum Operations:  number

Expected throughput:  MB/s [help]

Checksum Timeout Pad Time:  seconds [help]

File Transfer

Enable this service:

Enable SCP:

Max. Concurrent File Transfers:  number [help]

Archiving

Enable this service:

Max. Concurrent Archive Operations:  number [help]

Expected Throughput:  MB/S [help]

Archive Timeout Pad Time:  seconds [help]

Band Extraction

Enable this service:

Max. Concurrent Band Extractions:  number [help]

Band Extraction Timeout Value:  seconds [help]

Insert Checksum

Max. Concurrent Insert Checksum Operations:  number [help]

Insert Copy

Max. Concurrent Insert Copy Operations:  number [help]

Expected Throughput:  MB/S [help]

Insert Copy Timeout Pad Time:  seconds [help]

**Figure 13.5-12. ECS Services Configuration: Add Service Host Page**

**Table 13.5-8. ECS Services Configuration: Add Service Host - Field Descriptions  
(1 of 2)**

Field Name	Entry	Description
<b>Global Parameters</b>		
Label	Required	A unique name for the ECS Service host, preferably based on the actual host name.
Address	Required	The IP address (e.g., 127.5.2.88) or canonical name (e.g., f4eil01.hitc.com) of the host.
Port	Required	The port number associated with this service. Hint: the port can be determined by looking at the Quickserver's configuration file.
Auto Retry	Optional	Whether or not to automatically retry processing of actions for all services enabled on this host.
Comment	Optional	The description of the host and its services.
<b>Checksum</b>		
Enable this service	Optional	Whether or not to use this service.
Max. Concurrent Checksum Operations	Required if enabled	The maximum number of concurrent checksum operations that may be performed on this host at any one time.
Expected Throughput	Required if enabled	The expected data throughput for checksum operations. This is to identify stuck operations,
Checksum Timeout Pad Time	Required if enabled	The additional delay for a checksum operation before it is considered timed-out.
<b>File Transfer</b>		
Enable this service	Optional	Whether or not to use this service.
Enable SCP	Optional	Whether or not to use SCP as the file transfer method. This service takes effect only if "Enable this service" is checked.
Max. Concurrent File Transfers	Required if enabled	The maximum number of concurrent file transfers that may be executed on this host.
<b>Archiving</b>		
Enable this service	Optional	Whether or not to use this service.
Max. Concurrent Archive Operations	Required if enabled	The maximum number of concurrent archive operations that may be executed on this host.
Expected Throughput	Required if enabled	The expected data throughput for archive operations. This is to identify stuck operations.
Archive Timeout Pad Time	Required if enabled	The additional delay for an archive operation before it is considered timed-out.

**Table 13.5-8. ECS Services Configuration: Add Service Host - Field Descriptions  
(2 of 2)**

Field Name	Entry	Description
Band Extraction		
Enable this service	Optional	Whether or not to use this service.
Max. Concurrent Band Extractions	Required if enabled	The maximum number of concurrent band extraction operations that may be executed on this host.
Band Extraction Timeout Value	Required if enabled	The number of seconds for a band extraction operation before it is considered timed-out.
Insert Checksum		
Max. Concurrent Insert Checksum Operations	Optional	The maximum number of concurrent Insert Checksum operations that may be executed on this host.
Insert Copy		
Max. Concurrent Insert Copy Operations	Required	The maximum number of concurrent Insert Copy operations that may be executed on this host.
Expected Throughput	Required	The expected data throughput for Insert Copy operations. This is to identify stuck operations.
Insert Timeout Pad Time	Required	The additional delay for an Insert Copy operation before it is considered timed-out.

### 13.5.5.1 Remove Checksum Type

- 1 Click on the **Configuration** link of the **DPL Ingest GUI**.
  - The **Configuration** menu is expanded.
- 2 Click on the **ECS Services** link.
  - The **ECS Services Configuration** page is displayed (Figure 13.5-11).
  - The **ECS Services Configuration** page is a view only page. Individual settings cannot be entered using this initial page view.
- 3 In the **Checksum Types And Algorithms** section, click the checkbox next to the checksum type to be removed (multiple selections are accepted).
  - A checkmark appears in the checkbox.
- 4 Click on the **Remove** button.
  - A Confirmation prompt is displayed. Click **OK**.
  - The selected checksum(s) is removed.

### 13.5.5.2 Add Checksum Type

---

NOTE: There are two time-out parameters that the Ingest Service uses to determine when an operation should be considered overdue (i.e., timed-out) and cancels it. The two parameters are: (1) the expected throughput; (2) the time out pad time.

The Ingest Service will calculate the expected time of the operation for a granule by dividing the granule size by the expected throughput, and then add the time out padding. These parameters are only used to determine when an operation should be considered hung, so both the expected throughput and the time-out padding should be chosen pessimistically to avoid canceling operations that are just slow because of concurrent heavy workload.

---

- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
  - 2 Click on the **ECS Services** link of the **Configuration** menu.
    - The **ECS Services Configuration** page is displayed.
  - 3 In the **Checksum Types And Algorithms** section, click on the **Add** button.
    - The **New Checksum Type Information** screen (and its two input boxes) is displayed in the white space portion of the **Checksum Types And Algorithms** section.
  - 4 In the **New Checksum Type Information** section, click in the in the input box next to **Type**. Enter the **Checksum Type** information.
    - The checksum type entered will be displayed in the **Type** field.
  - 5 In the **New Checksum Type Information** section, click in the input box next to **Algorithm**. Enter the **Algorithm** information.
    - The Algorithm entered will be displayed in the **Algorithm** field.
  - 6 Click on the **ok** button.
    - The new checksum type and algorithm will be added to the **ECS Services Configuration** page.
  - 7 In the **Checksum Types And Algorithms** section of **ECS Services Configuration** page, review the default setting for the checksum. If the setting is not what you want, click on the desired **Checksum Default** button.
    - The desired default **Checksum Types and Algorithms** will be selected.
- 

### 13.5.5.3 Add an ECS Service Host Type

---

- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Configuration** menu is expanded.
- 2 Click on the **ECS Services** link in the navigation frame of the **DPL Ingest GUI**.
  - **The ECS Services Configuration** page is displayed.
- 3 In the **Hosts Used For ECS Services**, Click on the **Add ECS Service Host** button.

- The **ECS Services Configuration: Add Service Host** page (Figure 13.5-13 is displayed).

The screenshot shows the 'ECS Service Configuration: Add Service Host' page. At the top left is the 'DATA POOL INGEST web GUI' logo, and at the top right is the date and time 'Thu Jan 21 2010 15:46:03'. The main content area is divided into several sections:

- Global Parameters:** Includes fields for Label, Address, Port (with a 'number' hint), Auto Retry (checkbox), and a large text area for Comments.
- Checksum:** Includes 'Enable this service' (checkbox), 'Max. Concurrent Checksum Operations' (input field with '1' and 'number [help]' hint), 'Expected throughput' (input field with 'MB/s [help]' hint), and 'Checksum Timeout Pad Time' (input field with 'seconds [help]' hint).
- File Transfer:** Includes 'Enable this service' (checkbox), 'Enable SCP' (checkbox), and 'Max. Concurrent File Transfers' (input field with '1' and 'number [help]' hint).
- Archiving:** Includes 'Enable this service' (checkbox), 'Max. Concurrent Archive Operations' (input field with '1' and 'number [help]' hint), 'Expected Throughput' (input field with 'MB/s [help]' hint), and 'Archive Timeout Pad Time' (input field with 'seconds [help]' hint).
- Band Extraction:** Includes 'Enable this service' (checkbox), 'Max. Concurrent Band Extractions' (input field with 'number [help]' hint), and 'Band Extraction Timeout Value' (input field with 'seconds [help]' hint).
- Insert Checksum:** Includes 'Max. Concurrent Insert Checksum Operations' (input field with '1' and 'number [help]' hint).
- Insert Copy:** Includes 'Max. Concurrent Insert Copy Operations' (input field with '1' and 'number [help]' hint), 'Expected Throughput' (input field with 'MB/s [help]' hint), and 'Insert Copy Timeout Pad Time' (input field with 'seconds [help]' hint).

At the bottom of the form are two buttons: 'Add This Service Host' (with a green checkmark icon) and 'Cancel' (with a red X icon).

**Figure 13.5-13. ECS Services Configuration: Add Service Host Page**

- 4 In the **Global Parameters** section, perform the following to enter the server parameters:
  - Click the **Label** textbox. Enter a **unique name** for the ECS Service host.
  - Existing names will be rejected by the database.

- Click the **Address** textbox. Enter the **IP Address** (or the name) of the ECS Service host.
- Click the **Port** textbox. Enter the **port number** associated with the service ECS Service host.
- The port can be determined by looking at the quickserver's configuration file.
- Click the **Auto Retry** (optional) checkbox. A checkmark displays
- All services enabled will automatically retry processing in the event of failure.
- Click the **Comments** (optional) textbox. Enter a **description of the host** and its services.

**5** In the **Checksum** section, perform the following configurations:

- Click the checkbox next to the **Enable this service** (optional) label. A checkmark displays.
- If Checksum is enabled, complete the next steps, otherwise, go to step 6.
- Click the **Max. Concurrent Checksum Operations** textbox. Enter the **maximum number of checksum operations** that may be performed on this host at any one time.
- Click the **Expected Throughput** textbox. Enter the expected data throughput (MBs) for checksum operations. This will help to identify stuck operations.
- Click the **Checksum Timeout Pad Time** field. Enter additional delay time for a checksum operation before it is considered timed-out.

**6** In the **File Transfer** section, perform the following configurations:

- Click in the checkbox next to the **Enable this service** (optional) label. A checkmark displays.
- If File Transfer is enabled, complete the next steps, otherwise, go to step 7.
- Click the checkbox next to **the Enable SCP** label. A checkmark displays.
- Click the Max. Concurrent File Transfers field. Enter the maximum number of concurrent file **transfers** that may be executed on this host at any one time.

**7** In the **Archiving** section, perform the following configurations:

- Click the checkbox next to the **Enable this service** (optional) label. A checkmark displays.
- If Archiving is enabled, complete the next steps, otherwise, go to step 23.
- Click the **Max. Concurrent Archive Operations** field. Enter the maximum number of archive operations that may be performed on this host at any one time.
- Click the **Expected Throughput** field. Enter the expected data throughput (MBs) for archive operations. This will help to identify stuck operations.

- Click the **Archive Timeout Pad Time** field. Enter additional delay time for an archive operation before it is considered timed-out.
- 8** In the **Band Extraction** section, perform the following configurations:
- Click the checkbox next to the **Enable this service** (optional) label. A checkmark displays.
  - Click the **Max. Concurrent Band Extraction** field. Enter the maximum number of Band Extractions that may be performed on this host at any one time.
  - Click the **Band Extraction Timeout Value** field. Enter additional delay time for an Band Extraction operation before it is considered timed-out.
- 9** In the **Insert Checksum** section, perform the following configurations:
- Click the **Max. Concurrent Insert Checksum Operations** field and enter the **maximum number of concurrent checksum operations** that may be executed on this host at any one time.
- 10** In the **Insert Copy** section, perform the following configurations:
- Click the **Max. Concurrent Insert Copy Operations** field. Enter the maximum number of concurrent Insert Copy Operations that may be performed on this host at any one time.
  - Click the **Expected Throughput** field. Enter the expected data throughput (MBs) for Insert Copy operations. This will help to identify stuck operations.
  - Click the **Insert Copy Timeout Pad Time** field. Enter additional delay time for an Insert Copy operation before it is considered timed-out.
- 11** Select the **Add This Service Host** button at the bottom of the page.
- A Confirmation prompt is displayed. Select **OK**.
  - The new entry will be displayed on the **ECS Service Configuration** page.
-

#### 13.5.5.4 Edit an ECS Service Host Type

---

- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Configuration** menu is expanded.
  - 2 Click on the **ECS Services** link in the navigation frame of the **DPL Ingest GUI**.
    - **The ECS Services Configuration** page is displayed.
  - 3 In the **Hosts Used For ECS Services**, click on the name of the **ECS Service Host** to be edited.
    - The **ECS Services Configuration: Service Host Detail [Name]** page is displayed.
    - Any or all parameters listed on the **ECS Services Configuration: Service Host Detail [Name]** page can be edited from this page.
  - 4 In the **Global Parameters** section, enter the desired changes.
  - 5 In the **Checksum** section, enter the desired changes.
  - 6 In the **File Transfer** section, enter the desired changes.
  - 7 In the **Archiving Service** section, enter the desired changes.
  - 8 In the **Band Extraction Service** section, enter the desired changes.
  - 9 In the **Insert Checksum** section, enter the desired changes.
  - 10 In the **Insert Copy Service** section enter the desired changes.
  - 11 Select the **Apply Changes** button at the bottom of the page.
    - A Confirmation prompt is displayed. Select **OK** to implement changes.
- 

#### 13.5.6 Global Tuning Configuration

The Global Tuning link allows the operator to configure the Parameter Name and Value of the global tuning parameters in the Data Pool Ingest database. The parameters are listed along with their descriptions in Table 13.5-9.

