

4.7.4 Bulk Metadata Generation Tool

The Bulk Metadata Generation Tool (BMGT) is a utility which exports metadata for granules and collections in the ECS archive to the EOS ClearingHouse (ECHO). This metadata is utilized by ECHO to allow users to search for and order data from the ECS archive. BMGT is used to keep ECHO in sync with ECS archive holdings. BMGT can be run in four different ways, “AUTOMATIC”, “MANUAL”, “CORRECTIVE”, and “VERIFICATION” which are covered in this section. “VERIFICATION” actually covers three export types itself, “VER_LONG” , “VER_SHORT”, and “VER_INC”.

In any of its modes of use, BMGT exports metadata in “packages”. A package is simply a zip file containing multiple XML metadata files, along with zero or more BROWSE data files, which is exported and ingested into ECHO as a whole. The zip file contains at the least a “manifest” file which contains a list of the files, if any, which are contained within the package. Each package has a unique file name, and optionally a unique and sequential packageId.

4.7.4.1 BMGT Automatic Preprocessor

The BMGT Automatic Preprocessor (BAPP) is used by DAAC Operations Staff to export changes to the holdings of the ECS inventory at a regular interval. The DAAC will choose and configure a cycle length, which defines the time period for which metadata changes are aggregated into a single package for export to ECHO. The time period can be any whole number of hours between 1 and 24 which splits a day into a whole number of parts (e.g. 6 hours would be valid, as 4 such intervals would add up to an entire day. 5 hours would not). The BAPP should be run at least once per export interval, and will cause the metadata changes for any preceding un-exported interval(s) to be generated and exported to ECHO. If the BAPP is run more than once per interval, it will simply return without doing any work if there is not an unexported elapsed time period to export. Each day, when the BAPP is run for the first time, it populates the database entries corresponding with cycles for the entire day (and any preceding days where it was not run). Once the cycles are populated, and in subsequent runs throughout the day, the BAPP checks these pre-populated cycles to determine if any of them are eligible to be generated (i.e. the time span of the cycle has passed and it has not been generated yet). For any such cycle that the BAPP finds, it will select and mark changes to the inventory which have occurred during the cycle. It will then mark the cycle for generation by the BMGT Generator server. The BAPP will ensure consistency between the packages that it creates, in other words, it will not export the same metadata change more than once, and will not export metadata that conflicts with metadata that it exported previously. For this reason, the BAPP can be run as a Linux cron job, and allowed to proceed without user interaction. If an error condition arises, and operator intervention is required, an email will be sent to a configured address. The operator can monitor the state of metadata export, and set configuration parameters (as explained in the BMGT configuration section), using the BMGT GUI (See Section 4.7.5).

4.7.4.1.1 BMGT Automatic Preprocessor Usage

EcBmBMGTAutoStart <MODE>

BMGT Automatic Preprocessor usage

4.7.4.2 BMGT Manual Preprocessor

The BMGT Manual Preprocessor (BMPP) provides another interface through which the operator can initiate an export of ECS metadata through BMGT. Unlike an 'AUTOMATIC' instantiation of BMGT, which exports metadata in response to changes, or 'events', a 'MANUAL' BMGT run will export the current metadata for an operator provided set of granules and/or collections. An operator is able to specify which metadata products are desired, or can request the generation of them all. An operator is also able to use the Manual Preprocessor to re-run a previous AUTOMATIC export cycle which has failed or export the contents of the reExport Queue. The operator is also able to use the manual Preprocessor to initiate one of three types of "Verification" exports which will re export metadata which has already been exported to verify that there are no discrepancies between ECS and ECHO holdings. Once the Manual Preprocessor is run (in any of its modes of operation), the desired products will be created by the BMGT Generator server. These products can be exported to ECHO or simply written to the file system, depending on what that operator specifies. The Manual Preprocessor is meant primarily for use when errors occur in the normal automatic processing flow, or when DAAC Operations would like to verify the consistency of ECS and ECHO holdings either routinely or due to some known issue. It can also be used for any other situations in which the normal, automatic export of BMGT metadata is not sufficient, such as exporting historical metadata. The Manual Preprocessor does not prevent multiple exports of the same metadata as Automatic BMGT does. For this reason, DAAC Operations Staff should inform ECHO Staff before using the Manual Preprocessor for export to ECHO, and exercise discretion as to what is exported in a manual cycle.

4.7.4.2.1 Using the BMGT Manual Preprocessor

The BMGT Manual Preprocessor is executed via a start script (EcBmBMGTManualStart.pl, located in the /usr/ecs/<mode>/CUSTOM/utilities directory), which takes one or more parameters. Tables 4.7.4-1 through 4.7.4-11 provide a description of these parameters.

BMPP Guidelines:

- All parameters are optional except **--mode**, but at least one additional parameter must be specified.
- If another BMGT cycle is currently running, the operator will be prompted as to whether they would like to continue, or try again later. If **-x** is specified, and there is an AUTOMATIC cycle currently executing, the Preprocessor will exit. This behavior can be modified using the **--noprompt**, **--force**, and **--retry** options.
- Except when **--help**, **--corrective**, **--incremental** or **--regenerate** is used, at least one option from SELECTION CRITERIA must be specified.

- If no PRODUCT OPTIONS are specified, the preprocessor will by default generate all products.

Table 4.7.4-1. General Options

Option	Notes	Description
--help -h	Overrides all other options	Display a detailed help page.
--mode <MODE>	Required	Run in ECS mode <MODE>.

Table 4.7.4-2. Generated Product Options

Option	Notes	Description
--metg	Requires one or more SELECTION CRITERIA options, and/or one of the verification run type options (--short , --long , --incremental)	Generate an ECSMETG (granule metadata) product.
--metc	requires --collections or --collectionfile , and/or one of the verification run type options (--short , --long , --incremental)	Generate an ECSMETC (collection metadata) product.
--bbr	requires one or more SELECTION CRITERIA options or --short	Generate an ECSBBR (browse) product. The BBR product generated will contain any browse granules explicitly specified by the SELECTION CRITERIA options, as well as browse files associated with any granules specified by those options. Browse linkages to science files will also be generated. If a METG is being generated for an associated science granule, it will include the linkage, otherwise the linkage will be recorded in a METU file. If --short is specified, then the generated product will instead be a list of browse IDs organized by which collections' granules they are linked to, for purposes of verifying these linkages with ECHO.
--url	requires one or more SELECTION CRITERIA options	Generate a Granule Update product containing FTP URLs for any public granules specified by SELECTION_CRITERIA. If --metg is also specified, then this information will be contained in the Granule Metadata files instead.

Table 4.7.4-3. Run Type Options

Option	Notes	Description
--delete	requires one or more SELECTION CRITERIA options	Generate deletion metadata. If this option is omitted, insertion metadata will be generated. Granules and collections being processed in a deletion cycle must be either physically or logically deleted. Similarly, granules and collections specified for a normal insert cycle must currently exist in ECS. If a granule is logically or physically deleted from the archive, it must be explicitly specified (with the --granules or --granulefile option) by geoid rather than dbid. There is a special case, for collections, where a collection that has not been removed or disabled in ECS can be exported as a delete. In this case the user will be asked to confirm that this is their intention, and the collection will be automatically disabled in BMGT configuration.
--short --ver_short --vs		Generate a short form ("VER_SHORT") verification package. A short form package contains only the identifiers for selected collections/granules, and is used for performing existence checks with ECHO. Any of --metg , --metc , --bbr may be specified, but only one of them at a time. If --metg or --bbr is specified, then -g or -gf is not allowed. If --metc is specified, then -c and -cf , as well as -p and -pf are not allowed. -c and -cf are allowed with -metg and -bbr . -p and -pf are also allowed, but not recommended as they would likely result in packages that are very large and this is not desirable.
--long --ver_long --vl		Generate a long form ("VER_LONG") verification package. A long form package contains the full metadata for selected collections/granules, and is used for performing full metadata comparison with ECHO. --metg and/or --metc may be specified with --long , but if --metg is specified, then granules and/or collections must be specified with the -g,-gf,-c , or -cf options. Note that there is no BBR long form product, so --bbr will be ignored if it accompanies --long .
--incremental --ver_inc --inc --i		Initiate an incremental ("VER_INC") verification export, in which the granules to be exported as long form metadata are selected automatically based on an algorithm that exports granule verification in batches for eventual total coverage. An optional list of collections to consider for verification using this algorithm may be specified.

The following options can be used to specify the collections and/or granules for which metadata export is desired. At least one of these options must be specified, except when the **--regenerate** or **--corrective** option is being used. No metadata will be generated unless the associated collection is defined in the groups config file, and has CollExport set to 'Y'. No granule level metadata will be generated unless the collection also has GranExport set to Y. Note that in most cases, updates to the group config file will not be propagated to the database until an automatic cycle has been run, and therefore collections may not be available for manual export immediately after updating the file.

The options below allow specifying granules by dbid or geoid, and also specifying collections by shortname/versionid or group name. Each of these options can take a comma separated (with no spaces) list on the command line, or a file containing one or more values (separated by newlines or whitespace). Using an input file is strongly recommended if the list contains more than 2 or 3 items. If one or more collections are specified (by shortname/versionid or group), a start and/or end date may be specified to limit granules in those collections for which granule metadata (if any) is generated by insert or lastupdate time (depending on whether *--lastupdate* is specified).

If no granules or collections match the specified criteria, and are eligible for export, then an empty package will be generated, and marked as an error. If *--nosequence* or *--noexport* is not specified, then a SYNC package will be generated and exported to ECHO in response to such an error (the SYNC package is necessary in order to keep ECHO and ECS packageIds synchronized).

Table 4.7.4-4. Item Selection Options (1 of 2)

Option	Notes	Description
--collections -c <shortname.version ID>[,<shortname.version ID>,...]		Generate metadata for collection <shortname.versionID>. Multiple collections can be specified, separated by a comma and no space.
--collectionfile --cf <filename>		Same as --collections , but specifies a file which contains one or more collections. The collections can be on one or multiple lines and must be separated either by newlines or whitespace.
--granules -g <ID>[,<ID>,...]		Where <ID> is either a dbid or a geoid in the form: <SC/BR>:<SHORTNAME>.<VERSIONID>:<DBID> Generate metadata for the listed granules. Multiple granules can be specified, separated by a comma and no space.
--granulefile --gf <filename>		Same as --granules , but specifies a file which contains one or more dbids and/or geoids. The ids can be on one or more lines and must be separated either by newlines or whitespace.
--group -p <groupName>[,<groupName>,...]		Generate metadata for the collections and/or granules in the specified group(s).
--groupfile --pf <filename>		Generate metadata for the collections and/or granules in the group(s) listed in the specified file.
--starttime --st <datetime>	requires --collectionfile or -collections	Defines the starting time (inclusive) of a datetime range for which to generate granule metadata. This parameter is used only if --collection , or --collectionfile is specified. It will be used to select a subset of granules from the specified collection(s) for which metadata will be generated. <datetime> should be in the format "YYYY-MM-DD HH:MM:SS" [quotes are required].

Table 4.7.4-4. Item Selection Options (2 of 2)

Option	Notes	Description
--endtime --et <datetime>	requires -- collectionfile or - -collections	Defines the end time (non-inclusive) of a datetime range for which to generate granule metadata. This parameter is used only if --collection , or --collectionfile is specified. It will be used to select a subset of granules from the specified collection(s) for which metadata will be generated. <datetime> should be in the format "YYYY-MM-DD HH:MM:SS" [quotes are required].
--lastupdate	requires -- endtime and/or -- starttime	Causes the --starttime and --endtime values to be used to select granules based on lastupdate rather than insert time.

Table 4.7.4-5. Output Options

Option	Notes	Description
--noexport --ne	implies --nosequence	Do not export the generated package to ECHO, and do not assign it a sequence number.
--nosequence --ns		Generated package should not be assigned a sequence number. This is automatically implied when --noexport is specified.
--daacstring -d		A string up to 40 characters long and consisting only of valid Unix file name characters (excluding period) to be included as part of the file names in the metadata export package created by a manual export operation. For example, using " --daacstring AnnMiltEchoSmallMetgEchoTest " will produce a package zip file named: EDFManualExport.AnnMiltEchoSmallMetgEchoTest.200800710.200800710.2008007110752.000717.zip

Table 4.7.4-6. Concurrency Options

Option	Notes	Description
--excludeAuto -x		Prevent the execution of any Automatic export cycles concurrently with this manual cycle.
--noprompt -np		If there are other export cycles currently executing, instead of asking user what to do, just exit with an error. Useful when calling manual processor from a script.
--retry -y		If there are other export cycles currently executing, instead of asking user what to do, wait 10 seconds, and check again. Repeat until no currently executing cycles are found. Implies noprompt. Useful when calling manual processor from a script.
--force -f		Ignore currently executing export cycles and run regardless. Implies noprompt. Useful when calling manual processor from a script.

Table 4.7.4-7. Error Recovery Options

Option	Notes	Description
--regenerate -r <package ID >	incompatible with --excludeAuto and --delete . Overrides all other options besides OUTPUT OPTIONS	Attempt to regenerate the AUTOMATIC package specified by the packageId <package ID>. Must specify --nosequence if package to be regenerated is in COMPLETE state. Specified package must not be in the EXPORTED state. NOTE: packageId must be given, NOT cycleId .
--report -t		Generate a report of the contents of the reExport queue which are being reexported.
--corrective -v		Initiate a corrective export containing any granules which are in the reExport Queue. Incompatible with all options except --mode , --ns , --na , --delete . Calling without the --delete option will cause all items queued for insert n the reExport queue to be exported. Calling with --delete will cause the delete items to be exported. If both insert and delete items exist on the queue, then two packages, one with and one without --delete will be necessary to export all items queued for reexport.
--outdir -o <directory>	requires --report	Write the re-export queue report to a file in the given directory. The file will be clearly labeled as a BMGT re-export queue report with the current time as part of its name.

Examples

Request a manual BMGT package containing all relevant granules and collection metadata for all granules in all collections in the file './collections'. The package will have no sequence number and not be exported to ECHO.

```
EcBmBMGTManualStart.pl --mode <MODE> --metg --metc --noexport --nosequence --collectionfile ./collections
```

Request the regeneration of a previous AUTOMATIC cycle with packageId 122, but only for local usage, and not export to ECHO. A new package will be generated with the same package Id, but a new cycleId. All events during the specified cycle will be exported in the new cycle.

```
EcBmBMGTManualStart.pl --mode <MODE> --regenerate 122 --noexport
```

Request the generation of a BMGT package containing the METG, METC, and URL metadata for the granules and collections specified in the command options. In addition, METG and URL metadata will be generated for the granules that belong to the specified collections and were inserted into the inventory between the specified start and end dates.

```
EcBmBMGTManualStart.pl --mode <MODE> --metg --metc --url --collections  
AST_L1A.001,MOD29P1N.001,MOD29P1D.002 --granules  
213388,213400,213402,212100,213395 --starttime "2006-02-21 14:07:00" --endtime "2008-  
01-18 09:54:22"
```

Request the export of the contents of the reExport Queue to correct errors that were returned from ECHO for previous packages. Output a report of the contents of the corrective export to a file in the specified directory.

```
EcBmBMGTManualStart.pl --mode <MODE> --corrective --report --outdir  
./BmgtReports
```

Request the export of a listing of all granules in the specified collections to be compared against the ECHO holdings for the collections.

```
EcBmBMGTManualStart.pl --mode <MODE> --short --metg -c MOD29P1D.001,  
MYD29P1N.001
```

Request the export of full granule and collection metadata for all collections in the group 'MOLT' and all of the granules in those collections which have a lastUpdate value within the provided boundaries. This metadata will be compared against that which ECHO already has to find and repair any discrepancies.

```
EcBmBMGTManualStart.pl --mode <MODE> --long --metg --metc --p MOLT --starttime  
"2006-02-21 14:07:00" --endtime "2008-01-18 09:54:22" --lastupdate
```

Request the export of full granule metadata for a set of granules determined by the BMGT based on a configured time interval, max number of granules per package (both configured via the BMGT GUI), and the lastUpdate of the granules. This 'incremental' package will constitute a set of the least recently updated granules which have not yet been verified with ECHO since they were updated.

```
EcBmBMGTManualStart.pl --mode <MODE> --incremental
```

NOTE: it is recommended that incremental mode be set up as a cron job to run on a regular interval. If this is done, use the --force option to override any prompts which would require user response.

4.7.4.3 BMGT ReExport Queue Utility

When processing Ingest Summary Reports from ECHO, the BMGT system will handle some reported errors by enqueuing corrective actions on the BMGT ReExport Queue. DAAC Staff can then remedy the reported error by running the BMGT Manual Start Script with the **--corrective** option. The **--corrective** option processes any corrective actions on the ReExport Queue, and exports corresponding metadata to ECHO. This functionality is covered in Section 4.7.4.2.1.

In addition to processing the ReExport Queue for corrective export to ECHO, DAAC staff may also view and manage the ReExport Queue with the BMGT ReExport Queue Utility. The ReExport Queue Utility offers two options for viewing the queued actions; report, which prints the queue contents as a list of actions, and summary, which prints a statistical summary of the queued actions grouped by collection/group/itemtype(science or browse). The queue report or summary is printed to a file specified by the user (or to the terminal if none is specified). The utility also offers the ability to delete one or more actions from the queue, by providing dbIDs, cycleIds, or geoids on the command line or in a file. Report output can be filtered by collection, original cycleId, and/or group, which can be specified on the command line, or in a file.

4.7.4.3.1 Using the BMGT ReExport Queue Utility

The ReExportQueue utility will be called as shown below:

EcBmBMGTReExportQueue.pl <MODE> [COMMAND] [OPTIONS]

[COMMAND] is one of the commands listed in Table 4.7.4-8 below, and [OPTIONS] is zero or more of the options listed in Table 4.7.4-9.

Table 4.7.4-8. ReExport Queue Utility Commands

Command Name	Comments
--report -r	Print the current contents of the re-export queue, sorted by original cycle ID, newest first, then by collection, then by item type.
--stat -s	Print a statistical summary of the re-export queue contents. Items are grouped by collection plus group plus item type plus ECHO error response. Each group is accompanied by the count of the items within it.
--delete -d	Delete items from the re-export queue. -delete requires at least one of --cycleids, --cycleidfile, --ids or --idfile, but will accept more than one.

Table 4.7.4-9. ReExport Queue Utility Options (1 of 2)

Parameter Name	Comments
--mode -m <MODE>	Run in ECS mode <MODE>. Mode must be provided, either by this option, or by itself as the first argument to the utility.
--help -h	Display a detailed help page.

Table 4.7.4-9. ReExport Queue Utility Options (2 of 2)

Parameter Name	Comments
--outdir -o <dirname>	The directory in which to write the report or summary file. Each file will be automatically given a name that identifies it and the time the report or summary was created. Only one output directory may be specified at a time. If no directory is specified, output will be to the terminal.
--collection -c <ShortName.Version D>	The collection for which a report should be generated. More than one collection option may be given, resulting in all items from the re-export queue in any of the named collections being included in the report. Collection may be combined with group. Only valid for "report".
--group -c <groupName>	The group for which a report may be generated. More than one group option may be given, resulting in all items from the re-export queue in any of the named groups being included in the report. Group may be combined with collection. Only valid for "report".
--ids -i <ID>[,<ID>,...]	A list of IDs of granules to be deleted from the re-export queue. IDs must be separated by commas with no space between them, or they will be seen as separate, unrecognized arguments. IDs may be granule IDs (only digits) or geoids (e.g., SC:MOD14.005:12345). More than one ids switch may be given. ids may be combined with idfile.
--idfile -f <filename>	A file containing a list of granule IDs or geoids, separated by whitespace or commas. More than one idfile may be given. idfile may be combined with ids.
--cycleids -y <cycleid1,...>	A list of --cycleids . Combined with report, this option will cause the produced report to contain only those queued items which were added due to one of the listed cycles. Combined with delete, this option will result in the items which were enqueued due to the listed cycles being removed from the queue. IDs must be separated by commas with no space between them, or they will be seen as separate, unrecognized arguments. --cycleids may be combined with --cycleidfile .
--cycleidfile -l <cycleidfile>	A file containing a list of --cycleids , separated by whitespace or commas. More than one --cycleidfile may be given. --cycleidfile may be combined with --cycleids .

Examples

Print a report of all contents of the ReExport Queue to standard output.

```

EcBmBMGTReExportQueue.pl DEV03 --report
Granule ID      Collection  Type Group      Cycle ID      ECHO Error Response
Action
-----
- - - - -
INS            145454 Browse.001  BR  BRWS            36115 BROWSE_NOT_EXISTS
INS            117226 Browse.001  BR  BRWS            31655 BROWSE_NOT_EXISTS
DEL            94783  AE_Land.002 SC  AMSR            31290 GRANULE_UNEXPECTED
DEL            94784  AE_Land.002 SC  AMSR            31290 GRANULE_UNEXPECTED
  
```

Print a report of all contents of the ReExport Queue which belong to collection MB2LME.002 to standard output.

```
EcBmBMGTReExportQueue.pl DEV03 --report --collection MB2LME.002
```

Granule ID	Collection	Type Group	Cycle ID	ECHO Error Response
INS	21155 MB2LME.002	SC MISR		1335 BROWSE_NOT_EXISTS

Print a report of all contents of the ReExport Queue which belong to the MOLT group to standard output.

```
EcBmBMGTReExportQueue.pl DEV03 --report --group MOLT
```

The re-export queue is empty.

Print a statistical summary of all contents of the ReExport Queue to standard output.

```
EcBmBMGTReExportQueue.pl DEV03 --stat
```

Count	Collection	Type Group	ECHO Error Response
1	MB2LME.002	SC MISR	BROWSE_NOT_EXISTS
2	MISBR.005	SC MISR	BROWSE_NOT_EXISTS

Associated Browse

Parent Count	Parent Coll.	Browse Coll.	ECHO Error Response

Delete granule with dbID 21155 from the ReExport Queue.

```
EcBmBMGTReExportQueue.pl DEV03 --delete --ids 21155
```

Attempting to delete 1 granule from the re-export queue.

Write to a file in /home/cmshared a report of all contents of the ReExport Queue.

```
EcBmBMGTReExportQueue.pl DEV03 --report --outdir /home/cmshared/
```

Report written to /home/cmshared/bmgt-reexport-queue-report-20081203111502.txt

4.7.4.4 BMGT Configuration

Configuration of the BMGT is stored in a text file and a database table that are shared by all of the BMGT components.

4.7.4.4.1 EcBmBMGT.properties

This file is located in /usr/ecs/<MODE>/cfg. It contains low level configuration parameters, such as database connection information and configuration of a proxy (if needed) which is used as a gateway to the external internet for use during FTP.

Table 4.7.4-10. BMGT Configuration File Parameters (1 of 2)

Parameter Name	Description
PGM_ID	Not used by manual Preprocessor
LOG_LEVEL	Verbosity level of logs.
DATABASE_DRIVER	Database driver for Java BMGT servers. Not used by manual preprocessor.
DATABASE_HOST	The host where the SQL server is located.
DATABASE_PORT	The database port, used by the Java BMGT servers.
DATABASE_USER	The BMGT database user
DATABASE_PWSEED	The seed for decoding the database password.
DATABASE_DPLNAME	The name of the Data Pool database.
DATABASE_DPLPOOLSIZE	The size to use for the Data Pool database connection pool. (not used by manual pre processor)
DATABASE_INVNAME	The name of the Inventory database.
DATABASE_INVPOOLSIZE	The size to use for the Inventory database connection pool. (not used by manual pre processor)
FTP_TIMEOUT_USECS	The FTP timeout interval used by the Export server. This value (in milliseconds) determined how long BMGT will try to push or pull a file before giving up.
DPL_URL_ROOT	The root of all DataPool URLs. This must include both the protocol (most likely 'ftp://') and the fully qualified host name. This host should be accessible from outside the firewall. The default port for the given protocol is assumed unless a different port is specified after the hostname as ':<portnum>'. Entering the URL specified for this value into a browser should bring up the root of the anonymous FTP server. An example value is : "ftp://e4ftl01u.ecs.nasa.gov"
SITE_ID	The three letter site identifier
FTP_PROXY_HOST_NAME	The hostname of the ftp proxy server that should be used to FTP to the ECHO site. If this value is not provided, or is an empty string, no proxy server will be used.

Table 4.7.4-10. BMGT Configuration File Parameters (2 of 2)

Parameter Name	Description
FTP_PROXY_USERNAME	The login user name to the ftp proxy server. This value is only needed if the FTP_PROXY_SERVER configuration parameter is set.
FTP_PROXY_PASSWORD	The login password for the ftp proxy server. This value may only be needed if the FTP_PROXY_SERVER configuration parameter is set. If no password is required, this value may be omitted, or left empty.
FTP_CLIENT_IMPL	The option to change between using the legacy Apache FTP libraries for exporting packages or the datapool FTP pooling Web Service. For FTP pooling, use the value 'DIFtpClient'. For the legacy Apache library, use 'Apache'.
BCP_FILE_DIR	The location to put a temporary file holding granule IDs to be BCPed in to the database for manual export initiation.

4.7.4.4.2 DsMdBmgtConfig Table

The majority of the configuration parameters for the BMGT system are set in the DsMdBmgtConfig table of the Inventory database. Below is a subset of the parameters in that table. There are additional parameters which are not included below, but which are not directly relevant to the BAPP and BMPP (they are used by the down stream BMGT servers). The parameters below are configured using the BMGT GUI (Section 4.7.5).

Table 4.7.4-11. DsMdBmgtConfig Parameters (1 of 2)

Parameter Name	Used By	Description
AUTOMATIC_CYCLE_LENGTH_HRS	AUTO	The length of the currently configured automatic export cycle, measured in hours. The BMGT does not need to be restarted if this value is changed, but note that the new value will not apply until the next day. Valid values are 1,2,3,4,6,8,12,24
AUTOMATIC_CYCLE_RETRY_INTERVAL_MINS	AUTO	The time interval, measured in minutes, between retries of a failed automatic export cycle. Recommend values in the range 30 to 60 minutes.
GROUPS_CONFIG_FILE	BOTH	The absolute path of the ESDT group configuration file.
MAX_DATA_SKIPPED	AUTO	The maximum number of data-related errors that the BMGT may encounter when generating an export package before the package will fail.
MAX_SIZE_ECSBBR	BOTH	The maximum number of browse inserts/deletes allowed for ECSBBR files. Export products larger than this will have their output split into multiple files.
MAX_SIZE_ECSMETG_KB	BOTH	The maximum size for ECSMETG files, measure in Kb. Export products larger than this will have their output split into multiple files.

Table 4.7.4-11. DsMdBmgtConfig Parameters (2 of 2)

Parameter Name	Used By	Description
MAX_SIZE_ECSMETU	BOTH	The maximum number of updated granules that may be allowed in a single ECSMETU file. Export products larger than this will have their output split into multiple files. This value also limits the size of URL files.
NOTIFICATION_EMAIL_ADDR	BOTH	Email address(es) that will be used to send alerts or error notifications to. Multiple addresses may be provided by separating them with whitespace.
PRODUCT_ROOT_DIRECTORY	BOTH	The root directory under which the temporary package directories will be created. These are used to store the product/package files for ingest or export.
INCREMENTAL_INTERVAL	MANUAL	The lastUpdate interval in days for a BMGT incremental verification package. This is the maximum range of lastUpdate times in a single incremental verification package.
MAX_VERIFICATION_GRANULES	MANUAL	The maximum number of granules that can be exported in a BMGT long form verification package. The user will be prompted if this maximum will be exceeded and given the choice of overriding it.
REEXPORT_THRESHOLD	MANUAL	The number of reexport actions which will cause an alert email to be sent to the operator.
VER_REPAIRED_ITEM_LIST_DIR	MANUAL	The directory to put a list granules which received verification errors, but have been repaired. If this value is left blank, then no such lists will be created. If it is not blank, then for each long for verification export for which there are errors which have been repaired by ECHO, a file will be written.

4.7.4.4.5 Group Configuration

Group configuration determines what collections are enabled for export by BMGT, and how they are grouped. There are three sources for this information, all of which read from and/or populate each other.

- **EcBmBMGTGroup.xml**: The location of this file can be configured in the global tuning page of the BmgtGui, but is generally `/usr/ecs/<MODE>/CUSTOM/cfg/EcBmBMGTGroup.xml`. This file is where you do the initial configuration and make any changes to the configuration. The contents of this file are then used to populate the two group config tables as described below. Also, see the section on the format of this file below.
- **DsMdBmgtGroupConfig**: Holds the current group configuration. If there are any changes in the EcBmBMGTGroup.xml file, these will be reflected in DsMdBmgtGroupConfig table as soon as BMGT Auto start is run.
- **DsMdBmgtWrkGroups**: This holds the group configuration for a particular cycle. This should in general reflect the contents of both EcBmBMGTGroup.xml, and

DsMdGroupConfig, unless a change is in the process of being propagated from the file to the table.

All BMGT cycles get their group/collection mapping from DsMdBmgtWrkGroups during generation. The way that this is populated depends on the type of export.

4.7.4.4.5.1 Group Configuration File

The BMGT group config file is an XML file containing the definition of BMGT groups, and specifying which ECS collections belong to each group. Any collection for which BMGT output is desired must be included in this file. In fact it is recommended to have all collections which are in use at a DAAC included in this file. It is also recommended, but not necessary, to use the same groupings that are used in the DataPool.

The file contains multiple Group elements, each containing one or more collections. For each collection, the file contains 'GranExport' and 'CollExport' parameters, in addition to ShortName and VersionID. These values determine whether the specified collection will have collection, and/or granule metadata (if it exists) exported by a BMGT cycle. These parameters apply to all types of export cycles. The location of the group config file is determined by the value of 'GROUPS_CONFIG_FILE' in the database, as described in the table above. Below is an example of a simple groups config file:

The Group config file contains a root element called "groupConfigFile". This element can contain multiple "group" elements which are each defined like this:

- **group**
 - **name:** The name of the group.
 - **ESDT:** A collection to be included in the group.
 - **ShortName:** The shortname of the collection.
 - **VersionID:** The version ID of the collection.
 - **CollExport:** If Y, BMGT will export collection metadata for this collection.
 - **GranExport:** If Y, BMGT will export granule metadata for granules in this collection.

The group config file is read whenever the BAPP or BMPP is run. During an automatic cycle, its contents are loaded into a database table, and are compared to the configuration which is already saved there. If a change is detected, the following actions are performed:

- a) CollExport goes from N to Y: Collection metadata will be exported in this cycle, regardless of collection insert time.
- b) GranExport goes from N to Y: Metadata will be exported in this cycle for all granules in this collection, regardless of insert time.
- c) CollExport and GranExport go from N to Y: Same as (a) for the current cycle, same as (b) for next cycle.
- d) GranExport or CollExport goes from Y to N: THIS SHOULD NOT BE DONE UNTIL AFTER THE COLLECTION IS DELETED.

A Manual or Corrective cycle does not check for changes, but uses the current values in the group config file.

Figure 4.7.4-1 shows the sample groups configuration file.

```
<?xml version="1.0"?>
<groupConfigFile>
  <group>
    <name>ASTT1</name>
    <ESDT>
      <ShortName>AST_L1B</ShortName>
      <VersionID>1</VersionID>
      <CollExport>Y</CollExport>
      <GranExport>Y</GranExport>
    </ESDT>
    ...
  </group>
  ...
</groupConfigFile>
```

Figure 4.7.4-1. Sample Groups Config File

4.7.4.4.5.2 Using the GroupConfig File

Automatic

When the Automatic preprocessor runs, it updates DsMdBmgtGroupConfig with any values that have changed in EcBmBmgtGroup.xml. If there is a new collection, or an export flag has changed, this will be added to the database. If there is a changed flag, BMGT might also do some special processing. For instance, if granule export was newly enabled, the automatic pre processor will request the export of all granules in that collection. Based on what is put into DsMdBmgtGroupConfig, DsMdBmgtWrkGroups will also be populated.

Manual (and Verification/Corrective)

When the manual pre processor is run, it populates DsMdBmgtWrkGroups from the contents of EcBmBmgtGroup.xml. It does not modify DsMdBmgtGroupConfig. However, there are a few things that could determine whether a particular mapping can be added or not.

- 1) If a collection does not exist in DsMdBmgtGroupConfig, it cannot be added to DsMdBmgtWrkGroups, and nothing can be exported for that collection until an automatic cycle is exported.
- 2) If the collection does not have collection export flag set to Y in both the group config file and DsMdBmgtGroupConfig, it cannot be added to DsMdBmgtWrkGroups, and nothing can be exported for that collection in a manual export.
- 3) If the collection is not in DsMdCollections, it cannot be added to DsMdBmgtWrkGroups, and nothing can be exported for that collection unless the delete flag is set (--delete in manual start script) or the cycle is an AUTOMATIC export.

If you see the 'collection does not exist and cannot be exported' error in the manual pre

processor log file, this is likely because collection export is not Y in either the DsMdBmgtGroupConfig table or the groups config file

4.7.4.5 Required Operating Environment

BMGT runs on a Linux platform.

4.7.4.6 Interfaces and Data Types

Table 4.7.4-12 lists the supporting products that this tool depends upon in order to function properly.

Table 4.7.4-12. Interface Protocols

Product Dependency	Protocols Used	Comments
Data Pool database	SQL	Via SQL server machines
Inventory database	SQL	Via SQL server machines
Java JRE version 1.6.0_02	Linux system call	
Java jConnect	Java Library	
Perl Interpreter	Linux system call	

4.7.4.7 Outputs

The Manual and Automatic Preprocessors do not generate output files themselves. They produce output into the ECS Inventory and DataPool databases which causes output files to be created through the BMGT Generator. This output is a set of XML files which follow the ECHO 10 ingest Schema. These XML files are collected into a single zip file. Output may also include Browse files which are not packaged in the zip file.

4.7.4.8 Event and Error Messages

Error messages will be displayed to either the log file or standard output, depending on at what point during execution they occur (see Section 4.7.4.9).

4.7.4.9 Logs

The Manual preprocessor writes to a log file named EcBmBMGTManual.log in the /usr/ecs/<mode>/CUSTOM/logs directory. This log file contains the original call to the preprocessor, including all arguments, as well as all database stored procedure calls, any errors that occur, and other pertinent information. Fatal errors are printed both to the log and to standard output. Errors that occur before the log is opened will be printed to standard output only. The ReExport Queue utility writes to a similar log at EcBmBMGTReExportQueue.log in the same log directory.

The Automatic Preprocessor and the remaining BMGT components use a common logging library. The verbosity of this logging can be tuned by the LOG_LEVEL configuration parameter (via the BMGT GUI (Section 4.7.5)). At the highest verbosity, the log will contain all stored procedure calls, the entrance and exit to/from many methods, and any errors or exceptions which

occur. Any errors in the initial start up of a BMGT component (e.g. the component is already running) will be displayed in a separate standard output log.

4.7.4.10 Recovery

4.7.4.10.1 Manual Preprocessor

There is no manual recovery required for the BMPP. If the BMPP is killed by a user interrupt, or encounters a fatal error, it will move the state of the cycle (if any) it has created to CANCELED, and mark it for cleanup by the BMGT Monitor server. The operator is free to try the same command again once the cause of the failure is corrected, creating a new cycle, but there is no need, or ability to recover the failed cycle.

4.7.4.10.2 Automatic Preprocessor

If the BAPP fails to complete while in the middle of preprocessing a cycle, recovery is as simple as rerunning the BAPP. Like the BMGT servers, it will not change the state of the cycle until it has completed. A subsequent run will retrieve the same cycle and do all of the necessary preprocessing as if it had not been done before.

4.7.4.10.3 BMGT Servers

The BMGT servers (Generator, Packager, Exporter, and Monitor) poll the Inventory database for packages in a particular state, perform work on them, and then change the state of the package for the next server to pick up. If a server dies while doing work on a package, the package will remain in its current state, and be picked up again when the server is restarted. No operator interaction is required, other than fixing whatever problem may have caused the server to die.

If an error causes a package to fail, but does not cause the server to crash, the response will depend on the type of package. All automatic packages are required to complete, so they will be retried ad infinitum until successfully generated and exported. Retries are performed automatically at an interval defined by the configuration parameter "AUTOMATIC_CYCLE_RETRY_INTERVAL_MINS", and do not require re-running the BAPP. If desired, an automatic package can be re-run prior to the retry interval passing, by using the "--regenerate" (See Section 4.7.4.2.1) option of the BMPP. If a manual package fails, it will not be retried, and will be put in a failed state where it will be cleaned up. If the manual package, however, has a packageId associated with it (i.e. **--nosequence** was not specified), an empty "SYNC" package will be exported to ECHO to replace the failed manual package in the package sequence.

All packages that are exported to ECHO should result in an Ingest Summary Report being generated by ECHO. This report will list any errors that occurred on ingest of the metadata, and BMGT will handle these errors appropriately. Some types of errors may result in a regeneration and/or reexport of the package. If an AUTOMATIC or VER_INC package is retried in such a way more than a threshold number of times defined by NUM_RETRIES_FOR_ALERT, in the BMGT configuration, then an alert will be raised. The operator will be alerted via email and a notification will be displayed on the BMGT GUI. A raised alert will restrict what can be exported by BMGT before the issue has been addressed and the alert cleared. If the errant package was of type VER_INC, then the alert will limit allow export of only AUTOMATIC and

un sequenced MANUAL packages. If the errant package was of type AUTOMATIC, then the alert will allow only un-sequenced MANUAL packages to be exported. Clearing the alert (using the BMGT GUI) will return BMGT export to normal.

4.7.4.11 Sybase Error Handling

All BMGT components will attempt to deal with Sybase errors gracefully, usually by retrying the query. If a query cannot be completed after several retries, BMGT will try to put the current package into an appropriate state to reflect the error. If this fails, then the component will either exit, or continue to output error text to the log files. All Sybase errors will be reported to the log of the BMGT component in which the error occurred.

This page intentionally left blank.

4.7.5 Bulk Metadata Generation Tool GUI

The Bulk Metadata Generation Tool (BMGT) GUI is a web-based interface that allows the operator to monitor the export of BMGT packages (in Automatic, Manual, Corrective, or Verification mode). The primary purpose of the GUI is to provide the operator with a list of recent packages and their detailed information. In addition, the operator can also use it to configure various BMGT tuning parameters, such as the length of an Automatic cycle. Since it is possible for errors to occur during the FTP process, the GUI is also able to display the status of BMGT FTP service and the global FTP alerts.

In the BMGT GUI, each user session is controlled by a session timeout value (in minutes) defined in the `"/usr/ecs/OPS/COTS/tomcat_<version>/webapps/BmgtGui_<MODE>/WEB-INF/web.xml"` file. If the GUI page's idle time reaches the timeout value (by default set to 30 minutes), the session will be expired and the GUI will be automatically redirected to the login page.

The BMGT GUI follows the look and feel of the DPL Ingest GUI, however, with only a subset of that GUI's functionality implemented. Specifically,

- context-sensitive help is not supported
- user access privilege is defined simply as “Administrator” (allowed to configure global tuning parameters) or “Operator” (only allowed to view the parameters).

4.7.5.1 Login Page

The Login Page (shown in Figure 4.7.5-1) allows the operator to log in either as the Administrator (with the ability to configure the global tuning parameters) or as an Operator (view only, no editing privileges). The Administrator login requires a password, while the Operator one does not.

To login as Administrator, the user needs to perform the following steps:

1. enter the administrator login password in the box designated as “Administrator Password:”;
2. upon entering the correct password, click on the button labeled as “Admin Login”.

To login as Operator, simply click on the button labeled as “Operator Login” without entering the password.

In either case, the user is required to click on either of the login buttons to log into the BMGT GUI. If the user inputs an incorrect password, an error message in red font “Administrator incorrect password” is displayed below the login buttons.

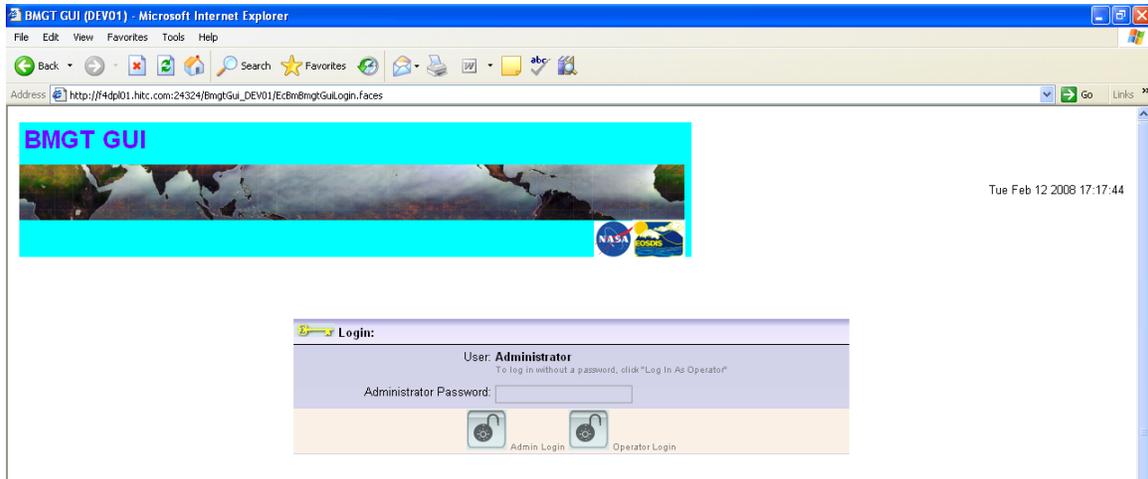


Figure 4.7.5-1. BMGT GUI Login Page

4.7.5.2 Navigation Panel

After a successful login, the user is presented with a navigation panel on the left side of the screen (Figure 4.7.5-2), which consists of the following menu items, texts, and links:

- Home Page
- Monitoring
 - Recent Packages
 - Failed Packages
 - ReExportQueue
- Configuration
 - Global Tuning
 - Group Configurations
 - Error Tuning
- [reload page]
- You are logged in as Administrator (*or Operator*)
- You are under mode DEV01 (*or other modes*)
- [log out]

This navigation panel is displayed on each of the GUI pages to provide the user a menu-based utility to switch between the GUI pages. Under the “Monitoring” heading are three options for monitoring the state of BMGT packages. The Recent Packages item allows the user to view recent export packages, including those currently in progress. The Failed Packages item shows export packages that encountered errors, and the ReExportQueue item shows ECS objects which are queued to have their metadata reExported to ECHO due to a previous error returned from ECHO. Under the “Configuration” heading are three options for modifying and/or viewing BMGT configuration settings. The Global Tuning item allows the user to view and update the BMGT global configuration parameters, the Group Configurations item allows the user to view and modify some attributes of the current collection group configuration (and view the current status of incremental verification), and the Error Tuning item allows the user to view the error

handling policies for error codes returned from ECHO. A user must be logged in as Admin in order to modify the values in Global Tuning or Group Configuration. The values in Error Tuning are static and can not be modified through the BMGT GUI.

The navigation panel also displays your login type, i.e. either Admin or Operator, and the mode the GUI is in. It also provides a “reload page” button to allow the user to manually refresh the GUI page on the right, and a “log out” button to log the user out of the GUI.

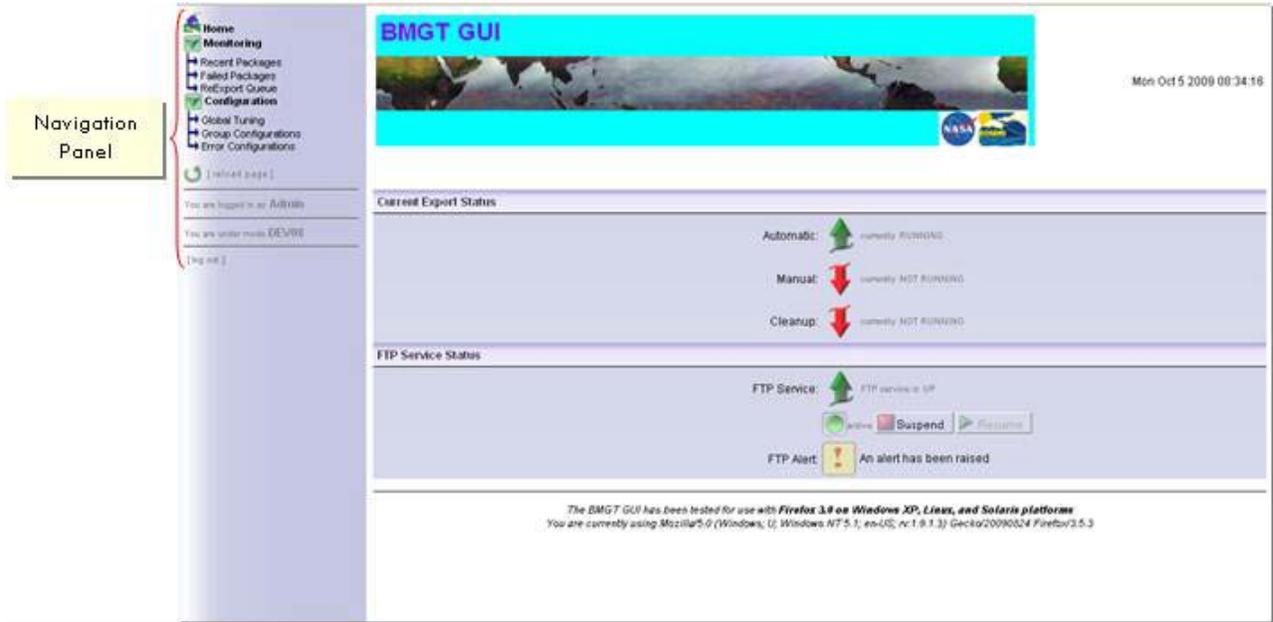


Figure 4.7.5-2. Home Page and Navigation Panel

4.7.5.3 Home Page

After logging in, the user will see the BMGT GUI Home Page (the right part of Figure 4.7.5-2), which provides an overview of the current system status, including the current export status (whether any packages are currently being generated for each export type), and the BMGT FTP Service status.

The Current Export Status section of the page shows whether the instances of the Automatic or Manual Export are currently running. An upward green arrow indicates the corresponding export type is running while a downward red arrow indicates it is not running. Note that ‘running’ in this context means that a cycle is being generated. Regardless of the status on this page, BMGT will be able to generate cycles of any export type as long as the Generator server is running.