There are three sections of the Global Tuning page. The first section titled Global Admin Tuning Parameters, consists of tuning parameters that can be edited by an operator with Ingest Admin Tuning privileges. The second section titled Global Tuning Parameter Configuration requires Tuning privileges. The third section titled Database Connection Configuration requires Tuning privileges. If the logged in operator does not have permission to edit a section, the fields and buttons for that section will be disabled.

Dynamic parameters are those that are applied to the Ingest Service without having to restart the Ingest Service. The Ingest Service will automatically apply these parameters within 1 minute of having been set in the database. Static parameters are those that require the Ingest Service to be restarted.

**Table 13.5-9. Global Tuning Parameter Descriptions (1 of 4)**

Parameter Name	Dynamic/ Static	Description
<b>Global Admin Tuning Parameters:</b>		
ARCHIVE_CACHE_CHECK_INTERVAL	Dynamic	Number of seconds between checks on archive cache.
DAYS_TO_KEEP_COMPLETED_NOTIFICATIONS	Dynamic	Number of days to keep completed notifications in InNotification table
DEFAULT_ALERT_RETRY_SECS	Dynamic	Default number of seconds to wait in between retrying a situation that caused a suspension
ENABLE_NOTIFICATION_PERFORMANCE_LOG	Dynamic	Indicates whether notification performance log has been enabled
ENABLE_POLLING_PERFORMANCE_LOG	Dynamic	Indicates whether polling performance log has been enabled
ENABLE_PROCESSING_PERFORMANCE_LOG	Dynamic	Indicates whether processing performance log has been enabled
FAIL_MULTIPLE_LINKAGE_PH_GRANULE	Dynamic	Indicate whether to fail PH granules with linkage error due to multiple science granules referenced by a single local granule id.
GET_DPL_SPACE_MINS	Dynamic	Number of minutes to wait in between refreshing DPL free space info
HANDLE_MULTIPLE_LINKAGE_GRANULE	Dynamic	Indicates whether to fail (FAIL), to link to most recent insertTime (RECENT), to invoke and Operator Intervention (INTERV) for a Browse, PH, or QA granule which references multiple science granules by a single local granule id
MAX_NUM_FILES_IN_VOLUME_GROUP	Dynamic	Maximum number of files in a volume group
MAX_RETRY_CHECKSUM_VERIFY	Dynamic	Maximum number of allowable retries for a checksum verification error

**Table 13.5-9. Global Tuning Parameter Descriptions (2 of 4)**

Parameter Name	Dynamic/ Static	Description
MINS_TO_KEEP_COMPLETED_MESSAGES		Number of minutes to keep completed messages in the database
MINS_TO_KEEP_COMPLETED_REQS	Dynamic	Number of minutes before a completed request qualifies for archival
MONTHS_TO_KEEP_HIST_STATS_ALERTS	Dynamic	The retention time in months for keeping historic information for requests, alerts and throughput statistics
NUM_RETRIES_UR_ERROR	Dynamic	Number of times to retry UR Translation due to an error
RETRY_SECS_UR_ERROR	Dynamic	Number of seconds to wait in between retrying UR Translation on error
VOLUME_GROUP_MONITOR_INTERVAL	Dynamic	Time interval in house for processing server to monitor volume group changes
<b>Global Tuning Parameter Configuration:</b>		
CUSTOM_DATA_LOG_FULL_THRESHOLD	Dynamic	The percentage of space used which will trigger an operator warning alert on CUSTOM data log directory
DEFAULT_NUM_RETRIES	Dynamic	Default number of retries for an error condition where no error-specific number exists
DEFAULT_RETRY_INTERVAL	Dynamic	Default retry interval (seconds) where no error-specific interval exists
EDOS_SUCCESSFUL_PAN_DIR	Dynamic	EDOS directory in which successful PANs are to be stored
FAILED_CHECKSUM_HOLDING_DIR	Dynamic	Location of files that failed checksum verification. This directory needs to be monitored and when necessary, cleaned up.
IGNORE_ARCHIVE_ALERT	Dynamic	Still activate requests independent of archive status.
IGNORE_DPL_FS_DOWN	Dynamic	Indicates whether or not we activate requests that use a suspended file system

**Table 13.5-9. Global Tuning Parameter Descriptions (3 of 4)**

Parameter Name	Dynamic/ Static	Description
IIU_TIMEOUT_VALUE	Dynamic	The amount of time the server will wait for a request to IIU before assuming the request is lost
MAX_CONCURRENT_PREPROCESS	Dynamic	Maximum number of concurrent preprocessing operations
MAX_CONCUR_DPL_INSERT	Static	Maximum number of allowed concurrent DPL Insert processes for Ingest
MAX_CONCUR_IIU_PROCESSES	Dynamic	Maximum number of allowed concurrent IIU processes for Ingest
MAX_CONCUR_PDR_VALIDATIONS	Dynamic	Maximum number of allowed concurrent PDR validations for Ingest
MAX_CONCUR_SCP_OPS	Dynamic	Max number of concurrent SCP ops
MAX_CONCUR_XVU_PROCESSES	Dynamic	Maximum number of allowed concurrent XVU processes for Ingest
MAX_CONSEC_FS_ERRORS	Dynamic	Maximum number of permissible file system access errors for different granules prior to raising an alert
MAX_CONSEC_XFER_ERRORS	Dynamic	Maximum number of permissible transfer errors for different files (including PAN/PDRD) prior to raising an alert
MAX_CONSEC_XFER_ERRORS_PDR	Dynamic	Maximum number of permissible PDR transfer errors for different files prior to raising an alert
MAX_GRANS_WITH_SERV_ERR	Dynamic	Maximum of allowable number of the same type of error for an ECS service for different granules prior to raising an alert for that ECS Service
PROCESSING_MAX_GRANS	Dynamic	Maximum number of granules that can be in processing at once
PROCESSING_MAX_VOLUME	Dynamic	Maximum amount of data in MB that can be in processing at once
SMTP_HOST	Dynamic	Host on which the SMTP server resides

**Table 13.5-9. Global Tuning Parameter Descriptions (4 of 4)**

Parameter Name	Dynamic/ Static	Description
THROUGHPUT_STATS_INTERVAL	Dynamic	Number of minutes at which throughput statistics will be recorded
VALIDATION_WARNINGS_DIR	Dynamic	Directory where we will store metadata files for granules which had validation warnings returned by the XVU. This directory needs to be monitored and when necessary, cleaned up. Note: the directory is not automatically cleaned up it must be maintained manually.
VALIDATION_WARNINGS_EMAIL	Dynamic	Comma separated list of email addresses to send granule validation warnings to.
XVU_TIMEOUT_VALUE	Dynamic	The amount of time the server will wait for a request to XVU before assuming the request is lost
<b>Database Connection Configuration</b>		
MAX_AIM_DB_CONN	Dynamic	Maximum database connection pool size for AIM DB
MAX_DPL_DB_CONN	Dynamic	Maximum database connection pool size for DPL DB
MAX_INGEST_DB_CONN	Dynamic	Maximum database connection pool size for Ingest DB
MAX_SSS_DB_CONN	Dynamic	Maximum database connection pool size for SSS DB
MIN_AIM_DB_CONN	Dynamic	Minimum database connection pool size for AIM DB
MIN_DPL_DB_CONN	Dynamic	Minimum database connection pool size for DPL DB
MIN_INGEST_DB_CONN	Dynamic	Minimum database connection pool size for Ingest DB
MIN_SSS_DB_CONN	Dynamic	Minimum database connection pool size for SSS DB

### 13.5.6.1 Change Global Tuning Parameters

- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Configuration** menu is expanded.
- 2 Click on the **Global Tuning** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Global Tuning** page is displayed (Figure 3.5-14).

**Global Tuning**

[HELP]

Global Admin Tuning Parameter Configuration

Parameter Name	Description	Value
ARCHIVE_CACHE_CHECK_INTERVAL	Number of seconds between checks of archive cache	120
DAYS_TO_KEEP_COMPLETED_NOTIFICATIONS	Number of days to keep completed notifications in notification table	2
DEFAULT_ALERT_RETRY_SECS	Default number of seconds to wait in between retrying a situation that caused a suspension	60
ENABLE_NOTIFICATION_PERFORMANCE_LOG	Indicates whether notification performance log has been enabled	<input type="checkbox"/>
ENABLE_POLLING_PERFORMANCE_LOG	Indicates whether polling performance log has been enabled	<input type="checkbox"/>

Apply Changes Reset

Global Tuning Parameter Configuration

Parameter Name	Description	Value
CUSTOM_DATA_LOG_FULL_THRESHOLD	The percentage of space used which will trigger an operator warning alert on CUSTOM data log directory	93
DEFAULT_NUM_RETRIES	Default number of retries for an error condition where no error-specific number exists	3
DEFAULT_RETRY_INTERVAL	Default retry interval (seconds) where no error-specific interval exists	30
EDOS_SUCCESSFUL_PAN_DIR	EDOS directory in which successful PANs are to be stored	/usr/ecs/OPS/CUSTOM/d...
FAILED_CHECKSUM_HOLDING_DIR	Location of files that failed checksum verification	/usr/ecs/OPS/CUSTOM/d...
IGNORE_ARCHIVE_ALERT	Still archive requests independent of archive status	<input checked="" type="checkbox"/>

Apply Changes Reset

Database Connection Configuration

Parameter Name	Description	Value
MAX_AIM_DB_CONN	Maximum database connection pool size for AIM DB	10
MAX_DPL_DB_CONN	Maximum database connection pool size for DPL DB	10
MAX_INGEST_DB_CONN	Maximum database connection pool size for Ingest DB	40
MAX_SSS_DB_CONN	Maximum database connection pool size for SSS DB	10

Apply Changes Reset

Dynamic parameters indicators (green curved arrow)



**Figure 13.5-14. Global Tuning Page**

**Note:** Operator must have Ingest Admin or Tuning privileges to make changes on this page.

- The **Global Tuning** is page divided into the following three sections:
  1. **Global Admin Tuning Parameter Configuration.**

## 2. Global Tuning Parameter Configuration.

## 3. Database Connection Configuration.

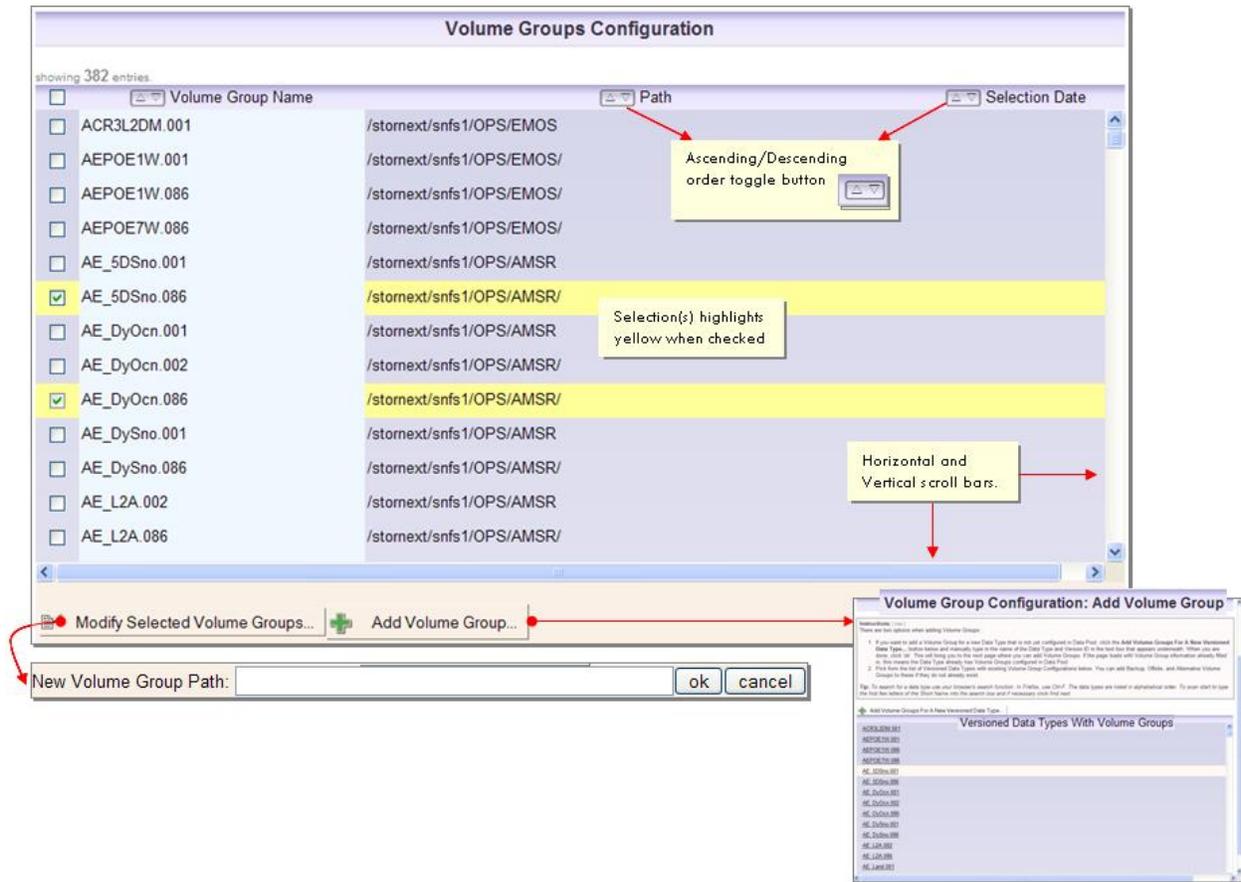
- 3 Click in the **Value** field and enter the desired change for the selected parameter.
  - The change is displayed as entered.
- 4 Click on the **Apply Changes** button found in each section.
  - A Confirmation prompt is displayed. Select **OK to apply changes**.

**NOTE:** The directories for Failed\_Checksum\_Holding\_DIR and Validation\_Warning\_DIR need to be routinely monitored. These directories require a manual cleanup.

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### 13.5.7 Configure Volume Groups

The Volume Group configuration in the DPL Ingest GUI was developed to duplicate the functionality in the decommissioned STMGT GUI tab with minor refinements and enhancements. The **Volume Groups Configuration** page (Figure 13.5-15) displays the list of currently configured volume groups. This alphabetical listing is displayed on one scrollable-page by Data Type Shortname. You can search for a desired data type by using the browser's built-in search function.



**Figure 13.5-15. Volume Groups Configuration (listing page)**

The **Volume Groups Configuration** page is divided into three distinct columns that provide important information about a particular **Volume Group**:

1. **Volume Group Name.**
2. **Path.**
3. **Selection Date.**

The bottom of the **Volume Groups Configuration** page has buttons to add a new volume group or to modify existing volume groups.

Table 13.5-10 contains a description of the fields contained on the **Volume Groups Configuration** page (Figure 13.5-15).

**Table 13.5-10. Volume Groups Configuration Page Field Descriptions**

Field Name	Entry	Description
Volume Group Name	System Generated	The name of the Volume Group based on a Data Type shortname with version identifier.
Path	System Generated	The fully qualified UNIX path to where data is stored for the specified data type.
Selection Date	System Generated	Non-NULL selection date defined for the ESDT version of which there are two volume group history sets defined for forward processing and reprocessing data respectively.
New Volume Group Path	Operator	A hidden field that is displayed when the operator clicks "Modify Selected Volume Groups" button.

An authorized Ingest Admin is authorized to add a Volume Group for a new Data Type version or add a Volume Group to an existing Data Type version. When adding a Volume Group for a new Data Type, the following rules apply:

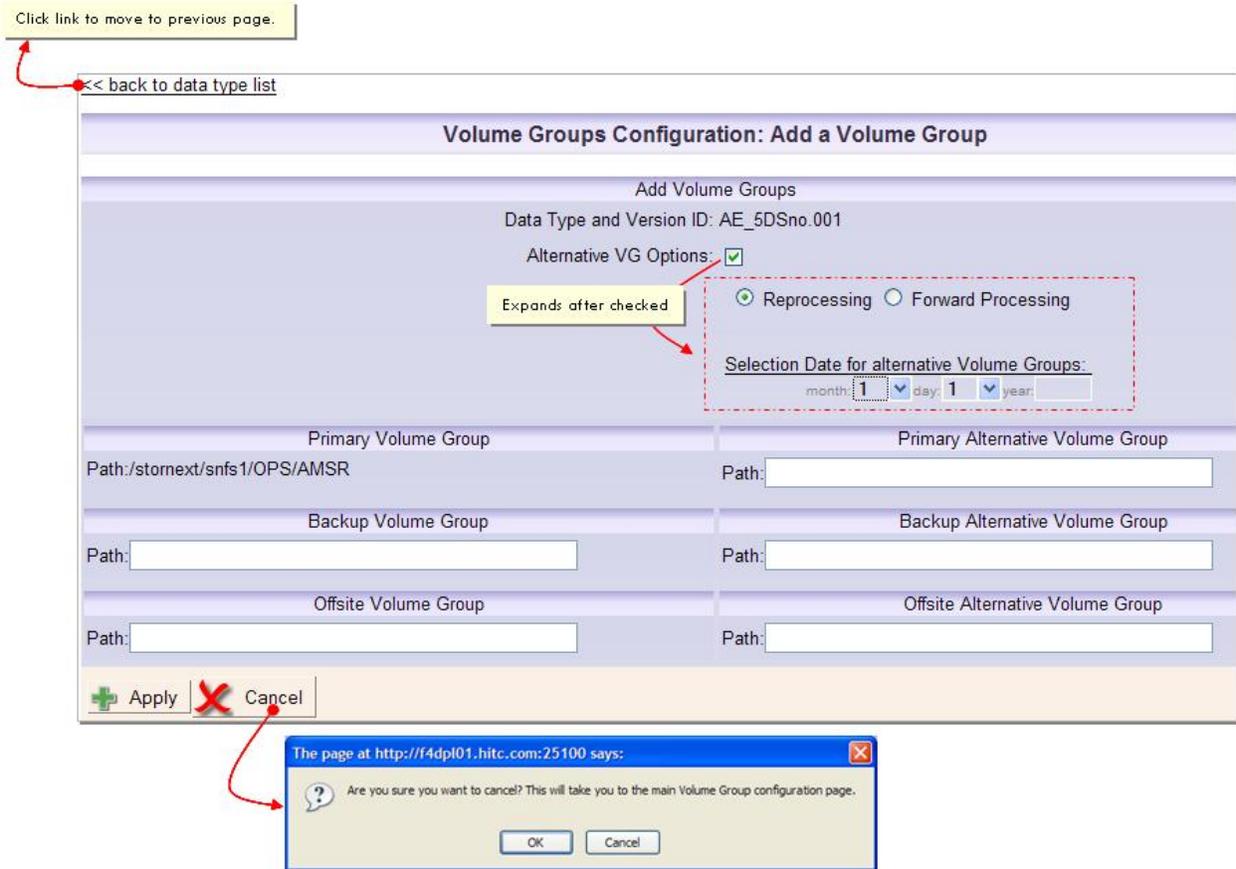
- The Primary path information must be entered.
- **Backup Volume Group, Offsite Volume Group, or Alternative Volume Group History Set** are optional and may be entered at a later time.

Table 13.5-11 provides a description of the fields contained on the **Volume Groups Configuration: Add Volume Group** (Figure 13.5-16) and Add a Volume Group (Figure 13.5-17) pages.

Click link to move to previous page.

The screenshot shows a web browser window with the title "Volume Group Configuration: Add Volume Group". At the top left, there is a link "<< back to volume group main page" with a callout box pointing to it that says "Click link to move to previous page." Below the title bar, there is an "Instructions" section with a "[ hide ]" link. The instructions state: "There are two options when adding Volume Groups: 1. If you want to add a Volume Group for a new Data Type that is not yet configured in Data Pool, click the **Add Volume Groups For A New Versioned Data Type...** button below and manually type in the name of the Data Type and Version ID in the text box that appears underneath. When you are done, click 'ok'. This will bring you to the next page where you can add Volume Groups. If the page loads with Volume Group information already filled in, this means the Data Type already has Volume Groups configured in Data Pool. 2. Pick from the list of Versioned Data Types with existing Volume Group Configurations below. You can add Backup, Offsite, and Alternative Volume Groups to these if they do not already exist." Below the instructions is a "Tip" section: "Tip: To search for a data type use your browser's search function. In Firefox, use Ctrl-F. The data types are listed in alphabetical order. To scan start to type the first few letters of the Short Name into the search box and if necessary click find next." Below the tip is a button with a green plus icon and the text "Add Volume Groups For A New Versioned Data Type". A callout box points to this button with the text "Data Type and Version ID entry expands after click." Below this button is a form with a "[ cancel ]" link, a text input field labeled "Data Type Name and version ID:", and an "ok" button. Below the form is a section titled "Versioned Data Types With Volume Groups" containing a list of data types: AE SI6.001, AE SI6.086, AE WkOcn.001, AE WkOcn.086, AMSR-L1A.002, AMSREL1A.002, AMSREL1A.086, AQEPHDE.001, AQEPHDE.086, and AST EXP.086. A callout box points to the list with the text "Highlights when cursor overlay Volume Group Name." Another callout box points to the scroll bars of the list with the text "Horizontal and Vertical scroll bars."

Figure 13.5-16. Volume Group Configuration: Add Volume Group Page



**Figure 13.5-17. Volume Group Configuration: Add a Volume Group Page**

**Table 13.5-11. Add Volume Group Page Field Description (1 of 3)**

Field Name	Data Type	Size	Entry	Description
Data Type and Version ID	Character	16	Required	A Data Type short name and version identifier.
Alternative VG Options	Checkbox	N/A	Not Required	Allows operator to enter options for alternative Volume Groups. This can only be checked if an Alternative Volume Group was specified, otherwise, the checkbox is disabled.

**Table 13.5-11. Add Volume Group Page Field Description (2 of 3)**

Field Name	Data Type	Size	Entry	Description
Selection Date for Alternative Volume Groups	Character	8	Required if adding Alternative Volume Group History Set	When the Alternative VG checkbox is selected, the Selection Date section is enabled and is required to be filled out by the user. Selection Date is a separate date to guide Archive Server to select a appropriate Volume Group History set for storing / retrieving data. When acquisition date is not null and less than the Selection Date, Reprocessing Volume Group history set will be used, otherwise, forward processing Volume Group history set will be used.
Reprocessing, Forward Processing	Option Buttons	N/A	Required if adding Alternative Volume Group History Set	Alternative volume groups can be configured either for Reprocessing or even for Forward Processing. Default is for Reprocessing. Although the flexibility to add a new alternative for forward processing is supported, it should be used with a great caution.
Primary Volume Group Path:	Character	Unlimited	Required	The fully-qualified UNIX path to where data is currently being stored for the specified data type to the Primary Archive.
Backup Volume Group Path:	Character	Unlimited	Required if Backup enabled	The fully-qualified UNIX path to where data is currently being stored for the specified data type to the Backup Archive.
Offsite Volume Group Path:	Character	Unlimited	Required if Offsite enabled	The fully-qualified UNIX path to where data is currently being stored for the specified data type to the Offsite Archive.
Primary Alternative Volume Group Path:	Character	Unlimited	Required if Primary Alternative enabled	The fully-qualified UNIX path to where reprocessing data is currently being stored for the specified data type to the Primary Alternative Archive.

**Table 13.5-11. Add Volume Group Page Field Description (3 of 3)**

Field Name	Data Type	Size	Entry	Description
Backup Alternative Volume Group Path:	Character	Unlimited	Required if Backup Alternative enabled	The fully-qualified UNIX path to where data is currently being stored for the specified data type to the Backup Alternative Archive.
Offsite Alternative Volume Group Path:	Character	Unlimited	Required if Offsite Alternative enabled	The fully-qualified UNIX path to where data is currently being stored for the specified data type to the Offsite Alternative Archive.

When a Volume Group is added, the name will be created based on the type of Volume Group that was added. There are six types, as explained in Table 13.5-12. Note that “R” indicates an alternative Volume Group for reprocessing. There is no explicit suffix for forward processing.

**Table 13.5-12. Volume Group Naming**

Volume Group Type	Extension	Example
Primary	none	AST_L1B.003
Primary Alternative	R	AST_L1B.003R
Backup	B	AST_L1B.003B
Backup Alternative	BR	AST_L1B.003BR
Offsite	O	AST_L1B.003O
Offsite Alternative	OR	AST_L1B.003OR

### 13.5.7.1 Add a Volume Group for a New Versioned Data Type

- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Configuration** menu is expanded.
- 2 Click on the **Volume Groups** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Volume Groups Configuration** page is displayed (Figure 13.5-16).

- 3 Scroll to the bottom of the page and select the **Add Volume Groups** button.
  - The **Volume Groups Configuration: Add Volume Group** page is displayed (Figure 13.5.17).
- 4 Click on the **Add Volume Groups For a New Versioned Data Type**.
  - The **Data Type and version ID** field is displayed.
- 5 Click in the **Data Type and version ID** field and enter the new **Data Type and Version ID**. Select **ok**.
  - The **Volume Group Configuration: Add a Volume Group** page is displayed (Figure 13.5-17).
- 6 (Optional) Click the **Alternate VG Options** checkbox.
  - A checkmark is displayed in the checkbox.
- 7 (Optional) Click the **Reprocessing** (or **Forward Processing**) option button.
  - A mark is displayed in the selected option button.
- 8 (Optional) If the **Alternate VG Options:** box is selected; you must enter the date in the provided **Selection Date for alternate Volume Groups** area.
  - A date is displayed in the selected area provided.
- 9 Click in the **Primary Volume Group Path** edit window and enter the fully-qualified UNIX path to where data is currently being stored for the specified new data type to the Primary Archive.
  - Data is displayed in the edit window.
- 10 Click in the **Primary Alternative Volume Group Path** edit window and enter the fully-qualified UNIX path to where data is currently being stored for the specified new data type to the Primary Alternate Archive,
  - Data is displayed in the edit window.
- 11 Click in the **Backup Volume Group Path** edit window and enter the fully-qualified UNIX path to where data is currently being stored for the specified new data type to the Backup Archive.
  - Data is displayed in the edit window.
- 12 Click in the **Backup Alternative Volume Group Path** edit window and enter the fully-qualified UNIX path to where data is currently being stored for the specified new data type to the Backup Alternate Archive.
  - Data is displayed in the edit window.
- 13 Click in the **Offsite Volume Group Path** edit window and enter the fully-qualified UNIX path to where data is currently being stored for the specified new data type to the Offsite Archive.