The FTP Service Status section displays the current state of the BMGT FTP Service and allows the user to suspend/resume the service. The BMGT FTP Service can be in one of the following three states:

- (1) a red downward arrow indicates the BMGT FTP Service is down. Under such a state, both “Suspend” and “Resume” buttons are disabled;

- (2) an upward green arrow and an enabled “Suspend” button indicate the BMGT FTP Service is up and active. Clicking on the “Suspend” button will suspend the service and turn on the “Resume” button;
- (3) an upward green arrow and an enabled “Resume” button indicate the BMGT FTP Service is suspended. Clicking on the “Resume” button will resume the service and turn on the “Suspend” button.

In addition to the BMGT FTP status, the GUI also shows the existence or absence of a global FTP Alert in this section. A single alert may be pending due to the FTP errors, in which the FTP Alert line shows the alert description (shown in Figure 4.7.5-2). If there is no FTP Alert existing, this line simply shows “None”.

The home page will also show BMGT Alerts caused by cycles which have repeatedly resulted in errors from ECHO. These alerts will be displayed in the same way as described in the Recent Packages Page section.

4.7.5.4 Recent Packages Page

Figure 4.7.5-3 shows the Recent Packages Page.

The screenshot displays the 'Recent Packages' section of the BMGT GUI. It features a table with the following data:

Cycle ID	Package ID	Export Type	Status	Last Status Update	Coverage From	Coverage To
26120		AUTOMATIC	NEW	2011-02-08 00:01:06.223	2011-02-08 23:00:00.0	2011-02-09 00:00:00.0
26119		AUTOMATIC	NEW	2011-02-08 00:01:06.223	2011-02-08 22:00:00.0	2011-02-08 23:00:00.0
26118		AUTOMATIC	NEW	2011-02-08 00:01:06.223	2011-02-08 21:00:00.0	2011-02-08 22:00:00.0
26117		AUTOMATIC	NEW	2011-02-08 00:01:06.223	2011-02-08 20:00:00.0	2011-02-08 21:00:00.0
26116		AUTOMATIC	NEW	2011-02-08 00:01:06.223	2011-02-08 19:00:00.0	2011-02-08 20:00:00.0
26115		AUTOMATIC	NEW	2011-02-08 00:01:06.223	2011-02-08 18:00:00.0	2011-02-08 19:00:00.0
26114		AUTOMATIC	NEW	2011-02-08 00:01:06.223	2011-02-08 17:00:00.0	2011-02-08 18:00:00.0
26113		AUTOMATIC	NEW	2011-02-08 00:01:06.22	2011-02-08 16:00:00.0	2011-02-08 17:00:00.0
26112		AUTOMATIC	NEW	2011-02-08 00:01:06.22	2011-02-08 15:00:00.0	2011-02-08 16:00:00.0
26111		AUTOMATIC	NEW	2011-02-08 00:01:06.22	2011-02-08 14:00:00.0	2011-02-08 15:00:00.0
26110		AUTOMATIC	NEW	2011-02-08 00:01:06.22	2011-02-08 13:00:00.0	2011-02-08 14:00:00.0
26109		AUTOMATIC	NEW	2011-02-08 00:01:06.22	2011-02-08 12:00:00.0	2011-02-08 13:00:00.0
26108	22628	AUTOMATIC	PACKAGE_GENERATED	2011-02-08 12:01:26.623	2011-02-08 11:00:00.0	2011-02-08 12:00:00.0
26107	22627	AUTOMATIC	PACKAGE_GENERATED	2011-02-08 11:01:26.07	2011-02-08 10:00:00.0	2011-02-08 11:00:00.0
26106	22626	AUTOMATIC	PACKAGE_GENERATED	2011-02-08 10:01:25.546	2011-02-08 09:00:00.0	2011-02-08 10:00:00.0

Figure 4.7.5-3. Recent Packages Page

The Recent Packages page provides a listing of the most recent packages and their status information. The number of packages displayed can be modified by entering a number in the box marked “Page Size”. The operator can move through the list using the four directional buttons at the top of the list (these buttons move to the first, previous, next, and last pages respectively).

The listing consists of the following columns:

- **Cycle ID:** The export cycle ID (Clicking on the underlined link will bring up the Package Details Page, discussed below). This ID is used to uniquely identify an export package.
- **Package ID:** The assigned package ID. The package ID is used primarily by ECHO to confirm the processing order of export packages. All AUTOMATIC, CORRECTIVE, and VER_INC export packages are assigned package IDs. The package ID is optional for MANUAL, VER_LONG and VER_SHORT packages. The Package ID is generally unique, with the exception of SYNC packages that will have the same Package ID as the MANUAL export package that failed. AUTOMATIC cycles which have been manually regenerated will have the same package ID (and a different cycle ID) when they are regenerated.
- **Export Type:** The type of the export package, which can be one of AUTOMATIC, MANUAL, CORRECTIVE, VER_INC, VER_SHORT, VER_LONG, or SYNC. AUTOMATIC Export packages are those generated by the BMGT system automatically at configured intervals. MANUAL packages are generated by using the BMGT Manual Preprocessor (documented elsewhere). SYNC Export packages result from MANUAL Export packages that failed (only in the case where the MANUAL Export package was assigned a Package ID). CORRECTIVE packages are basically like MANUAL packages, except they export metadata that was queued for re export due to a previous error. VER_INC, VER_LONG, and VER_SHORT, are also similar to MANUAL packages, but are used to verify that the current ECHO holdings are in sync with ECS.
- **Status:** The current status of the package, with the values defined in S_BGT_01250.
- **Last Status Update:** The time and date at which the package status was last updated.
- **Coverage From:** The start of the temporal coverage of the export package.
- **Coverage To:** The end of the temporal coverage of the export package.

The user can filter the listing of packages by clicking the “Show/Hide Filter” button and entering search criteria then pressing the “Apply” button (see Figure 4.7.5-4.).

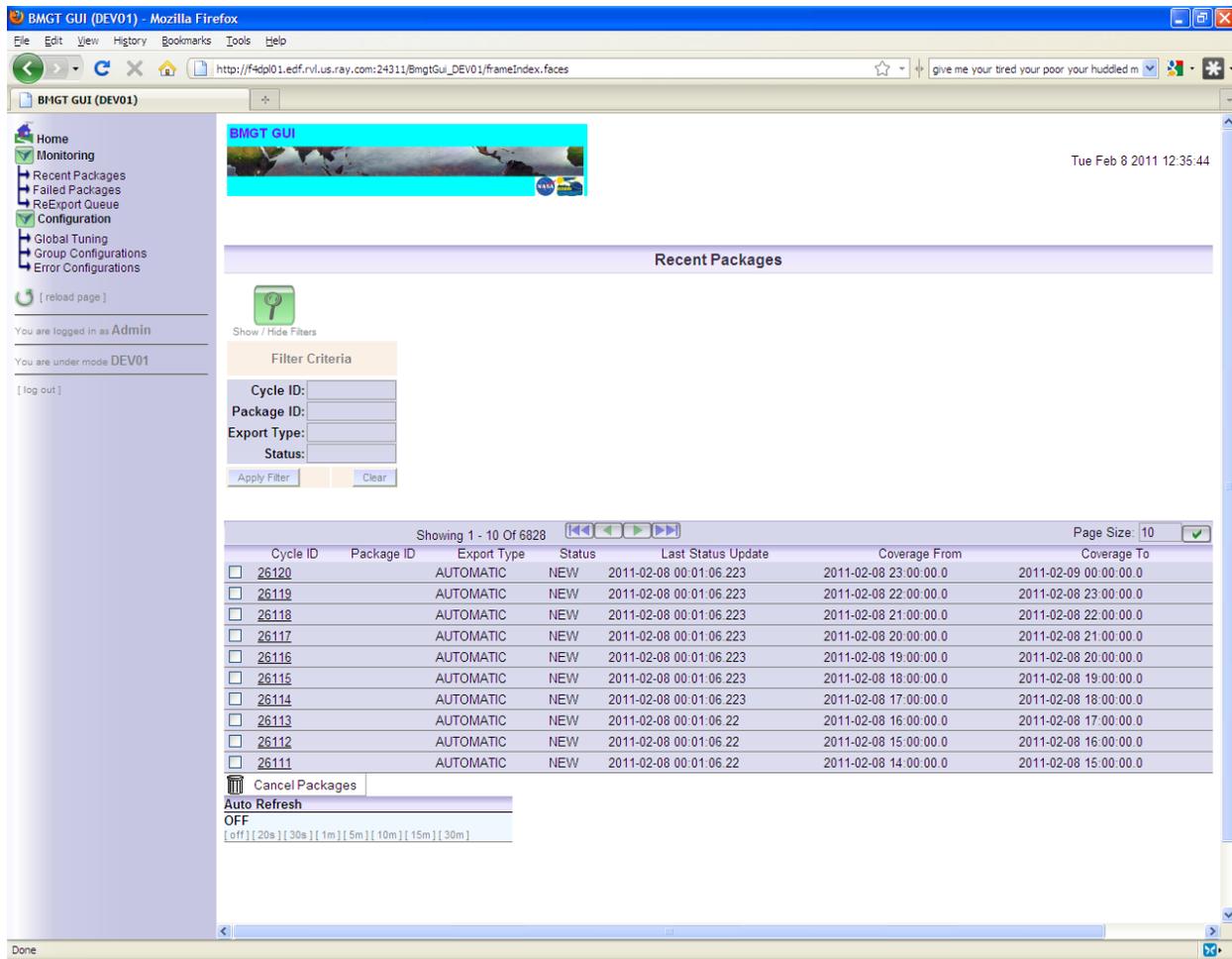


Figure 4.7.5-4. Recent Packages Page Filter

When a package is in a state other than TRANSFERRING, it is considered as cancelable, and a checkbox is displayed at the left of the cycle ID corresponding to the package. To cancel a package, select the checkbox next to the package, and then select the ‘Cancel Packages’ button (located at the bottom left of the page). This will cancel all packages whose checkboxes are currently selected. After cancellation, the package status will be updated to CANCELLING. When successfully cancelled, the package states will be updated to CANCELED. Note that cancellation of a package is a serious and potentially disruptive action, and should only be considered as a last resort. If the cancelled package was assigned a Package ID, that package will need to be regenerated by using the manual preprocessor in order to avoid stalling ECHO processing.

If an AUTOMATIC or VER_INC cycle has been exported to ECHO, and has resulted in an error requiring regeneration or retransmission of the package, and the package has resulted in this type of error the threshold number of times defined by the configuration parameter NUM_RETRIES_FOR_ALERT, then an alert will be raised in the database and displayed on the

top of all GUI pages, as shown in figure 4.7.5-3. Once the error has been addressed, the operator can select the checkbox next to the alert and then press the “Clear Alerts” button to remove the alert. While an alert is raised, BMGT will be limited in what types of packages can be exported. When an AUTOMATIC alert is raised, only un-sequenced MANUAL packages can be exported. When a VER_INC alert is raised, only AUTOMATIC and un-sequenced MANUAL packages can be exported.

4.7.5.5 Failed Packages Page

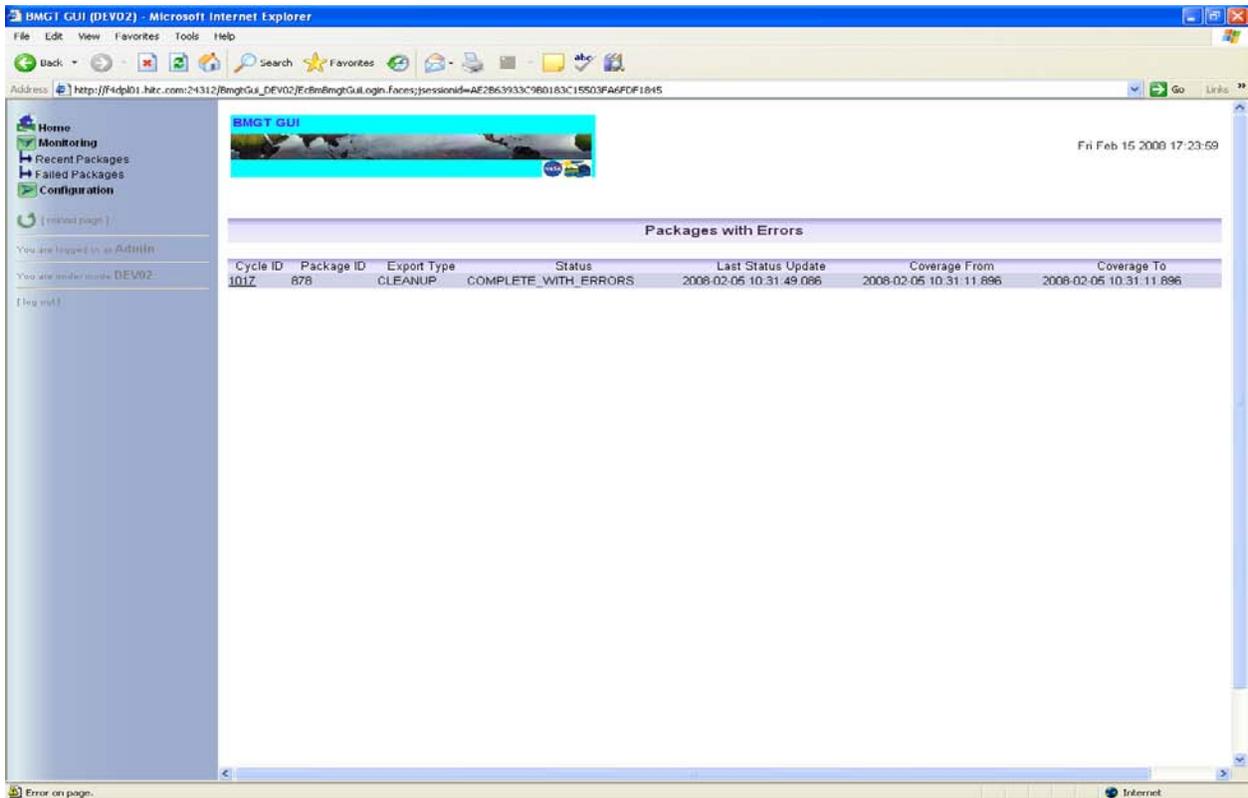


Figure 4.7.5-5. Failed Packages Page

The Failed Packages Page (Figure 4.7.5-5) shows a listing of the most recent packages that resulted in an error. The list columns are identical to those on the Recent Packages Page (Figure 4.7.5-3) and the cycle ID column is a link to the package details page for the cycle.

4.7.5.6 ReExport Queue Listing Page

The screenshot displays the BMGT GUI (OPS) interface in Mozilla Firefox. The main content area is titled "ReExport Queue" and shows a list of 20 items. The table below represents the data shown in the screenshot:

Cycle ID	Type	Collection	Version ID	DbID	Error Code	Action
14381	SC	MOD10A1	5	259201	GRANULE_UNEXPECTED	DEL
14381	SC	MOD10A1	5	264705	GRANULE_UNEXPECTED	DEL
14381	SC	MOD10A1	5	264706	GRANULE_UNEXPECTED	DEL
14381	SC	MOD10A1	5	264707	GRANULE_UNEXPECTED	DEL
14381	SC	MOD10A1	5	264708	GRANULE_UNEXPECTED	DEL
14381	SC	MOD10A1	5	264709	GRANULE_UNEXPECTED	DEL
14381	SC	MOD10A1	5	264710	GRANULE_UNEXPECTED	DEL
14381	SC	MOD10A1	5	264711	GRANULE_UNEXPECTED	DEL
14381	SC	MOD10A1	5	264712	GRANULE_UNEXPECTED	DEL
14381	SC	MOD10A1	5	264713	GRANULE_UNEXPECTED	DEL
14381	SC	MOD10A1	5	264714	GRANULE_UNEXPECTED	DEL
14381	SC	MOD10A1	5	264715	GRANULE_UNEXPECTED	DEL
14381	SC	MOD10A1	5	264716	GRANULE_UNEXPECTED	DEL
14381	SC	MOD10A1	5	264717	GRANULE_UNEXPECTED	DEL
14381	SC	MOD10A1	5	264718	GRANULE_UNEXPECTED	DEL
14381	SC	MOD10A1	5	264719	GRANULE_UNEXPECTED	DEL
14381	SC	MOD10A1	5	265818	GRANULE_UNEXPECTED	DEL
14381	SC	MOD10A1	5	265819	GRANULE_UNEXPECTED	DEL
14381	SC	MOD11A2	5	291693	GRANULE_UNEXPECTED	DEL
14381	SC	MOD11A2	5	291700	GRANULE_UNEXPECTED	DEL

Figure 4.7.5-6. ReExport Queue Page

The ReExport Queue Page (Figure 4.7.5-6) provides a list of all items queued for reExport by BMGT. It provides the item type and identification, the error code responsible for the re-export, and the cycle Id of the initial export attempt.

The Operator can filter which items in the queue will be displayed by clicking on the “Show/Hide Filters” icon (a green magnifying glass) at the top left of the page and then specifying a filter value for one of the columns and pressing the ‘Apply Filter’ button (Figure 4.7.5-7). The number of items to display on a page can be selected, and the Operator can use the arrow buttons at the top of the list to move between pages of items.

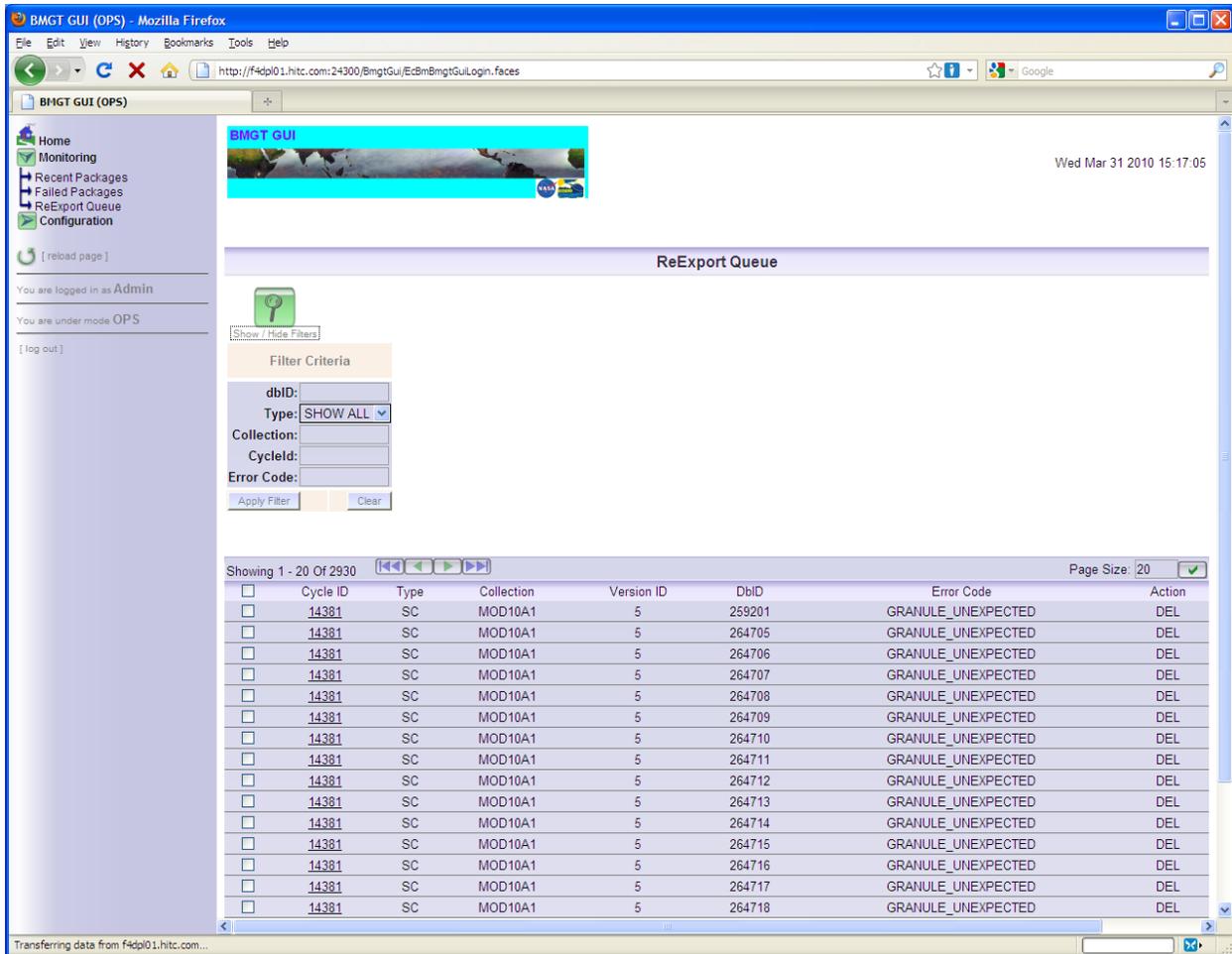


Figure 4.7.5-7. ReExport Queue Page Showing Filter

4.7.5.7 Package Details Page

The Package Details Page shows additional information for each package, and can be viewed by clicking the underlined link of the corresponding cycle ID on the Recent Packages, Failed Packages, and ReExport Queue pages.

This package detailed information is displayed in three (or four, for VERIFICATION packages) sections, titled as Audit Trail Information, Ingest Summary Statistics, Product Information, and Verification Package Status (where applicable) respectively.

- **Audit Trail Information**

A summary of general package information that has been presented on the Monitoring screens and the information about the package's Ingest Summary Report, including two links which provide access to the report, if it is available. The first link is to a formatted version of the report. The second link is to the original, unprocessed report file in XML format. The formatted report is much more readable and therefore is the recommended viewing method. The filesystem path to the report is also displayed, and can be used to

obtain the unformatted “ugly” version of the report(not really useful other than for parsing by software).

- **Ingest Summary Statistics**
The ingest summary statistic data, including the statistic type (Browse, Collection, or Granule), and the number of Inserts, Deletions, Updates, and Rejections for each statistic type. Also included here is the number of ECHO errors which were Ignored, ReExported, and Not Handled.
- **Product Information**
The content of a package, broken down by Product Type and Group. The Product Type can be one of {METC, METG, METU, BBR} and the Product Status can be one of {NEW, COMPLETE, COMPLETE_WITH_ERRORS, COMPLETE_WITH_WARNINGS, FAILED}.
- **Verification Package Status**
The breakdown of Verified, Repaired, and Failed items in a verification export. Verified items have been verified to have identical metadata in ECS and ECHO, Repaired items had a discrepancy, but it was repaired by either ECHO or BMGT, and failed items have discrepancies which will require operator intervention to repair. This information is only displayed in a verification export package.

The Ingest Summary Statistics and Product Information sections may have empty fields, depending on the package’s status. Figures 4.7.5-8 and 4.7.5-9 show the Package Details page.

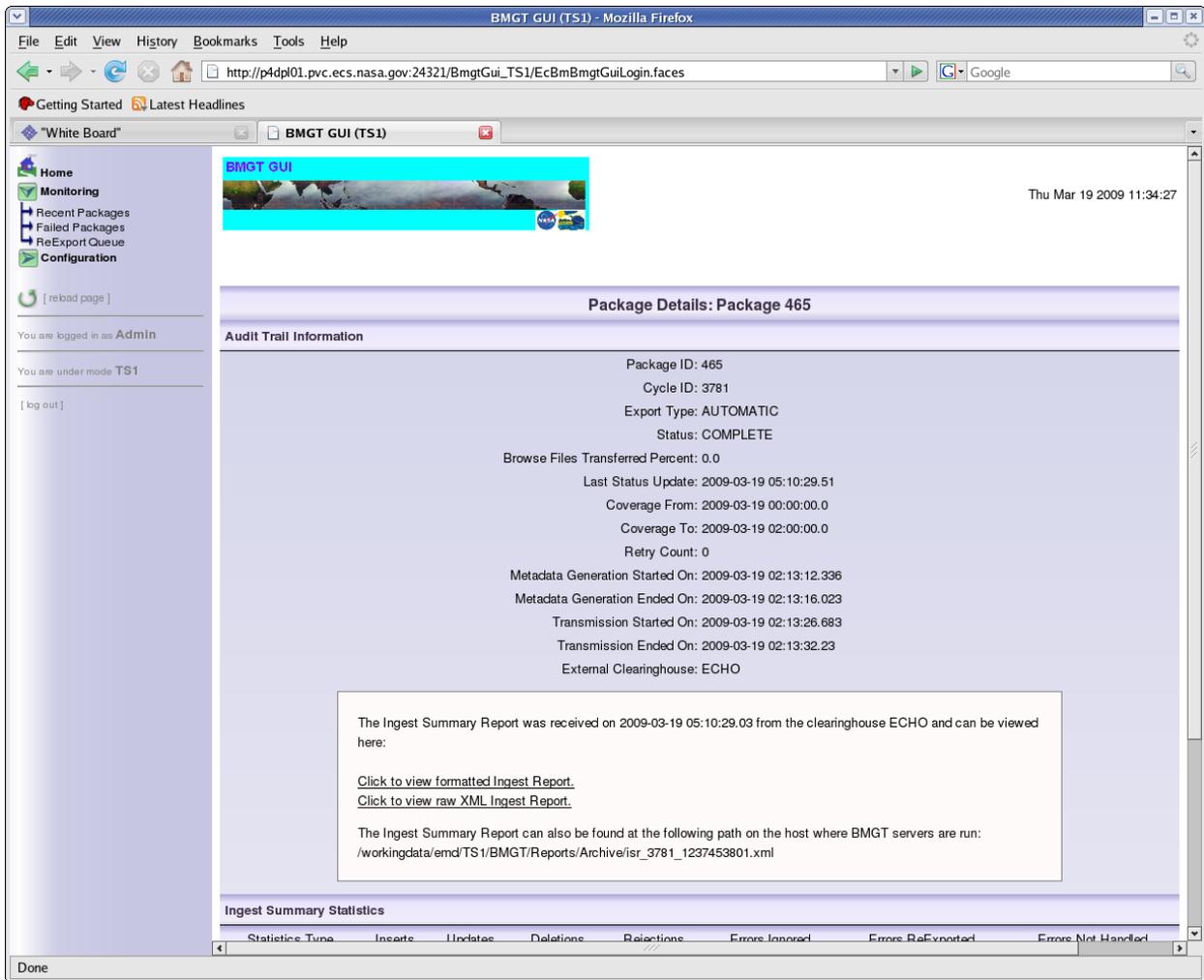


Figure 4.7.5-8. Package Details Page

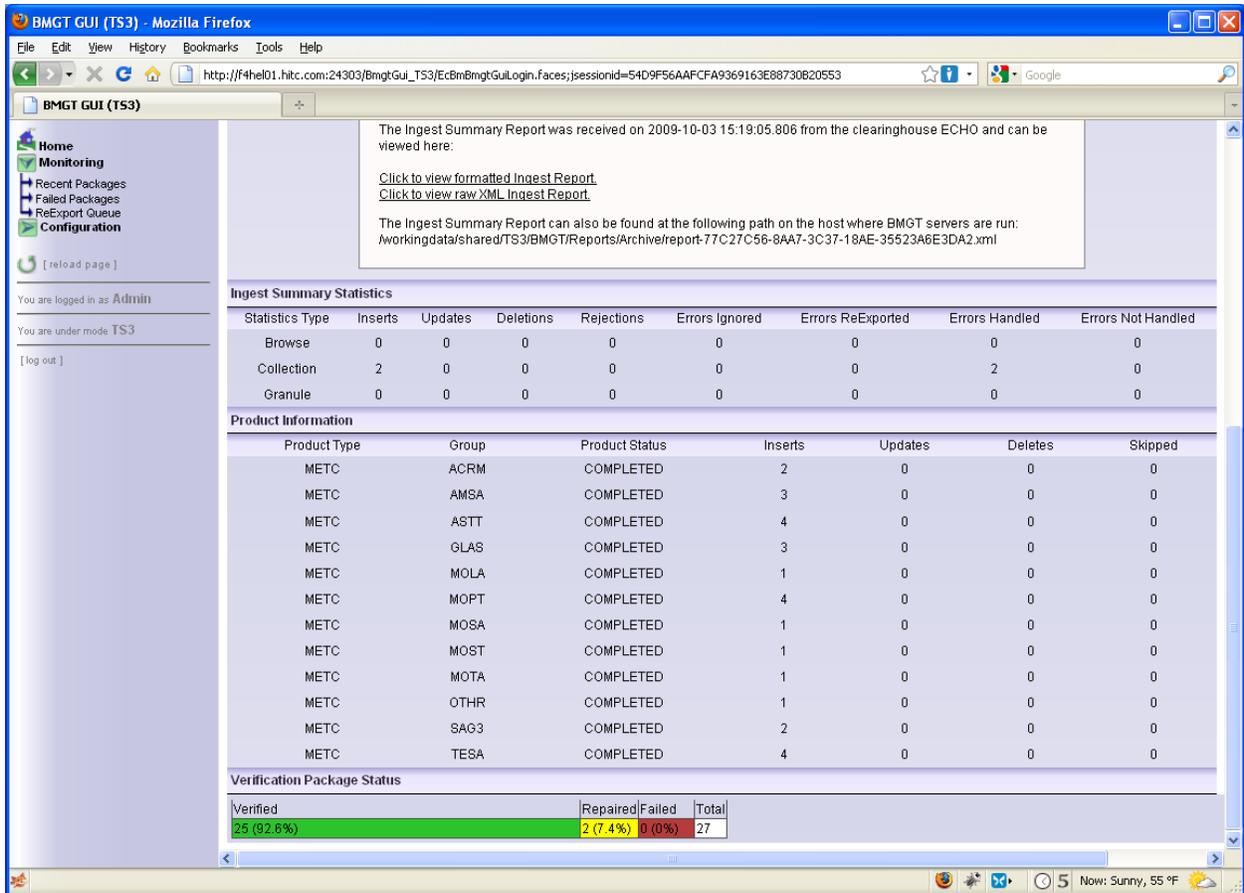


Figure 4.7.5-9. Package Details Page with Verification Package Status

4.7.5.8 Formatted Ingest Summary Report

Figure 4.7.5-10 shows the Formatted Ingest Summary Report Page

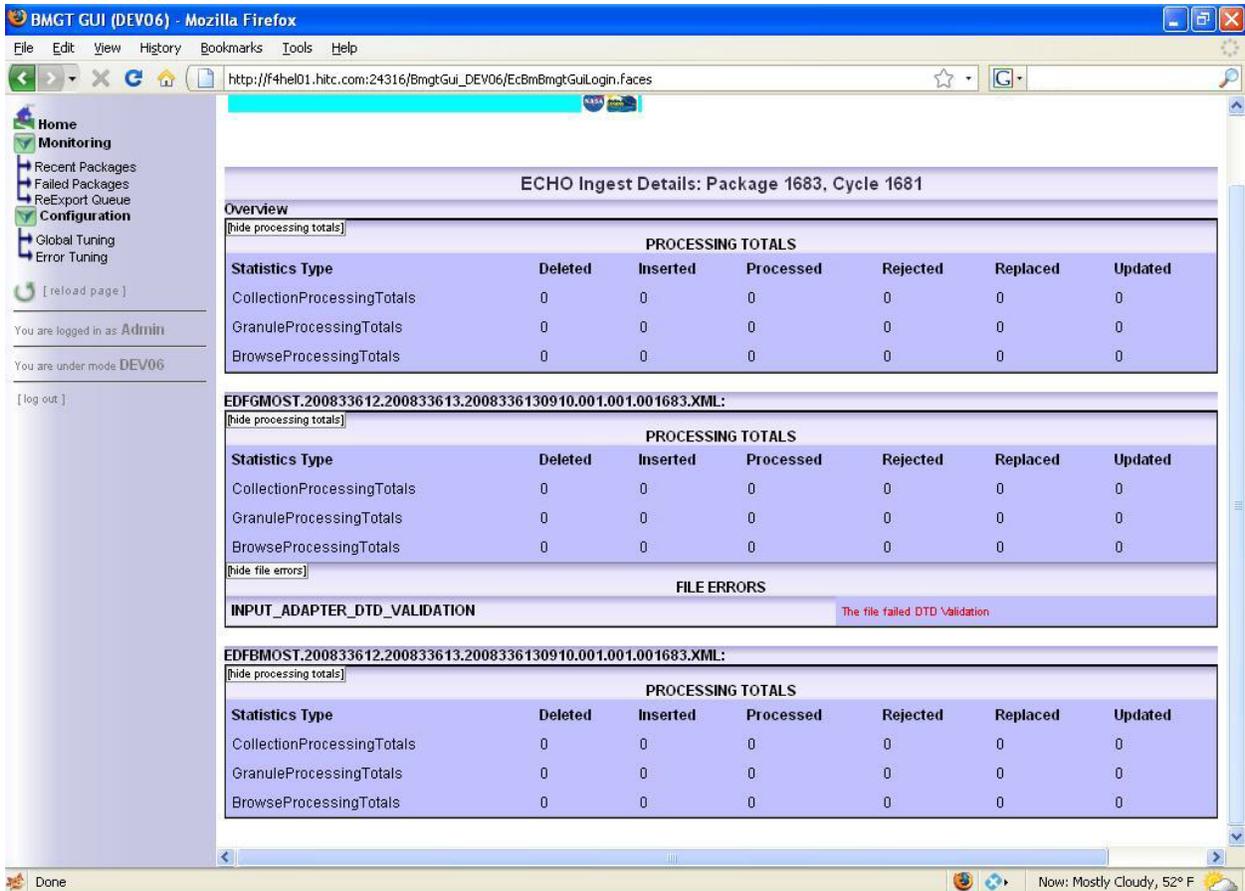


Figure 4.7.5-10. Formatted Ingest Summary Report Page

The Formatted Ingest Summary Report Page provides a tabular view of the contents of the report returned by ECHO. The report, in its raw format, is in XML format, and is not meant to be human readable. This page simply applies a stylesheet to the report, and presents it in a more useful format (the original XML file can be viewed in the GUI, or found on the filesystem using the link and path provided on the Package Details page).

The formatted report contains the package and cycle Id at the top of the page, followed by overview statistics of the entire package, as well as any Job (synonymous with package) errors. There is then a section for each file in the package, which contains the statistics for that file, followed by any file or item level errors within that file. Each section of the report has a 'hide' button at the top left which allows the user to toggle the display of that section. This is useful if there are hundreds of errors in one file, but the user wants to look at errors in another file without scrolling through the entire list. When a section is hidden, the 'hide' button becomes a 'show' button (see Figure 4.7.5-11) and will restore the hidden section when clicked.

ECHO Ingest Details: Package 1683, Cycle 1681

Overview
[\[show processing totals\]](#)

PROCESSING TOTALS						
[hidden]						

EDFGMOST.200833612.200833613.2008336130910.001.001001683.XML:
[\[show processing totals\]](#)

PROCESSING TOTALS						
[hidden]						

[\[show all 3 item errors\]](#)

ITEM ERRORS						
[hidden]						

EDFBMOST.200833612.200833613.2008336130910.001.001001683.XML:
[\[hide processing totals\]](#)

Statistics Type	Deleted	Inserted	Processed	Rejected	Replaced	Updated
CollectionProcessingTotals	0	0	0	0	0	0
GranuleProcessingTotals	0	0	0	0	0	0
BrowseProcessingTotals	0	6	6	4	0	0

[\[hide item errors\]](#)

Error Code	Item Id	ErrorMessage
IMAGE_FILE_NOT_SUPPLIED	BR:Browse.001:50853	Referenced browse image [BR:Browse.001:50853] was required but not found
	BR:Browse.001:50848	Referenced browse image [BR:Browse.001:50848] was required but not found
	BR:Browse.001:50855	Referenced browse image [BR:Browse.001:50855] was required but not found
	BR:Browse.001:50852	Referenced browse image [BR:Browse.001:50852] was required but not found

Figure 4.7.5-11. Formatted Ingest Summary Report Page (with Hidden Sections)

4.7.5.9 Global Tuning Page

The screenshot shows the BMGT GUI Global Tuning Page. The page title is "Global Tuning" and the date is "Wed Mar 31 2010 15:46:29". The page is titled "Main BMGT Parameters" and contains a table with the following columns: Parameter Name, Description, and Value. The table lists various configuration parameters, including passwords, cycle lengths, intervals, directories, hosts, and cleanup settings. The user is logged in as Admin.

Parameter Name	Description	Value
ADMIN_PASSWORD	The BMGT GUI administrator password. Note that this is stored in the database in encrypted form. When the password is changed on the BMGT GUI, the GUI will automatically encrypt the password before storing it.
FTP_PASSWORD	The encrypted password that will be used to authenticate the log in to the ECHO host. The BMGT does not need to be restarted for changes to this value to take effect.
AUTOMATIC_CYCLE_LENGTH_HRS	The length of the currently configured automatic export cycle, measured in hours. The BMGT does not need to be restarted if this value is changed, but note that the new value will not apply until the next day. Valid values are 1, 2, 3, 4, 6, 8, 12, 24.	1
AUTOMATIC_CYCLE_RETRY_INTERVAL_MINS	The time interval, measured in minutes, between retries of a failed automatic export cycle. Recommend values in the range 30 to 60 minutes.	30
BMGT_PDR_POLLING_DIRECTORY	The DPL Ingest polling directory into which BMGT PDRs will be placed.	/datapool/OPS/user/FS
BMGT_PDR_POLLING_HOST	The fully qualified host name where the DPL Ingest polling location is configured.	LOCAL
CLEANUP_OLD_CYCLES_DAYS	Number of days before a package's audit trail information can be cleaned up.	8
DATABASE_RETRY_COUNT	The number of attempts that should be made to execute a database command.	5
DATABASE_RETRY_INTERVAL_SECS	The time, measured in seconds, between retries of a database command.	30
DATA_CENTER_ID	Value to use in generated METG_BBR.xml for the DataCenterId value	EDF
DEFAULT_COORDINATE_SYS	The default value for collections and granules coordinate system	CARTESIAN
DEFAULT_SPATIAL_REP	The default value for GranuleSpatialRepresentation in both granule and collection metadata for collections where no value is configured in the SpatialExdts file	NoSpatial
DESC_FILE_DIR	The directory where ESDT descriptor files are located.	/stomext/smallfiles/OPS
DIF_ID_ESDT_FILE	The location of the file which specifies the DIF ID for collections which have DIF IDs. If a collection is not in the file, then no DIF ID will be included in the metadata generated.	/usr/ecs/OPS/CUSTOM
DISPLAY_MAX_PACKAGES	Determines how many recent packages will be displayed on the GUI Monitoring page.	500
DTD_LOC	The DTD host and port. This is the root URL where all of the DTDs can be found. The DTD file name will be appended after this value.	http://www.echo.nasa.gov
EMAIL_HOST	The SMTP mail server full qualified host name that will be used to send emails.	ftel01.hitc.com
FTP_HOST_NAME	The name of the ECHO host to which export packages will be pushed, and Ingest Summary Reports will be pulled. This may be either a hostname, or an IP address. The BMGT does not need to be restarted for changes to this value to take effect.	ingest-test.echo.nasa.gov

Figure 4.7.5-12. Global Tuning Page (1 of 3)

The Global Tuning Page displays a list of BMGT configuration parameters (shown in Figure 4.7.5-12). The list is a three-column table with the title of Parameter Name, Description and Value, respectively. The explanation or definition of each configuration parameter is described in the Description column. The Value field of the table is enabled for updating only if the user logged in as the Administrator. If logged in as the Operator, these fields will be disabled and can only be viewed by the user.

The top two rows of this table are for password configuration. When logged in as the Administrator, the user can change the administrator login password and BMGT FTP password in these two rows, respectively. The user's inputs for password changes are always marked over (displayed as an array of asterisks) for security purposes.

When logged in as the Administrator, the user can change the values of configuration parameters by performing the following steps:

- Edit the parameter value in the input box;
- Check the checkbox adjacent to the input box in the same row;
- After checking all the checkboxes of the parameters that need to be updated, click the Apply Changes button at the bottom of the page to apply changes;
- Before pressing Apply Changes button, the user can cancel the changes by clicking the Cancel Changes button .The values of configuration parameters that have been changed in the input boxes are reset to their original values, whether the corresponding checkbox is checked or not.

The configuration changes made through the Global Tuning Page do not take effect until all BMGT servers are restarted with the start scripts, with the exception of the BMGT FTP login configuration parameters (FTP_USERNAME and FTP_PASSWORD).

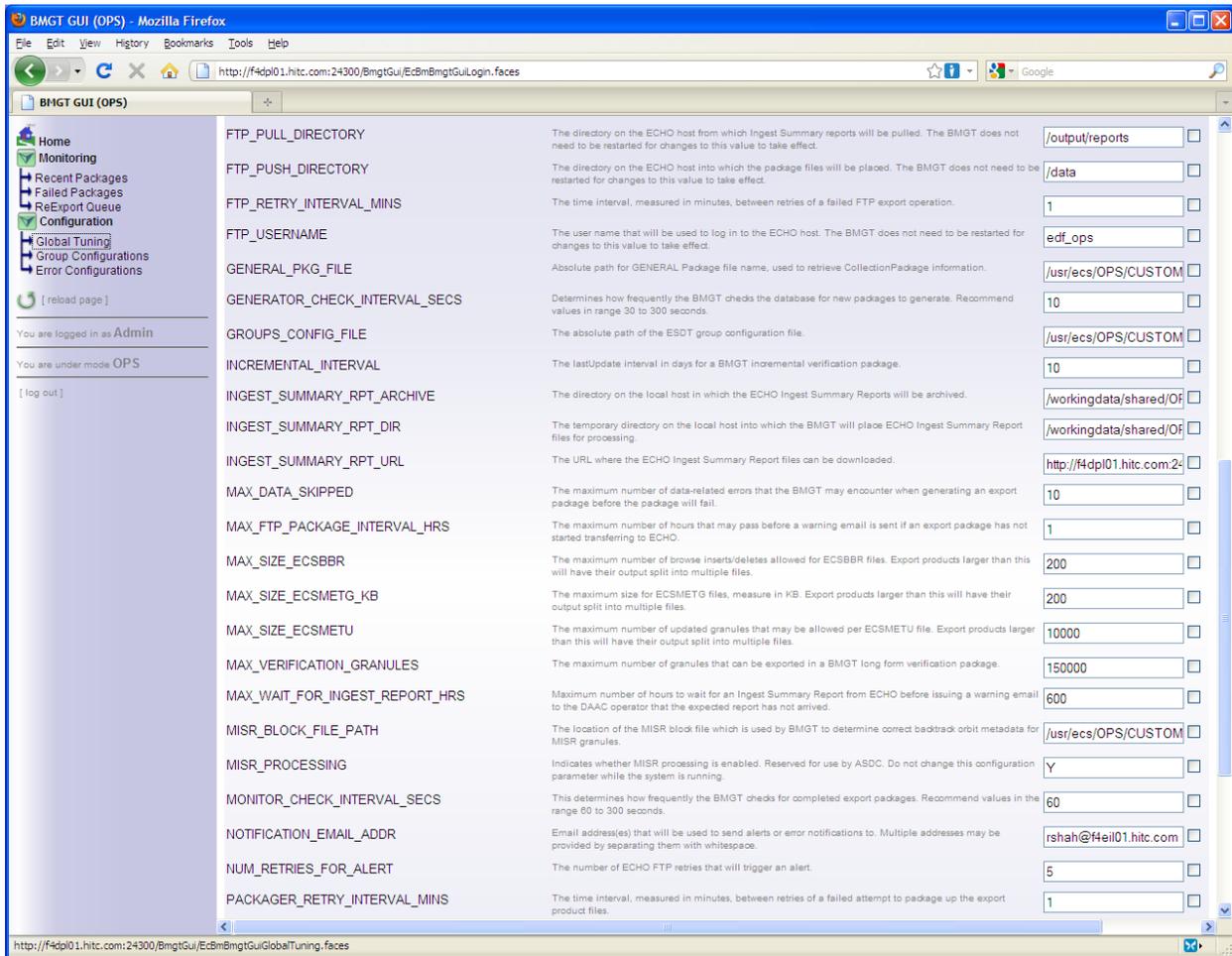


Figure 4.7.5-12. Global Tuning Page (2 of 3)

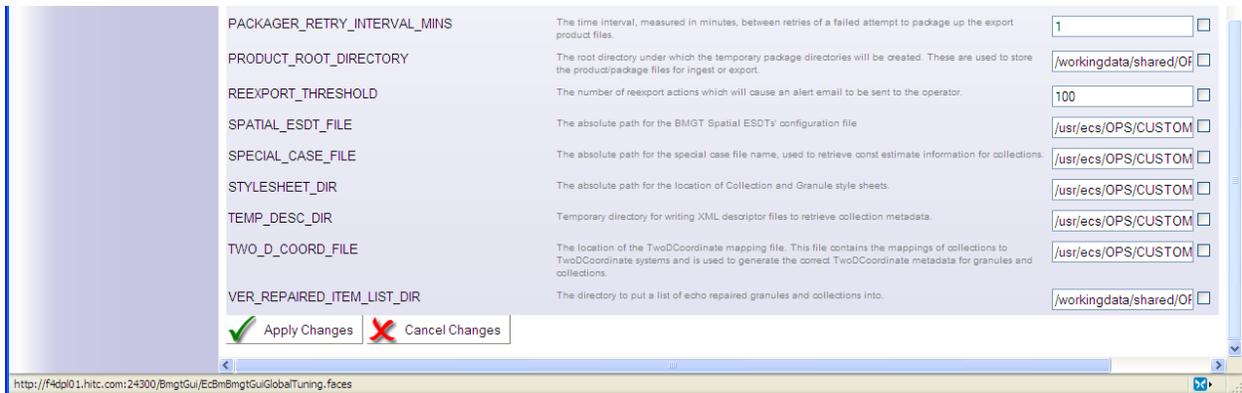


Figure 4.7.5-12. Global Tuning Page (3 of 3)

4.7.5.10 Group Configurations Page

The Group Configurations Page provides a view of the current collection group configuration. This configuration comes from the database, but is populated from the group configuration file whenever an automatic cycle is initiated. This page also shows the current status of incremental verification for each group and collection as well as for the ECS inventory as a whole.