- Data is displayed in the edit window.
- 14** Click in the **Offsite Alternative Volume Group Path** edit window and enter the fully-qualified UNIX path to where data is currently being stored for the specified new data type to the Offsite Alternate Archive.
- Data is displayed in the edit window.
- 15** Click in the **Apply** button.
- A Confirmation prompt is displayed. Select **OK**
  - The changes are applied.
- 

The following rules apply when adding Volume Groups to an existing Data Type version (e.g., Backup, Offsite, etc.):

- The **Volume Group** name will be selected from the **Primary Volume Groups** page. When the **Add Volume Group** page is loaded, the Volume Group name will appear at the top.
- Any previously added **Volume Group** will be displayed, but not editable. For example, if a **Backup Volume Group** has already been added, the **Volume Group** path will be shown, but the operator will not be able to edit this path.
- Similarly, if any **Alternative Volume Groups** have been specified, the **Alternative VG** options and **Volume Groups** will be displayed, but not editable.
- If the operator is adding the **Alternative Volume Group History Set** for the first time, the **Alternative Options** must be selected and the operator may choose the processing type (Forward Processing or Reprocessing) for the **Alternative Volume Group History Set**, as well as a selection date to be applied to the **Reprocessing Volume Groups**.

### 13.5.7.2 Add a Volume Group for an Existing Versioned Data Type

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- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Configuration** menu is expanded.
- 2 Click on the **Volume Groups** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Volume Groups Configuration** page is displayed.
- 3 Scroll to the bottom of the page and select the **Add Volume Groups** button.
  - The **Volume Group Configuration: Add Volume Group** page is displayed (Figure 13.5-16).
- 4 Click on the desired existing **Volume Group Name**.
  - The **Volume Groups Configuration: Add a Volume Group** page (Figure 13.5-17) is displayed for the Data Type selected.
- 5 (Optional) Click on the **Alternate VG Options:** checkbox.
  - A checkmark is displayed in the checkbox.
- 6 (Optional) Click on the **Reprocessing** (or **Forward Processing**) option button.
  - A mark is displayed in the selected option button.
- 7 (Optional) If the **Alternate VG Options:** checkbox is selected; you must enter the date in the provided **Selection Date for alternate Volume Groups** area.
  - A date is displayed in the selected area provided.
- 8 Click in the **Primary Volume Group Path** edit window and enter the fully-qualified UNIX path to where data is currently being stored for the specified new data type to the Primary Archive.
  - Data is displayed in the edit window.
- 9 Click in the **Primary Alternative Volume Group Path** edit window and enter the fully-qualified UNIX path to where data is currently being stored for the specified new data type to the Primary Alternate Archive,
  - Data is displayed in the edit window.
- 10 Click in the **Backup Volume Group Path** edit window and enter the fully-qualified UNIX path to where data is currently being stored for the specified new data type to the Backup Archive.
  - Data is displayed in the edit window.
- 11 Click in the **Backup Alternative Volume Group Path** edit window and enter the fully-qualified UNIX path to where data is currently being stored for the specified new data type to the Backup Alternate Archive.

- Data is displayed in the edit window.
- 12** Click in the **Offsite Volume Group Path** edit window and enter the fully-qualified UNIX path to where data is currently being stored for the specified new data type to the Offsite Archive.
- Data is displayed in the edit window.
- 13** Click in the **Offsite Alternative Volume Group Path** edit window and enter the fully-qualified UNIX path to where data is currently being stored for the specified new data type to the Offsite Alternate Archive.
- Data is displayed in the edit window.
- 14** Click in the **Apply** button.
- A Confirmation prompt is displayed. Select **OK**
  - The changes are applied.
- 

### 13.5.7.3 Modify Volume Groups

---

- 1** Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
- The **Configuration** menu is expanded.
- 2** Click on the **Volume Groups** link in the navigation frame of the **DPL Ingest GUI**.
- The **Volume Groups Configuration** page (Figure 13.5-15) is displayed.
  - All columns on the **Volume Groups Configuration** page can be sorted in ascending or descending order. To sort on a column, click on the up or down arrow at the top of the column.
- 3** Click in the checkbox next to the **Volume Group Name** of the desired volume group(s) to be change.
- A checkmark is placed in the checkbox and the selection is highlighted yellow.
  - Multiple selections may be made using the <Ctrl> key.
- 4** Scroll to the bottom of the page and select the **Modify Selected Volume Groups** button.
- A path input field appears at the bottom of the page.
- 5** Enter the **New Volume Group Path** in the edit field and click the **ok** button.
- A Confirmation prompt is displayed. Select **OK**
  - The changes to the Volume Group Path will be applied.
-

## 13.5.8 Operator Configuration

The Operator Configuration page (Figure 13.5-18) consists of a list of operator names and their current permission settings. The security operator configures authorized users for the Data Pool Ingest GUI, and add, edit, or remove users.

**Legend: Operator Permissions and related context-sensitive Help Tips.**

- view only  
The operator can only view pages in this application and can not manage (such as suspend or resume requests) or make changes to configuration parameters. A view-only operator will see most text boxes, buttons, and checkboxes disabled.
- ingest control  
The operator can manage requests and interventions - actions like suspend, resume, and change priority. The operator can also clear alerts and fail or retry granules associated with any request and enter operator annotations.
- ingest admin  
The operator can configure Providers, Data Types, Remote Hosts, Archive File Systems, and ECS Services.
- ingest tuning  
The operator can modify global tuning parameters.
- ingest security  
The operator can manage (add, delete, modify) operators.

**Figure 13.5-18. Operator Configuration Page**

There are five permission levels. An operator assigned the view only permission level, cannot be authorized additional permissions. The other four levels can be added together as they represent the ability to manage an exclusive set of properties associated with data pool ingest. An operator may be assigned multiple permissions, other than view only. The following list reviews the five permission levels for the Data Pool Ingest GUI.

- **View Only** – The operator cannot alter or modify anything on the GUI, nor can he/she take actions. All textboxes, checkboxes, drop-down lists, etc. are disabled.
- **Ingest Control.** The operator can manage Ingest requests and interventions, i.e., he/she has the ability to suspend or resume requests, place on hold and close

-  **Ingest Admin.** The operator can alter general configuration parameters such as SCP/FTP Host configuration, providers, data types, etc. This level of operator cannot modify tuning parameters.
  -  **Ingest Tuning.** The operator can alter global and host-specific tuning configuration parameters.
  -  **Security Admin.** The operator can maintain security-related information like passwords and operators.
- 

### 13.5.8.1 Modify Operator Permission Settings

---

- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Configuration** menu is expanded.
- 2 Click on the **Operators** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Operator Configuration** page is displayed.
  - All Operators and their current Permission settings are displayed.
  - Changes to this page can only be made if you have **Security Admin** permissions.
- 3 Click in the checkbox next to the **Operator Name** of the desired operator to change permissions.
  - Multiple selections may be made.
  - A checkmark must be visible before further changes can be made.
- 4 Click in the checkbox next to the desired permission.
  - A checkmark is displayed in the checkbox.
  - Scroll to the bottom of the **Operator Management** section and click on the **Update Operators** button.
  - A Confirmation prompt is displayed. Select **OK**.

**NOTE:** Changes to an existing operator's permissions will not take effect until the next login by that particular operator.

---

### 13.5.8.2 Add Operator Permissions

---

- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Configuration** menu is expanded.
  - 2 Click on the **Operators** link in the navigation frame of the **DPL Ingest GUI**.
    - The **Operator Configuration** page is displayed.
    - All Operators and their current Permission settings are displayed.
    - Changes to this page can only be made if the operator has **Security Admin** permissions.
  - 3 Scroll to the bottom of the **Operator Configuration** page until the **Add Operator** section of this page is visible.
  - 4 Click in the **Operator Name** field and enter the **name of the operator**.
  - 5 Click in the **Password** field and enter the **password**.
    - The **Password** field will be populated with stars.
  - 6 Click in the **Verify Password** field and **re-enter the password**.
    - The **Verify Password** field will be populated with stars.
  - 7 Click the checkbox next to the desired **Permissions**.
    - At least one permission level must be selected.
  - 8 Select the **Add Operator** button.
    - A Confirmation prompt is displayed. Select **OK**.
    - The new operator name will be added to the list of operators in the **Operator Management** section of the **Operator Configuration** page.
- 

### 13.5.8.3 Remove Operator Permission Settings

---

- 1 Click on the **Configuration** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Configuration** menu is expanded.
- 2 Click on the **Operators** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Operator Configuration** page is displayed.
  - All Operators and their current Permission settings are displayed.
  - Changes to this page can only be made if the operator has **Security Admin** permissions.
- 3 Click in the checkbox next to the **Operator Name** to be removed.
  - Multiple selections may be made.

- A checkmark must be visible before further changes can be made.
- 4 Scroll to the bottom of the Operator Management page and click on the **Remove Operators** button.
- A Confirmation prompt is displayed. Select **OK**

**NOTE:** Changes to an existing operator’s permissions will not take effect until the next login by that particular operator.

---

## 13.6 Reports

### 13.6.1 Reports

The reporting capability of the Ingest GUI offers the ability to view detailed reports on data providers and data types, as well as request summary and granule summary reports. The report pages are located under the **Reports** menu in the navigation pane.

The report pages (**Detailed**, **Request Summary** and **Granule Summary**) display the information across data providers or data types. As with all types of reports, the operator must select a date range (presets are provided for the last 24 and 48 hours), as well as criteria for the search. These include one or more **Data Providers**, one or more **Data Types**, and one or more **Final Request Statuses**. Additionally, **Ingest Method (DPL or NON-DPL)** can also be selected. All Data Criteria fields are optional, but at least one selection of one field must be made to generate the report. Due to the large volume of data that may be in the database, reports can sometimes take a while to process and generate a display.

Table 13.6-1 provides an activity Checklist for Reports.

**Table 13.6-1. Reports**

Order	Role	Task	Section
1	Ingest Technician	Generating a Detailed Report	(P) 13.6.1.1
2	Ingest Technician	Viewing Volume Group(s) History	(P) 13.6.2.1

### 13.6.1.1 Generating a Detailed Report

---

- 1 Click on the **Reports** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Reports** menu is expanded.
- 2 Click on the **Detailed**, **Request Summary** or **Granule Summary** in the navigation frame of the **DPL Ingest GUI**.
  - **The Detailed Report, Request Summary Report or Granule Summary Report** criteria page is displayed.
- 3 In the **Date/Time Criteria** section of the page, select the desired **Start Date/Time** and **End Date/Time**.
  - The date and time information is displayed as selected.
- 4 In the **Data Criteria** section of the page, select one or more **Data Provider**, one or more **Data Type**, one or more **Final Request Status** and the **Ingest Method** (DPL or NON-DPL) by clicking on the desired selections.
  - The desired selections are highlighted.
- 5 Click on the **Generate Report** button.
  - The **Processing Your Request** transitional screen is displayed.
  - Time to process your request will depend on factors such as time span, number of Data Providers, Data Types and Request Statuses selected.
  - Eventually, one of the following report outputs will be displayed.
  - Detailed Report Page (Figure 13.6-1)

**Detailed Report**

---

**Date/Time Criteria**

Start Date/Time: month: 1, day: 1, year: 2009, hour: 12, min: 8  
 End Date/Time: month: 1, day: 30, year: 2009, hour: 12, min: 8  
 Presets: Last 24 hours, Last 48 hours, Previous criteria runs.

---

**Data Criteria**

Data Provider: --ALL PROVIDERS-- (ArchiveOnline selected)  
 Data Type: --ALL DATA TYPES-- (AEPOE1W.086 selected)  
 Final Request Status: Successful, Cancelled, Partially\_Cancelled, Failed, Partial\_Failure, Terminated  
 Ingest Method: DPL, NON-DPL

Generate Report (No report generated yet)

---

**Current Report Criteria:**

Data Provider(s): [ArchiveOnline]      Data Type(s): [ALL]  
 Final Request Status: [ALL]      Start Date/Time: 1/1/2009 12:8  
 End Date/Time: 1/30/2009 12:8

Generates "Report Output" if criteria not met.