System Verification Status

Verified	Total
5736 (100%)	5736

Group Verification Status

AMSR

Verified	Total
5258 (100%)	5258

ESDT	ColExportFlag	GranExportFlag	Last Update	Current ESDT Verification Status	Reset	MaxNumGrans
AE_DySno.002	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2010-01-13 11:59:59.996	Verified 81 (100%)	N	5000
AE_Land.002	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2010-01-13 11:59:59.996	Verified 5177 (100%)	N	5000
AE_Land.086	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2010-01-19 13:14:15.66	Verified 0 (%)	N	5000

ASTT

Verified	Total
3 (100%)	3

OTHR

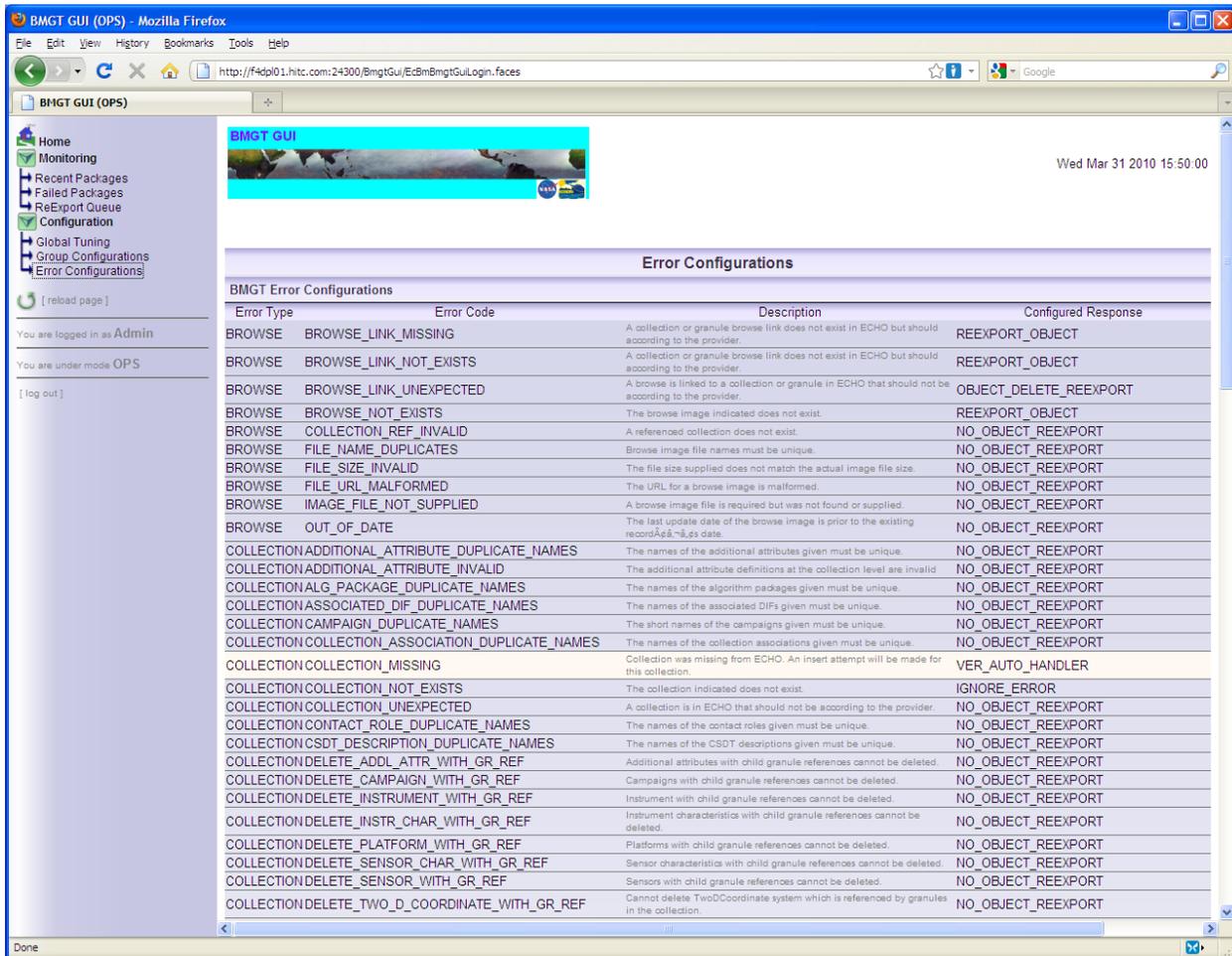
Verified	Total
3 (100%)	3

GLAS

Figure 4.7.5-13. Group Configurations Page

4.7.5.11 Error Configuration Page

Figure 4.7.5-14 shows the Error Configuration Page.



Error Type	Error Code	Description	Configured Response
BROWSE	BROWSE_LINK_MISSING	A collection or granule browse link does not exist in ECHO but should according to the provider.	REEXPORT_OBJECT
BROWSE	BROWSE_LINK_NOT_EXISTS	A collection or granule browse link does not exist in ECHO but should according to the provider.	REEXPORT_OBJECT
BROWSE	BROWSE_LINK_UNEXPECTED	A browse is linked to a collection or granule in ECHO that should not be according to the provider.	OBJECT_DELETE_REEXPORT
BROWSE	BROWSE_NOT_EXISTS	The browse image indicated does not exist.	REEXPORT_OBJECT
BROWSE	COLLECTION_REF_INVALID	A referenced collection does not exist.	NO_OBJECT_REEXPORT
BROWSE	FILE_NAME_DUPLICATES	Browse image file names must be unique.	NO_OBJECT_REEXPORT
BROWSE	FILE_SIZE_INVALID	The file size supplied does not match the actual image file size.	NO_OBJECT_REEXPORT
BROWSE	FILE_URL_MALFORMED	The URL for a browse image is malformed.	NO_OBJECT_REEXPORT
BROWSE	IMAGE_FILE_NOT_SUPPLIED	A browse image file is required but was not found or supplied.	NO_OBJECT_REEXPORT
BROWSE	OUT_OF_DATE	The last update date of the browse image is prior to the existing record's <code>ts</code> date.	NO_OBJECT_REEXPORT
COLLECTION	ADDITIONAL_ATTRIBUTE_DUPLICATE_NAMES	The names of the additional attributes given must be unique.	NO_OBJECT_REEXPORT
COLLECTION	ADDITIONAL_ATTRIBUTE_INVALID	The additional attribute definitions at the collection level are invalid.	NO_OBJECT_REEXPORT
COLLECTION	ALG_PACKAGE_DUPLICATE_NAMES	The names of the algorithm packages given must be unique.	NO_OBJECT_REEXPORT
COLLECTION	ASSOCIATED_DIF_DUPLICATE_NAMES	The names of the associated DIFs given must be unique.	NO_OBJECT_REEXPORT
COLLECTION	CAMPAIGN_DUPLICATE_NAMES	The short names of the campaigns given must be unique.	NO_OBJECT_REEXPORT
COLLECTION	COLLECTION_ASSOCIATION_DUPLICATE_NAMES	The names of the collection associations given must be unique.	NO_OBJECT_REEXPORT
COLLECTION	COLLECTION_MISSING	Collection was missing from ECHO. An insert attempt will be made for this collection.	VER_AUTO_HANDLER
COLLECTION	COLLECTION_NOT_EXISTS	The collection indicated does not exist.	IGNORE_ERROR
COLLECTION	COLLECTION_UNEXPECTED	A collection is in ECHO that should not be according to the provider.	NO_OBJECT_REEXPORT
COLLECTION	CONTACT_ROLE_DUPLICATE_NAMES	The names of the contact roles given must be unique.	NO_OBJECT_REEXPORT
COLLECTION	CSDT_DESCRIPTION_DUPLICATE_NAMES	The names of the CSOT descriptions given must be unique.	NO_OBJECT_REEXPORT
COLLECTION	DELETE_ADDL_ATTR_WITH_GR_REF	Additional attributes with child granule references cannot be deleted.	NO_OBJECT_REEXPORT
COLLECTION	DELETE_CAMPAIGN_WITH_GR_REF	Campaigns with child granule references cannot be deleted.	NO_OBJECT_REEXPORT
COLLECTION	DELETE_INSTRUMENT_WITH_GR_REF	Instrument with child granule references cannot be deleted.	NO_OBJECT_REEXPORT
COLLECTION	DELETE_INSTR_CHAR_WITH_GR_REF	Instrument characteristics with child granule references cannot be deleted.	NO_OBJECT_REEXPORT
COLLECTION	DELETE_PLATFORM_WITH_GR_REF	Platforms with child granule references cannot be deleted.	NO_OBJECT_REEXPORT
COLLECTION	DELETE_SENSOR_CHAR_WITH_GR_REF	Sensor characteristics with child granule references cannot be deleted.	NO_OBJECT_REEXPORT
COLLECTION	DELETE_SENSOR_WITH_GR_REF	Sensors with child granule references cannot be deleted.	NO_OBJECT_REEXPORT
COLLECTION	DELETE_TWO_D_COORDINATE_WITH_GR_REF	Cannot delete TwoDCoordinate system which is referenced by granules in the collection.	NO_OBJECT_REEXPORT

Figure 4.7.5-14. Error Configuration Page

The Error Tuning Page provides a reference to all of the possible error codes that could be returned from ECHO in response to a package, and the BMGT response to each error. The BMGT Monitor server is responsible for parsing errors from Ingest Summary Reports, and performing the appropriate action. Since some of the responses are meant for specific scenarios, and would not necessarily work in others, this configuration is not meant to be changed by DAAC staff. The following responses can be used by BMGT to handle an error from ECHO:

- **NO_OBJECT_REEXPORT:**
This is the default response, and is the response used for most errors. An error mapped to this response will always cause an email to be sent (to the email address set in 'NOTIFICATION_EMAIL_ADDR' in the Global Tuning Page), and the cycle

for which the Ingest Summary Report was received will have its status set to "COMPLETE_WITH_ERRORS". The email will detail all errors encountered in the Ingest Summary Report.

- **DUPLICATE_PACKAGE:**
Identical to NO_OBJECT_REEXPORT.
- **NO_OBJECT_REEXPORT_CONTACT_ECHO:**
This is the same as NO_OBJECT_REEXPORT except that the email will contain a message recommending that the DAAC operator contact ECHO to diagnose and/or correct the problem.
- **REEXPORT_OBJECT:**
BMGT will determine whether the error can be handled by simply reexporting a science or browse granule to ECHO. If this is the case, it will add the relevant granule(s) to the BMGT ReExport Queue, set the cycle status to "COMPLETE_WITH_WARNINGS", and send an email to the configured notification address. The contents of the ReExport Queue can then be re-exported to ECHO manually by the DAAC operator (using the Manual Preprocessor with the '--corrective' option). Otherwise, the error will either be ignored, or will be handled by the NO_OBJECT_REEXPORT policy.
- **REEXPORT_OBJECT_DELETE:**
BMGT will determine whether the error can be handled by simply exporting the deletion of the science or browse granule to ECHO. If this is the case, it will add the relevant granule(s) to the BMGT ReExport Queue as a deletion action, set the cycle status to "COMPLETE_WITH_WARNINGS", and send an email to the configured notification address. The contents of the ReExport Queue can then be re-exported to ECHO manually by the DAAC operator (using the Manual Preprocessor with the '--corrective' option). Otherwise, the error will either be ignored, or will be handled by the NO_OBJECT_REEXPORT policy.
- **IGNORE_COMPLETELY:**
BMGT will simply ignore an error mapped to this policy, and the cycle will remain as if the summary report contained no errors.
- **IGNORE_ERROR:**
BMGT will determine whether the error can be ignored based on the type of error and the state of the affected granules in ECS. If the error can be ignored, the cycle status will be the same as if the summary report contained no errors. If not, the error will be handled by the NO_OBJECT_REEXPORT policy.

- **IGNORE_ERROR_CONTACT_ECHO:**
Same as IGNORE_ERROR, except the email, if any, contains a message recommending that the DAAC staff contact ECHO to diagnose and/or correct the problem.
- **RETRY_PACKAGE:**
Causes the package to be retransmitted to ECHO (without regenerating the products), and an email to be sent to the configured notification address.
- **RETRY_PACKAGE_CONTACT_ECHO:**
Same as RETRY_PACKAGE, except the email contains a message recommending that the DAAC staff contact ECHO to diagnose and/or correct the problem.
- **REGENERATE_PACKAGE:**
Causes the metadata products to be regenerated, packaged, and transmitted to ECHO, and an email to be sent to the configured email address.
- **REGENERATE_PACKAGE_CONTACT_ECHO:**
Same as REGENERATE_PACKAGE, except the email contains a message recommending that the DAAC staff contact ECHO to diagnose and/or correct the problem.

4.7.6 Data Pool Maintenance GUI

The Data Pool Maintenance (DPM) GUI provides an operator interface to monitor the current status of Data Pool Inserts and to maintain specific Data Pool parameters. This GUI manages ECS and Non-ECS data collections. Specifically, the DPM GUI provides the following capabilities:

- Monitor the active insert processes
- Monitor the Data Pool Insert Queue
- Manage existing Data Pool Collection Groups
- Add new Data Pool Collection Groups (includes ECS and Non-ECS)
- Manage existing Data Pool Collection Themes
- Add new Data Pool Collection Themes
- Suspend and Resume Data Pool Inserts
- Turn the NoFreeSpace Flag on or off
- Configure parameters used by the Data Pool Action Driver (DPAD) and the Data Pool Insert Utility (DPIU)

4.7.6.1 Quick Start Using the Data Pool Maintenance GUI

Bring up the Web Browser and then access the URL for the DPM GUI web page. The operator may be prompted by a dialogue box similar to that shown in Figure 4.7.6-1. The requested information must be entered to continue.

For example, <http://<host name location>:22111/DataPool.html>

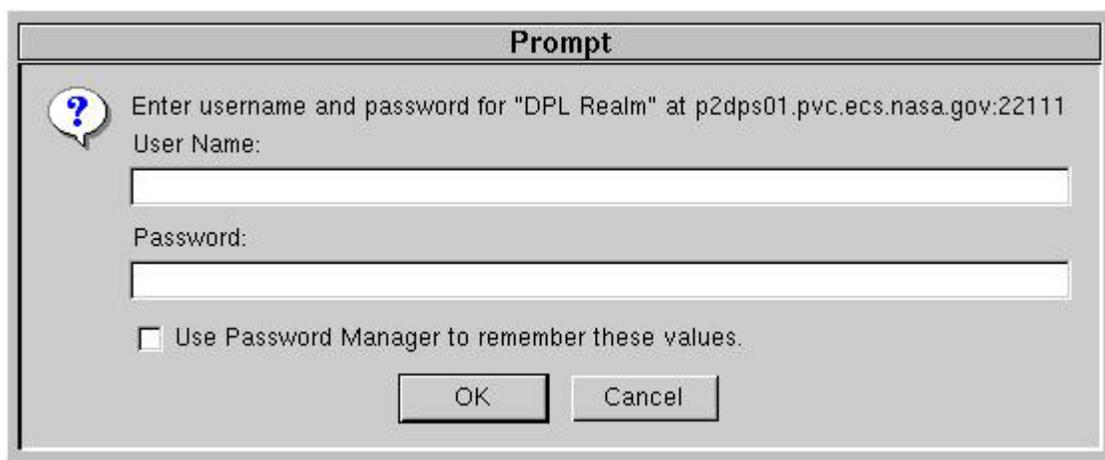


Figure 4.7.6-1. Login Prompt

4.7.6.1.1 DPM Home Page

The DPM Home Page screen shown in Figure 4.7.6-2 gives the operator current status of Data Pool Inserts. The screen is refreshed automatically. The operator is shown the current screen

refresh rate, the current chunk size for the list of active insert processes. Minimum values for screen refresh rate is 60 seconds and Active Insert Process List row size is 1. Maximum value for Active Insert Process List row size is 100. The operator must click on the adjacent **Apply** button to initiate changes. Summary of Data Pool File System table displays current status of the FreeSpace Flag, Availability Flag, and amount of desired free space in megabytes for each file system. Summary of Active Processes table displays configured number of Maximum Allowed Processes, the Maximum Allowed Processes from ARCHIVE cache, the Maximum Allowed Processes from ARCHIVE tape, the total number of active insert processes running, the number of active insert processes using ARCHIVE cache, the number of active insert processes using ARCHIVE tape. The list of Active Insert Processes table displays the current status of the active insert processes. The screen can be immediately refreshed by clicking on the **Refresh Home Page** link. Use the tab buttons at the top to navigate to the Home Page, Batch Summary, List Insert Queue, Collection Groups, Themes, Data Pool File System, Cloud Cover, Configuration Parameters, Aging Parameters, and End Session screens. See Table 4.7.6-1 for descriptions of the Home Page elements.

The screenshot shows the 'Data Pool Maintenance' web interface. At the top, there are navigation tabs: Home Page, Batch Summary, List Insert Queue, Collection Groups, Themes, and Data Pool File System. Below the tabs are configuration controls for 'Screen Refresh Rate' (set to 60) and 'Active Insert Processes' (set to 100), both with 'Apply' buttons. There are also checkboxes for 'Active Insert Status Filter' including Pending, Validated, Copied, Checksummed, and Extracted.

The main content area contains two summary tables and a list of active insert processes.

File System	Insert Status	DPL Insert Status	Free Space	Used Space (Updated)	Free Space Flag	Availability	Min Freed Space in MB
DEFAULT <small>(Idagapd.EDEV05\ssnPF11)</small>	● active	● active	87 GB	76% <small>Sep 23 2008 10:11:53M</small>	State : Y <small>Last Changed: Jan 13 2007 11:08:53M</small>	State : Y <small>Last changed:</small>	10
F51 <small>(Idagapd.EDEV05\ssnPF11)</small>	● active	● active	87 GB	76% <small>Sep 23 2008 10:11:53M</small>	State : Y <small>Last Changed: Mar 9 2007 10:03:53M</small>	State : Y <small>Last changed: Mar 9 2007 10:03:53M</small>	3
F52 <small>(Idagapd.EDEV05\ssnPF12)</small>	● active	● active	210 GB	42% <small>Sep 23 2008 10:11:53M</small>	State : Y <small>Last Changed: Jan 13 2007 2:24:53M</small>	State : Y <small>Last changed: Jan 13 2007 2:24:53M</small>	10
Integrit <small>(Idagapd.EDEV05\ssnPF1)</small>	● suspended by operator	● active	0 GB	%	State : N <small>Last Changed:</small>	State : N <small>Last changed:</small>	1

Maximum allowed processes	50000
Maximum allowed processes from archive cache	50
Maximum allowed processes from archive tape	450
Total number of active insert processes running	0
Total number of validated active insert processes running	0
Total number of pending active insert processes running	0
Number of active insert processes using archive cache	0
Number of active insert processes using archive tape	0

Task ProcessID	ecid	Collection	Version	Start Time	Status Time	Status	Archive Cache	Retries

Figure 4.7.6-2. Data Pool Maintenance Home Page

Table 4.7.6-1. DPM Home Page Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
Screen Refresh Rate	Integer	4	Optional	Allows the operator to adjust the Screen Refresh Rate in seconds.
Active Insert Processes	Integer	4	Optional	Chunk size to set for the list of active insert processes. Default is 100
Active Insert Process Filter	Check box	5	Optional	Filters Active Insert Processes based on process status
File System Label	char	10	Required	File System Label. Limited to 10 characters.
Free Space Flag	char	1	Optional	Indicates if space is available for Data Pool insert. 'ON' value indicates that space is available. Default is 'ON'.
Ingest Status	Int	1	Derived	Indicates if the file system is enabled for DPL ingest processes.
DPL Insert Status	Int	1	Derived	Indicates if the file system is enabled for public datapool insert processes.
Free Space	Int	5	Derived	Indicates the space available on this file system (in GB)
Used Space	Int	2	Derived	Indicated the percentage of the file system used and the date this statistic was last updated.
Availability	char	1	Optional	File system available for insert. Value 'YES' indicate it is available and value 'NO' it is not available. The default value is 'YES'.
Min Freed Space in MB	int	4	Optional	Amount space must be freed in order to make the file system available
Maximum allowed processes	int	4	System Generated	Maximum allowed processes for Data Pool
Maximum allowed processes from ARCHIVE cache	int	4	System Generated	Maximum allowed processes from ARCHIVE cache
Maximum allowed processes from ARCHIVE tape	int	4	System Generated	Maximum allowed processes from ARCHIVE tape
Total number of active insert processes running	int	4	System Generated	Total number of active insert processes running
Number of active insert processes using ARCHIVE cache	int	4	System Generated	Number of active insert processes using ARCHIVE cache
Number of active insert processes using ARCHIVE tape	int	4	System Generated	Number of active insert processes using ARCHIVE tape
Unix Process ID	char	10	System Generated	Unix Process ID

Table 4.7.6-1. DPM Home Page Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
ECS ID	char	10	System Generated	ECS ID number
Collection	char	20	System Generated	Name of collection
Version	int	4	System Generated	Version number
Start Time	char	10	System Generated	Process start time
Status Time	char	10	System	Process status time
Status	char	10	System Generated	Status of the process
ARCHIVE Cache	char	1	System Generated	Indicates if the process belongs to ARCHIVE cache or not
Retries	int	4	System Generated	Number of retries in case of failures

4.7.6.1.2 Batch Summary Tab

The Batch Summary Screen shown in Figure 4.7.6-3 displays a summary of the status of Data Pool inserts for each batch label. Status includes new, completed, failed, retried, and cancelled inserts. Minimum refresh rate is 1 minute. The **Apply Refresh Rate** button will refresh the screen with any updated information in the fields within a specified amount of time. See Table 4.7.6-2 for a description of the Batch Summary's entries.

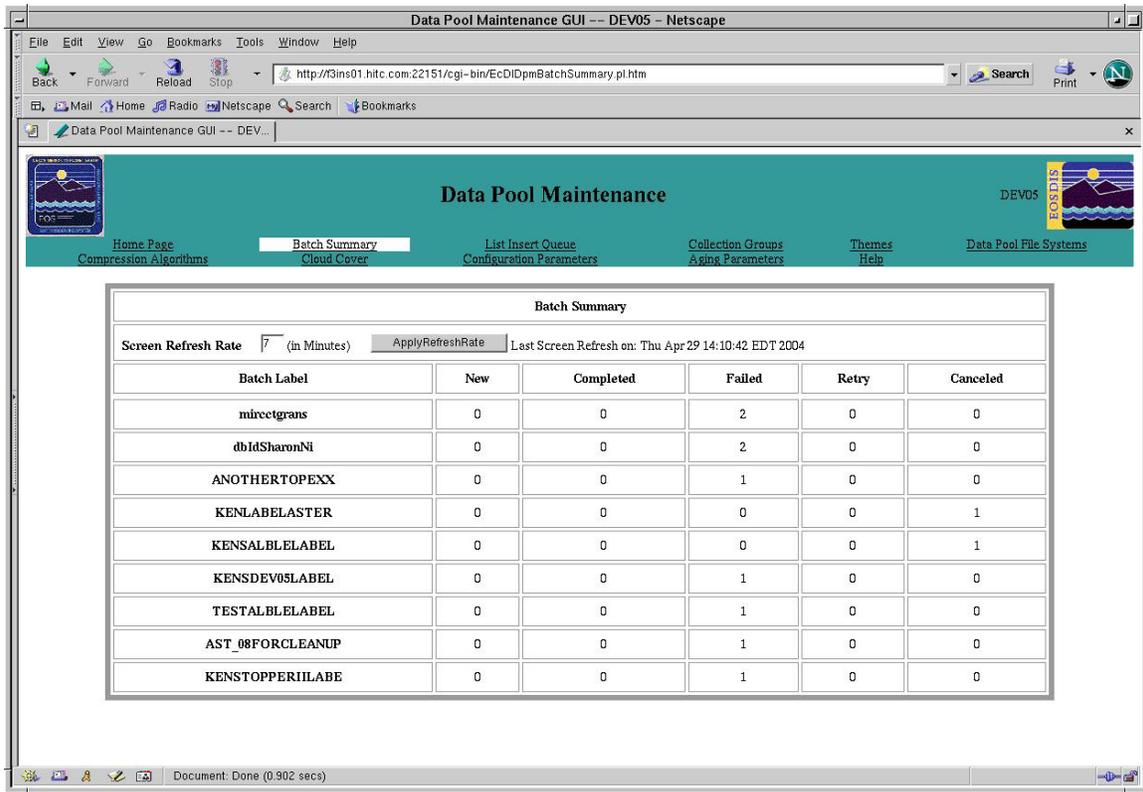


Figure 4.7.6-3. Batch Summary Screen

Table 4.7.6-2. Batch Summary Screen Field Descriptions

Field Name	Data Type	Size	Entry	Description
Batch Label	int	4	System Generated	Name of the batch label
New	int	4	System Generated	Number of batch inserts in NEW state
Completed	int	4	System Generated	Number of batch inserts in COMPLETED state
Failed	int	4	System Generated	Number of batch inserts in FAILED state
Retry	int	4	System Generated	Number of batch inserts in RETRY state
Cancelled	int	4	System Generated	Number of batch inserts in CANCELLED state

4.7.6.1.3 List Insert Queue Tab

The List Insert Queue Screen shown in Figure 4.7.6-4 allows the operator to monitor the Data Pool Inserts that still need to be processed or retried. The operator can cancel Inserts that are in the Insert Queue by clicking on the checkbox adjacent to the Status column. After selecting all desired inserts, click on the **Apply Change** button to initiate changes. The Inserts will be marked as “CANCELED” in the Data Pool database. The List Insert Queue screen will be refreshed with only inserts left to be processed. The DPAD driver will cleanup all canceled inserts at a configured interval. The List Insert Queue Screen can be filtered using the File System Label drop down list, Batch Label drop down list and Status drop down list. Clicking on the **File System** Label drop down list will display all the File System Labels in database. The operator can choose ‘ALL’ from the **File System** Label drop down list and choose one label from **Batch Label** drop down list and choose ‘ALL’ from Status drop down list to view all insert statuses for that label in all File Systems. The operator can also narrow down the list by choosing one batch label from the **Batch Labels** drop-down list, a specific status from the **Status** drop down list and a specific file system from the **File System** Label drop down list. After selecting the filter options, click on the **Apply Filter** button to display a filtered list. The XML file and path name for a Non-ECS granule insert action can be viewed by clicking on "NONECS" from the Data Source column. XML file path is displayed in Figure 4.7.6-5. The content of the XML file can be viewed by clicking on the file path. This will display the text of the file as shown in Figure 4.7.6-6.

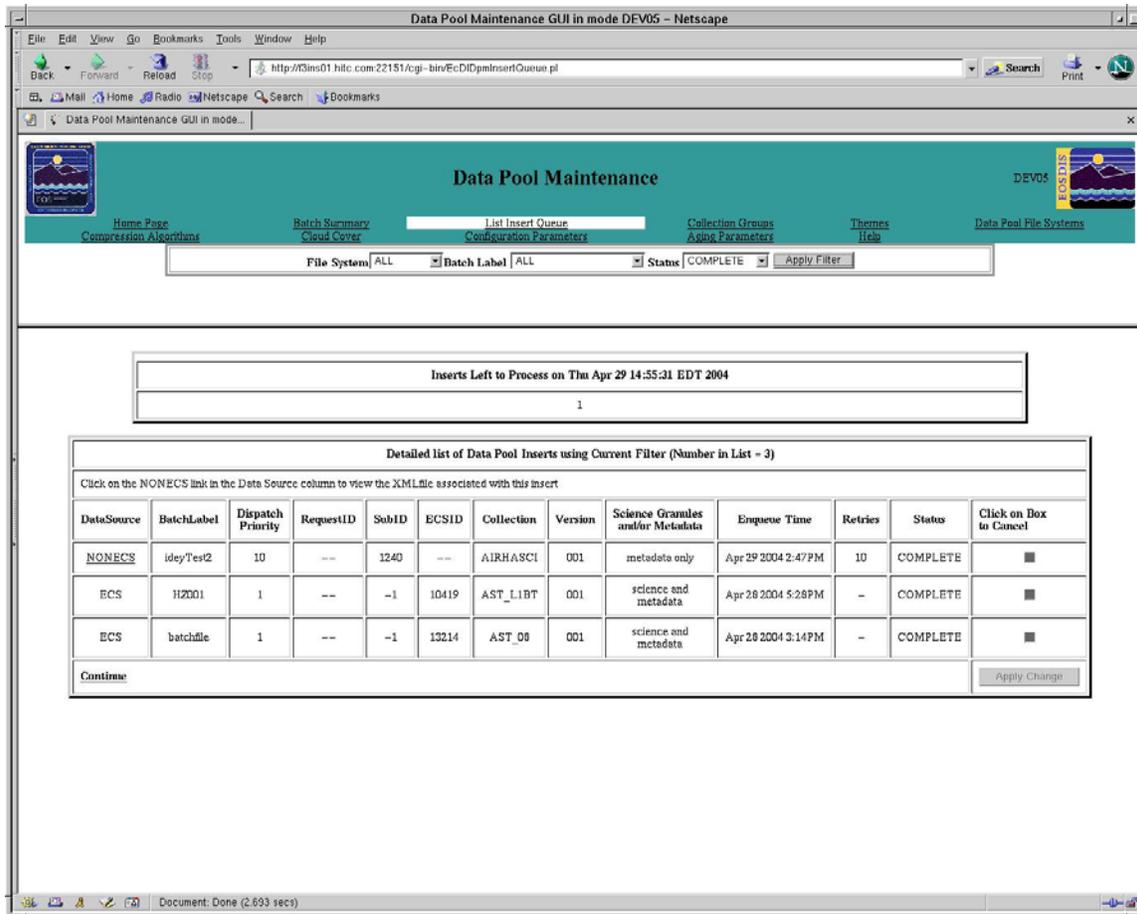


Figure 4.7.6-4. List Insert Queue Screen

See Table 4.7.6-3 for a description of the List Insert Queue's field descriptors.

Table 4.7.6-3. List Insert Queue Screen Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
Data Source	char	6	Required	To describe the source of the data whether ECS or NONECS.
Batch Label	char	20	System Generated	Name of batch
Dispatch Priority	int	4	System Generated	Number of priority by which requests will be processed
RequestID	char	10	System Generated	Request ID of the order
SubID	char	10	System Generated	Submission ID number

Table 4.7.6-3. List Insert Queue Screen Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
ESCID	char	10	System Generated	ECS ID number
Collection Version	int	4	System Generated	Version number of collection.
Science Granules and/or Metadata	char	n/a	Optional	Indicate whether collection whether collection is Science Granules and/or Metadata.
Enqueue Time	char	10	System Generated	Time in queue
Retries	int	4	System Generated	Number of retries
Status	char	10	System Generated	Status of the input process
Click on Box to Cancel	checkbox	1	Optional	Select when cancellation of request is needed

Note: This screen depicts the total number of Data Pool Inserts left to process and retry. It also displays a detailed list of Data Pool Inserts using the current filter and total number of rows in the database. Default filter is set to ignore for Batch Label and NEW/RETRY for Status. Full capability users can cancel an insert.

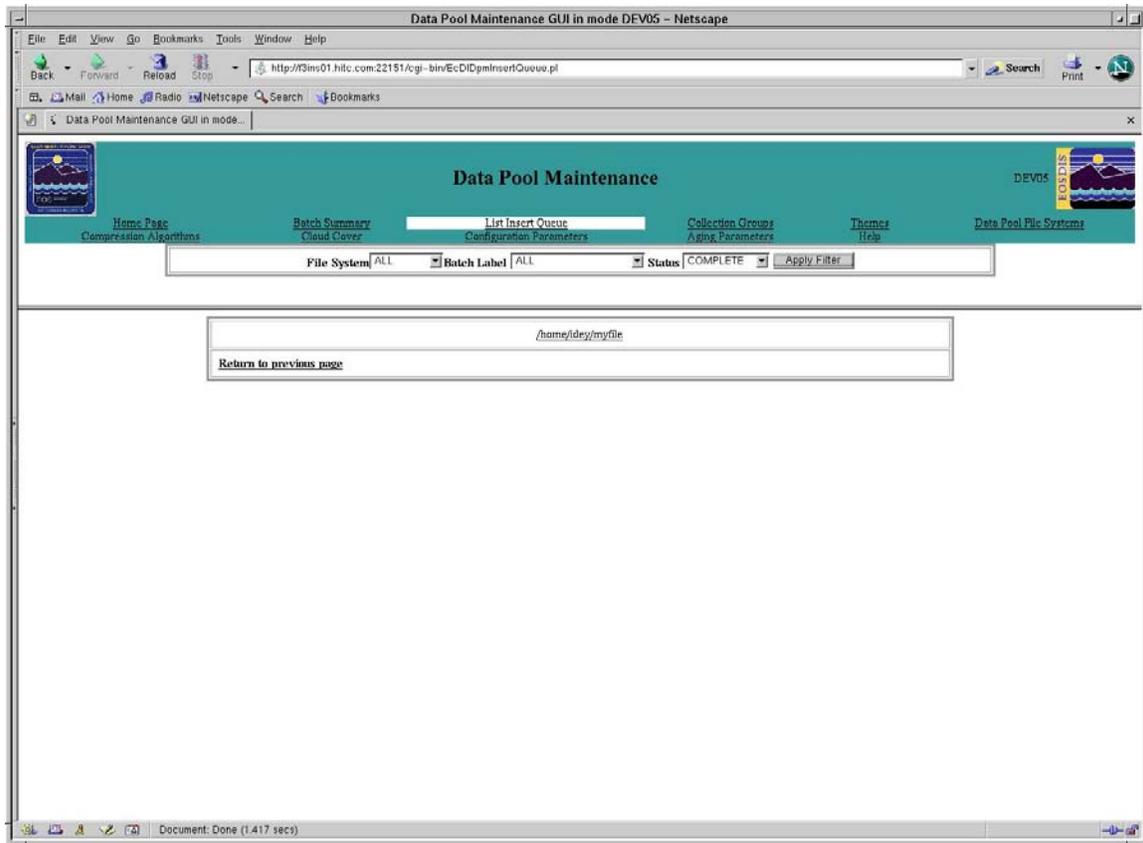


Figure 4.7.6-5. List Insert Queue Screen - Absolute xml File Path

The screen in Figure 4.7.6-5 depicts the absolute XML file path for Non-ECS Data Pool inserts.

Note: Limited capability users cannot cancel any inserts.

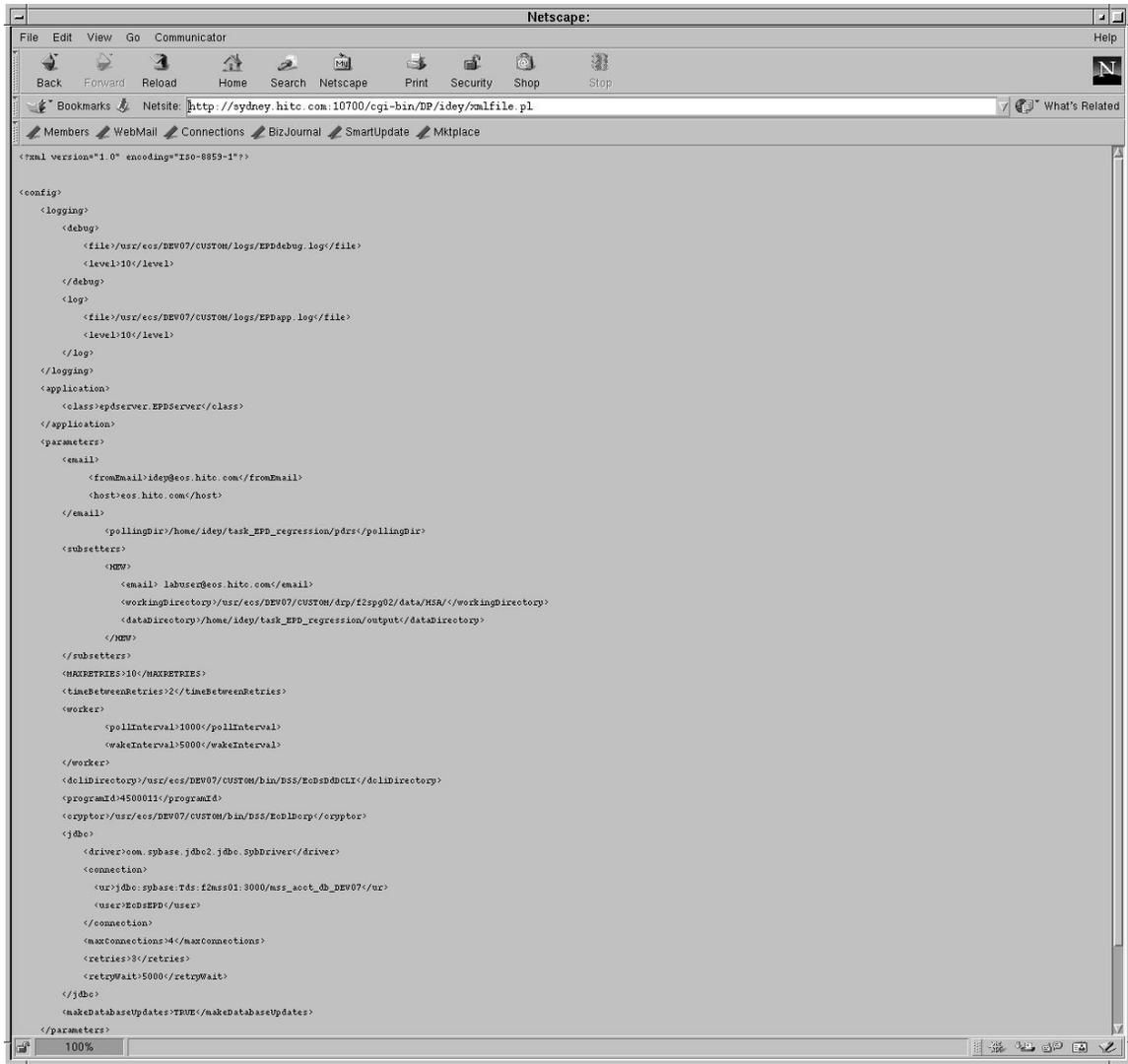


Figure 4.7.6-6. List Insert Queue Screen - XML File Content

4.7.6.1.4 Configuration Parameters Tab

The Configuration Parameters Screen shown in Figure 4.7.6-7 allows all operators to display the current values for the Data Pool Configuration Parameters. Full-capability operators can adjust the values for the parameters by entering new values in the input box. After making all changes, click on the **Click on Box to Modify Parameter** checkbox adjacent to the configuration parameters. Click on the **Apply Change** button to initiate the changes. See Table 4.7.6-4 for a description of the configuration parameters.

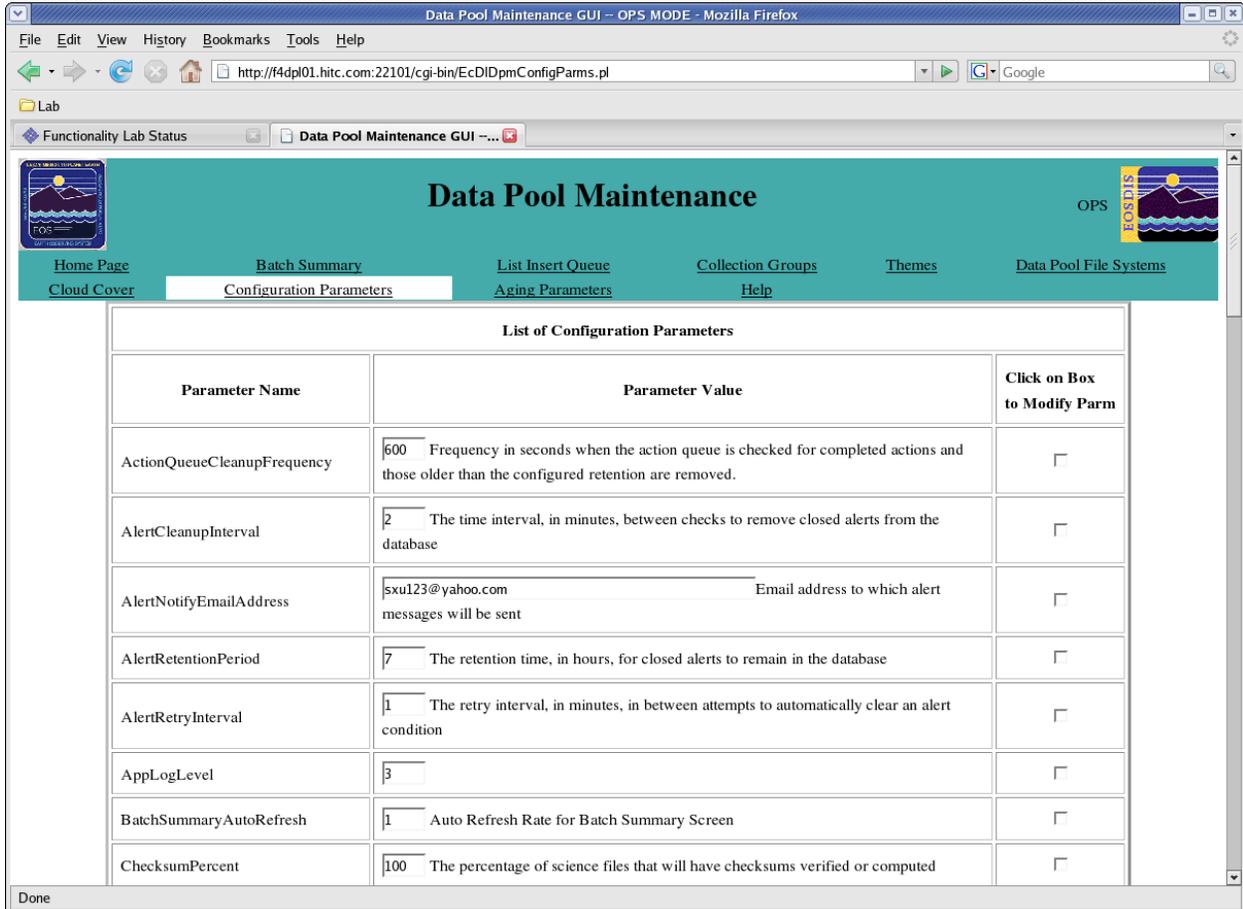


Figure 4.7.6-7. Configuration Parameters Screen

The screen in Figure 4.7.6-7 depicts the Data Pool configuration parameters. The full capacity operator can update the parameters.

Note: Limited Capability users cannot update any parameters. Check boxes and button are non clickable

Table 4.7.6-4. Manage Configuration Parameters Field Description (1 of 5)

Field Name	Data Type	Size	Entry	Description
ActionQueueCleanUpFrequency	Integer	4	Optional	Frequency in seconds when the action queue is checked for completed actions and those older than the configured retention are removed.
AlertCleanupInterval	Integer	2	Optional	The time interval, in minutes, between checks to remove closed alerts from the database.
AlertNotifyEmailAddress	Char	2	Optional	Email address to which alert messages will be sent.
AlertRetentionPeriod	Integer	2	Optional	The retention time, in hours, for closed alerts to remain in the database.
AlertRetryInterval	Integer	2	Optional	The retry interval, in minutes, in between attempts to automatically clear an alert condition.
BatchSummaryAutoRefresh	Integer	4	Optional	The frequency in minutes when the batch summary front is refreshed.
ChecksumPercent	Integer	2	Optional	The percentage of science files that will have checksums verified or computed.
Clean703Orders	Char	1	Optional	Flag indicating whether DPL should clean up order only granules: Y or N
DPLRetentionPatchInstalled	Char	1	Optional	The existence of this configuration parameter means that the DPL Retention patch has been installed and granules will not expire from the Data Pool.
DatabaseRetryCount	Integer	2	Optional	The number of times a retryable database error may be retried before being considered failed.
DatabaseRetryInterval	Integer	2	Optional	The number of seconds to wait between retries of a retryable database error.
DefaultRetentionPeriod	Integer	4	Optional	The default retention period in days for all Data Pool Insert Actions.

Table 4.7.6-4. Manage Configuration Parameters Field Description (2 of 5)

Field Name	Data Type	Size	Entry	Description
DefaultRetentionPriority	Integer	4	Optional	The default retention priority for all Data Pool Insert actions. The valid range is 1 – 255.
DeleteCompleteActionsAfter	Integer	4	Optional	The time in minutes that operators let completed actions stay in the insert action queue before making them eligible for removal. This is intended to provide the operator with some ability to check on past actions. The time period should not be configured too long.
DisplayAIPChunkSize	Integer	4	Optional	Number of rows return per chunk for the Active Insert Processes List.
FileSystemCheckInterval	Integer	2	Optional	The time interval, from 1 to 10 minutes, in between attempts to automatically clear a Data Pool file system alert condition.
FileSystemRefreshRate	Integer	2	Mandatory	Time in minutes before the File Systems Page Refreshes. Values: Never, 1,5,10,15,30 mins
FilterChecksumAIP	Char	1	Mandatory	Show Checksummed Active Insert Processes on the Data Pool Maint. GUI page. Values: YES, NO
FilterCopiedAIP	Char	1	Mandatory	Show Copied Active Insert Processes on the Data Pool Maint. GUI page. Values: YES, NO
FilterExtractedAIP	Char	1	Mandatory	Show Extracted Active Insert Processes on the Data Pool Maint. GUI page. Values: YES, NO
FilterPendingAIP	Char	1	Mandatory	Show Pending Active Insert Processes on the Data Pool Maint. GUI page. Values: YES. NO
FilterValidAIP	Char	1	Mandatory	Show Validated Active Insert Processes on the Data Pool Maint. GUI page. Values: YES. NO

Table 4.7.6-4. Manage Configuration Parameters Field Description (3 of 5)

Field Name	Data Type	Size	Entry	Description
FreeSpaceResumePercent	Integer	2	Mandatory	The percentage of free space required before a Data Pool file system full condition may be cleared.
GranuleLockRetentionPeriod	Integer	2	Optional	The age in hours that determines when a granule lock should be considered stale.
GranuleOmLockRetentionPeriod	Integer	2	Optional	The age in minutes that determines when a granule lock by OMS should be considered stale.
HEGCleanupAge	Integer	4	Optional	HEG cleanup age in days
IdleSleep	Integer	4	Optional	The number of seconds when there is nothing to do. Obsolete in 7.20
InCacheTimeLimit	Integer	4	Optional	The max time in minutes that operators are willing to wait for a DPIU process to complete whose files are in cache. After the time, DPAD kills the process and retries the action. Obsolete in 7.20
InsertRetryWait	Integer	4	Optional	The number of seconds to wait before an insert that failed should be resubmitted.
MAX_READ_DRIVES_<ARCHIVE>	Integer		Optional	One parameter per archive, Max number of simultaneous tape drives in used for the archive <ARCHIVE>.
MFSONInsert	Char	1	Optional	Availability of multiple file system on insert. Actual value set to Y(YES) / N(NO). Default is N (NO). Obsolete in 7.20
MaxConcurrentBandExtract	Integer	2	Optional	The maximum number of concurrent Band Extraction operations.
MaxConcurrentDPIUThreads	Integer	2	Optional	The concurrency limit for the DPIU processing queue.
MaxConcurrentEventThreads	Integer	2	Optional	The concurrency limit for the DPAD event processing queue.