---

**Report Output**

Req.ID	Data Provider	Ingest Type	Ingest Method	Request Status	Start Date/Time	End Date/Time	Tot.# grans.	# Succ. grans.	Vol (MB)	File Count	Time to xfer (secs)	Time to preproc (secs)	Time to Archive (secs)	Priority	Restart Flag
274518	ArchiveOnline	Polling_wIDR	DPL	Successful	2009-01-07 10:17:13	2009-01-07 10:17:17	1	1	0.125	2	0	3	0	HIGH	
274519	ArchiveOnline	Polling_wIDR	DPL	Successful	2009-01-07 10:17:13	2009-01-07 10:17:17	1	1	0.360	2	0	3	0	HIGH	
274704	ArchiveOnline	Polling_wIDR	DPL	Successful	2009-01-13 08:13:59	2009-01-13 08:14:05	1	1	0.125	2	0	3	0	HIGH	
274705	ArchiveOnline	Polling_wIDR	DPL	Successful	2009-01-13 08:13:59	2009-01-13 08:14:05	1	1	0.360	2	0	5	0	HIGH	

Highlights on cursor overlay.

**Figure 13.6-1. Detailed Report Page**

- Request Summary Report Page (Figure 13.6-2)

**Request Summary Report**

**Date/Time Criteria**

Start Date/Time: month: 12, day: 1, year: 2008, hour: 12, min: 28  
 End Date/Time: month: 2, day: 26, year: 2009, hour: 12, min: 28  
 Presets: Last 24 hours, Last 48 hours, Previous criteria runs.

**Data Criteria**

Data Provider: ASTER\_OSFS, ASTER\_OSF, ArchiveOnline, BMGT, DDIST, ECSBulkExport, FDS  
 Data Type: --ALL DATA TYPES--  
 Final Request Status: --ALL STATUSES--  
 Ingest Method: DPL, NON-DPL

Generate Report: **Report Output**  
 No report generated yet.

Current Report Criteria:  
 Data Type(s): [ALL]  
 Start Date/Time: 12/1/2008 12:28  
 Final Request Status: [ALL]  
 End Date/Time: 2/26/2009 12:28

Report Output

Data Provider	Ingest Type	Ingest Method	Ttl. Reqs	Ttl. Errors	Ttl. Volume (GB)	Gran Avg	Gran Max	File Avg	File Max	Size Avg (MB)	Size Max (MB)	Xfer time Avg (secs)	Xfer time Max (secs)	Preproc time Avg (secs)	Preproc time Max (secs)	Archive Time Avg (secs)	Archive Time Max (secs)
QAUU_SIPS	Polling_w/DR	DPL	60	0	0.164	1.000	1	2.000	2	2.801	7.869	0.833	6	28.517	35	0.417	2
ArchiveOnline	Polling_w/DR	DPL	96	4	0.082	1.021	2	2.021	3	0.878	8.971	0.240	2	4.083	24	0.208	2
<b>TOTALS:</b>			156	4	0.246	1.013	2	2.013	3	1.617	8.971	0.468	6	13.481	35	0.288	2

Generates "Report Output"

Highlights on cursor overlay.

Figure 13.6-2. Request Summary Report Page

- Granule Summary Report Page(Figure 13.6-3)

### Granule Summary Report

**Date/Time Criteria**

Start Date/Time: month: 1, day: 1, year: 2008, hour: 2, min: 10  
 End Date/Time: month: 1, day: 1, year: 2009, hour: 1, min: 2  
 Presets: Last 24 hours, Last 48 hours, Previous criteria runs.

**Data Criteria**

Data Provider: --ALL PROVIDERS--  
 Data Type: --ALL DATA TYPES--  
 Final Request Status: --ALL STATUSES--  
 Ingest Method: DPL

**Current Report Criteria**

Data Provider(s): [ALL]      Data Type(s): [ALL]  
 Final Request Status: [ALL]      Start Date/Time: 1/1/2008 2:10  
 End Date/Time: 1/1/2009 1:2

**Report Output**

Data Provider	Ingest Type	Ingest Method	Data Type	Ttl. Grans	Ttl. Errors	Ttl. Volume (GB)	File Avg	File Max	Size Avg (MB)	Size Max (MB)	Xfer time Avg (secs)	Xfer time Max (secs)	Preproc time Avg (secs)	Preproc time Max (secs)	Archive Time Avg (secs)	Archive Time Max (secs)
JPL	Polling_wDR	DPL	MOD29P1D	124	0	0.025	2.000	2	0.205	0.535	1.427	90	15.524	34	0.161	2
BMGT_CRIT_30_L1A	Polling_wDR	DPL	MYD13A3	3	3	0.003	2.000	2	1.157	1.189	0.667	1	0.000	0	0.000	0
MODAPS_COMBINE	Polling_wDR	DPL	MOD29P1D	4	0	0.024	2.000	2	6.110	6.110	0.000	0	0.000	0	0.000	0
Bender	Polling_wDR	DPL	DAP	2	1	0.002	2.000	2	1.250	1.2	0.000	0	0.000	1	0.000	0
JPL	Polling_wDR	DPL	AE_DySno	1	0	0.002	2.000	2	2.055	2.0	0.000	0	0.000	19	0.000	0
Bender	Polling_wDR	DPL	MYD14	213	2	0.052	2.000	2	0.249	0.745	0.901	21	4.803	12	0.643	4
JPL	Polling_wDR	DPL	AE_Si25	1	0	0.020	2.000	2	20.954	20.954	0.000	0	25.000	25	1.000	1
MODAPS_TERRA	Polling_wDR	DPL	MOD29	2	1	0.022	2.000	2	11.398	11.398	45.500	91	1.000	2	0.000	0
NSIDC_DAAC	Polling_wDR	DPL	MOD29P1D	5190	25	1.063	2.000	2	0.210	0.850	1.028	60	8.545	367	0.840	18
pchen	Polling_wDR	DPL	AST_L1A	1	1	0.108	1.000	1	110.922	110.922	2.000	2	0.000	0	0.000	0
BMGT	Polling_wDR	DPL	MYD29P1N	10	0	0.001	2.000	2	0.124	0.291	0.100	1	11.000	13	0.200	1
LeoProvider	Polling_wDR	DPL	MOD14	10	0	0.002	2.000	2	0.198	0.412	0.500	4	45.900	50	0.400	2
BMGT_CRIT_30_L1A	Polling_wDR	DPL	MOD11A2	3	3	0.003	2.000	2	1.151	1.163	0.667	2	0.000	0	0.000	0
<b>TOTALS:</b>				120179	881	248.778	1.719	98	2.120	307.082	2.004	1059	16.665	50531	1.378	1076

**Figure 13.6-3. Granule Summary Report Page**

## 13.6.2 Viewing the Volume Groups History Page

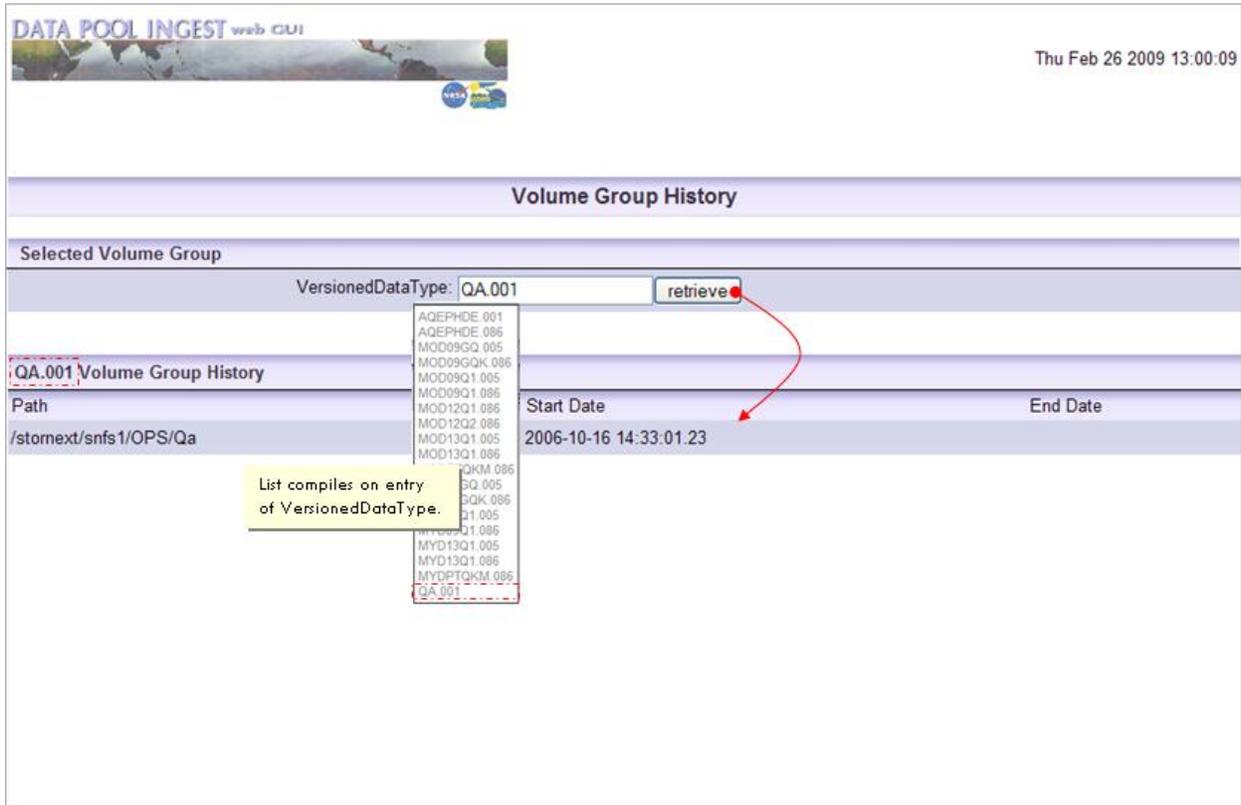
The **Volume Groups History** page displays the history of the configuration changes that have occurred to volume groups. Table 13.6-2 displays the information contained on the **Volume Groups History** page.

**Table 13.6-2. Volume Groups History Page Field Description**

Field Name	Data Type	Size	Entry	Description
VersionedData Type (Data Type. Version ID)	Character	16	Required	The name of a Volume Group.
Path	Character	Unlimited	System Generated	In reverse chronological order, the fully qualified UNIX paths to where data has been stored for the specified data type. The current path is listed first.
Start Date	Date	16	System Generated	The date on which this configuration became active for the listed data type.
End Date	Date	16	System Generated	The date on which this configuration was superseded by new configuration information. If blank, this row reflects the current configuration for the volume group. If any row has a blank end date, the volume group is closed, and no further data is accepted for that volume group.

### 13.6.2.1 Viewing Volume Group(s) History

- 1 Click on the **Reports** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Reports** menu is expanded.
- 2 Click on the **Volume Groups History** link in the navigation frame of the **DPL Ingest GUI**.
  - The **Volume Groups History** page is displayed (Figure 13.6-4).



**Figure 13.6-4. Volume Group History Page**

- 3 In the **Selected Volume Group** section, click in the field next to the **VersionedData Type** and enter (or select from the drop-down list )the name of the **Volume Group** to be retrieved.
  - The **Volume Group** name is displayed as entered.
- 4 Click the **retrieve** button.
  - The **Path**, **Start Date** and **End Date**, are displayed in **[Name] Volume Group History** section.

## 13.7 Help Pages and Context Help

The **Help** section contains information the operator can have readily available while operating the Data Pool Ingest GUI. Included in this section are three pages: General Topics, Context Help and About.

The **General Topics** page includes an index of topics that should be useful to the operator in understanding how the GUI and Data Pool Ingest system work (Figure 13.7-1). The operator can press on the name of a section from the index in order to jump to the section text.

The screenshot shows the DPL Ingest GUI (DEV09) in a Mozilla Firefox browser window. The page title is "DATA POOL INGEST web GUI" and the date is "Thu Feb 1 2007 15:43:35". The left sidebar contains a navigation menu with items: Home, Monitoring, Interventions & Alerts, Configuration, Reports, Help, General Topics (selected), Context Help, and About. Below the menu, it says "You are logged in as IngAdmin" and provides links for "Operator Actions", "log out", "change password", and "show my permissions". The main content area is titled "Index" and contains a list of links: "Request State Transition" and "Granule State Transition". Below the index, the "Request State Transition" section is expanded, showing a list of possible request paths categorized into "Normal Transition", "Cold Restart", and "Validation Failed". The "Normal Transition" category includes: 1. New, 2. validated - validation successful, 3. Active - dispatched, and 4. Successful - all granules successful, PAN notif. created. The "Cold Restart" category includes: 1. New, 2. validated - validation successful, and 3. Terminated - cold restart. The "Validation Failed" category includes: 1. New and 2. Failed - validation failed. Below this, the "Possible Request Paths (cont.)" section is expanded, showing "Failed Granules", "Suspended Granules", and "Operator Cancellation". The "Failed Granules" category includes: 1. New, 2. validated - validation successful, 3. Active - dispatched, and 4. one of: Partial\_Failure - not all granules failed, Failed - all granules failed. The "Suspended Granules" category includes: 1. New, 2. validated - validation successful, 3. Active - dispatched, 4. One of: Partially\_Suspended - at least one granule suspended, one active; Suspended - at least one suspended, none active; and 5. Operator resumes granule from checkpoint, at which point the states would go to: Resuming - at least one granule suspended, one active. The "Operator Cancellation" category includes: 1. New, 2. validated - validation successful, 3. Active - dispatched, 4. Cancelling - operator cancels request, and 5. one of: Partially\_Cancelled - not all granules cancelled; Cancelled - all granules cancelled. Below this, the "Granule State Transition" section is expanded, showing a list of possible granules paths categorized into "Normal Transition" and "Possible Error States". The "Normal Transition" category includes: 1. Processing (START) and 2. Transferring. The "Possible Error States" category is currently empty.

**Figure 13.7-1. Help – General Topics**

The **Context** page explains another tool provided by the operator to assist him in effectively using the Data Pool Ingest GUI. Throughout most pages on the DPL GUI, you can get relevant, context-sensitive help by hovering your mouse (no need to click) over the [ **help** ] text. In many

cases this is to explain the significance of a parameter or to provide instructions on what to do on the page. A blue pop-over window will appear and disappears as soon as the mouse is moved.

## 13.8 Data Pool Maintenance GUI

The Data Pool Maintenance GUI is responsible for monitoring and maintaining the Data Pool. Data Pool Ingest requires the use of the Data Pool Maintenance (DPM) GUI to perform the following tasks:

- Managing Data Pool Collection Groups
- Managing Data Pool Collections within Collection Groups

Table 13.8-1 provides an activity Checklist for Data Pool Maintenance.

**Table 13.8-1. Data Pool Maintenance**

Order	Role	Task	Section
1	Ingest Technician	Launching the DPM GUI	(P) 13.8.1.1
4	Ingest Technician	View Collection Groups	(P) 13.8.2.1
5	Ingest Technician	Modify Collection Groups	(P) 13.8.2.2
6	Ingest Technician	Add a Collection Group	(P) 13.8.2.3
7	Ingest Technician	Add an ECS Collection to a Collection Group	(P) 13.8.2.4
8	Ingest Technician	Modify an ECS Collection	(P) 13.8.2.5

### 13.8.1 Data Pool Maintenance GUI

The **DPM GUI** is used for Data Pool maintenance tasks. Of course, the first thing to do is launch the GUI. The procedure for launching the GUI is provided separately here and is referenced in other procedures. It applies to both full-capability and limited-capability operators.

#### 13.8.1.1 Launch the DPM GUI

- 
- 1 At the UNIX command line prompt enter: **setenv DISPLAY <client name>:0.0**  
**setenv DISPLAY <client name>:0.0**
    - Use either the X terminal/workstation IP address or the machine-name for the client name.
    - When using secure shell, the DISPLAY variable is set just once, before logging in to remote hosts. If it were to be reset after logging in to a remote host, the security features would be compromised.

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

**/tools/bin/ssh <host name>**

- The **-l** option can be used with the ssh command to allow logging in to the remote host (or the local host for that matter) with a different user ID. For example, to log in to x0acs03 as user cmops enter:

**/tools/bin/ssh -l cmops x4oml01**

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

**ssh x4oml01**

**- or -**

**ssh -l cmops x4oml01**

- Examples of Data Pool Maintenance GUI host names include **x4hel01**.
- If you receive the message, “Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?” enter **yes** (“y” alone will not work).
- If you have previously set up a secure shell passphrase and executed sshremote, a prompt to Enter passphrase for RSA key '<user@localhost>' appears; continue with Step 3.
- If you have not previously set up a secure shell passphrase, go to Step 4.

3 If a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears, enter:

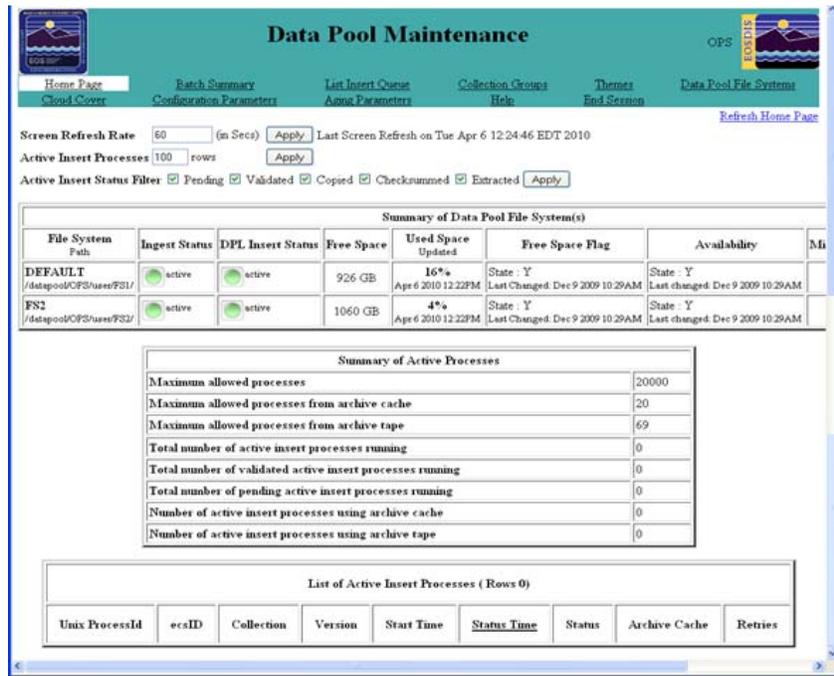
**<passphrase>**.

- If a command line prompt is displayed, log-in is complete.
- If the passphrase is unknown, press **Return/Enter**, which should cause a **<user@remotehost>'s password:** prompt to appear (after the second or third try if not after the first one), then go to Step 4.
- If the passphrase is entered improperly, a **<user@remotehost>'s password:** prompt should appear (after the second or third try if not after the first one); go to Step 4.

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

**<password>**

- A command line prompt is displayed.
  - Log-in is complete.
- 5 Type **firefox** & then press **Return/Enter**.
- It may be necessary to respond to dialogue boxes, especially if the browser is already being used by someone else who has logged in with the same user ID.
  - The Mozilla Firefox web browser is displayed.
- 6 If a bookmark has been created for the **DPM GUI**, select the appropriate bookmark from those listed on the browser's Bookmarks pull-down window.
- The **Login:** prompt is displayed.
- 7 If no bookmark has been created for the **DPM GUI**, type **http://host:port** in the browser's **Location (Go To)** field then press **Return/Enter**.
- For example: `http:// f4hel01.hitc.com:22181/`.
- 8 Type the appropriate user name in the **User** textbox of the security **Login** prompt.
- 9 Type the appropriate password in the **Password** textbox of the security **Login** prompt.
- 10 Click on the **Login** button:
- The dialogue box is dismissed.
  - The **DPM GUI** ["Home" Page] is displayed (Figure 13.8-1).



**Figure 13.8-1. DPM GUI Home Page**

## 13.8.2 Managing Data Pool Collection Groups

The conceptual structure of the data pool is set up for each DAAC based on the collections and granules archived at the DAAC. Related collections are grouped in **Collection Groups** (e.g., ASTER collections and granules from the Terra mission, MODIS Oceans collections and granules from the Terra Mission, MISR collections and granules from the Terra mission, MODIS Snow and Ice collections and granules from the Terra mission). Each collection group initially consists of a number of collections that have been specified as valid for Data Pool insertion (i.e., granules of the data types in the collection may be inserted into the Data Pool).

The Collection Group page of the **DPM GUI** allows both full-capability operators and limited-capability operators to view collection groups. It also provides access to pages for viewing collections within a collection group. In addition, the page has links that allow a full-capability operator to modify or add a collection group or collection in the Data Pool database.

Both full-capability operators and limited-capability operators can use the procedure that follows to display the list of collection groups that have collections specified as valid for Data Pool insertion and to view information about those collections.

### 13.8.2.1 View Collection Groups

---

- 1 Launch the **DPM GUI**.
  - For detailed instructions refer to the **Launch the DPM GUI** procedure (previous procedure of this lesson).
  - The **Home Page** is the default display, offering links for access to Data Pool maintenance function pages (i.e., **Data Pool File Systems, Cloud Cover, List Insert Queue, Batch Summary, Collection Groups, Themes, Configuration Parameters, Aging Parameters, Help** and **End Session**).
- 2 Click on the **Collection Groups** link.
  - The Collection Group page is displayed (Figure 13.8-2).

You can manage the collections of a group by clicking on the groupid

Data Source	Group ID (Click for managing collections)	Display Name	Description
ECS	<a href="#">ACRM</a>	ACRM	All collections/granules from the ACRM mission
ECS	<a href="#">AIRA</a>	AIRA	AIRS/AMSUMHS collections/granules from the Aqua mission
ECS	<a href="#">AMSA</a>	AMSA	AMSR-E collections/granules from the Aqua mission
ECS	<a href="#">ASTT</a>	ASTT	ASTER collections/granules from the Terra mission
ECS	<a href="#">BRWS</a>	BRWS	Browse collections/granules
ECS	<a href="#">DASP</a>	DASP	Data Assimilation System Products
ECS	<a href="#">GLAS</a>	GLAS	Geoscience Laser Altimeter System
ECS	<a href="#">LSR7</a>	LSR7	All collections/granules from the Landsat 7 mission

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ECS	<a href="#">MOOA</a>	MOOA	MODIS Oceans collections/granules from Aqua mission
ECS	<a href="#">MOOT</a>	MOOT	MODIS Oceans collections/granules from the Terra mission
ECS	<a href="#">MOPT</a>	MOPT	MOPTIT collections/granules from the Terra mission
ECS	<a href="#">MOSA</a>	MOSA	MODIS Snow and Ice collections/granules from the Aqua mission
ECS	<a href="#">MOST</a>	MOST	MODIS Snow and Ice collections/granules from the Terra mission
ECS	<a href="#">MOTA</a>	MOTA	MODIS Terra plus Aqua Combined
ECS	<a href="#">MSRT</a>	MSRT	MISR collections/granules from the Terra mission
ECS	<a href="#">OTHER</a>	OTHER	Other Products. This group is used for ancillary products or other non-science products.
NON-ECS	<a href="#">OUTPUTS</a>	OUTPUTS	This collection group uses for the output collections.
ECS	<a href="#">SAGE</a>	SAGE_III_SCF	Weekly collection of files from NCEP of Atmospheric pressure/temperature profile
ECS	<a href="#">TES</a>	TES	TES Data
ECS	<a href="#">TEST</a>	TEST	Remap regression
NON-ECS	<a href="#">UAE</a>	UAE	NONECS Data

[Add Collection Group](#)   [Modify Collection Group](#)

**Figure 13.8-2. Collection Group Page**

- 3 Observe data displayed on the Collection Group page.
  - The table on the Collection Group page has columns containing the following types of collection group information:
    - **Data Source.**
    - **Group ID (Click for managing collections).**
    - **Display Name.**
    - **Description.**

- The following links are available on the Collection Groups page:
    - **Group ID (Click for managing collections)** - Links to a **List of Collections** contained in that group.
    - **Add Collection Group.**
    - **Modify Collection Group.**
- 4 To obtain more information about the collections in one of the groups, click on its link in the **Group ID (Click for managing collections)** column.
- The **List of Collection** page is displayed (Figure 13.8-3).

Data Source: ECS Group ID: AMSA. Display Name: AMSA Description: AMSR-E collections/granules from the Aqua mission

File System: ALL Apply Filter

Collection (Click for Detail Information)	Version	Science Gramules and/or Metadata	Data Pool Insertion	HEG Processing	Export Urls to ECHO	Quality Summary Url	Spatial Search Type	Global Coverage	Day/Night Coverage	24 Hour Coverage	Cloud Coverage	Nominal Coverage Rate	Check the Box to Delete Collection
<a href="#">AE_L2A</a>	001	science and metadata	valid for Data Pool	Enabled	Yes	--	Orbit	No	No	No	No	--	<input type="checkbox"/>
<a href="#">AMSR-L1A</a>	001	science and metadata	valid for Data Pool	Disabled	Yes	--	Orbit	No	No	No	No	--	<input type="checkbox"/>
<a href="#">AE_DrOc</a>	002	science and metadata	valid for Data Pool	Enabled	Yes	--	Rectangle	Yes	No	Yes	No	--	<input type="checkbox"/>
<a href="#">AEPOE1W</a>	001	science and metadata	valid for Data Pool	Disabled	Yes	--	Not supported	No	No	Yes	No	--	<input type="checkbox"/>
<a href="#">AMSR_E1A</a>	002	science and metadata	valid for Data Pool	Disabled	Yes	--	Orbit	No	No	No	No	--	<input type="checkbox"/>
<a href="#">AE_Land</a>	002	science and metadata	valid for Data Pool	Disabled	Yes	--	Orbit	No	No	No	No	--	<input type="checkbox"/>
<a href="#">AE_Rain</a>	002	science and metadata	valid for Data Pool	Disabled	Yes	--	Orbit	No	No	No	No	--	<input type="checkbox"/>
<a href="#">AE_RnGd</a>	002	science and metadata	valid for Data Pool	Disabled	Yes	--	Rectangle	Yes	Yes	Yes	No	--	<input type="checkbox"/>

Add New Collection Return to previous page DeleteCollection

You can view the detail information of a collection by clicking on the collection link

**Figure 13.8-3. List of Collection**

- 5** Observe data displayed on the **List of Collections** page.
- Near the top of the **List of Collections** page contains the following basic types of collection group information:
  - There is a file system filter (and associated **Apply Filter** button) for displaying data on the Collection **Detail Information** page for all file systems or by individual file system.
  - The **List of Collection** page has columns containing the following types of collection group information:
    - **Collection (Click for Detail Information)** link.
    - **Version.**
    - **Science Granules and/or Metadata.**
    - **Data Pool Insertion.**
    - **HEG Processing.**
    - **Export Urls to ECHO.**
    - **Quality Summary Url.**
    - **Spatial Search Type.**
    - **Global Coverage.**
    - **Day/Night Coverage.**
    - **24 Hour Coverage.**
    - **Cloud Coverage.**
    - **Nominal Coverage Rule**
    - **Check the Box to Delete Collection**
  - The following links are available on the **List of Collection** page:
    - Each collection listed in the **Collection** column links to a Collection **Detail Information** page.
    - **Add New Collection.**
    - **Return to previous page.**
- 6** To filter data displayed on the **List of Collections** page, click on the **File System** filter option button.
- Options are displayed.
- 7** Select a file system filter option click on the appropriate choice from the option list.