Table 4.7.6-4. Manage Configuration Parameters Field Description (4 of 5)

Field Name	Data Type	Size	Entry	Description
MaxConcurrentPublish	Integer	2	Optional	The maximum number of concurrent Data Pool publication operations.
MaxConcurrentReadsPerTape	Integer	2	Optional	The maximum number of concurrent tape read (stage) operations for a single tape.
MaxConcurrentRegister	Integer	2	Optional	The maximum number of concurrent Data Pool registration operations.
MaxConcurrentRegister	Integer	2	Optional	The maximum number of concurrent Data Pool registration operations.
MaxConcurrentValidate	Integer	2	Optional	The maximum number of concurrent request validation operations.
MaxConsecutiveErrors	Integer	2	Optional	The maximum number of consecutive errors or timeout conditions for a service before an alert will be raised.
MaxInsertRetries	Integer	4	Optional	The maximum number of times an insert should be tried again (-1 means forever).
MaxReadDrivesPerRequest	Integer	2	Optional	Max number of simultaneous tape drives in used.
MaxTapeMountPerRequest	Integer	4	Optional	Maximum number of tape mount allow per request.
NewActionCheckFrequency	Integer	4	Optional	The frequency in seconds for checking for new actions. DPAD always checks if we are out of actions that can be dispatched, so unless getting things queued up in memory is urgent, this could be a time interval of minutes.
NumOfAllowedCacheProcesses	Integer	4	Optional	The maximum number of insert processes that require ARCHIVE access to cache.
NumOfAllowedInsertProcesses	Integer	4	Optional	The maximum number of insert processes running at any time.
NumOfAllowedNonCacheProcesses	Integer	4	Optional	The maximum number of insert processes that require ARCHIVE access to tape.

Table 4.7.6-4. Manage Configuration Parameters Field Description (5 of 5)

Field Name	Data Type	Size	Entry	Description
OnTapeTimeLimit	Integer	4	Optional	The maximum time in hours operators are willing to wait for a DPIU process to complete whose files are not in cache. After that time, DPAD kills the process and retries the action.
OrderOnlyFSLabel	Char	1	Optional	Order only file system label.
RefreshRate	Integer	4	Optional	The DPM Home Page refresh rate in seconds.
PerfLogLevel	Integer	1	Optional	Level for perf logging, 1-3.
RunAwayCheckFrequency	Integer	4	Optional	The frequency in seconds for checking for runaway processes. Recommend not making it much smaller than InCacheTimeLimit. Obsolete in 7.20.
RunawayDuration	Integer	4	Optional	Max period of time to wait for an insert to complete. Obsolete in 7.20.
SizeOfInsertQueueList	Integer	4	Optional	The number of Data Pool Insert Queue entries that can be displayed at any one time by the DPM GUI.
StartUpWait	Integer	4	Optional	The number of seconds to delay start-up while trying to clean out left over DPIU processes. Obsolete in 7.20.

The Collection Groups Screen shown in Figure 4.7.6-8 allows the operator to view collection groups in the Data Pool database and navigate to the functions described in the following sections. See Table 4.7.6-5 for descriptors of the Collection Group screen.

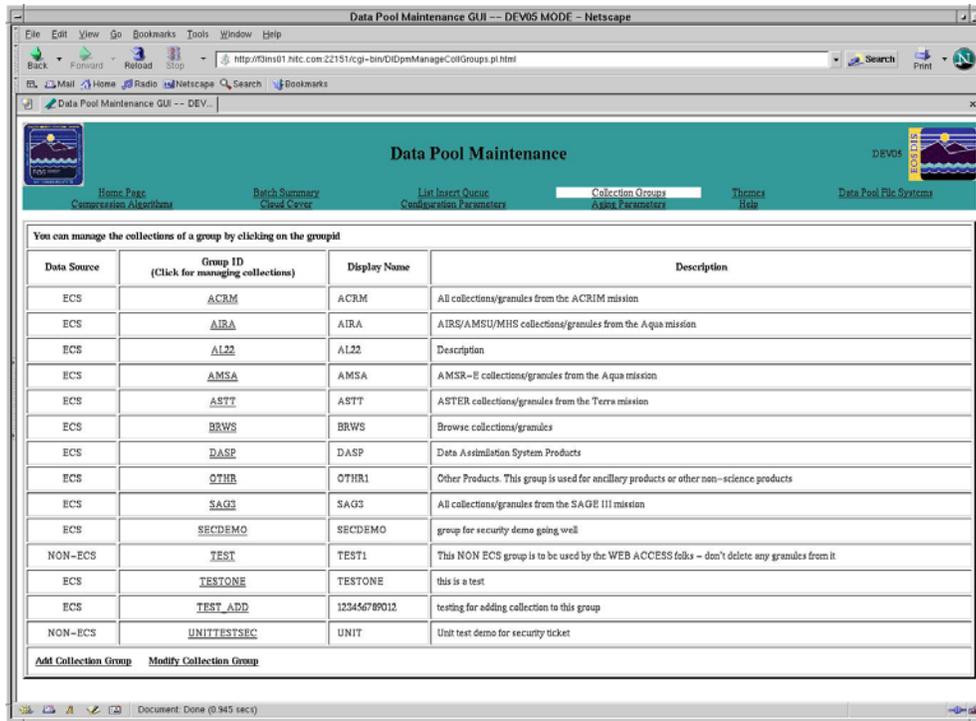


Figure 4.7.6-8. Collection Groups Screen Currently in the Data Pool

Table 4.7.6-5. Collection Group Field Descriptions

Field Name	Data Type	Size	Entry	Description
Data Source	Character	6	Required	To describe the source of the data whether ECS or NONECS.
Group ID	Character	12	Required	An up-to twelve letter identifier ([A-Z],[0-9] or underscore) of the group.
Display Name	Character	12	Optional	A twelve letter identifier of the display name (if left blank defaults to Group ID). (possible characters are [A-Z],[0-9], underscore or blank).
Description	Character	255	Required	A description for the collection group. It is scrollable up to 255 characters.

The **Add Collection Group** link will allow the user to add a new collection to the collection group and the **Modify Collection Group** link allows any changes to be made to the collection group.

Note: Limited capability users cannot click ‘Add Collection Group’ or ‘Modify Collection Group’ links.

4.7.6.1.5.1 Add New Collection Group

The full-capability operator can add a new ECS or Non-ECS collection group by clicking on the **Add Collection Group** link shown in Figure 4.7.6-8. This link will take the operator to the screen shown in Figure 4.7.6-9. To create a new group, the operator is required to enter the Group ID and Description, the Display Name is optional, and will default to the Group ID if nothing is entered. The Display Name is used for Web Drill Down. After entering the new collection group, click on the **Apply Change** button. The new collection group will be added to the Data Pool database and the List of Collection Groups screen will be refreshed. See Table 4.7.6-6 for Add Collection Group parameters.

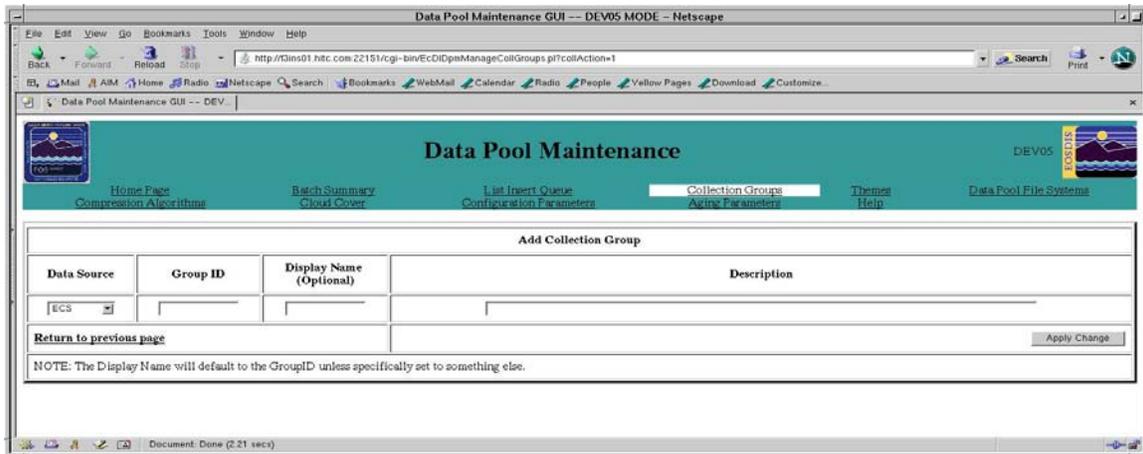


Figure 4.7.6-9. Add Collection Group Screen

Note: Limited Capability users cannot use this functionality.

Table 4.7.6-6. Add Collection Group Field Description

Field Name	Data Type	Size	Entry	Description
Data Source	Character	6	Required	To describe the source of the data whether ECS or NONECS.
Group ID	Character	12	Required	An up-to twelve letter identifier ([A-Z], [0-9] or underscore) of the group.
Display Name	Character	12	Optional	A twelve letter identifier of the display name (if left blank defaults to Group ID). (Possible characters are [A-Z], [0-9], underscore or blank).
Description	Character	255	Required	A description for the collection group. It is scrollable up to 255 characters.

4.7.6.1.5.2 Modify Collection Group Description

The full-capability operator can modify the description and display name for a collection group by clicking on the **Modify Collection Group** link shown in Figure 4.7.6-8. This link will take the operator to the screen shown in Figure 4.7.6-10. The operator can modify the description and display name for a collection group. After making a change, click on the **Check Box To Modify** checkbox, adjacent to the collection group description. After making all changes, click on the **Apply Change** button. The changes will be applied to the Data Pool database and the **List of Collection Groups** screen will be refreshed. See Table 4.7.6-7 for a description of the Modify Collection Group parameters.

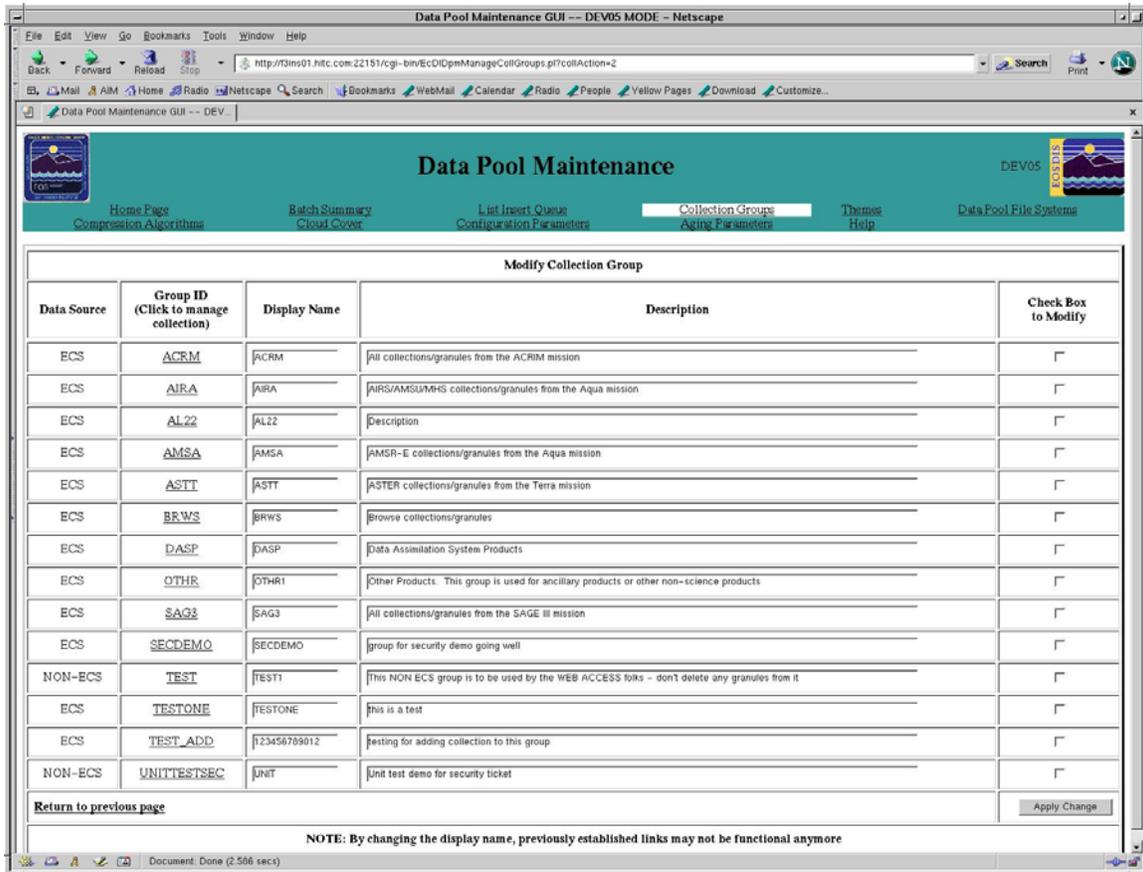


Figure 4.7.6-10. Modify Collection Group Screen

The screen in Figure 4.7.6-10 is called from Figure 4.7.6-8 and allows the full capacity operator to modify the collection group.

Note: Limited Capability users cannot use this functionality.

Table 4.7.6-7. Modify Collection Group Field Description

Field Name	Data Type	Size	Entry	Description
Data Source	Character	6	Required	To describe the source of the data whether ECS or NONECS.
Group ID	Character	12	Required	An up-to twelve letter identifier ([A-Z],[0-9] or underscore) of the group.
Display Name	Char	12	Optional	Display name for the collection group.
Description	Char	100	Optional	A description for the collection group.

4.7.6.1.5.3 View Collections

The operator can view the collections associated with a collection group by clicking on the **GroupId** link shown in Figure 4.7.6-8. This link will take the operator to the Collections Associated with an ECS and Non-ECS Collection Group screen shown in Figure 4.7.6-11. **File System** 1 indicates a particular Data Pool file system. The default is to show all the collections from all Data Pool file system for a group. A drop down list will provide the operator the labels of all available file systems. The operator can use this list to filter the display of collections. The **Data Source** and **Group ID** are presented at the top of the table as a reference for which group is currently being viewed. See Table 4.7.6-8 for descriptions of the View Collection page entries.

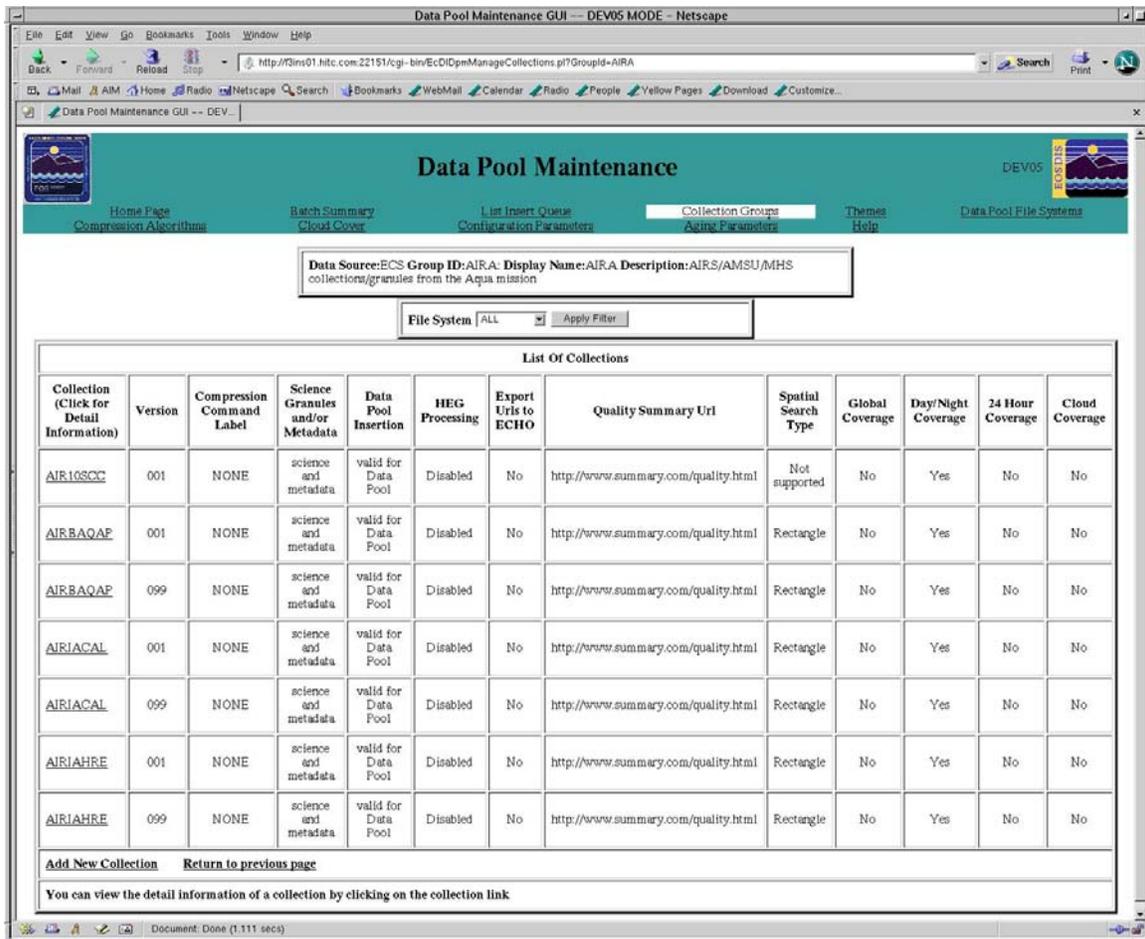


Figure 4.7.6-11. Collections Associated with Collection Groups

Note: Limited Capability users cannot click 'Add Collection' link.

Table 4.7.6-8. View Collection Group Field Description

Field Name	Data Type	Size	Entry	Description
Data Source	Character	6	Required	To describe the source of the data whether ECS or NONECS.
Group ID	Character	12	Required	An up-to twelve letter identifier ([A-Z], [0-9] or underscore) of the group.
Display Name	Char	12	Optional	Display name for the collection group.
Description	Char	100	Optional	A description for the collection group.
Collection	Char	8	System Generated	Name of a collection.
Version	Integer	1	System Generated	Version number of collection.
Science Granules and/or Metadata	Char	n/a	Optional	Indicate whether collection whether collection is Science Granules and/or Metadata.
Data Pool Insertion	Char	n/a	Optional	Indicates if the collection is eligible for insertion into Data Pool.
HEG Processing	Char	n/a	System Generated	Indicates if HEG processing is available or not
Export Urls to ECHO	Char	n/a	System Generated	Indicates in URL need to be exported or not
Quality Summary Url	Char	80	Optional	URL that describes the quality summary of a collection. Scrollable up to 255 characters
Spatial Search Type	Char	n/a	System Generated	Indicates if Spatial Search is required/needed.
Global Coverage	Char	1	Optional	Indicated if global coverage is needed.
Day/Night Coverage	Char	1	Optional	Indicate if day or night coverage is needed.
24 Hour Coverage	Char	1	Optional	Indicate if 24-hour coverage is needed.
Cloud Coverage	Char	1	Optional	Indicate if cloud coverage is needed.

The **Add Collection Group** link will allow the user to add a new collection to the collection group and the **Return to previous page** link will take the user to the page prior.

4.7.6.1.5.4 View Collection Description

The operator can view the detail description for a collection by clicking on the Collection link shown in Figure 4.7.6-11. This link will take the operator to the Description of a Collection screen shown in Figure 4.7.6-12. This page will give detail information about an ECS or Non-ECS collection. Modify Collection will display the modify collection page for full capability operators. The operator can return to the previous page by clicking on the 'Return to previous page' link.

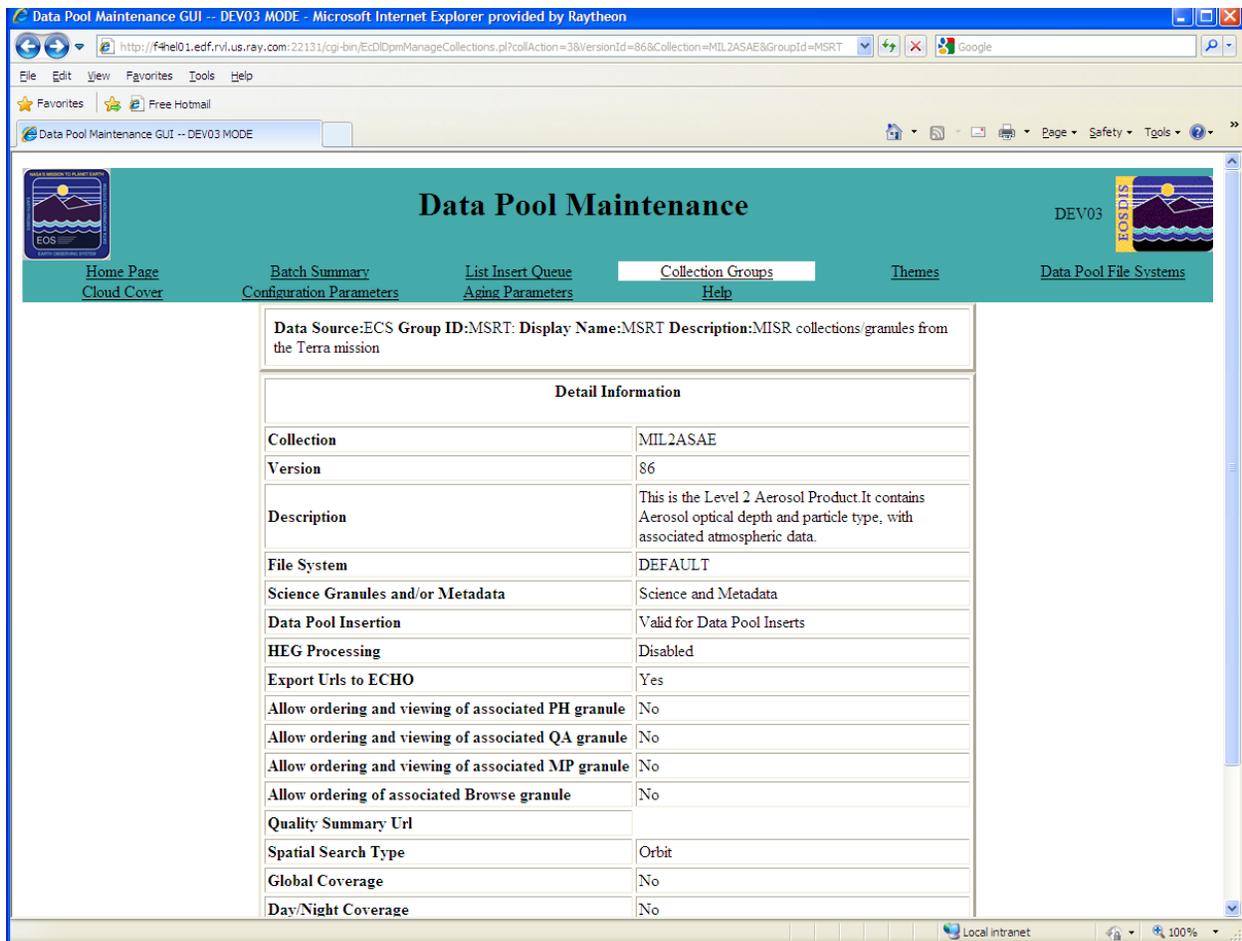


Figure 4.7.6-12. Description of a Collection

Field descriptions for the screen can be found in Table 4.7.6-9.

Note: Limited Capability users cannot click ‘Modify Collection’ link.

4.7.6.1.5.5 Add New Collection to Existing Collection Group

The full-capability operator can add an ECS collection by clicking on the **Add New Collection** link shown in Figure 4.7.6-11. An ECS collection can be added to an ECS Collection Group and a Non-ECS collection can be added to a Non-ECS group. The procedure for adding collections for ECS and Non-ECS groups are different. The operator can add a collection by clicking on the **Add New Collection** link in Figure 4.7.6-11. For ECS Group this link will take the operator to Figure 4.7.6-13, which displays a list of collections with its version number and description that are not in the Data Pool database. The operator can add any one of these collections to the group by clicking on the collection link. This will bring up the Add Collection page for an ECS Collection shown in Figure 4.7.6-12. The operator can add a Non-ECS collection to a Non-ECS

group by clicking on an **Add New Collection** link on a Non-ECS Collection Group Screen. This action will bring up Add Collection screen for a Non-ECS Collection shown in Figure 4.7.6-16.

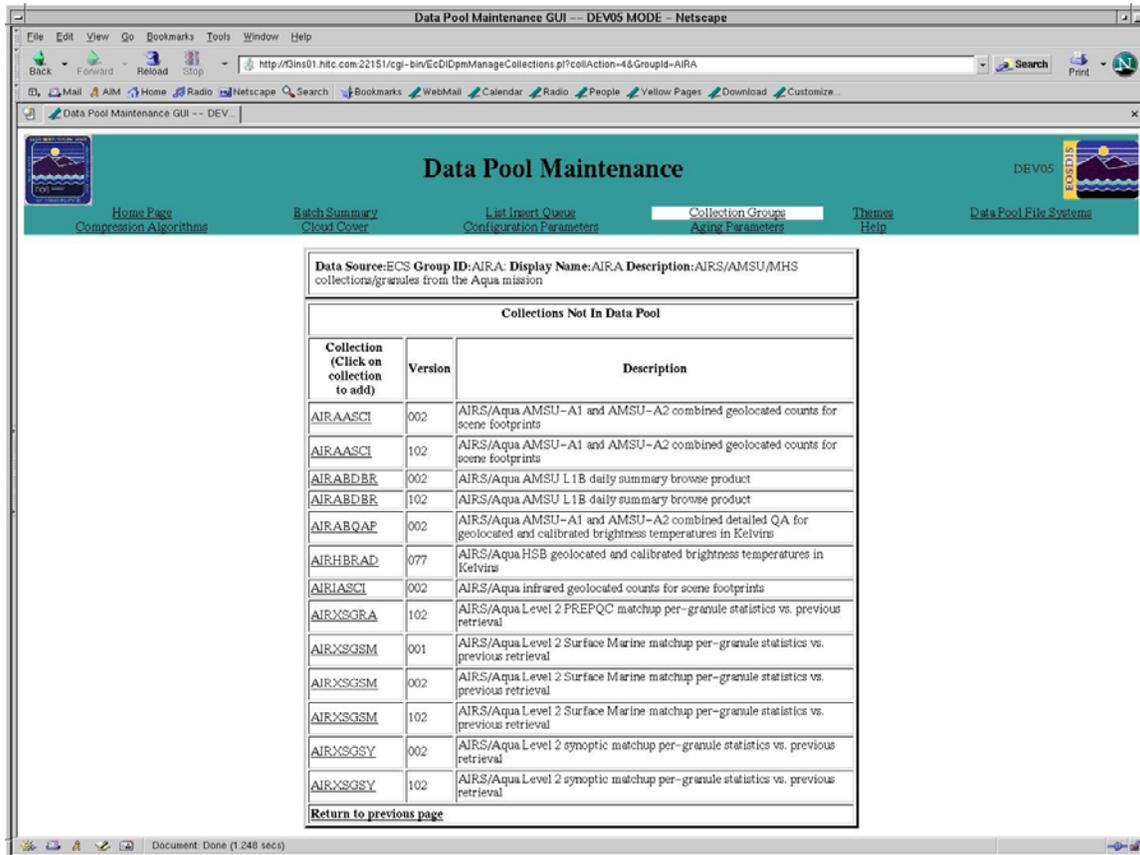


Figure 4.7.6-13. List of Collection Not in Data Pool

Note: This page is not accessible by Limited Capability users.

The full-capability operator can arrive at the Add ECS Collection page shown in Figure 4.7.6-14 by clicking on a collection link shown in Figure 4.7.6-11. Collection name, Version and Descriptions are predefined and cannot be changed. The operator can associate a collection with a File System label. Defaults for these two items are nulls. The Science Granules and /or Metadata row indicates if the collection is valid for science granule and metadata insertion or metadata only. The default value is science and metadata insertion. The operator can set the value to Metadata Only to indicate Metadata insertion only. The Data Pool Insertion indicates if the collection is eligible for insertion into Data Pool. The default value is invalid for data pool. The operator must set the value to valid for data pool to make the collection eligible for insertion into Data Pool. The Spatial Search Type indicates the types of search criteria used for Spatial searches such as GPolygon, Rectangle, or Orbit. The operator can also set the global coverage

flag to on/off. Default value for this flag is on. There are two more flag has on/off values can be set for a collection. Default for Day/Night flag is on and 24 hour flag is off. After creating the Quality Summary web page, the operators will enter the URL in the text area reserved for quality summary URL and thus associate the URL for the Quality Summary web page. A collection can be associated with a cloud cover attribute and its type. The operator can configure that in this page. There is also a text area to enter the cloud cover description. Defaults for quality summary, cloud cover attribute, cloud cover type and cloud cover description are nulls.

After making necessary selections the operator must press on **Apply Change** button to add the collection.

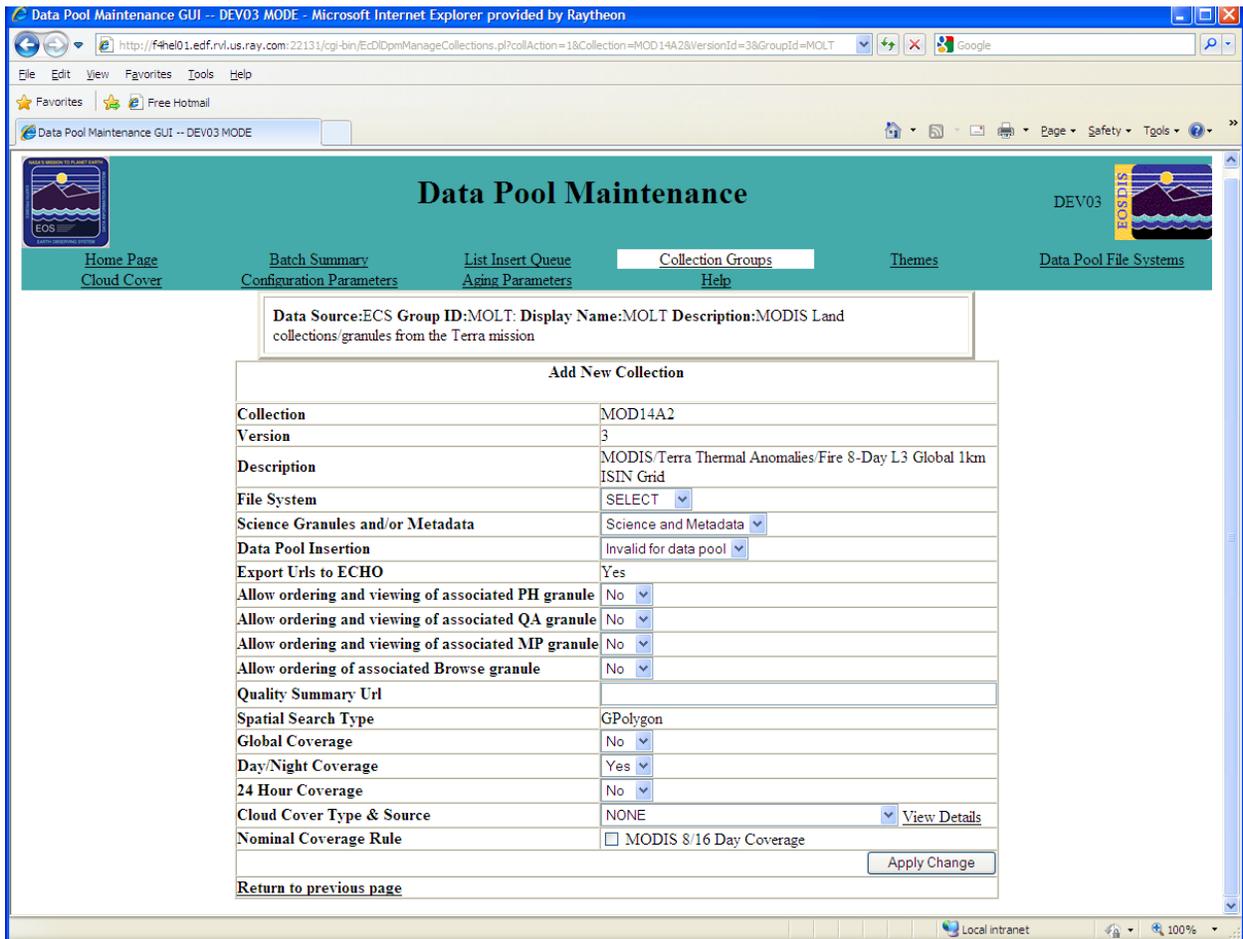


Figure 4.7.6-14. Add ECS Collection Page (This Page is only Accessible by Full Capability Operators)

Table 4.7.6-9. Add ECS Collection

Field Name	Data Type	Size	Entry	Description
Collection	Char	8	System Generated	Name of a collection.
Version	Integer	1	System Generated	Version number of collection.
Description	Char	80	Optional	Description of collection. Scrollable up to 255 characters.
File System	Char	n/a	Optional	File system path
Science Granules and/or Metadata	Char	n/a	Optional	Indicate whether collection whether collection is Science Granules and/or Metadata.
Data Pool Insertion	Char	n/a	Optional	Indicates if the collection is eligible for insertion into Data Pool.
Export Urls to ECHO	Char	1	Optional	Indicates if this collection is to be exported to ECHO.
Order PH	Char	1	Mandatory	If set to 'Y', allows associated PH granules to be ordered. The default value is 'N'. (Not applicable for Non-ECS or collection group 'OTHR'.)
Order QA	Char	1	Mandatory	If set to 'Y', allows associated QA granules to be ordered. The default value is 'N'. (Not applicable for Non-ECS or collection group 'OTHR'.)
Order MP	Char	1	Mandatory	If set to 'Y', allows associated MP granules to be ordered. The default value is 'N'. (Not applicable for Non-ECS or collection group 'OTHR'.)
Order Browse	Char	1	Mandatory	If set to 'Y', allows associated browse granules to be ordered. The default value is 'N'. (Not applicable for Non-ECS or collection group 'OTHR'.)
Quality Summary URL	Char	80	Optional	URL that describes the quality summary of a collection. Scrollable up to 255 characters
Spatial Search Type	Char	n/a	System Generated	Indicates if Spatial Search is required/needed.
Global Coverage	Char	1	Optional	Indicated if global coverage is needed.
Day/Night Coverage	Char	1	Optional	Indicate if day or night coverage is needed.
24 Hour Coverage	Char	1	Optional	Indicate if 24-hour coverage is needed.
Cloud Cover Type and Source	Char	n/a	Optional	Source and type name for a cloud cover.

Entries for Cloud Cover attribute and type must be verified against the XML small file archive.

An error window as shown in Figure 4.7.6-15 will pop up to indicate that collection cannot be added due to wrong cloud cover information. Click **OK** to dismiss the error window.

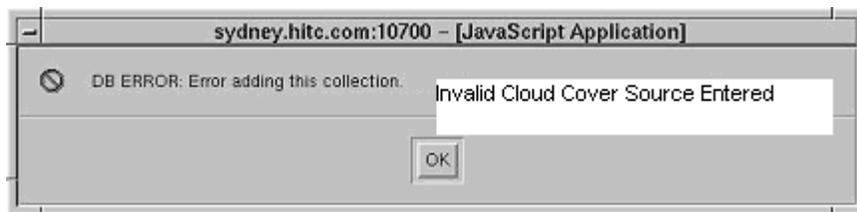


Figure 4.7.6-15. Error Window

The operator can add a Non-ECS collection to a Non-ECS group by clicking on an **Add New Collection** link in a Collections Associated with a Non-ECS Collection Group Screen. This action will bring up Add Collection screen for a Non-ECS Collection shown in Figure 4.7.6-16. The operator needs to enter a Collection name and Version number. These two fields are required. The operator can provide an optional collection Description for the collection. The operator can associate a collection with a File System label. Defaults for these two items are nulls. The Science Granules and /or Metadata row indicates if the collection is valid for science granule and metadata insertion or metadata only. The default value is science and metadata insertion. The operator can set the value to Metadata Only to indicate Metadata insertion only. The Data Pool Insertion indicates if the collection is eligible for insertion into Data Pool. The default value is invalid for data pool. The operator must set the value to valid for data pool to make the collection eligible for insertion into Data Pool. NONECS collections can also have the option to configure Spatial Search Type for a collection. Options provided are 'Not supported', 'Rectangle', Gpolygon and 'Orbit'. Default value for Spatial Search Type is 'Not Supported'. The operator can also set the global coverage flag to on/off. Default value for this flag is on. There are two more flag has on/off values can be set for a collection. Default for Day/Night Coverage flag is on and 24 hour coverage flag is off. After creating the Quality Summary web page, the operators will enter the URL in the text area reserved for quality summary URL and thus associate the URL for the Quality Summary web page. A collection can be associated with a Cloud Cover Type and Source attribute. The operator can configure that in this page. There is also a text area to enter the cloud cover description. Defaults for quality summary, cloud cover attribute, cloud cover type and cloud cover description are null. After making necessary selections operator must press on **Apply Change** button to add the collection. Table 4.7.6-10 gives descriptors for each of the Add New Non-ECS Collection entries.

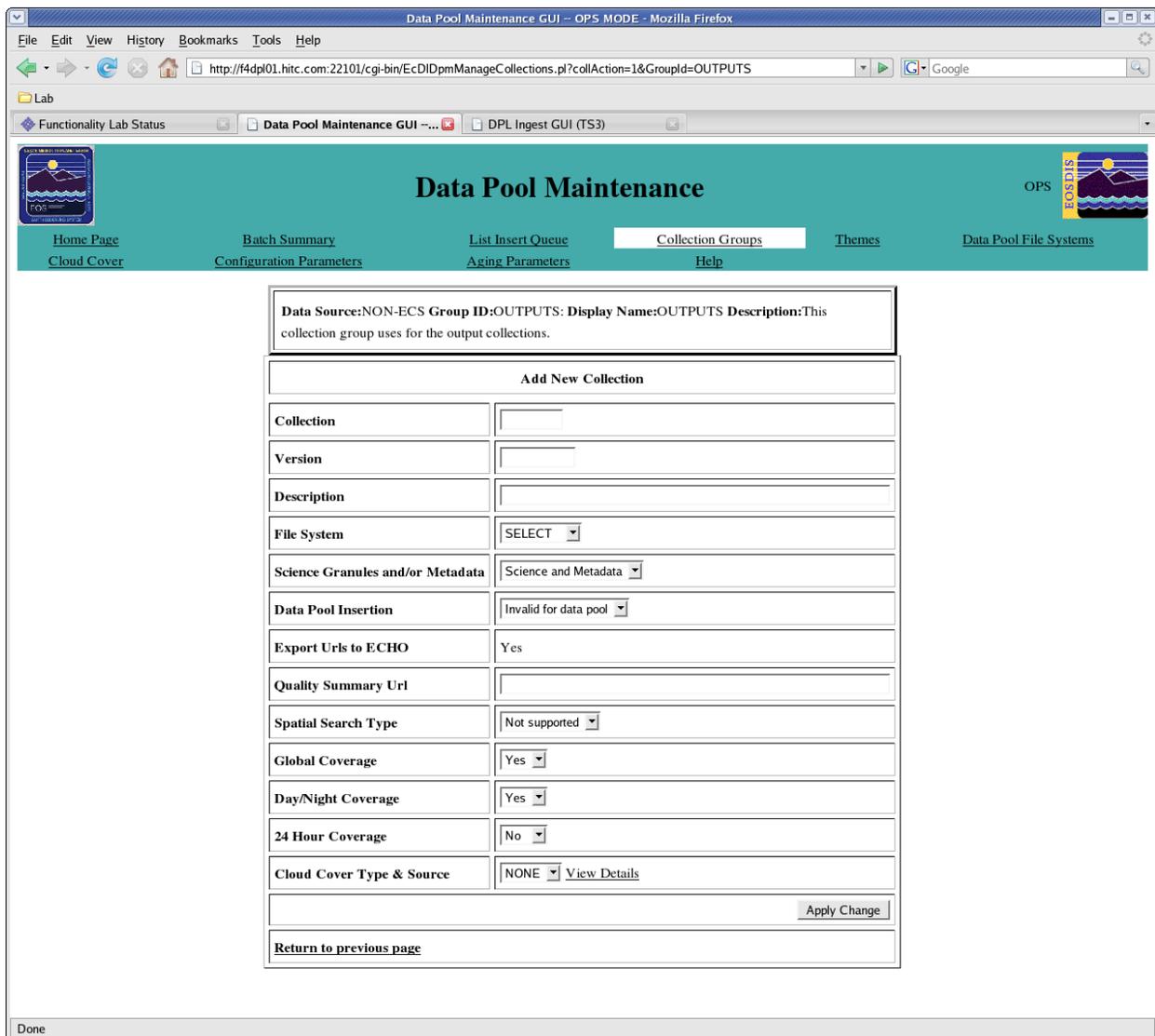


Figure 4.7.6-16. Add Non-ECS Collection Page (This Page is Only Accessible by Full Capability Operators)

Note: Limited Capability users cannot use this functionality.

Table 4.7.6-10. Add Non-ECS Collection

Field Name	Data Type	Size	Entry	Description
Collection	Char	8	Required	Name of a collection.
Version	Integer	1	Required	Version number of collection.
Description	Char	80	Required	Description of collection. Scrollable up to 255 characters.
File System	Char	n/a	Optional	File system path
Science Granules and/or Metadata	Char	n/a	Optional	Indicate whether collection whether collection is Science Granules and/or Metadata.
Data Pool Insertion	Char	n/a	Optional	Indicates if the collection is eligible for insertion into Data Pool.
Export Urls to ECHO	Char	1	Optional	Indicates if this collection is to be exported to ECHO.
Quality Summary URL	Char	80	Optional	URL that describes the quality summary of a collection. Scrollable up to 255 characters
Spatial Search Type	Char	n/a	Optional	Indicates if Spatial Search is required/needed and its type.
Global Coverage	Char	1	Optional	Indicated if global coverage is needed.
Day/Night Coverage	Char	1	Optional	Indicate if day or night coverage is needed.
24 Hour Coverage	Char	1	Optional	Indicate if 24-hour coverage is needed.

Entry for Non-ECS Collection name is verified against input error. It is also verified against same name and same version ID. An error window, as shown in Figure 4.7.6.17 and Figure 4.7.6.18, will pop up for each case on the Add Collection screen. Click **OK** to dismiss the error window.



Figure 4.7.6-17. Input Error Window



Figure 4.7.6-18. DB Error Window

4.7.6.1.5.6 Modify Existing Collection

The full-capability operator can modify a collection by clicking on the **Modify Collection** link shown in Figure 4.7.6-12 will take the operator to the Modify Collection page. There is one difference between the ECS and NON-ECS modify page. The ECS modify page does not allow the operator to modify a collection's description. The NON-ECS modify page allows the description field to be updated. Figure 4.7.6-19 describes modify an ECS collection example page and Figure 4.7.6-20 describes a NON-ECS modify page.

Both modify pages displays current information and allow operator modifications. After all desired changes are entered, the operator needs to click on the button called **Apply Change**. This action will change the data in database.

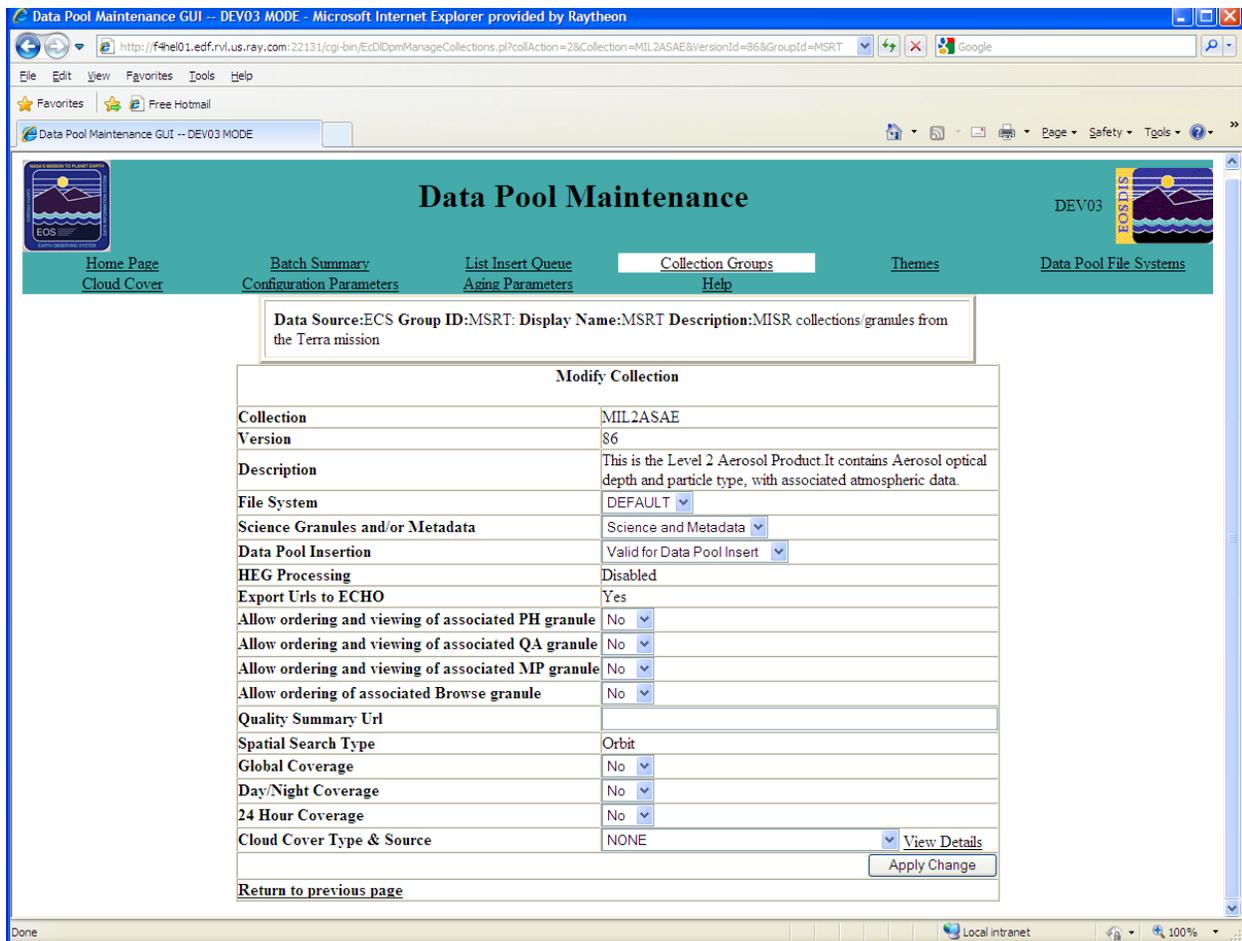


Figure 4.7.6-19. ECS Modify Collection Screen

Note: Limited Capability users cannot use this functionality.

Field descriptions for the screen can be found in Table 4.7.6-9.