- 8 To implement the filtering of data displayed on the **Collection Detail** link, click on the **Apply Filter** button.
- The **Collection (Click for Detail Information)** column is displayed with the filtered collection group information.
- 9 To obtain more information about one of the collections in the collection group, click on its link in the **Collection (Click for Detail Information)** column.
- The **Detail Information** page for the selected collection is displayed (Figure 13.8-4).

The screenshot shows the 'Data Pool Maintenance' web application. At the top, there is a navigation bar with links: Home Page, Batch Summary, List Insert Queue, Collection Groups (selected), Themes, and Data Pool File Systems. Below the navigation bar, there is a header section with the following text: 'Data Source: ECS Group ID: AMSA Display Name: AMSA Description: AMSR-E collections/granules from the Aqua mission'. The main content area is a table titled 'Detail Information' with the following rows:

Detail Information	
Collection	AE_Land
Version	2
Description	AMSR-E/Aqua global swath surface soil moisture and ancillary parameters including surface type, vegetation water content, surface temp., and QC parms are generated from level 2A AMSR-E Tbs spatially resampled to a nominal 25-km equal area earth grid.
File System	DEFAULT
Science Granules and/or Metadata	Science and Metadata
Data Pool Insertion	Valid for Data Pool Inserts
HEG Processing	Disabled
Export Urls to ECHO	Yes
Allow ordering and viewing of associated PH granule	Yes
Allow ordering and viewing of associated QA granule	Yes
Allow ordering of associated Browse granule	Yes
Quality Summary Url	
Spatial Search Type	Orbit
Global Coverage	No
Day/Night Coverage	No
24Hour Coverage	No
Cloud Cover Type	
Cloud Cover Source	
Cloud Cover Description	

At the bottom of the table, there are two links: [Modify Collection](#) and [Return to previous page](#).

**Figure 13.8-4. Detail Information**

- 10** Observe data displayed on the **Detail Information** page.
- Near the top of the **Detail Information page** is the following basic types of collection group information.
  - The **Detail Information** page has rows containing the following types of collection information:
    - **Collection.**
    - **Version.**
    - **Description.**
    - **File System.**
    - **Science Granules and/or Metadata.**
    - **Data Pool Insertion.**
    - **HEG Processing.**
    - **Export Urls to ECHO.**
    - **Quality Summary Url.**
    - **Allow ordering and viewing of associated PH granule.**
    - **Allow ordering and viewing of associated QA granule.**
    - **Allow ordering of associated Browse granule.**
    - **Spatial Search Type.**
    - **Global Coverage.**
    - **Day/Night Coverage.**
    - **24 Hour Coverage.**
    - **Cloud Cover Type.**
    - **Cloud Cover Source.**
    - **Cloud Cover Description.**
  - The following links are available on the Collection **Information Detail** page:
    - **Modify Collection.**
    - **Return to previous page.**
- 11** To view a description for another collection in the same group first click on the **Return to previous page** link.
- The **List of Collections** page is displayed again.

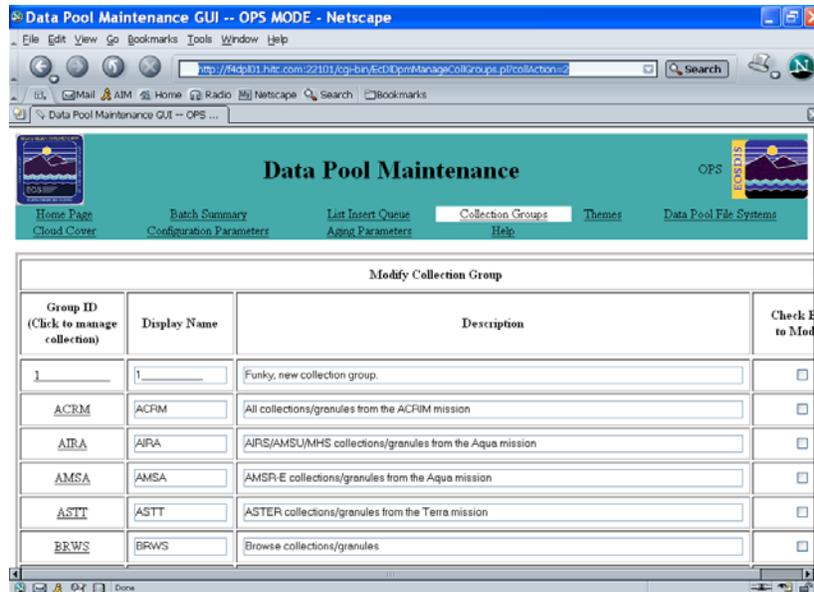
- 12 To view a description for another collection in the same group return to Step 9.
  - 13 To view a description for another collection in another group return to Step 2.
- 

It may be desirable to modify the description of one or more of the collection groups listed on the **Collection Groups** page. If there is a need to modify a collection group description, there is a link at the bottom of the list on that page providing access to a page that permits the descriptions to be modified. Full-capability operators (only) can use the following procedure to modify collection groups:

### 13.8.2.2 Modify Collection Groups

---

- 1 Launch the **DPM GUI**.
  - For detailed instructions refer to the **Launch the DPM GUI** procedure (previous section of this lesson).
  - The **Home Page** is the default display, offering links for access to Data Pool maintenance function pages (i.e., **Data Pool File Systems, Cloud Cover, List Insert Queue, Batch Summary, Collection Groups, Themes, Configuration Parameters, Aging Parameters, and End Session**).
- 2 Click on the **Collection Groups** link.
  - The Collection Groups page is displayed, providing a table listing collection group information; i.e., **Data Source, Group ID (Click to Manage Collections), Display Name, and Description**.
- 3 Click on the **Modify Collection Group** link at the bottom of the page.
  - The **Modify Collection Group** page is displayed (Figure 13.8-5), providing a table of collection group information showing five columns: **Data Source, Group ID (Click to Manage Collections), Display Name, Description, and Checkbox to Modify** (containing a checkbox to mark the collection group for change).



**Figure 13.8-5. Modify Collection Group**

- There is an **Apply Change** button at the bottom of the page for implementing changes.
- 4 To change the display name for the collection group, type the desired name in the **Display Name** field for the group ID.
    - The **Display Name** may have no more than 12 characters.
      - Valid characters include A-Z, 0-9, underscore and space.
  - 5 To change the description of the collection group, type the desired description in the **Description** field for the group ID.
    - The **Description** may have no more than 255 characters.
  - 6 Click in the checkbox at the end of the row containing collection group information to be modified.
    - The selected collection group information is marked for modification.
  - 7 Repeat Steps 4 through 6 for any additional collection groups to be modified.
  - 8 Click on the **Apply Change** button.
    - The revised collection group information is entered in the Data Pool database.
    - The Collection Group page is displayed with the modified collection group information.

---

From time to time, it may be necessary to add a collection group (e.g., if a DAAC begins archiving data from a new instrument). If a collection group is to be added to the list of

collection groups, it is necessary to use the **Add Collection Group** link at the bottom of the **Manage Collection Groups** page. Full-capability operators (only) can use the procedure that follows to modify collection groups:

**NOTE:** Although the following procedure is applicable, most of the time new collection groups will be added only during releases of new software versions and you will not use this procedure often.

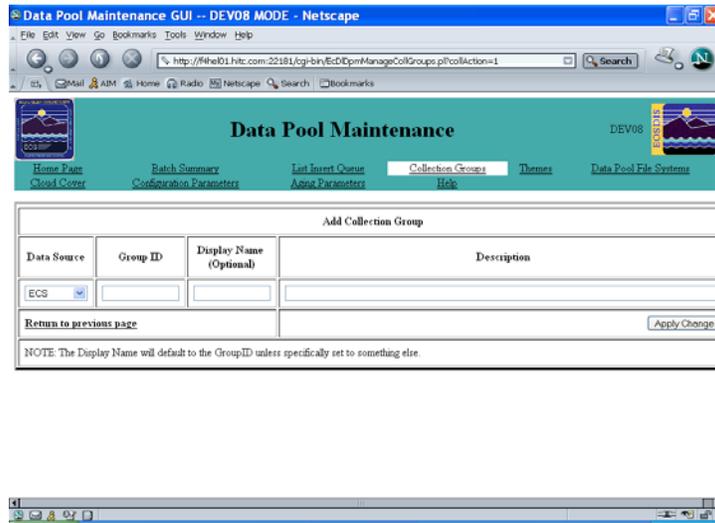
### **Caution**

The Add Collection Group function is to be exercised judiciously because the **DPM GUI** does not provide any means of deleting collection groups.

#### **13.8.2.3 Add a Collection Group**

---

- 1** Launch the **DPM GUI**.
  - For detailed instructions refer to the **Launch the DPM GUI** procedure (previous procedure of this lesson).
  - The **Home Page** is the default display, offering links for access to Data Pool maintenance function pages (i.e., **Data Pool File Systems, Cloud Cover, List Insert Queue, Batch Summary, Collection Groups, Themes, Configuration Parameters, Aging Parameters, and End Session**).
- 2** Click on the **Collection Groups** link.
  - The Collection Groups page is displayed, providing a table listing collection group information; i.e., **Data Source, Group ID (Click to Manage Collections), Display Name, and Description**.
- 3** Click on the **Add Collection Group** link at the bottom of the page.
  - The **Add Collection Group** page is displayed (Figure 13.8-6) providing a page with three columns of text-entry fields, **Data Source, Group ID, Display Name, and Description**.



**Figure 13.8-6. Add Collection Group**

- 4 Select the **Data Source** from the pull-down window.
  - **ECS** or **NONECS** is displayed in the field.
- 5 Type a unique identifier for the new collection group in the **Group ID** field.
  - The **Group ID** may have no more than 12 characters.
    - Valid characters include A-Z, 0-9, and underscore.
  - The **Group ID** will be compared with the existing **Group IDs** to ensure that it is not a duplicate of another ID.
- 6 To provide a display name that is different from the **Group ID** type a name in the **Display Name** field.
  - The **Display Name** is the name for the collection as displayed on the **Data Pool Web Access GUI**.
  - If no **Display Name** is entered, the **Group ID** will be used as the **Display Name**.
  - The **Display Name** may have no more than 12 characters.
    - Valid characters include A-Z, 0-9, underscore and space.
- 7 Type the description for the new collection group in the **Description** field.
  - The **Description** may have no more than 255 characters.
- 8 Click on the **Apply Change** button.
  - The new collection group information is entered in the Data Pool database.

- The Collection Group page is displayed with the new collection group information.

Although an initial Data Pool structure is provided, not all collections are necessarily specified as eligible for Data Pool insertion. Based on experience, or on changes in demand, a DAAC may wish to add one or more collections to a data group. Full-capability operators (only) can use the following procedure to add an ECS collection to an existing collection group:

### 13.8.2.4 Add an ECS Collection to a Collection Group

#### 1 Launch the DPM GUI.

- For detailed instructions refer to the **Launch the DPM GUI** procedure (previous section of this lesson).
- The **Home Page** is the default display, offering links for access to Data Pool maintenance function pages (i.e., **Data Pool File Systems**, **Cloud Cover**, **List Insert Queue**, **Batch Summary**, **Collection Groups**, **Themes**, **Configuration Parameters**, **Aging Parameters**, and **End Session**).

#### 2 Click on the **Collection Groups** link.

- The Collection Group page is displayed, providing a table listing collection group information; i.e., **Data Source**, **Group ID (Click to Manage Collections)**, **Display Name**, and **Description**.