Starting with Release 7.23, the cloud cover source can be modified for collections that already have granules in the public DPL, as opposed to 7.22, when the cloud cover source can be modified only for collection without DPL public granules. To correctly change the cloud cover source for such collections, the DPL Maintenance GUI functionality must be used together with the cloud cover utility script (EcDiCloudCoverUtilityStart). The following operations are permitted:

- a. **Remove** the cloud cover source for a specified collection: set the cloud cover source for the collection to “NONE” and run the EcDiCloudCoverUtilityStart –operation **remove** for the specified collection. This operation should be used when the DAAC does not want to present cloud cover counts to its users during the DPL Web Access web drill down steps.

- b. **Reconfigure** the cloud cover source for a specified collection: set the cloud cover source for the collection to the new source (if the new source doesn't already exist it will have to be created) and run the `EcDICloudCoverUtilityStart -operation repopulate` for the specified collection. This operation should be used when the DAAC determined that the cloud cover source has been incorrectly configured for a collection.
- c. **Enable/Configure** the cloud cover source for a specified collection: set the cloud cover source for the collection to the desired cloud cover source (a new source must be created if necessary) and run the `EcDICloudCoverUtilityStart -operation populate` for the specified collection. This operation should be used when the DAAC determined that the cloud cover source is absent for a collection that should have had a cloud cover source.

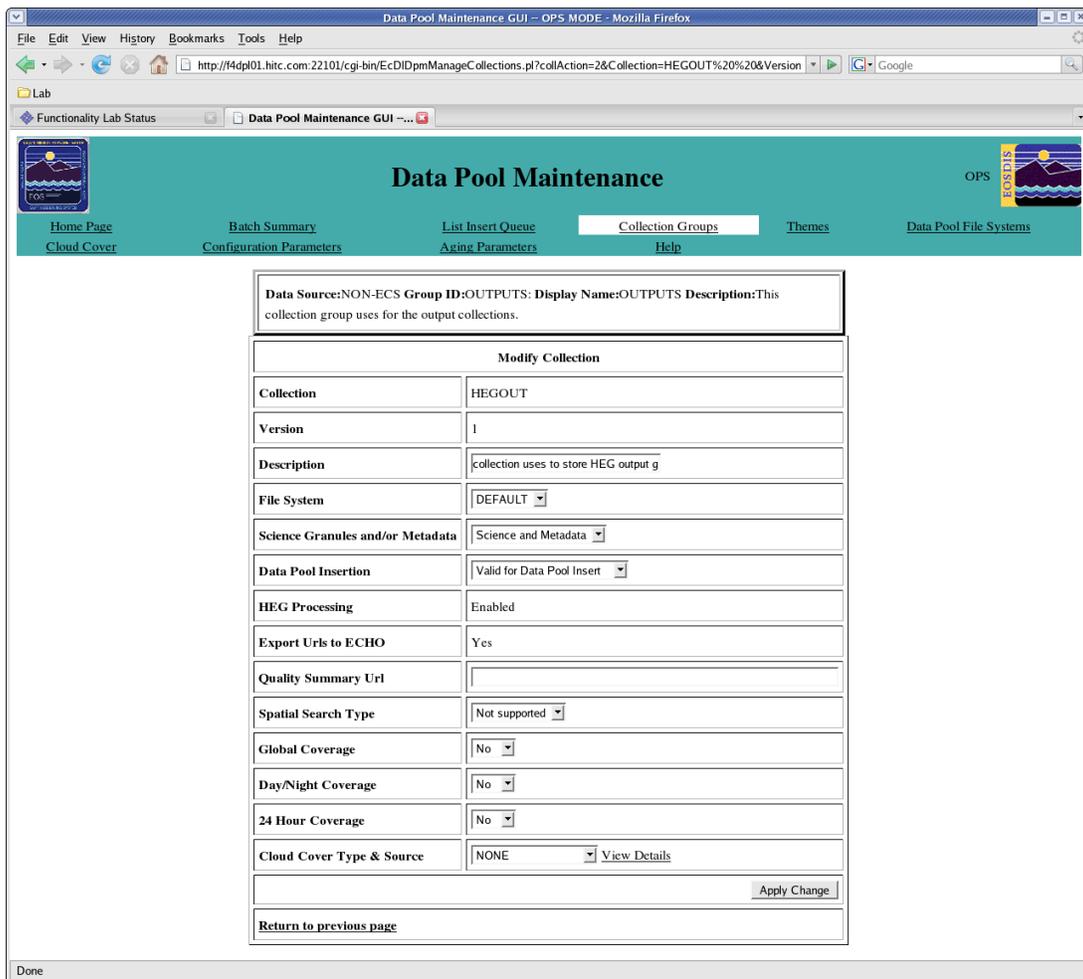


Figure 4.7.6-20. Non-ECS Modify Collections Screen

Field descriptions for the screen can be found in Table 4.7.6-10.

Note: Limited Capability users cannot use this functionality.

4.7.6.1.6 Data Pool File System Tab

Manage File System screen shown in Figure 4.7.6-21 allows the operator to view a list of file systems and information on Free Space Flag, Availability for insert, and Min Freed Space Amount. From this page the full capability operator can also configure a new file system and modifying an existing one by clicking on the link **Add New File System** and **Modify Data Pool File System Information** link respectively. Clicking on **Add New File System** will take the operator to 'Add New File System' page shown in Figure 4.7.6-22. The operators need to add five fields --- 1) File System Label: A label representing an existing Data Pool file system. 2) Free Space Flag: Value needs to be set is either ON or OFF. If is set to ON that means free space is available. If it is set to OFF then that means free space is not available. 3) Availability for Insert: Value needs to be set is either 'Available' or 'Unavailable'. If the value is set to 'Available' that means file system is available for Data Pool insert. If the value is set to 'Unavailable' that means file system is not available for Data Pool insert. 4): Absolute Path: indicates path name to location. 5) Min Freed Space: Need to enter an integer value, which represent megabytes of space. This amount space must remain free in order to make the file system available for insert. Clicking on **Modify File System** will take the operator to 'Modify File System Information' page shown in Figure 4.7.6-23. The operator can change Free Space Flag, Availability for insert flag, and the Min Freed Space Amount in this page. There are check boxes associated with each file system. The operator can change multiple file system at one time by checking the desired file system's checkboxes and press on **Apply Change** button.

The screenshot shows the 'Data Pool Maintenance' web application interface. At the top, there is a navigation bar with links for Home Page, Batch Summary, List Insert Queue, Collection Groups, Themes, and Data Pool File Systems. Below the navigation bar is a table titled 'File System Information' with the following data:

File System Path	Ingest Status	DPL Insert Status	Free Space	Used Space Updated	Free Space Flag	Availability	Min Freed Space (in Megabytes)
DEFAULT /datapool/DEV05/user/FS1/	Active	Active	87 GB	76% Aug 28 2008 12:49PM	State : Y Last Changed: Jun 13 2007 11:08AM	State : Y Last changed:	10
FS1 /datapool/DEV05/user/FS1/	Active	Active	87 GB	76% Aug 28 2008 12:49PM	State : Y Last Changed: Mar 6 2007 10:09AM	State : Y Last changed: Mar 6 2007 10:09AM	3
FS2 /datapool/DEV05/user/FS2/	Active	Active	210 GB	42% Aug 28 2008 12:49PM	State : Y Last Changed: Jan 15 2007 2:24PM	State : Y Last changed: Jan 15 2007 2:24PM	10
temptest /datapool/DEV05/user/af	suspended by operator	Active	0 GB	%	State : N Last Changed:	State : N Last changed:	1

Below the table, there are two buttons: 'Add New File System' and 'Modify File System'.

Figure 4.7.6-21. Data Pool File System Information Screen

Field descriptions for the screen can be found in Table 4.7.6-11.

Note: Limited Capability users cannot click ‘Add New File System’ or ‘Modify File System’ links.

Table 4.7.6-11. File System Information Field Description

Field Name	Data Type	Size	Entry	Description
Label	char	10	Required	File System Label. Limited to 10 characters. This is displayed in the File System Path column.
Absolute Path	char	255	Required	File system's absolute path. Only relative path is modifiable. Limited to 255 characters for the entire path. This is displayed in the File System Path column.
Ingest Status	Int	1	Derived	Indicates if the file system is enabled for DPL ingest processes.
DPL Insert Status	Int	1	Derived	Indicates if the file system is enabled for public datapool insert processes.
Free Space	Int	5	Derived	Indicates the space available on this file system (in GB)
Used Space	Int	2	Derived	Indicated the percentage of the file system used and the date this statistic was last updated.
Free Space Flag	char	1	Optional	Indicates if space is available for Data Pool insert. 'ON' value indicates that space is available. Default is 'ON'.
Availability	char	1	Optional	File system available for insert. Value 'YES' indicate it is available and value 'NO' it is not available. The default value is 'YES'.
Min Freed Space (in Megabytes)	int	4	Optional	Amount space must be freed in order to make the file system available

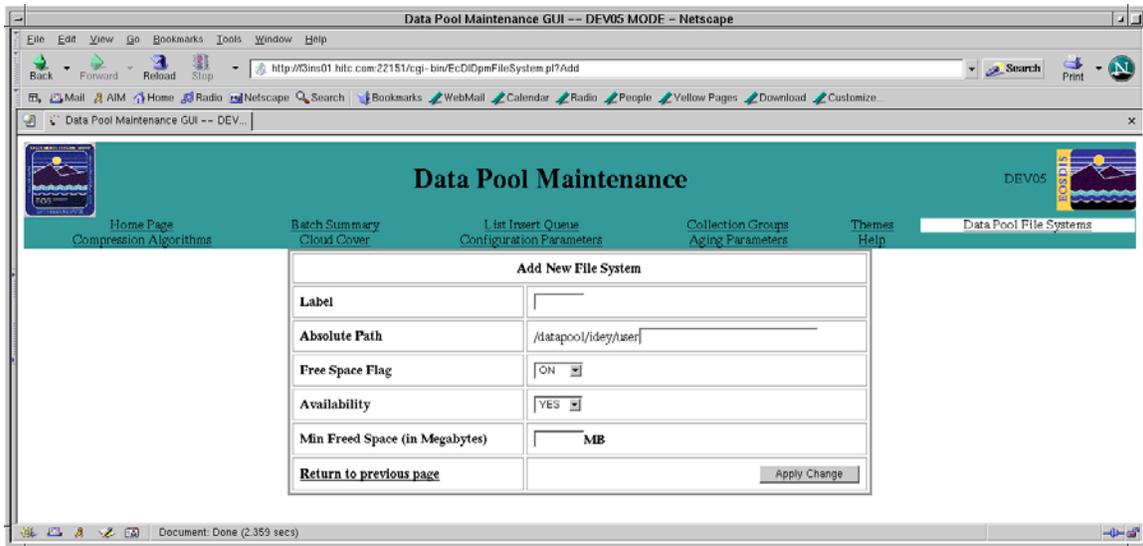


Figure 4.7.6-22. Add New File System Screen

Field descriptions for the screen can be found in Table 4.7.6-12.

Note: Limited Capability users cannot use this functionality.

Table 4.7.6-12. Add New File System Field Description

Field Name	Data Type	Size	Entry	Description
Label	char	10	Required	File System Label. Limited to 10 characters.
Absolute Path	char	255	Required	File system's absolute path. Only relative path is modifiable. Limited to 255 characters for the entire path.
Free Space Flag	char	1	Optional	Indicates if space is available for Data Pool insert. 'ON' value indicates that space is available. Default is 'ON'.
Availability	char	1	Optional	File system available for insert. Value 'YES' indicate it is available and value 'NO' it is not available. The default value is 'YES'.
Min Freed Space (in Megabytes)	int	4	Optional	Amount space must be freed in order to make the file system available

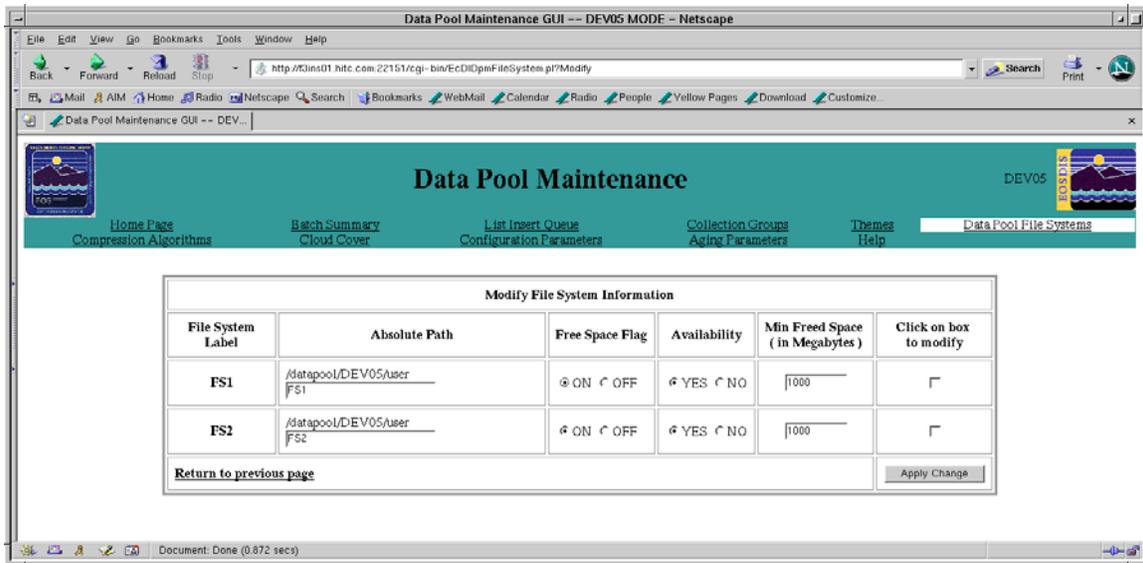


Figure 4.7.6-23. Modify File System Information Screen

Field descriptions for the screen can be found in Table 4.7.6-13.

Note: Limited Capability users cannot use this functionality.

Table 4.7.6-13. Modify File System Information Field Description

Field Name	Data Type	Size	Entry	Description
File System Label	char	10	Required	File System Label. Limited to 10 characters.
Absolute Path	char	255	Required	File system's absolute path. Only relative path is modifiable. Limited to 255 characters for the entire path.
Free Space Flag	char	1	Optional	Indicates if space is available for Data Pool insert. 'ON' value indicates that space is available. Default is 'ON'.
Availability	char	1	Optional	File system available for insert. Value 'YES' indicate it is available and value 'NO' it is not available. The default value is 'YES'.
Min Freed Space (in Megabytes)	int	4	Optional	Amount space must be freed in order to make the file system available
Click on box to modify	checkbox	1	Optional	Select when modifications are needed

4.7.6.1.7 Themes Tab

The Themes screen shown in Figure 4.7.6-24 allows the operator to view a list of themes in alphabetical order. This list can be filtered using three filter criteria: **Web Visible**, **Insert Enabled** and **Beginning Letters**. The options for **Web Visible**: Yes, No and ALL. The options for **Insert Enabled**: Yes, No and ALL. All of these criteria can be used together or separately. After selecting the option click **Apply Filter** button to view the filtered list of themes. From this page the operator can also delete a theme by selecting the corresponding Click On Box To Delete check box and clicking on the “**Apply Change**” button. The operator can add a new theme by clicking on the **Add A New Theme** link. This link will take the operator to "Add New Theme" page shown in Figure 4.7.6-25. The operator needs to add four fields regarding a theme: name, description, valid for insert or not and valid for web drill down or not. The operator also can modify an existing theme by clicking on the "**Modify Theme**" link from Figure 4.7.6-24. This link will take the operator to the Modify Theme page shown in Figure 4.7.6-28. Theme name is the only field that is not editable. The operator can modify the description of a theme by simply retyping in the text area. The operator also can change the option for Insert enabled and web enabled by selecting or deselecting the appropriate boxes. After making the selection the operator needs to select the check box corresponding to the theme and then press the **Apply Change** button. Upon pressing this button the changes will take effect in the Data Pool database and also the Manage Themes page in Figure 4.7.6-24 will be refreshed.

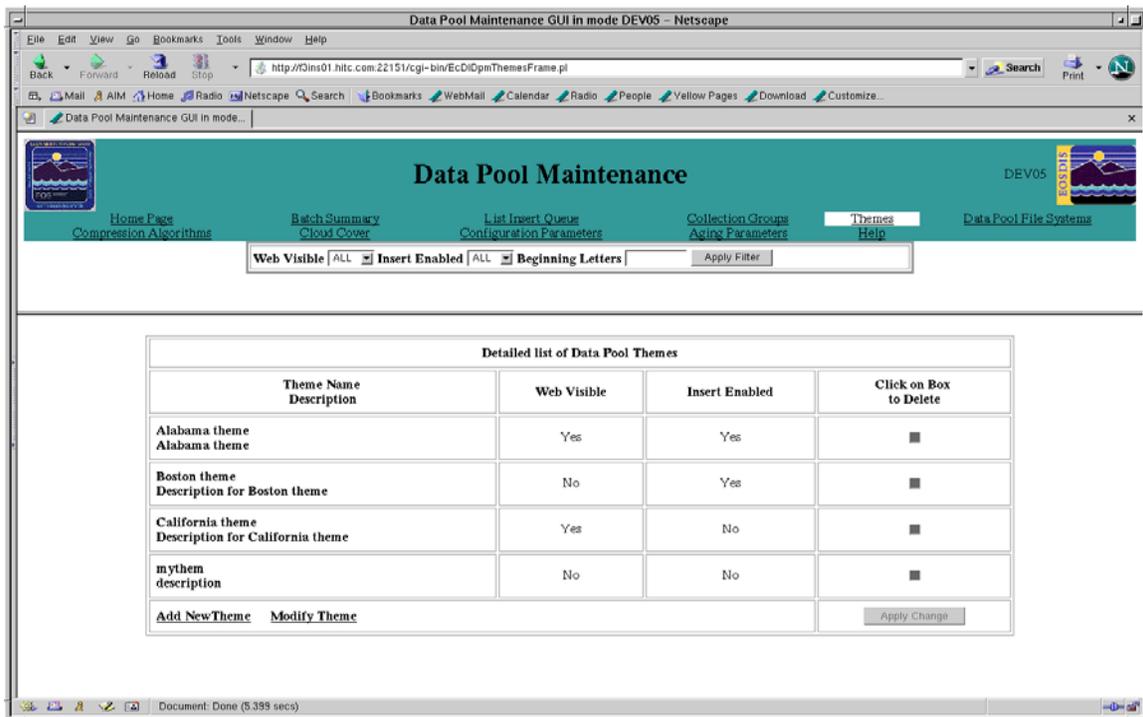


Figure 4.7.6-24. Themes Screen

Note: Limited Capability users cannot click ‘Add New Theme’ or ‘Modify Theme’ links. They also cannot delete themes. All check boxes and ‘Apply Change’ button cannot be clicked.

Table 4.7.6-14 lists the filter theme field descriptions.

Table 4.7.6-14. Filter Theme Field Description

Field Name	Data Type	Size	Entry	Description
Theme Name	char	40	Required	Partial or full name of a theme.
Description	char	100	Required	Description of the theme.
Web Visible	char	1	Optional	Availability for Web scroll down. The default will be system generated.
Insert Enabled	char	1	Optional	Enabled for Data Pool insert. The default will be system generated.
Click on Box to Delete	check box	1	Optional	Option to delete theme name and its corresponding information once box is checked

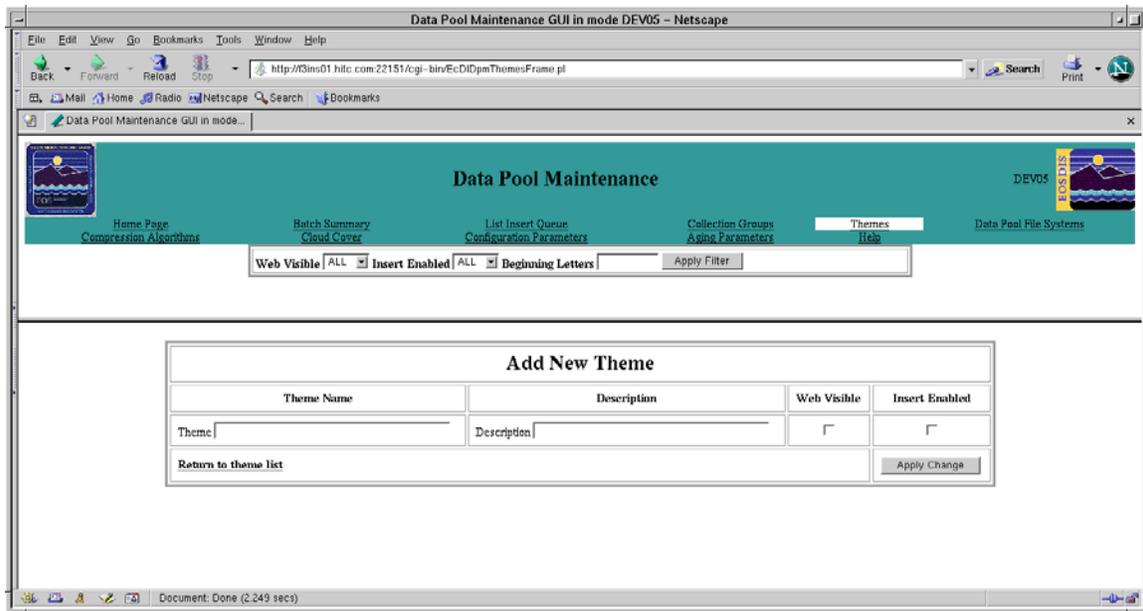


Figure 4.7.6-25. Add a New Theme Screen

Note: Limited Capability users cannot use this functionality

See Table 4.7.6-15 below for field descriptors for the Add New Themes page.

Table 4.7.6-15. Add a New Theme Field Description

Field Name	Data Type	Size	Entry	Description
Theme Name	char	20	Required	Name of a theme. Scrollable up to 40 characters.
Description	char	100	Required	Description of a theme. Scrollable up to 255 characters.
Web Visible	Check box	1	Optional	Availability for Web scroll down.
Insert Enabled	Check box	1	Optional	Enabled for Data Pool insert.

Theme names will be verified against input errors and name duplication. An error window will pop in each case over the **Add A New Theme** page to indicate the error, shown in Figure 4.7.6-26 and Figure 4.7.6-27. Click **OK** to dismiss the window.

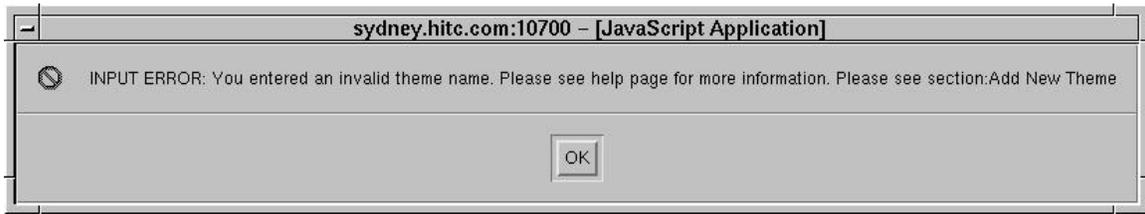


Figure 4.7.6-26. Input Error Screen



Figure 4.7.6-27. DB Error Screen

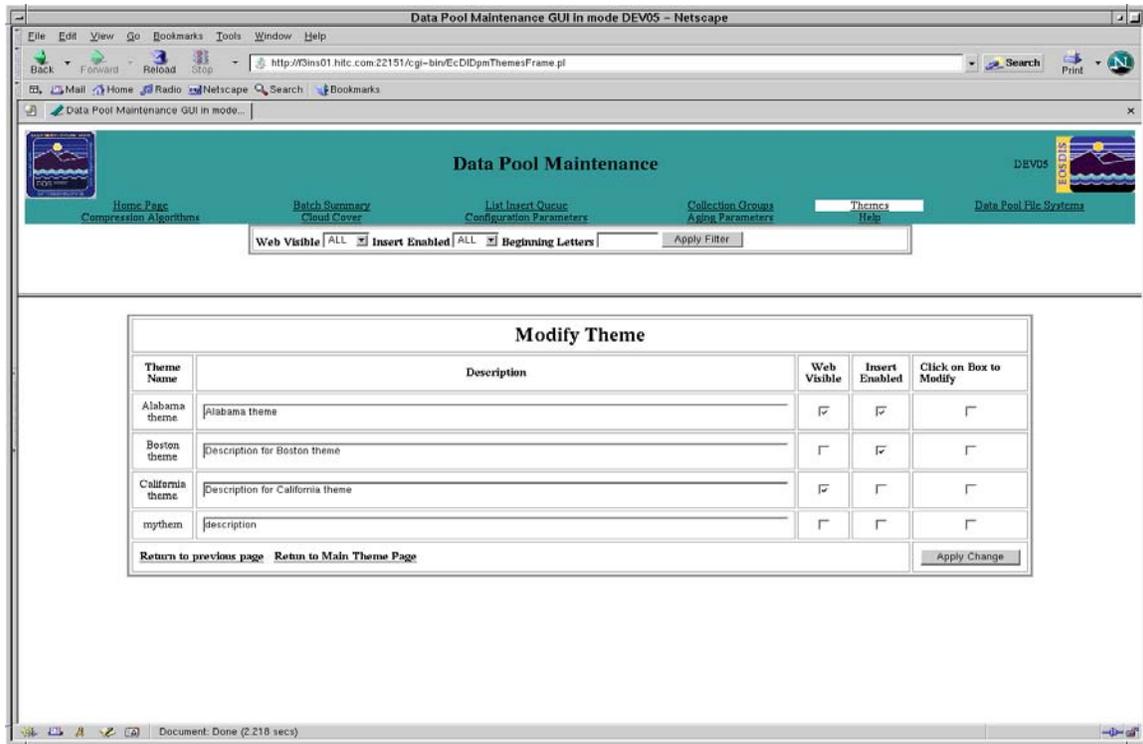


Figure 4.7.6-28. Modify Theme Screen

Note: Limited Capability users cannot use this functionality.

See Table 4.7.6-16 for Modify Theme Field Descriptions field descriptors.

Table 4.7.6-16. Modify Theme Field Description

Field Name	Data Type	Size	Entry	Description
Theme Name	char	20	Required	Name of a theme. Scrollable up to 40 characters.
Description	char	100	Optional	Description of a theme. Scrollable up to 255 characters.
Web Visible	check box	1	Optional	Availability for Web scroll down. Default will be not Web visible.
Insert Enabled	check box	1	Optional	Enabled for Data Pool insert. Default will be not available for insert.
Click on Box to Modify	checkbox	1	Optional	Select when modifications are needed

4.7.6.1.8 Cloud Cover Tab

Cloud Cover Information screen shown in Figure 4.7.6-29 allows the operator to view a list of Cloud Cover source names, their types and descriptions. It also provides check boxes beside each cloud cover information rows to delete any of the entries. Only full capability operators can execute this delete operation. The full capability operators can also configure a new cloud cover information and modifying description of an existing one by clicking on the link Add New Cloud Cover and Modify Source Description link respectively. Clicking on **Add New Cloud Cover** will take the operator to 'Add A New Cloud Cover Information' page shown in Figure 4.7.6-30. The operators need to add three fields --- 1) Source Type: A drop down list consisting of types. Currently there are two types: Core Metadata and PSA (Product Specific Attribute). If 'Core Metadata' is selected then source name will be automatically populated. 2) Source Name: Need to enter a valid source name if 'PSA' is selected for Source Type. 3) Source Description: Need to enter a description for the source. This description can be 255 characters long. Clicking on **Modify Source Description** will take the operator to '**Modify Cloud Cover Description**' page shown in Figure 4.7.6-31. The operator can change the source description. There are check boxes associated with each cloud cover information item. The operator can change information at one time by checking the desired cloud cover information's checkboxes and press on **Apply Change** button. See Table 4.7.6-17 for field descriptors of the cloud cover pages.

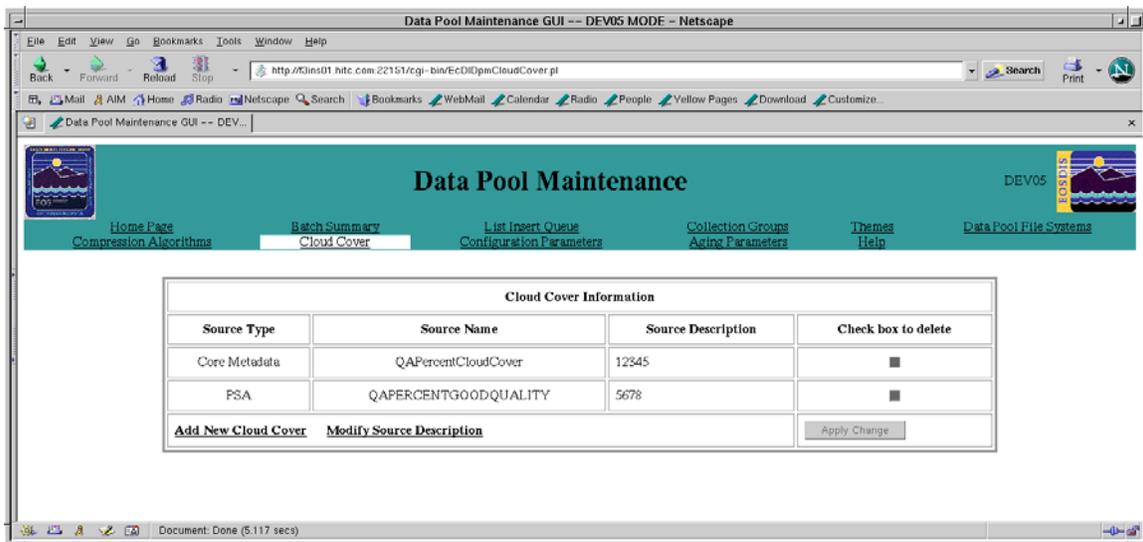


Figure 4.7.6-29. Cloud Cover Information Screen

Note: Limited Capability users are not allowed to delete cloud cover information.

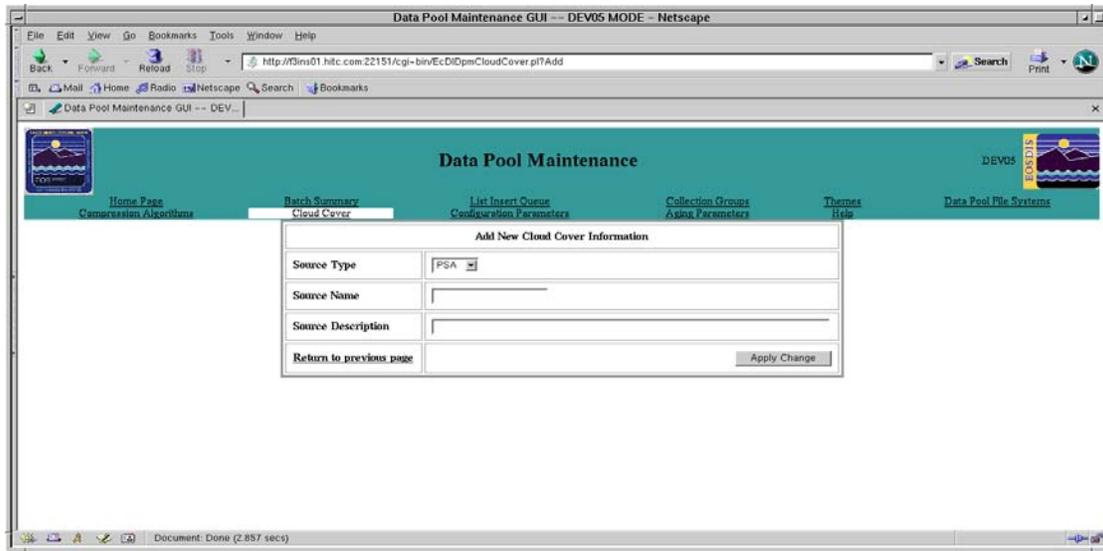


Figure 4.7.6-30. Add a New Cloud Cover Information Screen

Note: This page is not accessible by Limited Capability users.

Table 4.7.6-17. Add A New Cloud Cover Information Field Description

Field Name	Data Type	Size	Entry	Description
Source Type	char	30	Required	Cloud Cover source type
Source Name	char	20	Required	Valid source name
Source Description	char	30	Optional	Description about the source name. Up to 255 characters long
Click on box to delete	checkbox	1	Optional	Option to delete theme name and its corresponding information once box is checked

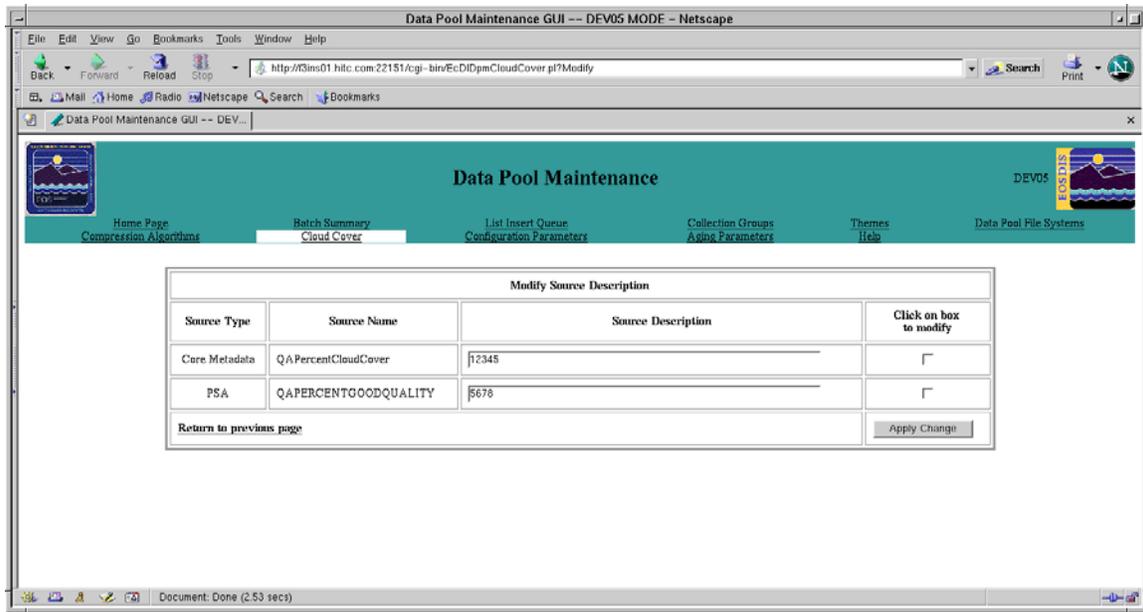


Figure 4.7.6-31. Modify Cloud Cover Description Screen

Note: This page is not accessible by Limited Capability users.

Table 4.7.6-18 describes the Modify Cloud Cover Description Fields.

Table 4.7.6-18. Modify Cloud Cover Description Field Description

Field Name	Data Type	Size	Entry	Description
Source Type	char	30	Required	Cloud Cover source type
Source Name	char	20	Required	Valid source name
Source Description	char	30	Optional	Description about the source name. Up to 255 characters long
Click on box to modify	check box	1	Optional	Select when medications are needed

4.7.6.1.9 Aging Parameters Tab

The Aging Parameters Page (Figure 4.7.6-32) allows the operator to view a list of Aging Parameters, their starting priority values, aging step values and maximum priority values. It also provides check boxes beside each aging parameter information rows to modify any of the entries.

Aging step values and priority values can be modified. Only full capability operators can execute this modify operation. The operator needs to add new values in the text boxes and then click the **Click On Box To Modify** checkbox at the end of the row. After making all changes click on **Apply Change** button. This will refresh the screen with new values and also update the database.

The fields of the Aging Parameters Page are described in Table 4.7.6-19.

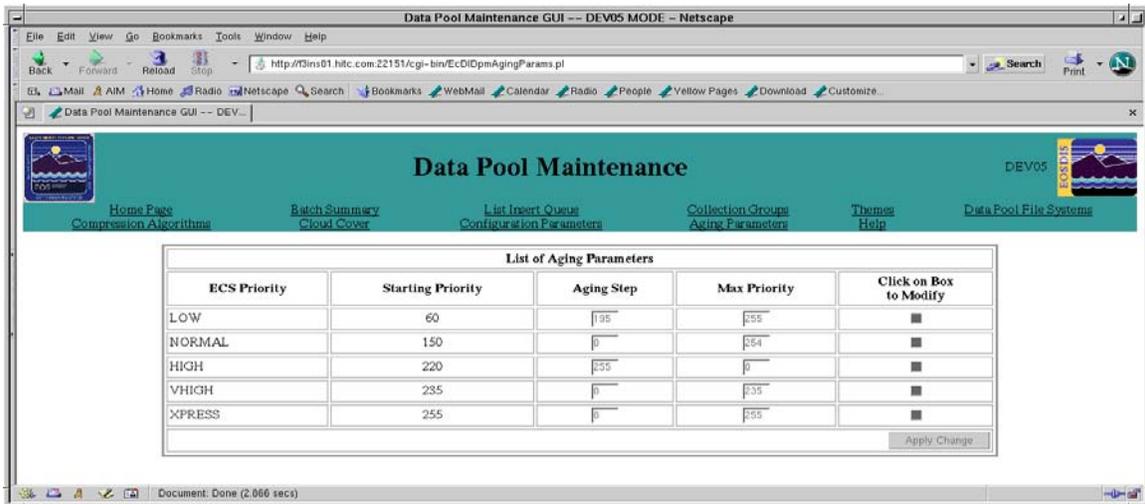


Figure 4.7.6-32. List of Aging Parameters Screen

Table 4.7.6-19. Aging Parameters Field Descriptions

Field Name	Data Type	Size	Entry	Description
ECS Priority	char	10	Required	Determines the level of priority for the Aging Parameter for ECS: Low, Normal, High, Very High, Express
Starting Priority	int	4	Required	Provides ascending order of Aging Parameters according to it priority number
Aging Step	int	4	Optional	Time interval to increase the priority value
Max Priority	int	4	Optional	Maximum priority value for an ECS priority level
Click on Box to Modify	checkbox	n/a	Optional	Select when modifications are needed

4.7.6.1.10 End Session Tab

The **End Session** tab is provided to end a session on demand. This tab is available only from the Data Pool Home Page. Upon clicking on **End Session** link it will bring up the **End Session** page shown in Figure 4.7.6-33.

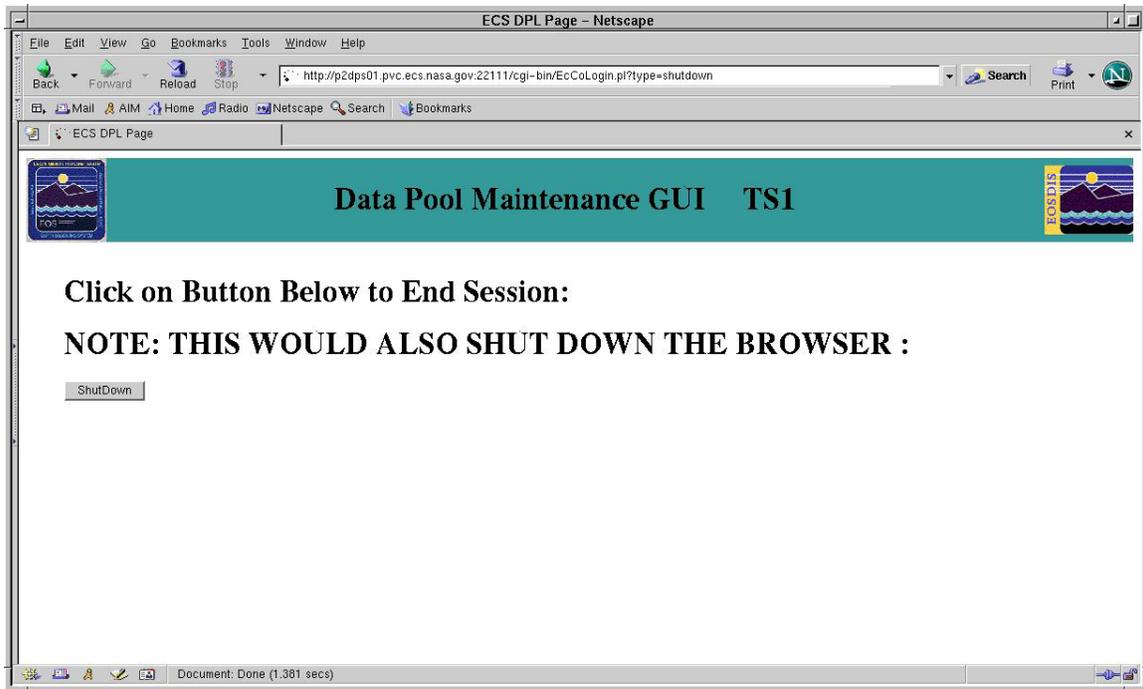


Figure 4.7.6-33. End Session Page

4.7.6.2 Data Pool Maintenance Main Screen

See Figure 4.7.6-2.

4.7.6.3 Required Operating Environment

The following environment is required for the DPM GUI to work properly:

- The O/S requirements are Linux 2.x or higher

4.7.6.4 Databases

The DPM GUI accesses the Data Pool database.

4.7.6.4.1 Interfaces and Data Types

The DPM GUI exchanges data between the Web Browser and Sybase, using Perl CGI and DBI Modules for the Interface.

4.7.6.5 Special Constraints

There are no special constraints to running the DPM GUI.

4.7.6.6 Outputs

There are no outputs from the DPM GUI except for status and error messages.

4.7.6.7 Event and Error Messages

The DPM GUI writes status and error messages to the EcDlDataPoolGUI.log file in the directory /usr/ecs/<MODE>/CUSTOM/logs.

4.7.6.8 Reports

The DPM GUI does not generate reports.

4.7.7 Using the Order Manager GUI

The Order Manager (OM) GUI provides operators with access to the Order Manager database. The GUI allows operators to view and modify requests that have been placed on hold by the Order Manager Server because they require operator intervention, and resubmit requests or portions of requests that have failed. It also supports the processing of physical media requests; management of HEG orders; and user configuration of ODL metadata users, external subsetter and SCP policy.

Notes on Operator Capability Levels

In accordance with new Operator GUI security standards, the OM GUI will implement two levels of permissions, such that only Full Capability operators have the ability to configure parameters and perform certain actions, while Limited Capability operators are restricted to basic functionality as outlined in this document. To accomplish this, the OM GUI disables inputs, buttons, and access to certain pages for Limited Capability Operators.

All screenshots in this document show pages accessible to Full Capability Operators, with the understanding that certain elements will be visibly disabled in many pages. All functionality not available to Limited Capability Operators will be clearly outlined in this document.

The OM GUI provides Full Capability operators with the ability to:

- Monitor for Operator Interventions and modify request parameters associated with those interventions (such as update metadata format, SCP parameters).
- View Completed Interventions.
- View list of all Distribution Requests, Processing Service Requests, Ftp Push Distribution Requests, Staging Distribution Requests, Archived Requests and Archived Processing Requests.
- Filter Distribution Requests by individual order id, request id, e-mail address, first name, or last name. Filter Distribution Requests by combinations of status, media type, order type, user id, and creation start and end time.
- From any list of Distribution Requests, perform the following actions as appropriate: change priority, resubmit, suspend, resume, cancel or stop a request.
- View detailed distribution request information and perform the following actions as appropriate:
 - Change priority, resubmit, suspend, resume, cancel or stop the request.
 - Add or change operator notes.
 - Change address information.
- View details of an ECS Order.
- View the profile of a user associated with an ECS Order.

- View suspended Ftp Push / SCP destinations and resume dispatching.
- Suspend an active destination or view non-terminal requests for the destination.
- View details for suspended Ftp Push / SCP destinations including Ftp Push / SCP Operations that caused the suspension and Ftp Push / SCP Requests that are not in a terminal state.
- View, update and cancel bundling order information (link to NSBRV GUI).
- Monitor for Operator Alerts caused by Ftp Push / SCP operations, Data Pool File System errors, Archive Server errors.
- Monitor and suspend/resume processing queue states.
- Monitor and suspend/resume staging states.
- Monitor the current staging status by media type, FTP Push or SCP.
- Configure OM Server and OM Database parameters.
- Configure the aging parameters for each ECS Priority level.
- Configure settings for each media type.
- Configure ODL metadata users.
- Configure the parameters for each external subsetter.
- Define and configure FTP Push / SCP destinations, as well as the “policies” for those destinations.
- Configure Archive Resource parameters.
- Monitor for OM Server statistics.
- Monitor for OM Staging statistics.
- Get general and context-based help for all OM GUI functions.

The OM GUI provides Limited Capability operators with the ability to:

- Monitor for Operator Interventions.
- View Completed Interventions.
- View list of all Distribution Requests, Ftp Push Distribution Requests or Staging Distribution Requests.
- Filter Distribution Requests by combinations of order id, request id, status, order type, media type, user id, first name, last name, e-mail address, or creation time.
- View detailed distribution request information.
- View processing service request information.

- View details of an ECS Order.
- View the profile of a user associated with an ECS Order.
- View archived distribution requests.
- View suspended Ftp Push / SCP destinations.
- View details for suspended Ftp Push / SCP destinations including Ftp Push / SCP Operations that caused the suspension and Ftp Push / SCP Requests that are not in a terminal state.
- View bundling order information (link to NSBRV GUI).
- Monitor for Operator Alerts caused by FTP Push operations, Data Pool File System errors, Archive Server errors, or Archive Tape errors.
- Monitor processing queue states.
- Monitor staging states.
- Monitor the current staging status by media type, FTP Push destination or SCP destination.
- View OM Server and OM Database parameters.
- View settings for each media type.
- View email settings for ODL metadata users.
- View configuration for each external subsetter.
- View FtpPush / SCP policy settings.
- View Archive Resource parameters.
- Monitor for OM Server statistics.
- Monitor for OM Staging statistics.
- Get general and context-based help for all OM GUI functions.

4.7.7.1 Starting the OM GUI

Start the web browser and then access the URL for the OM GUI web page with the format:

`http://server:port`

Example: `http://f4dp101.hitc.com:22401`

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

Browser Requirements

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

Java, other scripting languages, or plug-ins are not used in the OM GUI.

4.7.7.1.1 OM GUI Home Page

The OM GUI Home Page screen shown in Figure 4.7.7-1 explains the basic services of the OM GUI. There is a static frame to the left that allows for easy and direct access to the desired pages. Due to the nature of this navigation method, the individual pages should not be viewed outside the frame environment. The navigation frame is also resizable if so desired.

Login and Sessions

The operator has the option of recalling a session by typing a name into the Login box in the left frame. This is only to recall particular session settings and is not intended for security in any way (see the GUI Security section later in this document). If the login name does not exist, a new session is created. If the operator does not choose to login, a temporary session is created.

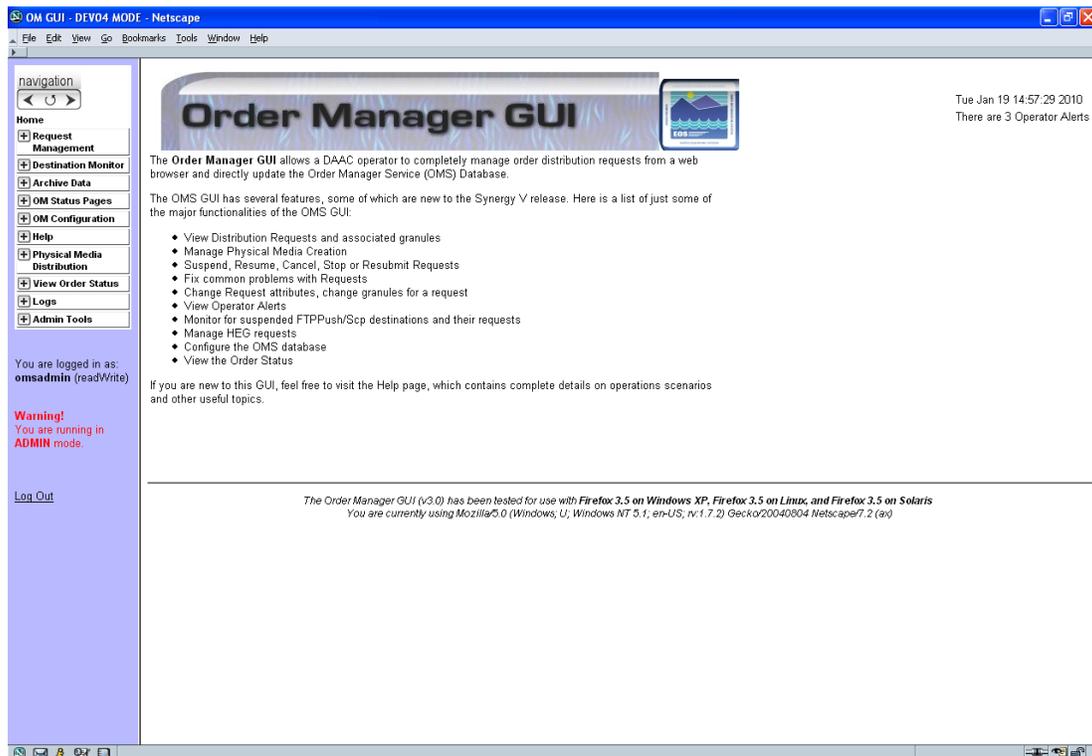


Figure 4.7.7-1. Order Manager GUI Home Page

Note: This screen shows an operator logged in using the OM GUI's non-secure login system. This only appears if the security protocols were not installed.

The operator alerts are displayed at the top of the screen.

4.7.7.1.2 GUI Security

The OMS GUI can optionally be installed with the GUI Security feature enabled. If it is, you will be prompted for a user name and password once the GUI is started. This user name will also be used as the session identifier, so that the operator can recall session settings. See Figure 4.7.7-2 for an example of the login dialog box.

User Names and Passwords

The installation team will have to create user names and passwords using special utilities. The details on this are in a different document.

GUI Security Disabled

If GUI Security has not been installed, the operator can still “log in” using the OMS GUI's proprietary login system (see “Login and Sessions” under Section 4.7.7.2). See Figure 4.7.7-2 for an example of the login dialog box.

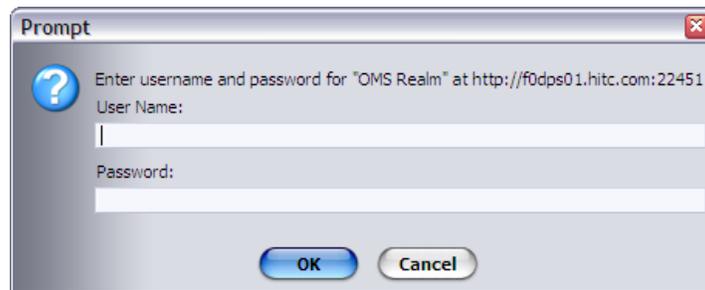


Figure 4.7.7-2. GUI Security Login

4.7.7.2 Request Management Pages

The Request Management section consists of several subsections that support a variety of capabilities allowing the operator to manage, modify, and monitor many aspects of distribution request processing. While the basic functionality of the Intervention pages remains the same, there are some enhancements, such as the ability to view Operator Interventions based on Staging errors.

In the event of a request failure, an operator intervention will appear on the “Open Interventions” page. In addition, an “Operator Alerts” page displays non-fatal warnings or errors that do not cause an Operator Intervention, but which otherwise might pose valuable to the operator. An example might be a suspended FTP Push destination.

4.7.7.2.1 Open Interventions Page

From the navigation menu, click on “Request Management” to display the available actions, and then click on “**Open Interventions**” to display the Open Interventions page, which contains a list of all the currently open Operator Interventions that require attention, as shown in Figure 4.7.7-3.

The screenshot shows the 'Open Interventions' page in the Order Manager GUI. The page includes a navigation menu on the left, a header with 'Order Manager GUI', and a main content area with filters, options, and a table listing interventions. The table has columns for Sel, Fail, Sub, Order ID, Request ID, Media Type, Request Size (MB), Status, Worked By, Created, Acknowledged, Explanation(s), and IntervType. The 'Created' column is highlighted.

Sel	Fail	Sub	Order ID	Request ID	Media Type	Request Size (MB)	Status	Worked By	Created	Acknowledged	Explanation(s)	IntervType
<input type="checkbox"/>	<input type="checkbox"/>		0400022967	0400023083	FtpPush	19	IN-WORK	omsadmin	Jun 23 2008 10:05PM	Jun 24 2008 11:24AM	Invalid Host Address Request Canceled Transfer failed	Operator Intervention
<input type="checkbox"/>	<input type="checkbox"/>		0400022966	0400023082	FtpPush	19	IN-WORK	omsadmin	Jun 23 2008 8:03PM	Jun 23 2008 8:36PM	Invalid Host Address Request Canceled Transfer failed	Operator Intervention
<input type="checkbox"/>	<input type="checkbox"/>		0400022964	0400023080	FtpPush	19	PENDING		Jun 23 2008 6:01PM		Invalid Host Address Request Canceled Transfer failed	Operator Intervention
<input type="checkbox"/>	<input type="checkbox"/>		0400022965	0400023081	FtpPush	19	PENDING		Jun 23 2008 3:59PM		Invalid Host Address Request Canceled Transfer failed	Operator Intervention
<input type="checkbox"/>	<input type="checkbox"/>		0400022963	0400023079	FtpPush	19	PENDING		Jun 23 2008 1:57PM		Invalid Host Address Request Canceled	Operator Intervention

Figure 4.7.7-3. Open Interventions Page

The listing shows the Request ID that caused the intervention, as well as the associated Order ID, media type, request status, the operator who worked the intervention (no name will be shown if it has not been worked on), creation time, acknowledgement time, and the short explanation of what caused the request intervention. There are also checkboxes which can be used to select interventions to be acted upon for a **Bulk Fail** or **Bulk Submit**. Note that the highlighted column heading indicates which field is currently being used to sort the entries in the table. See Table 4.7.7-1 for descriptions of each field on this page.

Table 4.7.7-1. Open Interventions

Field Name	Description
Sel Fail	Checkbox used to indicate the intervention to be acted upon for a Bulk Fail . If the box is checked, the request will be failed when the Bulk Fail button is pressed.
Sel Sub	Checkbox used to indicate the intervention to be acted upon for a Bulk Submit . If the box is checked, the request will be submitted when the Bulk Submit button is pressed.
Order ID	The Order ID associated with the Request. Clicking on the Order ID will display a "detail" of the Order information.
Request ID	The Request ID associated with the Intervention. Clicking on the Request ID will display a detail of the Intervention.
MediaType	The media type this Order/Request uses.
Request Size(MB)	Size of the request in megabytes.
Status	The current status of the Intervention. This can be one of: PENDING: No operator has been assigned nor any action has yet been taken for the Intervention. IN-WORK: An operator has been assigned to an Intervention. This does not necessarily mean an action has been taken.
Worked By	The operator currently working the intervention. If no name appears, the Intervention has not been worked or reviewed. An operator must assign a name to the intervention before any modifications can be made.
Created	The Creation Date/Time of the Intervention.
Acknowledged	The Date/Time that an action was first taken or when an operator assigned the intervention to a worker.
Explanation(s)	A description of the nature of the error. In the case of an FTP Push failure or Staging error, a special icon will appear to make it easily recognizable.
IntervType	Intervention type (new field). For normal interventions, this is simply "Operator Intervention". Three types have been added: <ul style="list-style-type: none"> • HEG – Interventions related to HEG processing errors • Media Creation Error – Interventions resulting from an error at the creation stage of a physical media volume or volumes • QC Failed – Interventions resulting from an error at the QC Verification stage of a physical media volume or volumes

Interventions List Bulk Actions

The interventions list bulk actions allow the operator to act on more than one intervention at the same time. Buttons are shown on the **Options** bar for the **Bulk Submit** and **Bulk Fail** actions. When the operator clicks the **Bulk Fail** button, any intervention whose **Sel Fail** checkbox has been checked will be failed. When the operator clicks the **Bulk Submit** button, any intervention whose **Sel Sub** checkbox has been checked will be submitted.

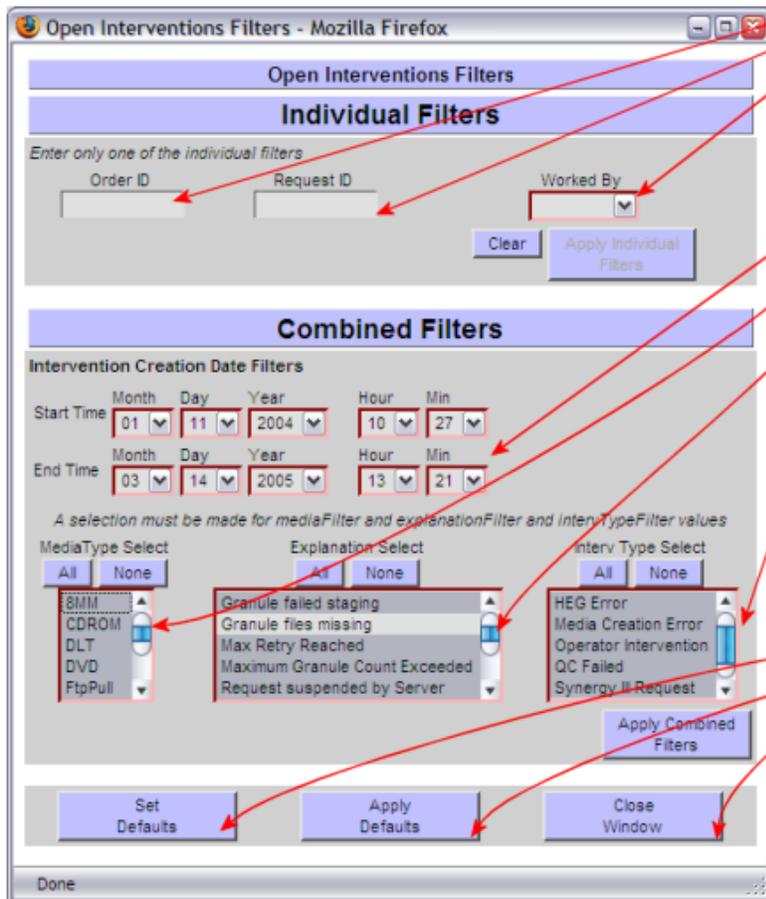
When the operator clicks the All checkbox below the **Bulk Fail** or **Bulk Submit** buttons, the corresponding checkboxes in the interventions list will be checked. When the operator clicks the None checkbox below the **Bulk Fail** or **Bulk Submit** buttons, the corresponding checkboxes in the interventions list will be unchecked.

Intervention List Filters

As with the Distribution Request pages, the Intervention pages have a filtering capability. To access this filter, click on the “Change Filter” button at the top of the page. This will display a pop-up window, as shown in Figure 4.7.7-5, in which the user can change the filter settings. The top of the page also displays your current filtering options, as shown in Figure 4.7.7-4.

The screenshot shows a window titled "Open Interventions" with a light blue header. Below the header, the "Current Filters" section is displayed in a grey background. It lists the following filter settings: Order ID: None, Request ID: None, Worked By: None, Creation Time: Start: Jan 11 2004 10:27AM, End: Mar 14 2005 01:17PM, Media Type: ALL, Explanation: Granule failed staging, Max Retry Reached, Maximum Granule Count Exceeded, Request suspended by Server, Trans, and Intervention Type: HEG Error, Media Creation Error, Operator Intervention, QC Failed, Synergy III Request. Below the filters, the "Options" section is shown, containing a "Change Filter" button, "Bulk Submit" and "Bulk Fail" buttons, and two checkboxes: "Select All" and "Select None".

Figure 4.7.7-4. Current Intervention Filters



Individual filters - enter any *one* of these fields and click "Apply Individual Filters"

Combined filters - enter any *combination* of these fields and click "Apply Combined Filters"

Buttons to:

- Set default fields
- Apply default filter values, ignoring currently selected filters
- Close the filter window

Figure 4.7.7-5. Filter Window diagram

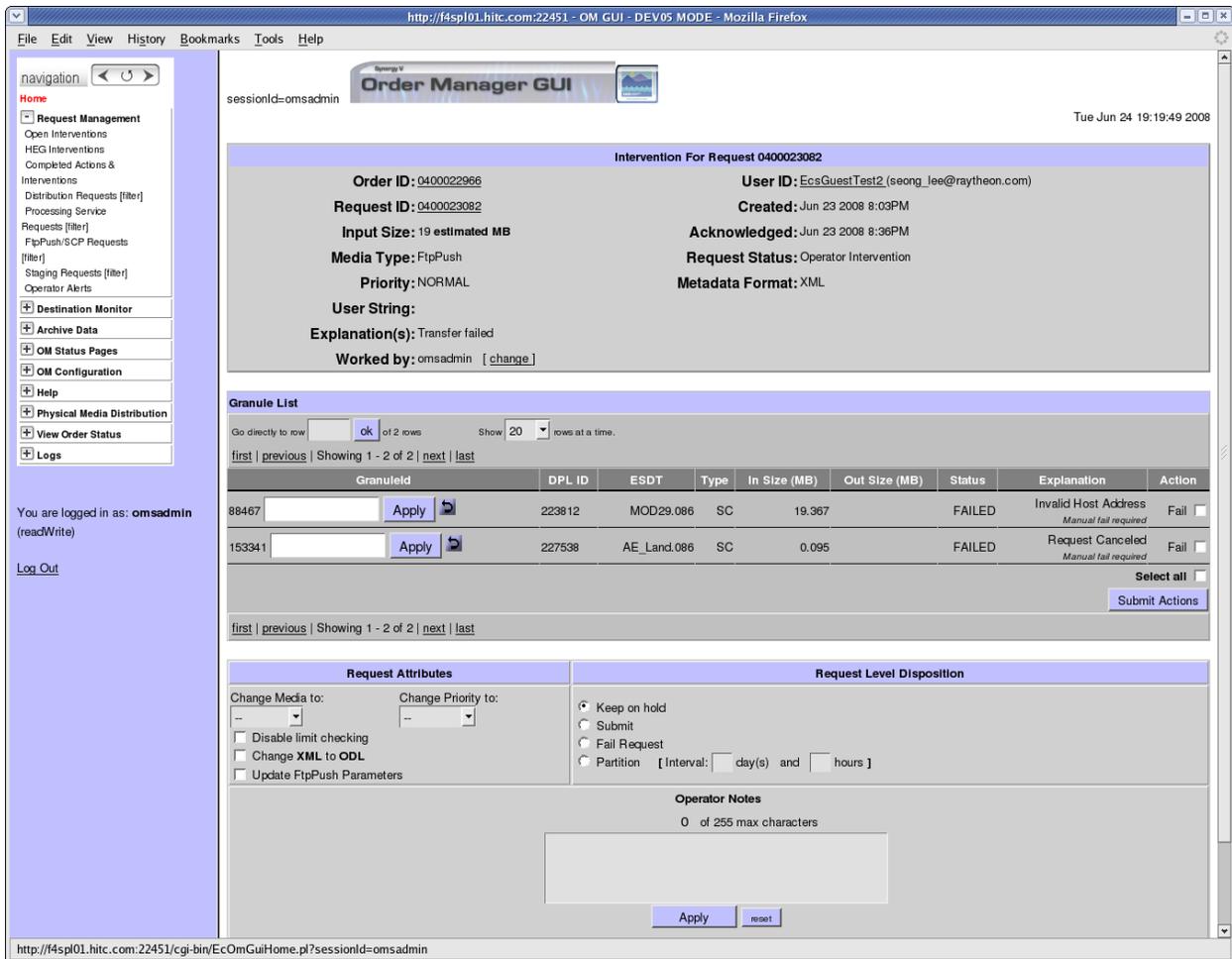


Figure 4.7.7-6. Open Intervention Detail

Note for Limited Capability Operators: The Open Intervention Detail page is limited to viewing the details of the intervention. Modifications may *not* be made to the Request or Granules for the Request. The operator is also prevented from taking any action on the Intervention.

To view the details of an intervention, click on its Request ID. This will bring you to a separate page (Figure 4.7.7-6) displaying all of the information on the previous listing, plus the user string (which would show the external request ID if the order source is the MTMGW), and the list of granules associated with the request.

From this page, the operator may take several actions to modify the request. First, any granule may be replaced with another by typing in a new granule ID and clicking “Apply”. The granules may also be failed by clicking the “Fail” button in the far right column on the row for that granule.

Please note that modifications to the granules are independent of the request attributes – i.e., any changes made will not affect the status of the request, and the request will still be in “Intervention” status until the operator submits the request. See Table 4.7.7-2 for a description of each field on this page.

Legend:

FC = Full Capability operator only (the operator can only view this field or control)

all = This field or control does not have any restrictions

Table 4.7.7-2. Open Intervention Detail Page (1 of 4)

Field Name	Perm. Level	Description
User ID	all	The “owner” of this order, in most cases the person who originated the order. Clicking on the User ID will display a complete profile of the User. In parentheses, also displayed is the e-mail address to which information about this order will be sent (e.g., a granule is failed or changed).
Priority	all	The ECS Priority level associated with this Request. These Priority levels are predetermined in the Data Pool. For example, a LOW priority might have a priority of 75. The Priority Levels can be viewed in the OM Configuration Pages under “Aging Parameters”.
Order ID	all	The Order ID associated with the Request.
Request ID	all	The Request ID associated with the Intervention.
Input Size	all	The estimated size in MB of the Request.
Media Type	all	The media type this Order/Request uses.
Request Status	all	The current processing status of the Request. The Status can be one of “Intervention” or “Suspended” (this applies only FTP Push destination errors that have caused an Operator Intervention).
Worked by	FC	The operator currently working the intervention. If no name appears, the Intervention has not been worked or reviewed. An operator must assign a name to the intervention before any modifications can be made.
Created	all	The Creation Date/Time of the Intervention.
Acknowledged	all	The Date/Time that an action was first taken or when an operator assigned the intervention to a worker.
Explanation(s)	all	A description of the nature of the error. In the case of an FTP Push failure or Staging error, a special icon will appear to make it easily recognizable.

Table 4.7.7-2. Open Intervention Detail Page (2 of 4)

Field Name	Perm. Level	Description
Granule List		
GranuleId	FC	The ECS Granule ID for the granule. This is not the full Granule ID as stored in the MSS or Order Manager Database, rather it is the 16-digit ID as stored in the Data Pool database. The operator can change the GranuleId by entering the new one in the text box next to the current GranuleId and clicking apply. Granule IDs must be changed one at a time. Maximum length is 16 digits.
ESDT	all	The ESDT the granule is associated with, consisting of the ESDT short name and version ID.
Type	all	The type of granule, displayed as a two-character code. For example, SC is Science, BR is Browse, etc.
In Size (MB)	all	The input size in MB of the granule, before any processing (e.g. HEG). This field is always displayed, not matter what type of granule it may be.
Out Size (MB)	all	The output size in MB of the granule, after it has underwent processing (e.g. HEG). This field is only displayed if an output size exists in the database.
Status	all	The current status of the granule. Statuses can be: SKIPPED: The granule has been skipped because it has failed validation (e.g., the granule was not found). Note that FAILED and SKIPPED granules may be failed by the operator. Granules in any other state can not be failed. NULL: This is the initial state, essentially meaning the status is OK. TRANSFERRING: The granule is in the process of being pushed to a destination. SHIPPED: The granule has been delivered to the PDS to be put of a physical medium, or the granule has been pulled. FAILED: There are several explanations for failed granules. Note that FAILED and SKIPPED granules may be failed by the operator. Granules in any other state can not be failed. HOLD: The granules may be placed on "HOLD" if it has failed validation or there are problems writing the granules to the media.
Explanation	all	Provides a more detailed explanation of the granule Status.
Action	FC	If the granule is eligible to be failed a "Fail" button will be provided in this column.

Table 4.7.7-2. Open Intervention Detail Page (3 of 4)

Field Name	Perm. Level	Description
Request Attributes		
Disable limit checking	FC	When the request is submitted, the request size will not be taken into consideration. If the request was too small or too large, this option should be used to bypass these checks.
Change Media to	FC	Select the desired new media type for this request. If FtpPush is selected, the operator will be prompted for the FtpPush destination details on the next page.
Change Priority to	FC	Select the desired new priority for this request.
Change XML to ODL	FC	This option will only appear if the metadata format was XML. When the option is checked, the operator will receive metadata in ODL format.
Change ODL to XML	FC	This option will only appear if the metadata format was ODL. When the option is checked, the operator will receive metadata in XML format which is the default metadata format.
Update FTP Push Parameters	FC	This option will only appear if the media type was originally FtpPush. When this option is checked, the operator will be prompted to change the existing FtpPush parameters on the next page.
Update SCP parameters	FC	This option will only appear if the media type was originally SCP. When this option is checked, the operator will be prompted to change the existing SCP parameters on the next page.
Request Level Disposition		
Keep on hold	FC	This will keep the request on "Hold" – i.e., in Intervention status, and will stay on hold until the operator submits or fails the request. This option also saves the operator notes.
Submit	FC	This is in effect re-submitting the request with the altered attributes. Once the request is submitted, the Intervention is closed out. When this option is selected, the operator will be prompted to confirm the disposition on the next page (and will possibly be prompted for further details of an altered Request Attribute).
Fail Request	FC	Selecting this option will fail the entire distribution request and close out the intervention. The operator will be prompted for confirmation on the next page. A DN option is presented on the Close Confirmation page when this disposition is selected. By default, a DN will be sent, unless the operator selects the option not to send it.

Table 4.7.7-2. Open Intervention Detail Page (4 of 4)

Field Name	Perm. Level	Description
Partition	FC	This is in effect submitting the request but with the specification to partition it over the current partition size (see the Media Configuration section for more details on partitioning). If days and/or hours are provided, the request will be partitioned in this time interval. The days and hours fields must be whole numbers with no decimal fractions.
Operator Notes	FC	Up to 255 characters can be stored for notes. The notes will only be saved if a disposition is taken on the request, even if a request is failed. When a granule ID is changed, a record of the change is automatically appended in the notes.

Close Confirmation

When the actions have been finalized, click “Apply” at the bottom of the screen. This brings up the Close Confirmation page, where the operator will be prompted to verify any actions s/he wishes to take. If the action warrants an e-mail (failed request, partition, modified granules) the operator may add text to the standard e-mail preamble that will be sent to the configured e-mail address for that user. If the media type has been changed from FtpPush to a physical media type, the operator will be prompted for the shipping address. If the media type has been changed to either FtpPush or SCP, the operator will be prompted for the destination details; some of this destination information is dependent on the media type.

Note: Since Limited Capability operators cannot work on Interventions, the Close Confirmation screen will not be accessible to them.

Note: This screen is not visible to limited-capability operators.

After the operator has verified and confirmed the actions, the next screen shows the status of the submitted disposition. Figure 4.7.7-7 shows an example of a successful submission and verifies that the database has been updated with the changes. To get back to the Open Interventions listing, click OK.

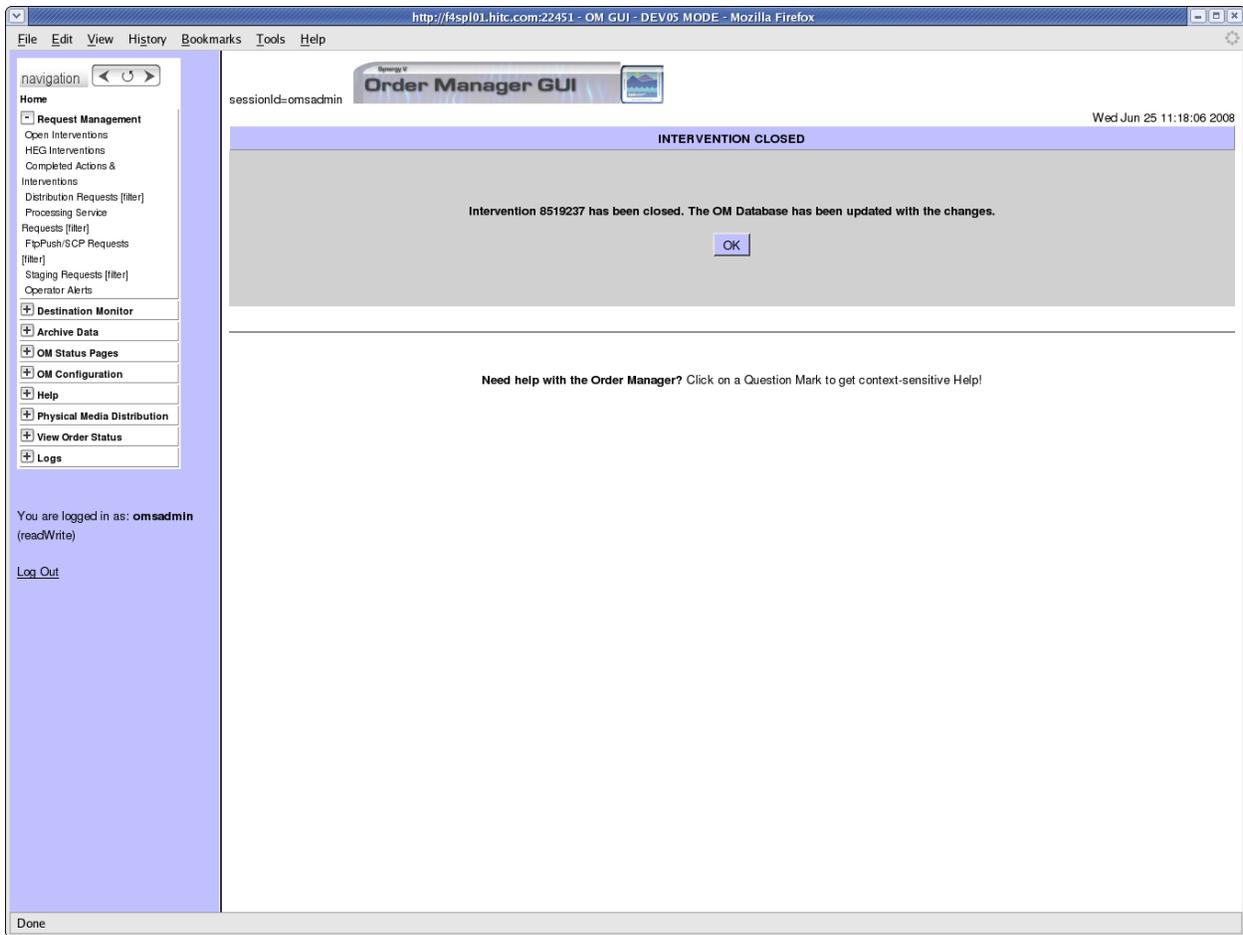


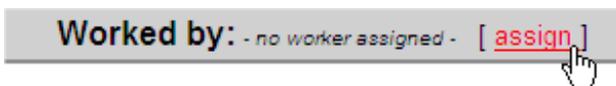
Figure 4.7.7-7. Close Confirmation Success Screen

Note: This screen is not visible to limited-capability operators.

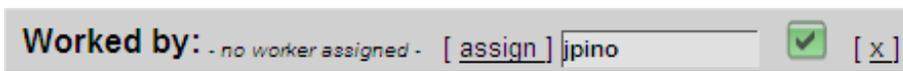
Instructions for Working an Intervention

The following are the operator steps to work on an intervention.

1. If a worker is not currently assigned to the intervention, *-no worker assigned-* will be displayed in the **Worked by** field. Click [assign]:



A text box will appear with your currently logged-on ID. You can also use a different ID. Click the green checkbox to assign the worker:



The page reloads with the new worker ID:

Worked by: jpino [[change](#)]

To assign a different worker, click [change] and put a new name in the textbox.

2. First, the operator can choose to fail or edit granules. For example, some granules that are inaccessible can be replaced by a new granule ID (the GranuleId). It is the operator's responsibility to obtain a suitable replacement, as the GUI/database will not automatically do this. Simply click the **Apply** button next to the granule to change it. Note: All granule changes are permanent. A granule cannot be un-failed, and no record is kept of previous granule IDs when changing the granule.
3. Next, the operator may change the request attributes, then select a disposition to close the intervention. There are four possible attributes the operator may change:
 - a. **Disable limit checking** – *If this is selected, the request size limit checking will be disabled.*
 - b. **Change Media to** – *Allows the request's media type to be changed to any physical or electronic media type. Some additional issues to be aware of:*
 - o **Changing to SCP or FtpPush** – *When confirming the resubmission of the request, the operator will be prompted to enter destination parameters, some of which will depend on the new media type.*
 - c. **Change Priority to** – *This changes the request's ECS priority level. A higher priority moves the request through the system more quickly.*
 - d. **Change XML to ODL** – *This will appear if the metadata format for the request is XML. It allows the operator have the metadata to be delivered in ODL format.*
 - e. **Change ODL to XML** – *This will appear if the metadata format for the request is ODL. It allows the operator have the metadata to be delivered in XML format.*
 - f. **Update FtpPush Parameters** – *This will appear if the media type is FTP Push. It allows the operator to update any FTP parameters, including the destination information.*
 - g. **Update SCP Parameters** – *This will appear if the media type is SCP. It allows the operator to update any SCP parameters, including the destination information.*

Dispositions

The available dispositions, or actions, the operator may make on the request are:

- **Keep on hold** – *Normally, the operator can use this disposition to add or update the operator notes on the intervention. The intervention will not be closed.*
- **Submit.** – *The operator can use this disposition to release the intervention, thus applying any new request attributes. Once the intervention is submitted, the request is no longer in*

Operator Intervention and will be sent back through validation and normal processing by the OMS Server.

- **Fail Request** – *Completely fails the distribution request, at which point it is not sent back through validation, nor will it be processed by the OMS Server.*
 - **Partition** – *For cases when a request size exceeds the maximum size limit. This is effectively submitting the request (see the **Submit** option above).*
4. The operator can also add to or edit the operator notes. (**Note:** there is a 255-character limit)
 5. Then click the **Apply** button. A confirmation page will display to show the disposition information. For a failed request and granules, the additional e-mail text box will display to allow operator to optionally add additional e-mail text. The default is to send e-mail for failed request or granules. However, the operator can choose not to send e-mail.

4.7.7.2.1.1 HEG Interventions

The OMS GUI can display Operator Interventions involving HEG orders. Several features are specific to HEG processing and HEG Intervention dispositions will be different from other types of interventions.

Processing Instructions

Since HEG processing involves XML processing instructions, these will be displayed when viewing a HEG intervention. Though a HEG order may contain a mix of granule types (those with and without processing instructions), if there are any to display, an additional column will be shown in the granule list. This column shows a link to view the processing instructions details, if any.

HEG Interventions Page

HEG interventions can be viewed by clicking the “HEG Interventions” link under the Request Management menu. This page is hard-coded to display only HEG interventions as shown in Figure 4.7.7-8.

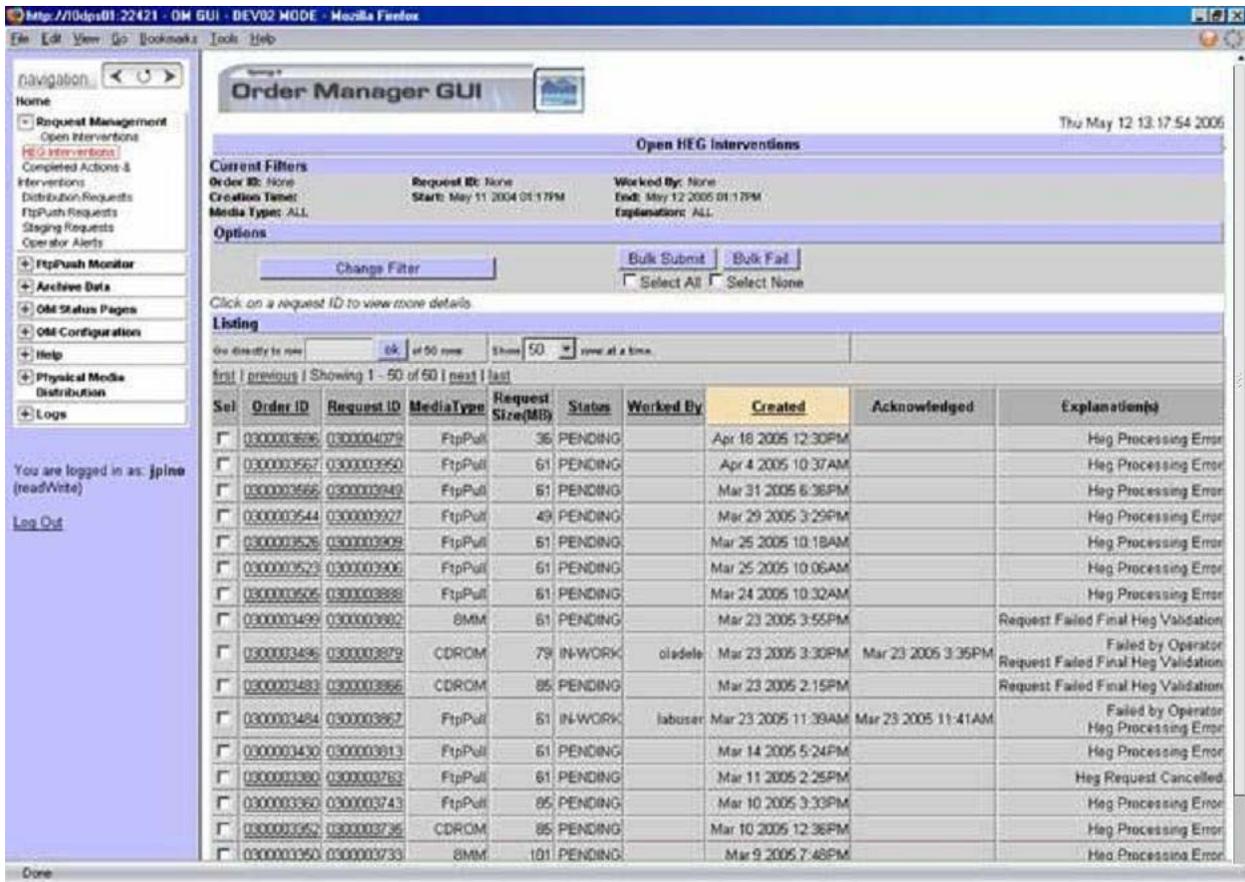


Figure 4.7.7-8. HEG Interventions Screen

4.7.7.2.1.2 HEG Intervention Detail

To view the detailed information for a HEG Request, click on the Request ID link to load the Detail Page as shown in Figure 4.7.7-9. Since it is possible for HEG granules to contain processing instructions, the operator may click on the “View...” link under the “Processing Instructions” column to view a popup window containing the XML processing text for that granule (see Figure 4.7.7-9).

Intervention Options

Because HEG Requests are in a processing state, they do not have the same disposition options that other requests do. In addition, Request Attributes (change of media type/priority) cannot be modified. The available disposition options are in Table 4.7.7-3.

Table 4.7.7-3. Intervention Options

Disposition	Description
Keep on hold	Places intervention in hold status; no action is taken with the request.
Submit	Submits the request with any changes. Failed granules remain failed and are not reprocessed.
Resubmit and retry processing of failed granules	Submits the request with any changes, but failed granules with HEG processing are retried.
Fail Request	Fails the distribution request entirely.

Granule Replacement

Eligible granules (SKIPPED or FAILED) may be marked “failed by operator”, but granule replacement is not permitted for a HEG intervention.

The screenshot displays the Order Manager GUI interface. The browser address bar shows the URL: http://f4spl01.hitc.com:22451 - OM GUI - DEV05 MODE - Mozilla Firefox. The page title is "Order Manager GUI". The user is logged in as "omsadmin".

Intervention For Request 0400009197

- Order ID: 0400009087
- Request ID: 0400009197
- Input Size: 307 estimated MB
- Media Type: FtpPull
- Priority: NORMAL
- User String:
- Explanation(s): Heg Processing Error
- Worked by: omsadmin [change]
- User ID: ECSSGuest (Ruiming_Tian@Raytheon.com)
- Created: Jul 12 2007 11:56AM
- Acknowledged: May 5 2008 2:11PM
- Request Status: Operator Intervention
- Metadata Format: XML

Input Granule List

Go directly to row of 3 rows. Show 20 rows at a time.

first | previous | Showing 1 - 3 of 3 | next | last

GranuleId	DPL ID	ESDT	Type	Processing Instructions	In Size (MB)	Out Size (MB)	Status	Explanation	Action
n/a		HEGOUT.001			365.986				Fail <input type="checkbox"/>
54999	114584	MOD09A1.086	SC	[View...]	153.000			Heg Processing Error	Fail <input type="checkbox"/>
56910	124578	MOD09A1.086	SC	[View...]	154.052	365.986		Request Canceled	Fail <input type="checkbox"/>

Select all
Submit Actions

first | previous | Showing 1 - 3 of 3 | next | last

Request Level Disposition

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

Operator Notes
0 of 255 max characters

Figure 4.7.7-9. HEG Intervention Detail

Close Confirmation

For a “submit retry processing” disposition, the close confirmation screen will display a warning (see Figure 4.7.7-10). Otherwise, this screen is the same as with other dispositions. Figure 4.7.7-11 shows the Processing Instructions.

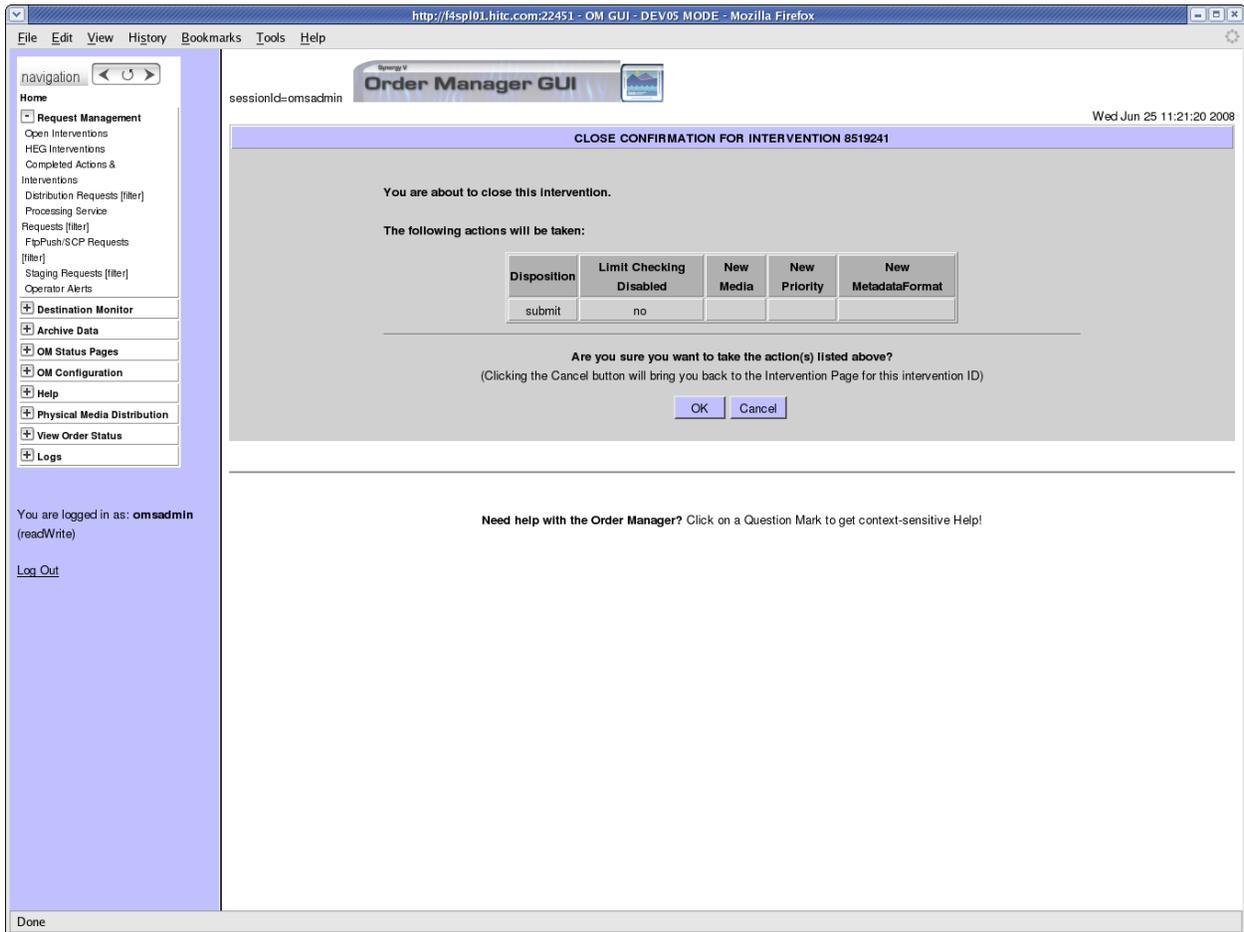


Figure 4.7.7-10. Close Confirmation for HEG Intervention

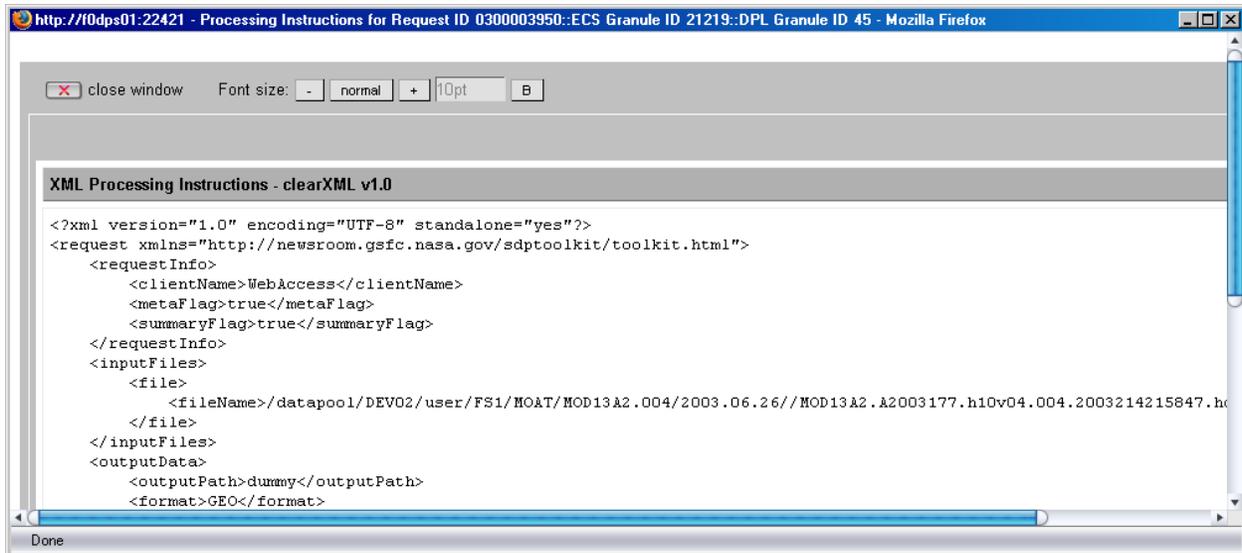


Figure 4.7.7-11. Processing Instructions

4.7.7.2.2 Operator Alerts Page

From the navigation menu, click on “Operator Alerts” to open the **Operator Alerts** page (Figure 4.7.7-12). By default, the filter is set to display all types of Alerts and the operator can filter the list for the various Alert types. The types of Operator Alerts that can be displayed are:

- FTP Push / SCP Destination Alerts (problems with the destination not causing an Operator Intervention)
- Data Pool File System Alerts
- Archive Server Alerts
- ECS Server Alerts – warnings about OMS resource errors

The list of alerts will also be sorted in ascending order by date (i.e., the oldest Alerts will appear first). For FTP Push Destination Alerts, the destination could be either a configured or a non-configured destination (not one in the Frequently Used Destinations list, as configured in the FTP Push Policy Configuration page).

The Alert Info will be shown in the column adjacent to the Alert Type. This column will contain more specific information about the nature of the problem. For example an FTP Push Alert would show the IP address (or configured alias, if appropriate) and why the destination is having problems.

For FTP Push or SCP Alerts, a link will appear in the Alert Details Column, and the operator may click on this to view a listing of all requests associated with the suspended destination. The

operator can then modify the request attributes manually. No detail page is available for other types of alerts, as all of the pertinent details are already displayed.

Unlike an Operator Intervention, no specific action can be taken to close an alert. The Order Manager Server will automatically clear an alert once all conditions related to the problem have been resolved.