#### 3 Click on the **Group ID** link for the ECS collection group to which the collection is to be added.

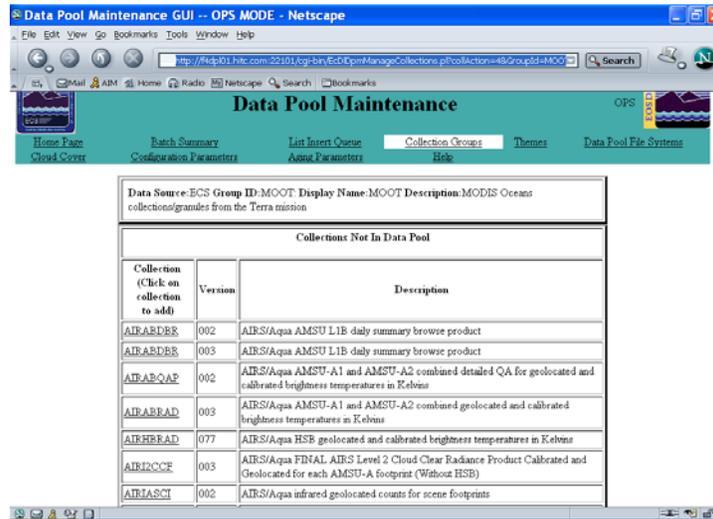
- The **List of Collections** page is displayed (Figure 13.8-7).

The screenshot shows the 'Data Pool Maintenance GUI -- DEV08 MODE - Netscape' browser window. The main content area displays the 'List of Collections' page. At the top, there is a navigation bar with links: Home Page, Batch Summary, List Insert Queue, Collection Groups, Themes, Data Pool File Systems, Cloud Cover, Configuration Parameters, Aging Parameters, and Help. Below the navigation bar, a text box shows: 'Data Source:ECS Group ID:ASTT Display Name:ASTT Description:ASTER collections/grandes from the Terra mission'. Below this is a 'File System' dropdown menu set to 'ALL' and an 'Apply Filter' button. The main table is titled 'List Of Collections' and has the following data:

Collection (Click for Detail Information)	Version	Science Grammes and/or Metadata	Data Pool Insertion	HEG Processing	Expert Urls to ECHO	Quality Summary Url	Spatial Search Type	Global Coverage	Day/Night Coverage	24 Hour Coverage	Cloud Coverage
<a href="#">ASTLIADG</a>	001	science and metadata	valid for Data Pool	Disabled	No	--	GPolygon	No	Yes	No	No
<a href="#">ASTLIYF1</a>	001	science and metadata	valid for Data Pool	Disabled	No	--	Not supported	No	Yes	No	No
		science	valid for				...				

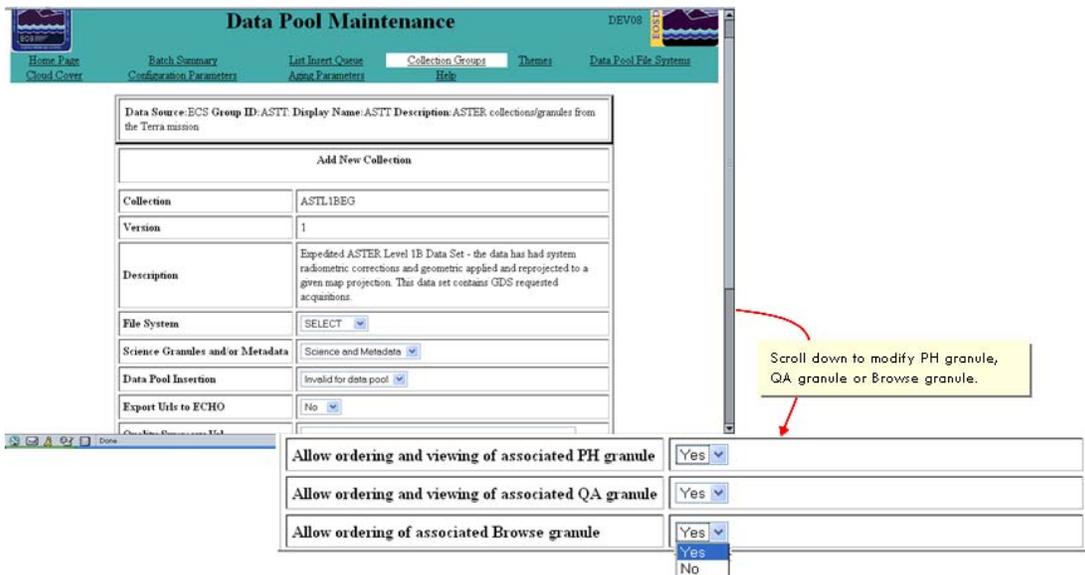
**Figure 13.8-7. List of Collections**

- 4 Click on the **Add New Collection** link at the bottom of the **List of Collections** page.
  - The **Collections Not in Data Pool** page is displayed (Figure 13.8-8).



**Figure 13.8-8. Collections Not In Data Pool Page**

- 5 Click on the link in the **Collection (Click on collection to add)** column of the collection to be added to the collection group.
  - The **Add New Collection** page is displayed (Figure 13.8-9).



**Figure 13.8-9. Add New Collection Page**

- NOTE:** On the ECS collection version of the **Add New Collection** page the **Collection, Version, Description, and Spatial Search Type** fields are already filled in using information from the Data Pool database.
- 6 To select a file system option (if applicable), click on the appropriate choice from the **File System** option list.
  - 7 To select a Science Granules and/or Metadata option, click on the appropriate choice from the Science Granules and/or Metadata option list.
    - **Science and Metadata** is the default option.
  - 8 To select a data pool insertion option, click on the appropriate choice from the Data Pool Insertion option list.
    - **Invalid for data pool** is the default option.
    - **Valid for data pool** must be selected if the collection is to be eligible for insertion into the Data Pool.
  - 9 To select an ECHO export option, click on the appropriate choice from the **Export Urls to ECHO** option list.
    - **No** is the default option.
    - **Yes** must be selected if collection URLs are to be eligible for export to ECHO.
  - 10 To select option to **Allow ordering and viewing of associated PH granule, QA granule, and/or Browse granule**, click the appropriate choice:
    - **No** to disable ordering or viewing of granule.
    - **Yes** to enable ordering or viewing of granule.
  - 11 If the collection is to be linked to a quality summary web site, enter the URL in the **Quality Summary Url** text entry field.
    - Ensure that **http://** is included in the **Quality Summary Url** text entry field.
  - 12 To select a global coverage option, click on the appropriate choice from the **Global Coverage** option list.
    - **Yes** indicates no spatial searches for the collection.
    - **No** indicates that spatial searches are allowed for the collection.
  - 13 To select a day/night coverage option, click on the appropriate choice from the **Day/Night Coverage** option list.
    - **Yes** indicates that day/night searches are allowed for the collection.
    - **No** indicates that the collection is excluded from day/night searches.
  - 14 To select a 24-hour coverage option, click on the appropriate choice from the **24 Hour Coverage** option list.
    - **Yes** indicates that the collection is excluded from time of day searches.
    - **No** indicates that time of day searches are allowed for the collection.

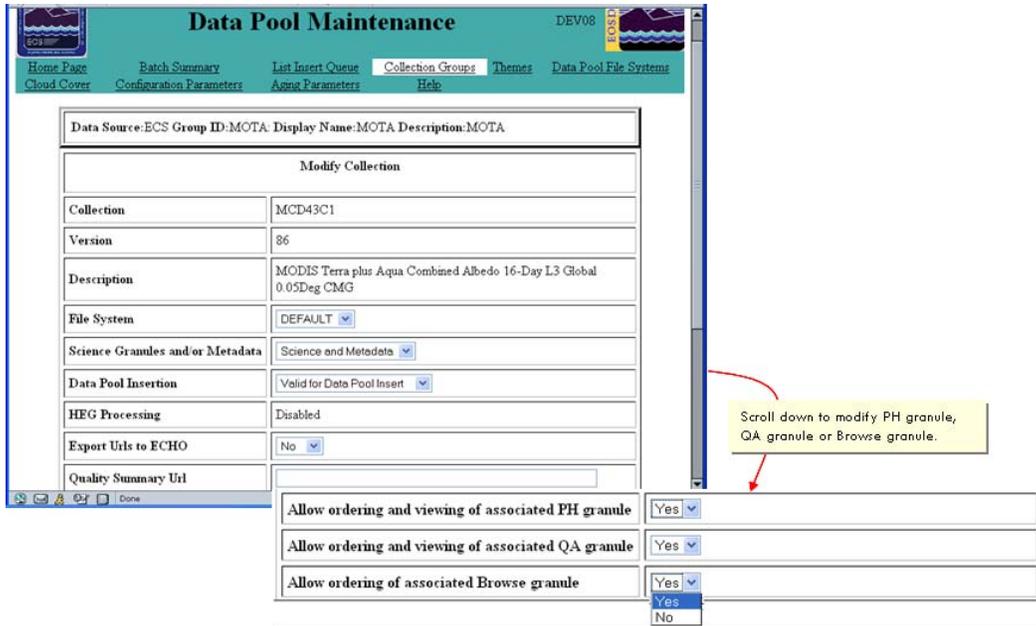
- 15 To select a cloud cover type and source option, click on the appropriate choice from the **Cloud Cover Type & Source** option list.
    - All cloud cover information in the Data Pool database is listed.
    - If the desired cloud cover type/source is not listed, it can be entered using the procedure **Add New Cloud Cover Information Using the DPM GUI** (previous section of this lesson).
  - 16 To view details of cloud cover type and source, click on the **View Details** link adjacent to the **Cloud Cover Type & Source** option list.
  - 17 Click on the **Apply Change** button.
    - The new collection information is entered in the Data Pool database.
    - The **List of Collection** page is displayed with the new collection information.
- 

As part of managing the Data Pool storage and retention of data, making adjustments based on experience and/or changes in demand, it may be desirable to modify a collection. The modification may mean specifying that metadata only may continue to be inserted and science granules may no longer be inserted, or declaring the collection no longer valid for data pool insertion at all.

### 13.8.2.5 Modify an ECS Collection

---

- 1 Launch the **DPM GUI**.
  - For detailed instructions refer to the **Launch the DPM GUI** procedure (previous section of this lesson).
  - The **Home Page** is the default display, offering links for access to Data Pool maintenance function pages (i.e., **Data Pool File Systems, Cloud Cover, List Insert Queue, Batch Summary, Collection Groups, Themes, Configuration Parameters, Aging Parameters, and End Session**).
- 2 Click on the **Collection Groups** link.
  - The Collection Group page is displayed, providing a table listing collection group information; i.e., **Data Source, Group ID (Click to Manage Collections), Display Name, and Description**.
- 3 Click on the **Group ID** link for the ECS collection group to which the collection is to be added.
  - The **List of Collections** page is displayed.
- 4 Click on the desired link found in the **Collection (Click on collection to add)** column.
  - The **Detail Information** page is displayed.
- 5 Click on the **Modify Collection** link.
  - The **Modify Collection** page is displayed (Figure 13.8-10).



**Figure 13.8-10. Modify Collection Page**

**NOTE:** On the ECS collection version of the **Modify Collection** page, the **Collection**, **Version**, **Description**, **Spatial Search Type**, and **HEG Processing** fields cannot be edited.

- 6 To select a file system option (if applicable), click on the appropriate choice from the **File System** option list.
- 7 To select a Science Granules and/or Metadata option, click on the appropriate choice from the Science Granules and/or Metadata option list.
  - **Science and Metadata** is the default option.
- 8 To select a data pool insertion option, click on the appropriate choice from the Data Pool Insertion option list.
  - **Invalid for data pool** is the default option.
  - **Valid for data pool** must be selected if the collection is to be eligible for insertion into the Data Pool.
- 9 To select an ECHO export option, click on the appropriate choice from the **Export Urls to ECHO** option list.
  - **No** is the default option.
  - **Yes** must be selected if collection URLs are to be eligible for export to ECHO.
- 10 To select option to **Allow ordering and viewing of associated PH granule, QA granule, and/or Browse granule**, click the appropriate choice:
  - **No** to disable ordering or viewing of granule.

- **Yes** to enable ordering or viewing of granule.
- 11** If the collection is to be linked to a quality summary web site, enter the URL in the **Quality Summary Url** text entry field.
- Ensure that **http://** is included in the **Quality Summary Url** text entry field.
- 12** To select a global coverage option, click on the appropriate choice from the **Global Coverage** option list.
- **Yes** indicates no spatial searches for the collection.
  - **No** indicates that spatial searches are allowed for the collection.
- 13** To select a day/night coverage option, click on the appropriate choice from the **Day/Night Coverage** option list.
- **Yes** indicates that day/night searches are allowed for the collection.
  - **No** indicates that the collection is excluded from day/night searches.
- 14** To select a 24-hour coverage option, click on the appropriate choice from the **24 Hour Coverage** option list.
- **Yes** indicates that the collection is excluded from time of day searches.
  - **No** indicates that time of day searches are allowed for the collection.
- 15** To select a cloud cover type and source option, click on the appropriate choice from the **Cloud Cover Type & Source** option list.
- All cloud cover information in the Data Pool database is listed.
  - If the desired cloud cover type/source is not listed, it can be entered using the procedure **Add New Cloud Cover Information Using the DPM GUI** (previous section of this lesson).
- 16** To view details of cloud cover type and source, click on the **View Details** link adjacent to the **Cloud Cover Type & Source** option list.
- 17** Click on the **Apply Change** button.
- The new collection information is entered in the Data Pool database.
  - The **List of Collection** page is displayed with the new collection information.

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