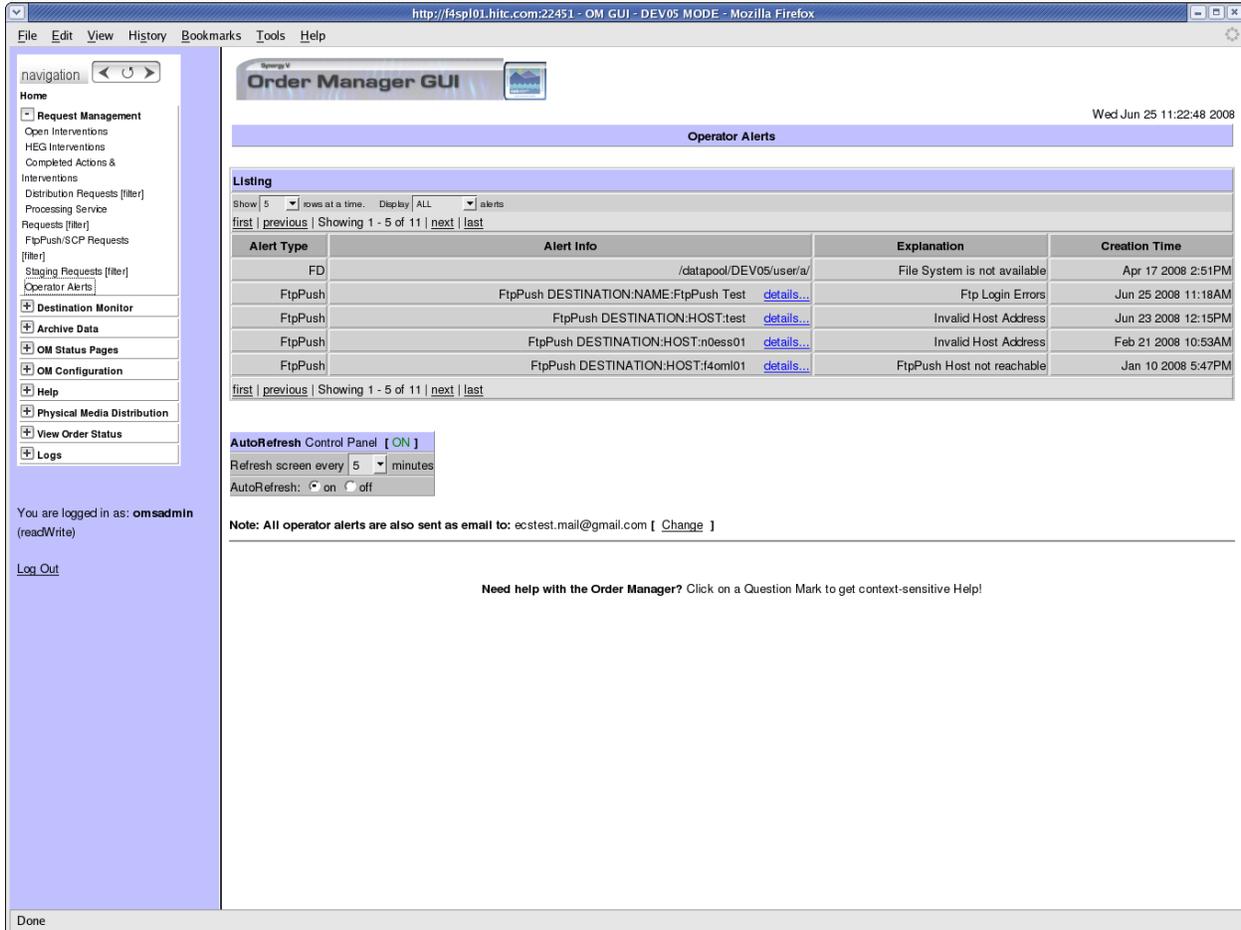


Figure 4.7.7-12. Operator Alerts

4.7.7.2.3 Completed Interventions Page

4.7.7.2.3.1 Completed Operator Actions and Interventions Page

From the navigation menu under the **Request Management** subheading, the operator can click on “Completed Actions & Interventions” to open the **Completed Operator Actions and Interventions** page (see Figure 4.7.7-13). This page displays all completed and closed Operator

Interventions and Actions. Once the operator has completed work on an intervention or action, the item in that list is moved to this page. Table 4.7.7-4 describes all the fields on this page.

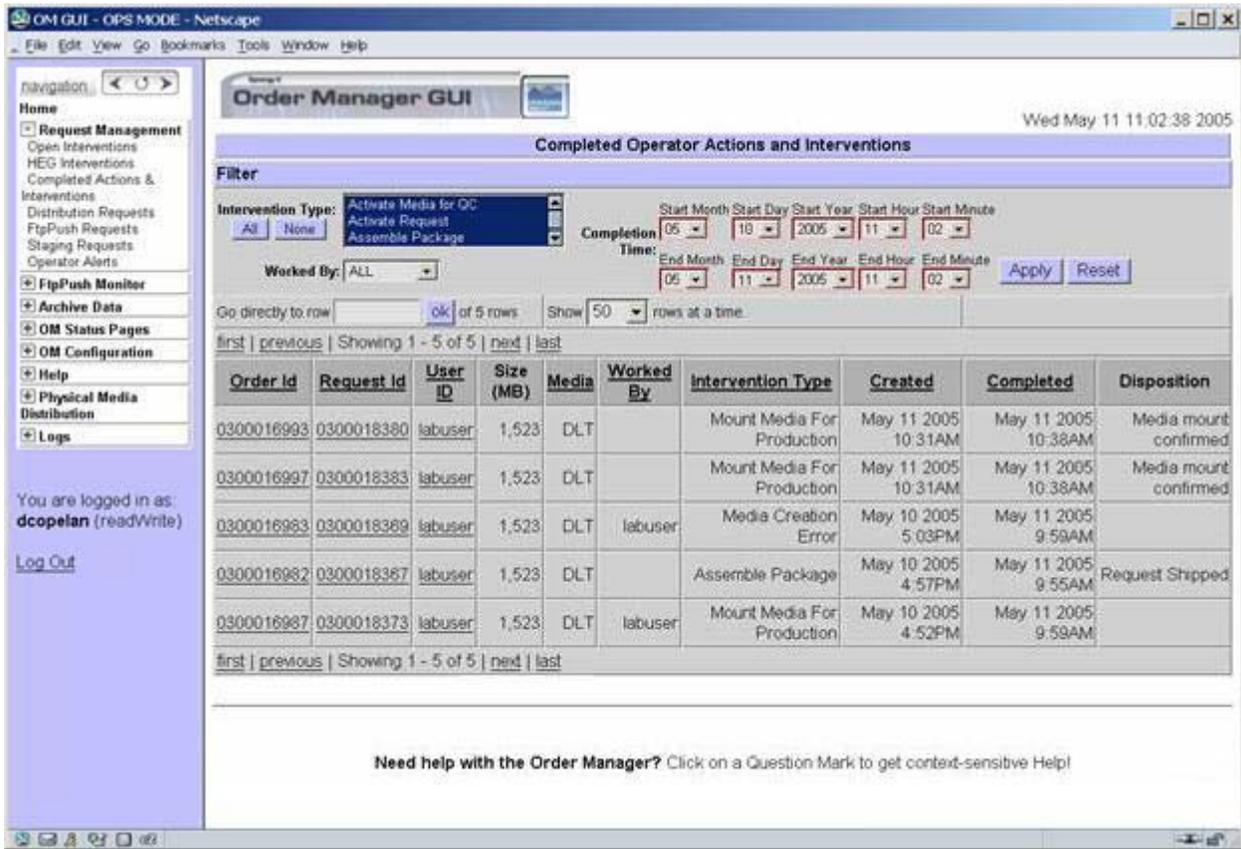


Figure 4.7.7-13. Completed Operator Actions and Interventions Page

Table 4.7.7-4. Fields on Completed Operator Actions and Interventions Page (1 of 2)

Field Name	Description
Order Id	The Order ID associated with the Request. Clicking on the Order ID will display a "detail" of the Order information.
Request Id	The Request ID associated with the Closed Intervention. Clicking on the Request ID will display a detail of the Intervention.
User ID	The "owner" of this order, in most cases the person who originated the order. Clicking on the User ID will display a complete profile of the User.
Size (MB)	The estimated size in MB of the Request.
Media	The media type this Order/Request uses.
Worked By	The operator who last worked on, resolved, or closed the Intervention.

Table 4.7.7-4. Fields on Completed Operator Actions and Interventions Page (2 of 2)

Field Name	Description
Intervention Type	The type of the Intervention or action.
Created	The Creation Date/Time of the Intervention.
Completed	The Closure Date/Time of the Interventions.
Disposition	The final action that was taken to resolve the Intervention.

Filtering the Completed Operator Actions and Interventions List

At the top of the page, the operator may select the time parameters, worker ID, and Intervention Type by which to filter the list. Once the operator clicks “Apply” in the filter window, the Completed Interventions page is reloaded with the applied filter values.

Completed Action/Intervention Detail

By clicking on a Request ID, the operator can view the same details of an Intervention or Action as contained on the Open Intervention Detail or Physical Media Console page (see Figure 4.7.7-14), except that the operator cannot take any action nor modify the Request in any way. To get back to the Completed Operator Actions and Interventions listing, the operator can click the back icon  on the top of the navigation frame.

4.7.7.2.3.2 Completed Interventions/ Actions Detail Page

When viewing the detail of a Completed Intervention, the operator can click the Order ID to view the Order information. Table 4.7.7-5 describes each field on this screen.

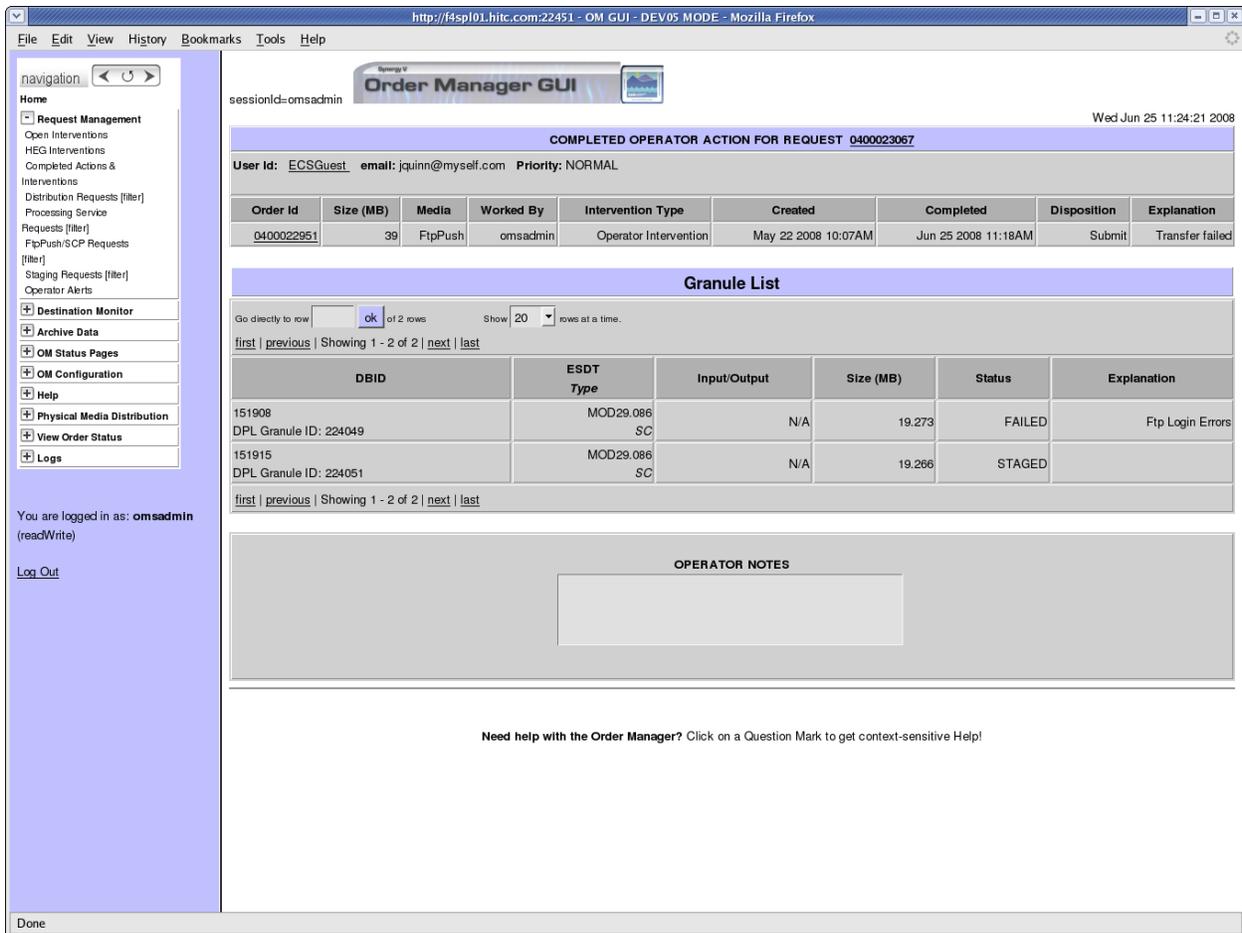


Figure 4.7.7-14. Completed Intervention/Action Detail Page

Table 4.7.7-5. Fields on Completed Intervention Detail Page (1 of 2)

Field Name	Description
User Id	The "owner" of this order, in most cases the person who originated the order. Clicking on the User ID will display a complete profile of the User.
email	The e-mail address to which information about this order will be sent (e.g., a granule is failed or changed).
Priority	The ECS Priority level associated with this Request. These Priority levels are predetermined in the Data Pool. For example, a LOW priority might have a priority of 75. The Priority Levels can be viewed in the OM Configuration Pages under "Aging Parameters".
Order Id	The Order ID associated with the Request. Clicking on the Order ID will display a "detail" of the Order information.
Size (MB)	The estimated size in MB of the Request.

Table 4.7.7-5. Fields on Completed Intervention Detail Page (2 of 2)

Field Name	Description
Media	The media type this Order/Request uses.
Worked By	For nonphysical media requests, shows the name of the worker who last worked this intervention.
Intervention Type	The type of the Intervention or action.
Created	The Creation Date/Time of the Intervention.
Completed	The Date/Time the Intervention was completed.
Disposition	The final action that was taken to resolve the Intervention.
Explanation	This is the explanation of any errors that occurred on the granule-level.
Fields on the Granule List	
DBID	The Database ID or "Granule ID" for the granule. This is not the full Granule ID as stored in the MSS or Order Manager Database, rather it is the 16-digit ID as stored in the Data Pool database.
ESDT Type	The ESDT type the granule is associated with, consisting of the ESDT short name and version ID.
Size (MB)	The size in MB of the granule.
Status	<p>The current status of the granule. Statuses can be:</p> <p>SKIPPED: The granule has been skipped because it has failed validation (e.g., the granule was not found).</p> <p>NULL: This is the initial state, essentially meaning the status is OK.</p> <p>TRANSFERRING: The granule is in the process of being pushed to a destination.</p> <p>SHIPPED: The granule has been delivered to the PDS to be put of a physical medium, or the granule has been pulled.</p> <p>FAILED: FTP Push transfer failure.</p> <p>HOLD: The granules may be placed on "HOLD" if it has failed validation or there are problems writing the granules to the media.</p>
Processing Instructions	Will be displayed when viewing a HEG intervention. A HEG order may contain a mix of granule types (those with and without processing instructions), if there are any to display, an additional column will be shown in the granule list. This column shows a link to view the processing instructions details, if any.
Explanation	Provides a more detailed explanation of the granule Status.
Operator Notes Box	
OPERATOR NOTES	This will contain a record of the DBID changes, plus any notes the operator may have manually typed in.

Links to Other Pages

The operator may click on the Request Id, Order Id or User Id to view the Request Detail, or Order pages, respectively, associated with the request. For HEG requests, the operator may click on the **View** link to view the processing instructions associated with the granule.

4.7.7.2.4 Distribution Requests Pages

The subsections are:

- Distribution Requests
- Processing Service Requests
- Destination Monitor
 - o Suspended Destinations
- Staging Requests
- Historical Requests
- Historical Processing Requests
- Order Detail

Lists of distribution requests also appear on the Order page, for bundling orders only, and on the Destination Detail page, requests not in a terminal state only. All actions that apply to other lists of distribution requests are available on these pages as well.

4.7.7.2.4.1 View Distribution Requests

There are six pages that display a Distribution Requests list. These are:

- Distribution Requests (All)
- Processing Service Requests
- FtpPush/SCP Requests
- Staging Requests
- Historical Distribution Requests
- Destination Monitor
- Order Page – Bundling Orders only

These pages share many common features. These shared features will be described in the next section, followed by descriptions of features that are unique to each page.

4.7.7.2.4.2 Distribution Requests Lists – Common Features

Request Lines

Each line of the request list shows pertinent fields for a specific request. A few fields are not shown in every list. These are specified in the unique features sections. Table 4.7.7-6 is a list of fields that appear for every request line.

Table 4.7.7-6. Fields Displayed (1 of 2)

Field Name	Data Type	Size	Description
Ord Typ	Character	8	"Regular", "Bundled", "MM" or "HEG".
OrderID	Integer	8	UID for this order created internally. This is a link to the Order page for this order.
RequestID	Link/Integer	10	UID for a request. This is a link to the Request Detail page.
Request Size(MB)	Integer	8	Cumulative size of granule science/metadata files in MB. Formatted as follows: for zero value – "0", for value > 0 and < .5 – "< .5", for all other values -rounded to the closest integer.
Gran Cnt	Integer	8	Number of granules associated with the request.
Staging Complete (Staging Requests Page)	Integer	8	Number of granules that have completed staging.
Complete (FtpPush /SCP Requests Page)	Integer	8	Number of granules that have completed FTP Push / SCP.
Media	Character	8	Type of media associated with the request.
Priority	Character	6	<p>This is a list of possible request priorities if the following conditions <u>do not</u> apply, the request:</p> <ul style="list-style-type: none"> • is in a terminal state , • has been submitted to PDS, • has a status of "QC Hold" or "Waiting for Shipment", • has a status of "Pending Media Prod" and the dispatch mode for its media type is manual, • has a status of "Transferring " and has a device assigned to it. <p>The current priority of the request is highlighted and can be changed.</p> <p>If the request is in a terminated state, no priority is displayed.</p> <p>Otherwise, the current priority is displayed and cannot be changed.</p>
Apply (priority) Button	Button	n/a	Click to change the priority of the request to the selected value.

Table 4.7.7-6. Fields Displayed (2 of 2)

Field Name	Data Type	Size	Description
Request Status	Character	21	Current status of the request. If the status is "Operator Intervention" and an OMS intervention exists, the status will be a link to the Intervention Detail page for the intervention.
Resource Class	Character	9	Resource class is an indicator of resource utilization based on archive resource demand. Values are: Cheap, Moderate, or Expensive.
ESDT	Character	12	Earth science data type.
UserID	Character	8	Identification of the user submitting the request.
Resub Cnt	Integer	5	Number of times specified request has been resubmitted.
Created	Date/Time	19	Date/time the request was created.
Last Update	Date/Time	19	Date/time the request was last updated.
Actions	Buttons	8	One button for each Action for which the request is eligible. See section "Actions" for details.

Navigation

The operator can scan through the list of requests by clicking on navigation links. These links permit selecting a specific starting row of requests or jumping to the **first**, **next**, **previous** or **last** block of requests. The operator can jump to a specified row by entering the row number in the box in the **Go directly to row** ___ of *n* rows line and clicking on the **OK** button. The pull down menu lets the operator select the number of requests displayed on a page; the available values are 5, 10, 20, 50 and 100 requests per page. If a value has been configured for the list, it will also be included as a selectable value. Table 4.7.7-7 provides descriptions of the navigation fields for the Distribution Requests page.

Table 4.7.7-7. Request Management Page Navigation Field Descriptions

Field Name	Data Type	Size	Entry	Description
Go directly to row (line no.) of nnnn rows	Integer	5	Optional	Line number of request to display at the top of the list.
ok	Button	n/a	Optional	Refreshes the list starting with request line entered.
first	Link	n/a	Optional	Selects first block of requests.
previous	Link	n/a	Optional	Selects previous block of requests.
next	Link	n/a	Optional	Selects next block of requests.
last	Link	n/a	Optional	Selects last block of requests.
Show nn rows at a time	Drop down list	3	Optional	Number of rows (nn) to display in the Distribution Requests listing. Default value is taken from the configuration file.

Refresh

This page will be refreshed by default every 5 minutes. The operator can change the refresh rate by selecting from the pull down menu. The operator can also choose to suspend refresh by clicking the **AutoRefresh Control Panel** on/off button. If any field is changed the new value is stored and the page refreshes immediately. See Table 4.7.7-8 for Field Descriptions.

Table 4.7.7-8. Request Management Page Refresh Field Descriptions

Field Name	Data Type	Size	Entry	Description
AutoRefresh	Toggle switch	n/a	Optional	Turns auto-refresh on or off depending upon the current state.
Auto-refresh screen every nn minutes	Drop down list	2	Optional	Interval in minutes for screen auto-refresh. Values are 1, 5, 10, 15, 30, 45, and 60.

Filters

The list of current filters for the displayed request list is shown at the top of the page. To change these filter values, the operator clicks on the **Change Filter** button. This causes a pop-up window containing fields for changing the various filters to appear. Once the operator has selected the desired filters and clicks the **Apply Individual Filters**, the **Apply Combined Filters** or the **Apply Defaults** button, the Distribution Requests list will be refreshed with the new filters. The Distribution Requests Filters page (Figure 4.7.7-15) field descriptions are shown in Table 4.7.7-9.

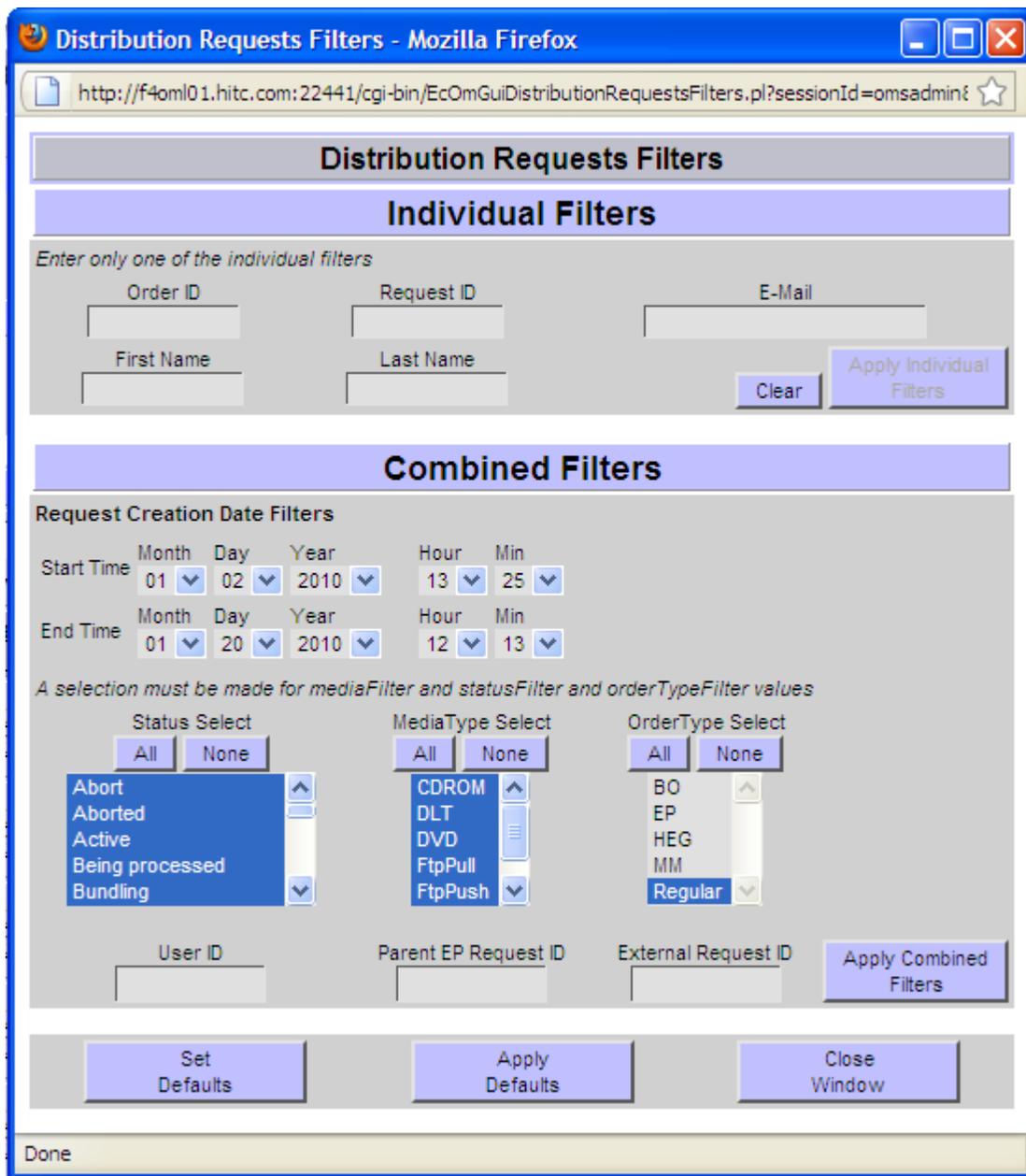


Figure 4.7.7-15. Distribution Request Filter Popup

Table 4.7.7-9. Distribution Requests Filter Page Field Descriptions (1 of 3)

Field Name	Data Type	Size	Entry	Description	Default Value
Individual Filters – only one item from this group may be entered					
Order ID	Integer	11	Optional	Order ID of requests to be selected.	None
Request ID	Integer	11	Optional	Request ID of request to be selected.	None
E-Mail	Character	15	Optional	E-Mail address of requests to be selected.	None
First Name	Character	12	Optional	First Name of requests to be selected.	None
Last Name	Character	12	Optional	Last Name of requests to be selected.	None
Clear Button	Button	n/a	Optional	Clears value in any field in this group and disables the Apply Individual Filters button.	n/a
Apply Individual Filters	Button	n/a	Optional	Applies the field in Individual filter group which has text entered.	n/a
Combined Filters – these filters will be “anded”. At least one value for Status and Media Type is required.					
Creation time from/to	Character	n/a	Required Defaults need not be changed	Select from pull-down lists to specify a starting date and time and an ending date and time for filtering.	To: current date/time. From current date/time minus 24 hours.
Status Select - All	Button	n/a	Optional	Selects all status values in the status scrolling list.	n/a
Status Select - None	Button	n/a	Optional	De-selects all status values in the status scrolling list. The warning message “A selection must be made..” is highlighted until a selection for status is made.	n/a
Status Select List	Scrolling List	n/a	Optional	Clicking on an entry in the list selects it if it is de-selected or de-selects it if it is selected. Any number of entries may be selected.	All statuses are selected.

Table 4.7.7-9. Distribution Requests Filter Page Field Descriptions (2 of 3)

Field Name	Data Type	Size	Entry	Description	Default Value
MediaType Select - All	Button	n/a	Optional	Selects all media type values in the media type scrolling list.	n/a
MediaType Select - None	Button	n/a	Optional	De-selects all media type values in the media type scrolling list. The warning message "A selection must be made..." is highlighted until a selection for media type is made.	n/a
MediaType Select List	Scrolling List	n/a	Optional	Clicking on an entry in the list selects it if it is de-selected or de-selects it if it is selected. Any number of entries may be selected.	All Media Types are selected.
OrderType Select - All	Button	n/a	Optional	Selects all order type values in the media type scrolling list.	n/a
OrderType Select - None	Button	n/a	Optional	De-selects all order type values in the media type scrolling list. The warning message "A selection must be made..." is highlighted until a selection for media type is made.	n/a
OrderType Select List	Scrolling List	n/a	Optional	Clicking on an entry in the list selects it if it is de-selected or de-selects it if it is selected. Any number of entries may be selected.	All Order Types are selected.
User ID	Character	13	Optional	User ID, entered to specify a user ID for filtering.	None
Parent EP Request ID	Character	13	Optional	Request ID of the Parent EP request	None
External Request ID	Character	13	Optional	External Request ID, entered to specify an external request ID for filtering	None
Apply Combined Filters	Button	n/a	Optional	Applies above "Combined" filters to the request list.	n/a

Table 4.7.7-9. Distribution Requests Filter Page Field Descriptions (3 of 3)

Field Name	Data Type	Size	Entry	Description	Default Value
General Buttons					
Set Defaults	Button	n/a	Optional	Sets all filter selections to their default values on the Filters page.	n/a
Apply Defaults	Button	n/a	Optional	Sets all filter selections to their default values on the Filters page and applies these values to the corresponding requests List Page.	n/a
Close Window	Button	n/a	Optional	Closes the Requests Filter window.	n/a

Any attributes that the operator selects/enters will be remembered for the duration of the session and for future sessions when the operator logs in with the same User ID, but only those in the group whose Apply button has been clicked will be used to filter the distribution requests list. There are two categories of filtering attributes -- Individual Filters and Combined Filters. Either of these filter categories can be applied at one time.

To select Individual Filters, the operator enters one of the five fields displayed: Order ID, Request ID, E-Mail, First Name and Last Name. If a value is entered in one of the five fields, the other four fields become disabled. Deleting the entered value or clicking the Clear button reenables all of the Individual Filter fields. Clicking the Apply Individual Filters button applies the entered field entry and reloads the Distribution Requests window with the results.

To select Combined Filters, the operator selects or enters values for the desired attributes. The Creation Date Filters are initially set to: End Time - the current date/time, and Start Time - 24 hours before the current date/time. If initial (default) date/time values are not changed, they will update to the current time whenever they are applied. The operator can change these attributes by clicking on the down triangle, which appears next to the value of each attribute, and then clicking on a value from the drop-down list that is displayed. The drop-down lists show all possible values for month, day, hour and minute. For the year, only the current year and the previous year are shown for selection.

At least one value must be selected for each of Status, MediaType, and OrderType attributes. The selected/entered attributes are “anded” for filtering. This means that only requests having all of the selected attribute values will be displayed. If any of the Status, MediaType, and OrderType attributes is not selected, the warning message “A selection must be made ...” is highlighted and the Apply Combined Filters button is disabled until the required values are selected.

The Status Select, MediaType Select, and OrderType Select lists initially display all possible statuses/media types/order types for a request with all values selected. The operator can click on the **None** button to deselect all entries in a list or **All** button to select all entries again. Also, the

operator can click on an individual status/media type entry in the scrolling list to select or deselect it. If the entry was not selected, it will be selected. If the entry was selected, it will be deselected. Any number (more than 0) or combination of statuses, media types or order types may be selected. To select multiple values from one list, hold down the Ctrl key while clicking on values after the first. To select a range of values from one list, click on the value at the start of the range and then hold down the Shift key while selecting the value at the end of the range.

All Combined Filter attributes will be applied when the operator clicks the Apply Combined Filters button at the lower right corner of the group. The Distribution Requests window will be reloaded filtered by the selected/entered attributes.

The three buttons at the bottom of the window are Set Defaults, Apply Defaults and Close Window.

- **Set Defaults** restores the default values to all filter attributes shown on the filters page to global default values. The distribution requests page is not updated. The operator can make additional changes to the filters before applying them to the distribution requests page by using the “Apply Individual Filters” or “Apply Combined Filters” buttons.
- **Apply Defaults** restores the global default values to all filter attributes on the Filter page, and applies these values to the distribution requests page. The “applied” values will be used in the future until they are changed.
- **Close Window** closes the Request Filters window. It does not affect the Distribution Requests window.

Default global values are:

For Individual Filters, all values are cleared (made empty).

For Combined Filters, Table 4.7.7-10 shows the global default values by page.

Table 4.7.7-10. Global Default Values by Page

Page	Element	Default Value
Distribution Requests	End Time	The current date and time.
	Start Time	24 hrs prior to the End Time.
	Status	All values are selected.
	Media Type	All values are selected.
	Order Type	All values are selected.
Processing Service Requests	End Time	The current date and time.
	Start Time	24 hrs prior to the End Time.
	Status	All values are selected.
	Media Type	All values are selected.
FTP Push/ SCP Distribution Requests	End Time	The current date and time.
	Start Time	24 hrs prior to the End Time.
	Status	All values are selected.
Staging Distribution Requests	End Time	The current date and time.
	Start Time	24 hrs prior to the End Time.
	Status	All values are selected.
	Media Type	All values are selected.
Historical Distribution Requests	End Time	The current date and time.
	Start Time	One(1) month prior to the End Time.
	Status	All values are selected.
	Media Type	All values are selected.
	Order Type	All values are selected.
Open Interventions	End Time	The current date and time.
	Start Time	One(1) year prior to the End Time.
	Media Type	All values are selected.
	Explanation	All values are selected.
	Interv Type	All values are selected.
Open HEG Interventions	End Time	The current date and time.
	Start Time	One(1) year prior to the End Time.
	Media Type	All values are selected.
	Explanation	All values are selected.

The ECS ORDER and Destination Detail pages have fixed filters that cannot be changed by the operator. Table 4.7.7-11 shows the filter values used for these pages.

Table 4.7.7-11. Filters for The ECS ORDER and Destination Detail Pages

Page	Element	Default Value
ECS ORDER	End Time	The current date and time.
	Start Time	Jan 1 1900
	Status	All statuses
	Media Type	All media types
	OrderId	Current orderId
Destination Detail	End Time	the current date and time
	Start Time	Jan 1 1900
	Status	All statuses
	Destination Node or Name	Current destination

The Distribution Requests Filters window remains open until the operator clicks the Close Window button at the bottom of the window or until its corresponding distribution requests page is replaced by another page.

Sorting

The request list can be sorted by clicking on the column header links **Order Typ, Request ID, Order ID, Destination, Complete, Media, Priority, Request Status, Capacity Class, User ID, Created** and **Last Update** wherever they appear. The default sort column is **Created** (creation date).

Actions

Note: Limited Capability operators are not allowed to execute actions for requests.

The operator can execute the following actions for any request that is eligible for the action by clicking on the button of the action. The action buttons will appear for only actions for which the request is eligible. Table 4.7.7-12 explains the actions and the criteria for a request to be eligible for each action.

If the request processing state is “Cancelling,” “Resuming,” “Resubmitting,” “Stopping,” “Submitted to PDS” or “Granule Canceled,” the processing state will be displayed in the action column and no actions are permitted.

Table 4.7.7-12. Eligibility Criteria for Each Action (1 of 2)

Action	Description	Criteria for Eligibility
Resubmit	Opens a new intervention for the request and loads the "Intervention Detail" page for subsequent action.	The request is in a terminated status (including cancel, abort, aborted and shipped).
Suspend	Suspends the request. The request is suspended, the distribution requests page is reloaded and the highlighted message "Suspending" is displayed in the Action column for the request until the OMS server completes the suspension of the request.	The request is not in a terminated status; And is not currently suspended and either: 1. non-failed granules still need to be staged or Ftp pushed and is not a physical media request with status "Transferring", "QC Hold" or "Waiting for Shipment"; or 2. is a physical media request with status "Pending Media Prod" and the dispatch mode for its media type is "automatic".
Resume	Resumes the request. A small popup window, "Confirm Resume for Request ID", appears for entry of the Worker name and Reason for Action. When login security is on, the operator's login id is inserted in the Worker name field. When the operator clicks the "Resume" action button, the request is resumed, the distribution requests page is reloaded and the highlighted message "Resuming" is displayed in the Action column for the request until the OMS server completes the resumption of the request.	The request is not in a terminated status; is suspended; was suspended by the operator; an OMS intervention exists; <u>Or</u> is a new request and processing of new requests is suspended.
Stop	Stops the request. The request is stopped, the distribution requests page is reloaded and the highlighted message "Stopping" is displayed in the Action column for the request until the OMS server completes the stopping of the request.	The request is not in a terminated status; is a physical media request; the Request Status is "Transferring"; Or the Request Status is "QC Hold" and at least one volume is "Verifying."

Table 4.7.7-12. Eligibility Criteria for Each Action (2 of 2)

Action	Description	Criteria for Eligibility
Cancel	Cancels the request. A small popup window, "Confirm Cancel for Request ID", appears for entry of the Worker name and Reason for Action. When login security is on, the operator's login id is inserted in the Worker name field. The operator is informed that any physical media volumes that are assigned to devices will be considered dismounted. When the operator clicks the 'Apply "Cancel Action"' button, an action is queued for the Order Manager server to cancel the request. The distribution requests page is reloaded and the highlighted message "Cancelling" is displayed in the Action column for the request until the OMS server finishes Cancelling the request. No other action buttons will be shown.	The request is not in a terminated status And is not suspended and has no OMS intervention.
Inactive	For external processing requests, if the request is in the terminal state or not under OMS control, the "Inactive" button is displayed which indicates no action for the request with current status.	The request is in a terminated status and is not under OMS control with status "waiting for data".

The OM GUI is designed to present to the operator only those Action buttons for which the request is eligible. However, if an action is not activated for a period of time, the Action may become "stale" if circumstances occur which change the status of the request such that it is no longer eligible for that Action. For example, the request may be canceled by an operator using a different instance of the OM GUI or the request may have terminated normally. In that case, when the operator clicks the Action button, an error message will be displayed by the database procedure which executes the action. After reading the message to understand the cause of the error, the operator may return to the original page (by using the Link provided) and refresh/reload that page to see the currently available actions.

Change Priority

Note: Limited Capability operators are not allowed to change the priority of a request.

The priority of a request can be changed while the request is eligible to have its priority changed. The criteria which determine when a request is eligible to have its priority changed are described in Table 4.7.7-6 The operator can change the priority of a distribution request by clicking on its Priority value and selecting the desired new priority value from the drop-down list. Then the operator must click on the associated **Apply** button. Once the new priority has been applied, the priority cell will display the highlighted message "Priority Changed".

Links

OrderID The operator can view the detailed information for the order to which a distribution request belongs by clicking on its OrderID.

RequestID The operator can view the detailed information for a distribution request by clicking on its Request ID.

UserID The operator can view the detailed information about the user who submitted the order containing the distribution request by clicking on its UserID.

Refresh Control

The operator can also choose to enable/disable auto-refresh by clicking on the corresponding AutoRefresh radio button. The operator can also change the refresh rate by selecting a rate from the pull down list (default 5 minutes).

4.7.7.2.4.3 Distribution Requests Lists – Unique Features

Distribution Requests Page

The following additional option buttons are available on the Distribution Requests page as shown in Figure 4.7.7-16b.

- **Bulk Cancel**
 - If there are Physical Media requests that are bulk cancelled the media volumes for these requests will be considered dismantled. The Bulk Cancel pop-up window is shown in Figure 4.7.7-16a.
- **Bulk Claim**
 - Operator Interventions can be bulk claimed using this button.
- **Bulk Resubmit**
 - Select all eligible requests for **Bulk Cancel** or **Resubmit**
 - Select no eligible requests for **Bulk Cancel** or **Resubmit**

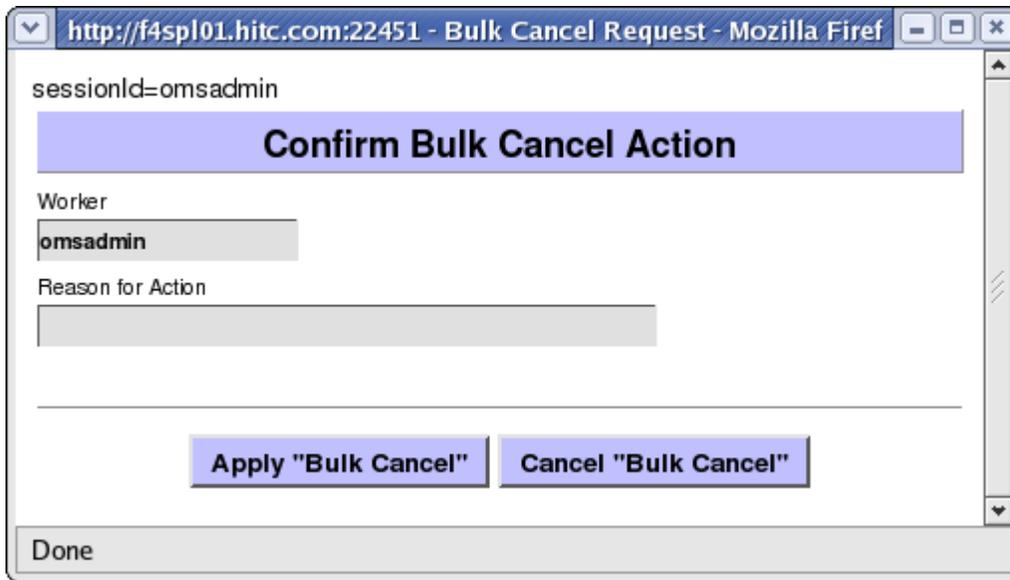


Figure 4.7.7-16a. Bulk Cancel Popup

The screenshot shows the Order Manager GUI in Mozilla Firefox. The browser address bar shows the URL: `http://f4sp01.edf.rvl.us.ray.com:22481/cgi-bin/index.pl?OpenInNewWindow=1&referer=Header.js&platform=Win32`. The page title is "Order Manager GUI" and the sub-page title is "Distribution Requests".

Current Filters:
 Order ID: None | Request ID: None | E-Mail: None | First Name: None | Last Name: None
 Creation Time: Start: Feb 3 2011 08:00AM | End: Feb 9 2011 09:01AM | Order Type: ALL
 Parent EP ID: None | External Request ID: None | Status: ALL
 Media Type: FtpPush

Options:
 Change Filter | Bulk Cancel | Bulk Claim | Bulk Resubmit
 Select All | Select None

Listing:
 Go directly to row: of 2 rows | Show 50 rows at a time.
 first | previous | Showing 1 - 2 of 2 | next | last

Sel	Ord Typ	OrderID RequestID	Request Size(MB)	Gran Cnt	Media	Priority	Request Status	ESDT	UserID	Resub Cnt	Created	Last Update	Actions
<input type="checkbox"/>	Regular	0800002022 0800002139	< .5	9	FtpPush	NORMAL <input type="button" value="Apply"/>	Operator Intervention	DAP.001	ECSGuest	1	Feb 7 2011 2:25PM	Feb 8 2011 3:09PM	<input type="button" value="Cancel"/>
<input type="checkbox"/>	Regular	0800002021 0800002136	< .5	1	FtpPush	NORMAL <input type="button" value="Apply"/>	Operator Intervention	DAP.001	ECSGuest	0	Feb 7 2011 1:47PM	Feb 7 2011 1:47PM	<input type="button" value="Cancel"/>

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

AutoRefresh Control Panel [OFF]
 Refresh screen every 5 minutes
 AutoRefresh: on off

Need help with the Order Manager? Click on a Question Mark to get context-sensitive Help!

Figure 4.7.7-16b. Distribution Requests List Page

Processing Services Requests

The Processing Services Requests page includes HEG and all external subsetter requests and “Processor” column is going to indicate the processor name. It does not have a filter for media type and order type. It will have processing service filter instead. All the external processing requests do not have any actions (cancel or suspend) while they are under the control of the external system.

http://f4spl01.hitc.com:22451 - OM GUI - DEV05 MODE - Mozilla Firefox

File Edit View History Bookmarks Tools Help

navigation < >

Home

- Request Management
 - Open Interventions
 - HEG Interventions
 - Completed Actions & Interventions
 - Distribution Requests [filter]
 - Processing Service Requests [filter]
 - FtpPush/SCP Requests [filter]
 - Staging Requests [filter]
 - Operator Alerts
- Destination Monitor
- Archive Data
- OM Status Pages
- OM Configuration
- Help
- Physical Media Distribution
- View Order Status
- Logs

You are logged in as: **omsadmin** (readWrite)

[Log Out](#)

sessionId=omsadmin **Order Manager GUI** Tue Jun 24 11:48:22 2008

Processing Service Requests

Current Filters

Order ID: None Request ID: None E-Mail: None First Name: None Last Name: None
 Creation Time: Start: Jun 23 2007 11:48AM End: Jun 24 2008 11:48AM User ID: None

Options

[Change Filter](#)

Listing

Go directly to row of 62 rows Show 5 rows at a time.

first | previous | Showing 44 - 45 of 62 | next | last

OrderID RequestID	Processor	Request Size(MB)	Gran Cnt	Media	Priority	Request Status	ESDT	UserID	Resub Cnt	Created	Last Update	Actions
0400022925 0400023041	HEG	0	1	FtpPush		Canceled	MOD29.086	ECSGuest	5	May 6 2008 5:33PM	May 7 2008 12:24PM	Resubmit
0400022933 0400023049	HEG	0	1	FtpPush		Shipped	MOD29.086	ECSGuest	0	May 6 2008 1:57PM	May 6 2008 1:58PM	Resubmit
0400022930 0400023046	HEG	0	1	FtpPull		Canceled	MOD29.086	ECSGuest	1	May 5 2008 5:28PM	Jun 10 2008 12:20PM	Resubmit
0400022929 0400023045	HEG	0	3	FtpPull		Shipped	MOD29.086	ECSGuest	0	May 5 2008 3:31PM	May 5 2008 3:33PM	Resubmit
0400022927 0400023043	HEG	0	1	FtpPush		Shipped	MOD29.086	ECSGuest	0	May 5 2008 3:26PM	May 5 2008 3:44PM	Resubmit

first | previous | Showing 44 - 45 of 62 | next | last

AutoRefresh Control Panel [OFF]

Refresh screen every 5 minutes

AutoRefresh: on off

Need help with the Order Manager? Click on a Question Mark to get context-sensitive Help!

Done

Figure 4.7.7-17a. Processing Services Requests Page

Figure 4.7.7-17a displays the similar filter and sort capabilities for the external processing requests as for the general list of distribution requests except for the “Inactive” action button.

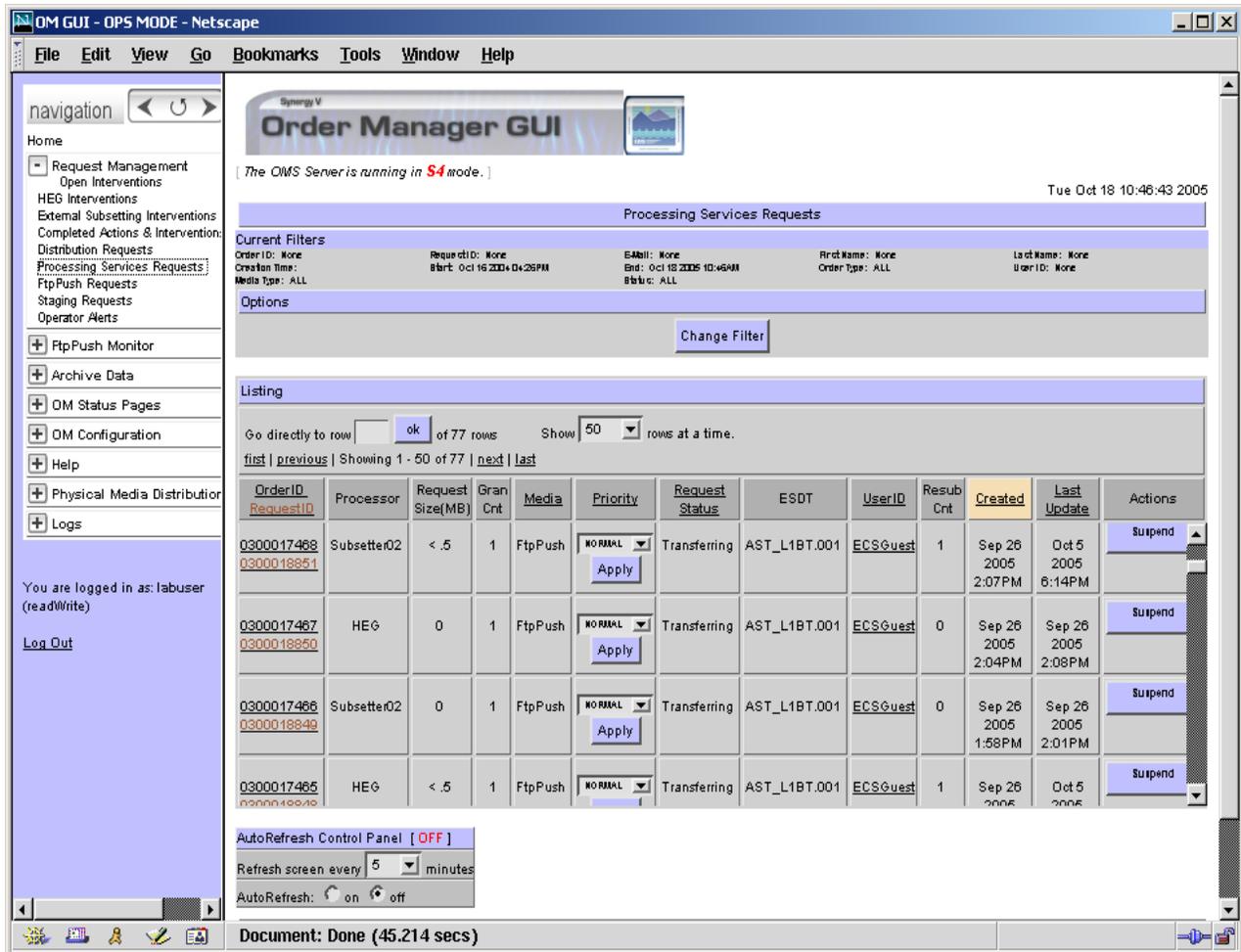


Figure 4.7.7-17b. Processing Services Requests Page

Figure 4.7.7-17b shows OMS GUI allows operator to cancel or suspend the external processing requests while those requests are under OMS control.

Processing Services Requests Filters

sessionId=omsadmin

Processing Service Requests Filters

Individual Filters

Enter only one of the individual filters

Order ID Request ID E-Mail

First Name Last Name

Combined Filters

Request Creation Date Filters

Start Time Month Day Year Hour Min
06 23 2007 11 48

End Time Month Day Year Hour Min
06 25 2008 11 32

Status Select

Abort
Aborted
Active
Being processed
Canceled

MediaType Select

FtpPull
FtpPush

ProcessService Select

HEG
OTHER

User ID Parent EP Request ID

Done

Figure 4.7.7-18. Processing Services Requests Filters Popup

Figure 4.7.7-18 shows the operator can filter any selected external processing service or HEG.

FtpPush/SCP Requests

For each request in the list, values for destination, completion status and resource class are shown. The operator can sort the list by completion status, media and resource class by clicking on the corresponding column headings as shown in Figure 4.7.7-19.

The screenshot shows the Order Manager GUI interface. The browser address bar indicates the URL: `http://f4spl01.hitc.com:22451 - OM GUI - DEV05 MODE - Mozilla Firefox`. The page title is "Order Manager GUI". The session ID is "omsadmin" and the date is "Tue Jun 24 11:49:11 2008".

The main content area is titled "FtpPush / SCP Distribution Requests". It includes a "Current Filters" section with the following values:

- Order ID: None
- Request ID: None
- E-Mail: None
- First Name: None
- Last Name: None
- Creation Time: Start: Jun 23 2008 11:49AM, End: Jun 24 2008 11:49AM
- Media Type: ALL
- Status: ALL

There is a "Change Filter" button below the filters.

The "Listing" section shows a table of requests. The table has the following columns: Ord Typ, OrderID, RequestID, Destination, Host Name, Request Size(MB), Gran Cnt, Complete, Media, Priority, Request Status, Resource Class, ES DT, UserID, Resub Cnt, Created, and Last Update.

Ord Typ	OrderID	RequestID	Destination	Host Name	Request Size(MB)	Gran Cnt	Complete	Media	Priority	Request Status	Resource Class	ES DT	UserID	Resub Cnt	Created	Last Update
Regular	0400022963	0400023079	OTHER	test	19	2	0	FtpPush	NORMAL	Operator Intervention	C	MULTIPLE	EcsGuestTest2	0	Jun 23 2008 12:14PM	Jun 23 2008 1:57PM
Regular	0400022964	0400023080	OTHER	test	19	2	0	FtpPush	NORMAL	Operator Intervention	C	MULTIPLE	EcsGuestTest2	0	Jun 23 2008 12:14PM	Jun 23 2008 6:01PM
Regular	0400022965	0400023081	OTHER	test	19	2	0	FtpPush	NORMAL	Operator Intervention	C	MULTIPLE	EcsGuestTest2	0	Jun 23 2008 12:15PM	Jun 23 2008 3:59PM
Regular	0400022966	0400023082	OTHER	test	19	2	0	FtpPush	NORMAL	Operator Intervention	C	MULTIPLE	EcsGuestTest2	0	Jun 23 2008 12:15PM	Jun 23 2008 8:03PM
Regular	0400022967	0400023083	OTHER	test	19	2	0	FtpPush	NORMAL	Operator Intervention	C	MULTIPLE	EcsGuestTest2	0	Jun 23 2008 12:15PM	Jun 23 2008 10:05PM

At the bottom of the page, there is an "AutoRefresh Control Panel" with a toggle set to "OFF" and a refresh interval of 5 minutes.

Figure 4.7.7-19. FtpPush/SCP Distribution Requests Page

Staging Requests

The Staging Requests page, shown in Figure 4.7.7-20, displays the completion status and resource class for each request in the list. The operator can sort the list by completion status or resource class by clicking on the corresponding column headings.

The screenshot shows the 'Order Manager GUI' interface. The main content area is titled 'Staging Distribution Requests' and displays a table of requests. The table has the following columns: Ord Typ, OrderID, RequestID, Request Size(MB), Gran Cnt, Staging Complete, Media, Priority, Request Status, Resource Class, ESDT, UserID, Resub Cnt, Created, Last Update, and Actions. The table contains six rows of data, each representing a request with its respective details and a 'Cancel' button in the Actions column.

Ord Typ	OrderID	RequestID	Request Size(MB)	Gran Cnt	Staging Complete	Media	Priority	Request Status	Resource Class	ESDT	UserID	Resub Cnt	Created	Last Update	Actions
Regular	0400009310	0400009420	44	4	0	CDROM	NORMAL	Operator Intervention	C	MOD29.086	ECSGuest	0	Jul 17 2007 12:24PM	Jul 17 2007 12:58PM	Cancel
Regular	0400009309	0400009419	44	4	4	CDROM	NORMAL	Operator Intervention	C	MOD29.086	ECSGuest	0	Jul 17 2007 11:30AM	Jul 17 2007 11:32AM	Cancel
Regular	0400009106	0400009216	44	4	4	CDROM	NORMAL	Operator Intervention	C	MOD29.086	ECSGuest	1	Jul 13 2007 12:28PM	Jul 16 2007 10:16AM	Cancel
Regular	0400009105	0400009215	44	4	4	CDROM	NORMAL	Operator Intervention	C	MOD29.086	ECSGuest	0	Jul 13 2007 12:24PM	Jul 16 2007 10:16AM	Cancel
Regular	0400009104	0400009214	44	4	4	CDROM	NORMAL	Operator Intervention	C	MOD29.086	ECSGuest	0	Jul 13 2007 12:23PM	Jul 16 2007 10:16AM	Cancel

Below the table, there is an 'AutoRefresh Control Panel' with a dropdown menu set to 'OFF', a refresh interval of '5' minutes, and radio buttons for 'on' and 'off'.

Figure 4.7.7-20. Staging Requests List Page

Historical Requests

The Historical Requests page, shown in Figure 4.7.7-21, does not allow any operator actions. Therefore, the Priority and Actions columns are not displayed.

sessionId=omsadmin **Order Manager GUI** Tue Jun 24 12:04:32 2008

Historical Distribution Requests

Current Filters
 Order ID: None Request ID: None E-Mail: None First Name: None Last Name: None
 Creation Time: Start: Jan 1 2007 00:00 End: Jun 24 2008 12:04PM Order Type: ALL User ID: None
 Status: ALL

Options [Change Filter](#)

Listing
 Go directly to row: of 49 rows Show rows at a time.
[first](#) | [previous](#) | Showing 1 - 5 of 49 | [next](#) | [last](#)

Ord Typ	OrderID RequestID	Request Size(MB)	Gran Cnt	Media	Request Status	ESDT	UserID	Resub Cnt	Created	Last Update
Regular	0600110282 0600110605	61	2	FtpPush	Operator Intervention	MOD13A2.004	ECSGuest	0	May 18 2007 6:28PM	May 18 2007 6:29PM
Regular	0600110281 0600110604	30	1	FtpPull	Operator Intervention	MOD13A2.004	ECSGuest	0	May 18 2007 6:28PM	May 18 2007 6:29PM
Regular	0600110280 0600110603	61	2	FtpPush	Shipped	MOD13A2.004	ECSGuest	0	May 18 2007 5:49PM	May 18 2007 5:49PM
Regular	0600110279 0600110602	30	1	FtpPull	Shipped	MOD13A2.004	ECSGuest	0	May 18 2007 5:48PM	May 18 2007 5:49PM
Regular	0600110278 0600110601	30	1	FtpPull	Shipped	MOD13A2.004	ECSGuest	0	May 18 2007 5:33PM	May 18 2007 5:33PM

[first](#) | [previous](#) | Showing 1 - 5 of 49 | [next](#) | [last](#)

AutoRefresh Control Panel [OFF]
 Refresh screen every minutes
 AutoRefresh: on off

Need help with the Order Manager? Click on a Question Mark to get context-sensitive Help!

Figure 4.7.7-21. Historical Requests List Page

Historical Processing Requests

The Historical Processing Requests page, shown in Figure 4.7.7-22, allows the operator to search for and display archived external processing requests.

The screenshot displays the 'Historical Processing Requests' page in the Order Manager GUI. The browser window title is 'http://f4spl01.hitc.com:22491 - OM GUI - DEV09 MODE - Mozilla Firefox'. The page header shows 'sessionId=omsadmin' and the date 'Tue Jun 24 12:09:36 2008'. The main content area is titled 'Historical Processing Requests' and includes a 'Current Filters' section with the following values: Order ID: None, Request ID: None, E-Mail: None, First Name: None, Last Name: None, Creation Time: Start: Jan 1 2007 00:00, End: Jun 24 2008 12:09PM, and User ID: None. Below the filters is a 'Listing' section with a table of requests. The table has 11 columns: OrderID (with a sub-column RequestID), Processor, Request Size(MB), Gran Cnt, Media, Request Status, ESDT, UserID, Resub Cnt, Created, and Last Update. The table contains six rows of data. At the bottom of the page, there is an 'AutoRefresh Control Panel' with a toggle set to 'OFF' and a refresh interval of 5 minutes. A footer message reads: 'Need help with the Order Manager? Click on a Question Mark to get context-sensitive Help!'.

OrderID RequestID	Processor	Request Size(MB)	Gran Cnt	Media	Request Status	ESDT	UserID	Resub Cnt	Created	Last Update
2000013570 2000013926	HEG	< .5	1	FtpPull	Canceled	MOD10A1.005	ECSGuest	7	Nov 14 2007 10:44AM	Jan 11 2008 11:21AM
2000013569 2000013925	HEG	< .5	2	FtpPull	Shipped	MOD10A1.005	ECSGuest	0	Nov 14 2007 10:39AM	Nov 14 2007 10:40AM
2000013568 2000013924	HEG	< .5	1	FtpPull	Canceled	MOD10A1.005	ECSGuest	6	Nov 14 2007 10:19AM	Nov 15 2007 9:45AM
2000013481 2000013837	HEG	19	1	FtpPush	Shipped	MOD29.086	ECSGuest	1	Sep 20 2007 10:48AM	Sep 20 2007 10:51AM
2000013480 2000013836	HEG	11	1	FtpPull	Shipped	MOD29.086	ECSGuest	0	Sep 20 2007 10:44AM	Sep 20 2007 10:45AM

Figure 4.7.7-22. Historical Processing Requests Page

Historical Processing Requests Filter

sessionId=omsadmin

Historical Processing Requests Filters

Individual Filters

Enter only one of the individual filters

Order ID Request ID E-Mail

First Name Last Name Clear Apply Individual Filters

Combined Filters

Request Creation Date Filters

Start Time Month Day Year Hour Min
01 01 2007 00 00

End Time Month Day Year Hour Min
06 24 2008 15 13

Status Select All None

Abort
Aborted
Active
Being processed
Canceled

MediaType Select All None

FtpPull
FtpPush

ProcessService Select All None

HEG

User ID Parent EP Request ID Apply Combined Filters

Set Defaults Apply Defaults Close Window

Done

Figure 4.7.7-23. Historical Processing Requests Filter Popup

Figure 4.7.7-23 shows the historical requests filter popup window, which the operator can use to filter the list of historical external processing services and HEG requests, based on various criteria.

4.7.7.2.4.4 Distribution Request Details Page

The operator can click the request ID in any **Distribution Requests, Open Intervention, Order, or Completed Operator Actions and Interventions** page to display the detailed information for a request. Figures 4.7.7-24a and 4.7.7-24b display distribution request details screens for non-physical media requests

For all requests, the operator can perform the following functions:

- Click on the **OrderId** link to view the ECS order page.
- Change the priority of certain requests. **For a complete description of this feature see Section 4.7.7.2.4.2 Distribution Requests Lists – Common Features. Note:** Limited Capability operators cannot change the priority of a request.
- For Ftp Push requests, Edit FtpPush Parameters by clicking on the corresponding button. This causes the Edit FtpPush Parameters page to be displayed. Table 4.7.7-13 provides field descriptions for the entry of these values. **Note:** This feature is disabled for Limited Capability *operators*. The operator can also click Destination/Host Name to view the Destination Detail page.
- Perform actions for which the request is eligible. See Section 4.7.7.2.4.2 **Distribution Requests Lists – Common Features** for a description of actions and the types of requests they apply to.
- Scan through the granule list by clicking on navigation links. These links permit jumping to the **first**, **next**, **previous** or **last** block. The number of granules displayed in the table can be changed by selecting a value from the “Show *n* rows at a time” drop-down list. If the Distribution Request information at the top of the page indicates that the request is associated with a bundling order, the Granule List at the bottom reflects the contents of the current bundle.
- Annotate the request.
- Change any mailing, shipping address, or billing address field.

http://f4spl01.hitc.com:22451 - OM GUI - DEV05 MODE - Mozilla Firefox

File Edit View History Bookmarks Tools Help

sessionId=omsadmin **Order Manager GUI** Wed Jun 25 15:41:55 2008

DISTRIBUTION REQUEST 0400008927

Userid	ECSGuest	OrderId	0400008817
E-mail	doug_newman@raytheon.com	Order Type	Regular
Request Size (MB)	5	Ext. RequestId	Request 100-350.1
# Granules	3	Priority	HIGH <input type="button" value="Apply"/>
# Granules Staged	0	Request Status	Operator Intervention
# Granules Ftp Pushed	0	<input type="button" value="Edit FtpPush Parameters"/>	
Destination	OTHER (Suspended)	Host Name	f4oml01
Receive Date/Time	Feb 19 2007 12:08PM	Resubmit Count	0
Start Date/Time	Feb 20 2007 4:41PM	Media Type	FtpPush
Metadata Format	XML		
Last Update	Feb 20 2007 4:41PM	Resource Class	C
End Date/Time	Not available	Actions	<input type="button" value="Cancel"/>

Request Notes

349 characters of 2040 maximum

[Operator Intervention] Date Closed: Feb 20 2007 4:22PM Worked By: ghh Outcome: Submit OperatorNotes: DBID: 11768 changed to: 14197
 [Operator Intervention] Date Closed: Feb 20 2007 4:40PM Worked By: cc Outcome: Submit OperatorNotes: DBID: 14197 changed to: 10917

	MAILING ADDRESS	SHIPPING ADDRESS	BILLING ADDRESS
Title			
First Name	Douglas	Douglas	Douglas
Middle Initial			
Last Name	Newman	Newman	Newman
Email	doug_newman@raytheon.com	doug_newman@raytheon.com	doug_newman@raytheon.com
Organization	little	little	little
Address	1616 McCormick Drive	1616 McCormick Drive	1616 McCormick Drive
	3rd Floor	3rd Floor	3rd Floor
	Room 2023	Room 2023	Room 2023
City	Upper Marlboro	Upper Marlboro	Upper Marlboro
State/Province	MD	MD	MD
Country	USA	USA	USA

Done

Figure 4.7.7-24a. Distribution Request Details Page for Non-Physical Media Request (1 of 2)

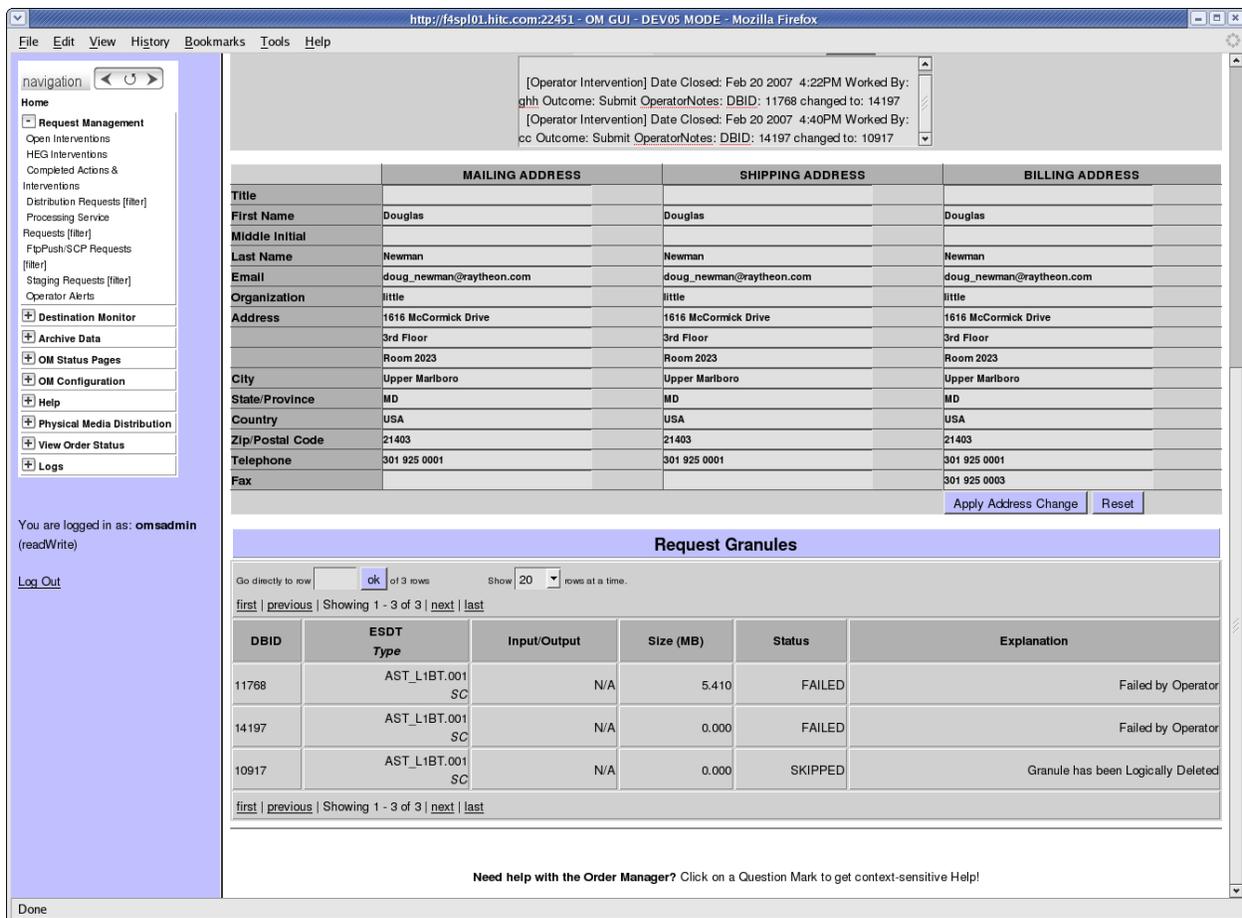


Figure 4.7.7-24b. Distribution Request Details Page for Non-Physical Media Request (2 of 2)

4.7.7.2.4.5 Edit FtpPush Parameters Page

Note: This page is not accessible to Limited Capability operators.

The Edit FtpPush Parameters Page displays a list of FTP Push parameters which can be edited by the operator. The operator can enter or change the value of any of the parameters displayed. The operator then clicks on one of the buttons at the bottom of the page. Button actions are:

- Change This Request – changes the FtpPush Parameters for the request listed and returns to the Request Detail Page.
- Change All Active Requests - changes the FtpPush Parameters for all requests for the destination listed that are not in a terminal state and returns to the Request Detail Page.
- Cancel – cancels all changes to FtpPush Parameters and returns to the Request Detail FtpPush Page.

Figure 4.7.7-25 shows the Edit FtpPush Parameters Page. Table 4.7.7-13 provides the descriptions of the fields on the Edit FtpPush Parameters Page.

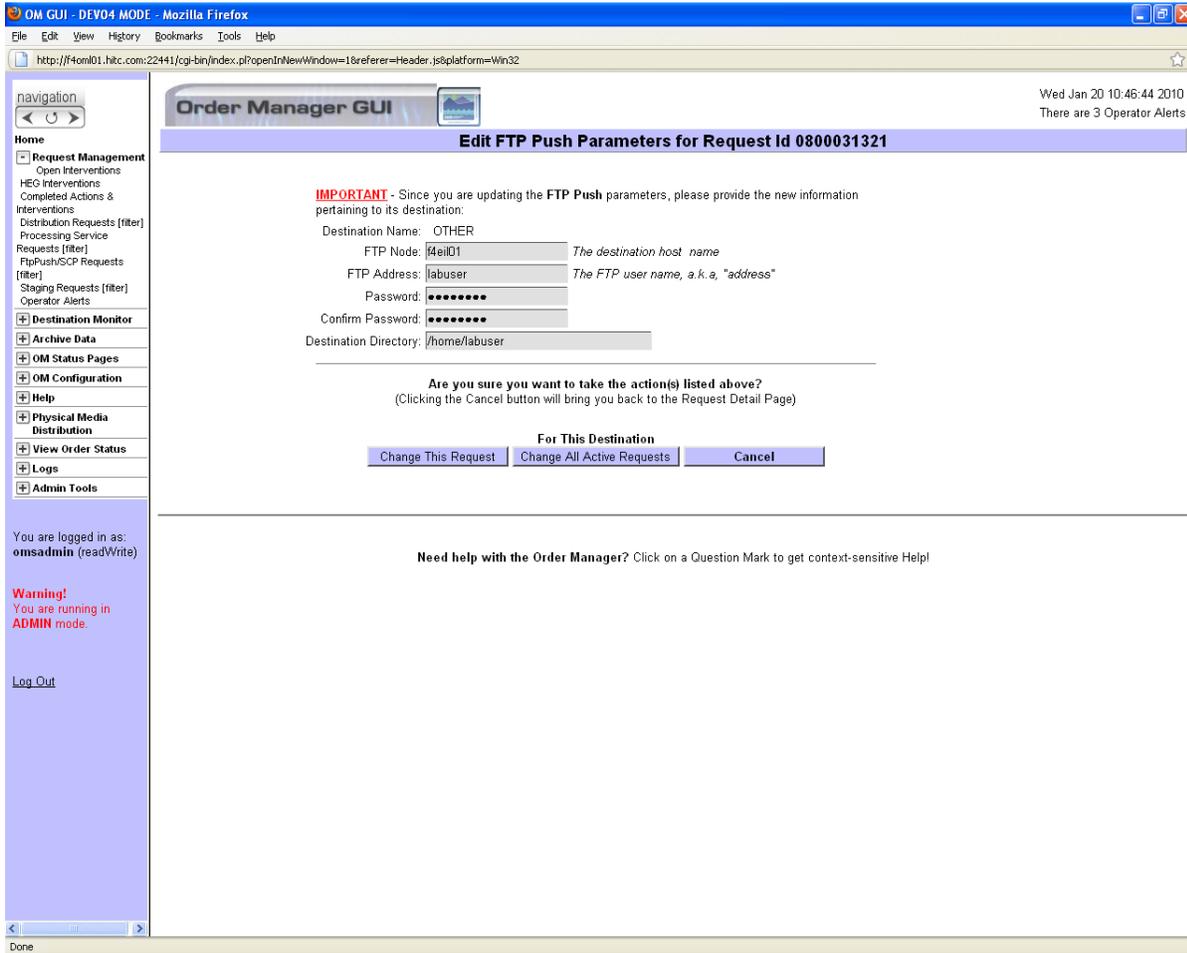


Figure 4.7.7-25. Edit FtpPush Parameters Page

Table 4.7.7-13. Field Descriptions for Edit FtpPush Parameters Page

Field Name	Data Type	Size	Entry	Description
FTP Node	Varchar	20	Required	The Unix hostname of the FTP recipient
FTP Address	Varchar	14	Required	The Unix login ID of the FTP recipient
Password	Varchar	15	Required	The Unix password for the FTP recipient
Confirm Password	Varchar	15	Required	The Unix password verification for the FTP recipient
User String	Varchar	255	Optional	String to be inserted into the FTP parameters
Destination Directory	Varchar	255	Required	The pathname of the Unix directory where the acquired files are to be stored

4.7.7.2.4.5 Edit SCP Parameters Page

Note: This page is not accessible to Limited Capability operators.

- The Edit SCP Parameters Page displays a list of SCP parameters which can be edited by the operator. The operator can enter or change the value of any of the parameters displayed.

Figure 4.7.7-26 shows the Edit SCP Parameters Page. Table 4.7.7-14 provides the descriptions of the fields on the Edit SCP Parameters Page.

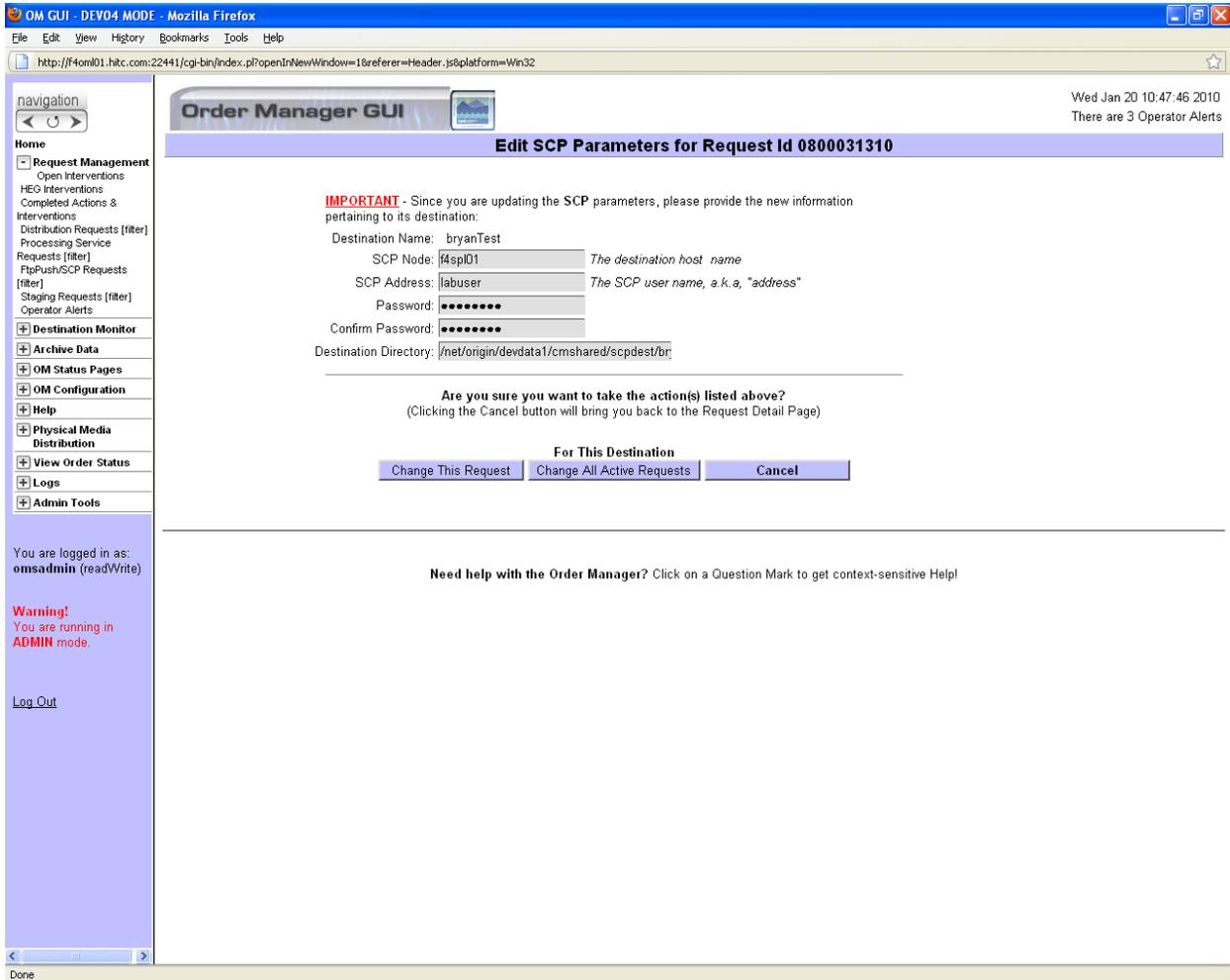


Figure 4.7.7-26. Edit SCP Parameters Page

Table 4.7.7-14. Field Descriptions for Edit SCP Parameters Page

Field Name	Data Type	Size	Entry	Description
Host Address	Varchar	20	Required	The Unix hostname of the SCP recipient.
SCP user	Varchar	14	Required	The Unix login ID of the SCP recipient.
Password	Varchar	15	Required	The Unix password for the SCP recipient.
Confirm Password	Varchar	15	Required	The Unix password verification for the SCP recipient.
Destination Directory	Varchar	255	Required	The pathname of the Unix directory where the acquired files are to be stored.

4.7.7.2.4.6 ECS Order Page

Note: Limited Capability operators are limited to viewing the details of an ECS Order. They cannot change the priority of or take actions for Requests.

The operator can click on the **Order ID** link in the Distribution Requests list page or the Distribution Request details page to open the **ECS Order** detailed information page, as illustrated in Figure 4.7.7-27. If the order is a bundling order, the operator can click the **Spatial Subscription Server** link to go to the Spatial Subscription Server Web page to view and update the Bundling Order as illustrated in Figure 4.7.7-28. The operator can click a **Request ID** to go to **Distribution Request** details page for that request (see Figure 4.7.7-29).

http://f4oml01.hitc.com:22411 - OM GUI - DEV01 MODE - Mozilla Firefox

File Edit View History Bookmarks Tools Help

navigation: < >

Home

- Request Management
 - Open Interventions
 - HEG Interventions
 - Completed Actions & Interventions
 - Distribution Requests [filter]
 - Processing Service Requests [filter]
 - FtpPush/SCP Requests [filter]
 - Staging Requests [filter]
 - Operator Alerts
- Destination Monitor
- Archive Data
- OM Status Pages
- OM Configuration
- Help
- Physical Media Distribution
- View Order Status
- Logs

You are logged in as: **omsadmin**
(readWrite)

[Log Out](#)

sessionId=omsadmin

Order Manager GUI

Tue Jun 24 12:44:16 2008

ECS ORDER 0600113320

Request ID:	0600113643		
Order Type:	Regular	Start Date:	Not available
Order Source:	OmsCliDriver	User ID:	ECSGuest
Ext. RequestId	Not available	Status:	Canceled
Receive Date:	May 30 2008 4:24PM	Ship Date:	Not available
Last Update:	Jun 9 2008 3:56PM	Order Home DAAC:	LAR
Description:	Not available		

Need help with the Order Manager? Click on a Question Mark to get context-sensitive Help!

Done

Figure 4.7.7-27. ECS Order Information Page

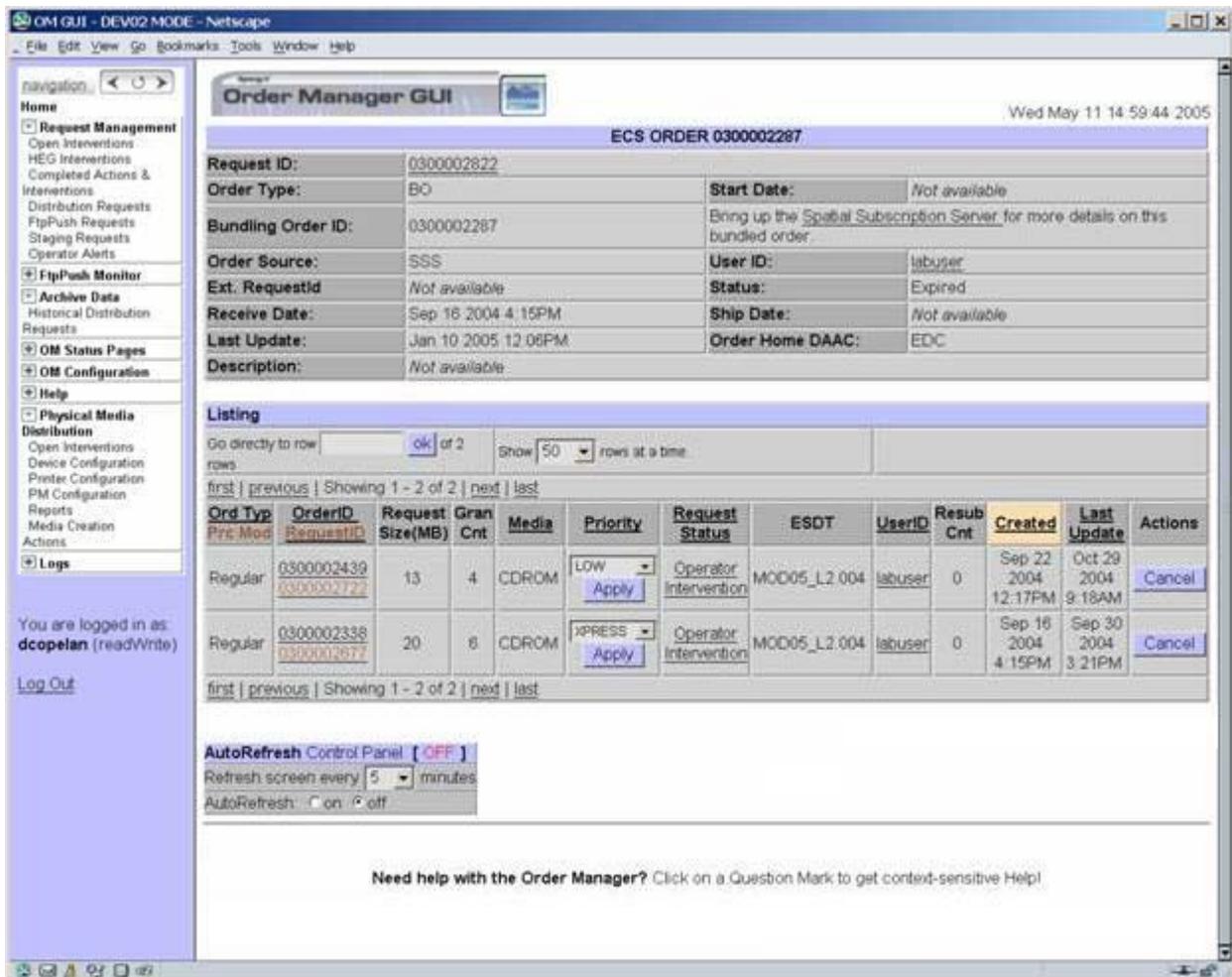


Figure 4.7.7-28. ECS Order Information Page for Bundling Order

4.7.7.3 Destination Monitor

4.7.7.3.1 Suspended Distribution Destinations Page

Note: Limited Capability operators cannot take any actions on this page.

The Distribution Destinations Displays a list of suspended FTP Push / SCP Destinations as shown in Figure 4.7.7-29. The operator can see details for a destination by clicking the name of the destination (for a configured destination) or the hostname (for a non-configured destination) to be viewed. This displays the Ftp Push / SCP Monitor – Destination Details page described in Section 4.7.7.3.2 FTP Push / SCP Destinations Detail Page.

The operator can resume dispatching to a destination by clicking its **Resume** button.

The Active Destinations section allows the operator to enter either a Destination Name or Host Name and either suspend / resume the destination or see the Destination Monitor by clicking the Destination Name – Destination Details page for the destination.

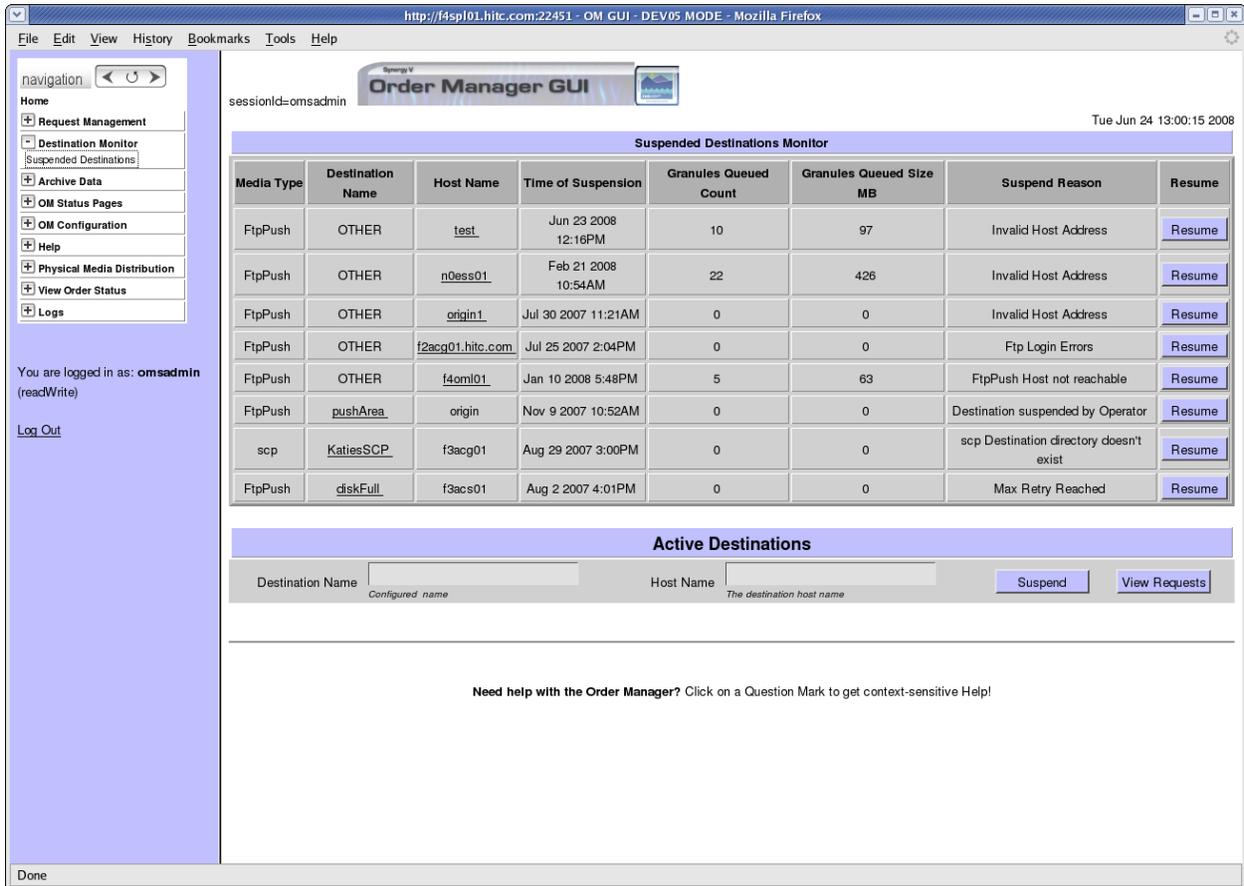


Figure 4.7.7-29. Suspended Destinations Monitor Page

Note: Limited Capability operators cannot take any actions on this page.

The FTP Push / SCP Distribution Destination Detail Page displays a **Suspend/Resume** button, a list of FTP Push / SCP Operations that Caused the Suspension of the destination and a list of FTP Push Requests That Are Not In A Terminal State for the destination.

The Suspend/Resume button is labeled **Resume** if the destination is suspended and **Suspend** if the destination is active. Clicking this button will suspend or resume the destination.

For a description of the list of FTP Push Requests, see Section 4.7.7.2.4.1. View Distribution Requests.

4.7.7.3.2 FTP Push/ SCP Distribution Destinations Detail Page

Note: Limited Capability operators cannot take any actions on this page.

The FTP Push / SCP Distribution Destinations Detail Page displays a list of FTP Push / SCP Operations that Caused the Suspension of the destination selected and a list of FTP Push Requests That Are Not In A Terminal State for the destination selected. This is displayed in Figures 4.7.7-30 and 4.7.7-31.

For a description of the list of FTP Push / SCP Requests see Section 4.7.7.2.4.2.

The screenshot shows the Order Manager GUI interface. The main content area is titled "Ftp Push Monitor - Suspended Configured Destination" with "Destination Name OTHER" and "Host Name test". Below this, there is a "Resume Destination" button and a "Destination Failed Request List" table. The table has columns for Request Id, ECS Granule Id, DPL Granule Id, Last Update, Size (MB), and Explanation. Below the failed requests list is a "FtpPush Requests List For this Destination" section, which includes a "Listing" table with columns for Ord Type, OrderID, Request Size(MB), Gran Cnt Complete, Priority, Request Status, Resource Class, ESDT, UserID, Resub Cnt, Created, Last Update, and Actions.

Request Id	ECS Granule Id	DPL Granule Id	Last Update	Size (MB)	Explanation
0400023079	153341	227538	Jun 23 2008 1:57PM	0.0954	Request Canceled
0400023080	153341	227538	Jun 23 2008 6:01PM	0.0954	Request Canceled
0400023081	153341	227538	Jun 23 2008 3:59PM	0.0954	Request Canceled
0400023082	153341	227538	Jun 23 2008 8:03PM	0.0954	Request Canceled
0400023083	153341	227538	Jun 23 2008 10:05PM	0.0954	Request Canceled
0400023079	88467	223812	Jun 23 2008 1:57PM	19.3672	Invalid Host Address
0400023080	88467	223812	Jun 23 2008 6:01PM	19.3672	Invalid Host Address
0400023081	88467	223812	Jun 23 2008 3:59PM	19.3672	Invalid Host Address
0400023082	88467	223812	Jun 23 2008 8:03PM	19.3672	Invalid Host Address
0400023083	88467	223812	Jun 23 2008 10:05PM	19.3672	Invalid Host Address

Ord Type	OrderID	Request Size(MB)	Gran Cnt Complete	Priority	Request Status	Resource Class	ESDT	UserID	Resub Cnt	Created	Last Update	Actions
Regular	0400022967 0400023083	19	2 0	NORMAL	Operator Intervention	C	MULTIPLE	EcsGuestTest2	0	Jun 23 2008 12:15PM	Jun 23 2008 10:05PM	Cancel
Regular	0400022966 0400023082	19	2 0	NORMAL	Operator Intervention	C	MULTIPLE	EcsGuestTest2	0	Jun 23 2008 12:15PM	Jun 23 2008 8:03PM	Cancel
Regular	0400022965 0400023081	19	2 0	NORMAL	Operator Intervention	C	MULTIPLE	EcsGuestTest2	0	Jun 23 2008 12:15PM	Jun 23 2008 3:59PM	Cancel

Figure 4.7.7-30. FTP Push Distribution Destinations Detail Page

sessionid=omsadmin Tue Jun 24 15:25:43 2008

SCP Monitor - Suspended Configured Destination
Destination Name **tomroegscp** Host Name **origin**

Destination Failed Request List

Request Id	ECS Granule Id	DPL Granule Id	Last Update	Size (MB)	Explanation
0600113626	210008	186451	Apr 16 2008 1:01PM	0.0678	scp Copy Server is down
0600113627	210012	186456	Apr 16 2008 1:11PM	0.8708	scp Copy Server is down
0600113628	210121	186601	Apr 16 2008 1:16PM	1.1503	scp Copy Server is down
0600113629	210008	186451	Apr 16 2008 12:56PM	0.0678	scp Copy Server is down
0600113629	210012	186456	Apr 16 2008 12:30PM	0.8708	scp Copy Server is down
0600113629	210121	186601	Apr 16 2008 12:40PM	1.1503	scp Copy Server is down
0600113633	210012	186456	Apr 16 2008 1:06PM	0.8708	scp Copy Server is down

SCP Requests List For this Destination

Listing

Go directly to row of 7 rows Show rows at a time.

[first](#) | [previous](#) | Showing 1 - 7 of 7 | [next](#) | [last](#)

Ord Typ	OrderID	Request Size(MB)	Gran Cnt	Complete	Priority	Request Status	Resource Class	ESDT	UserID	Resub Cnt	Created	Last Update	Actions
Regular	0600113310 0600113633	1	1	0	VHIGH	Operator Intervention	C	MOD29P1N.005	labuser	2	Feb 8 2008 3:00PM	Apr 16 2008 1:06PM	Cancel
Regular	0600113306 0600113629	2	3	0	VHIGH	Operator Intervention	C	MULTIPLE	labuser	2	Feb 8 2008 11:43AM	Apr 16 2008 12:56PM	Cancel
Regular	0600113305 0600113628	1	1	0	VHIGH	Operator Intervention	C	MYD11A2.005	labuser	2	Feb 7 2008 4:21PM	Apr 16 2008 1:16PM	Cancel
Regular	0600113304	1	1	1	VHIGH	Operator	C	MOD29P1N.005	labuser	0	Feb 7 2008	Apr 16 2008	Cancel

Figure 4.7.7-31. SCP Distribution Destinations Detail Page

4.7.7.4 OM Queue Status Page

Note: Since Limited Capability operators cannot change queue states, the status buttons will be stationary images.

The Queue Status Page is located under the “OM Status Pages” subsection of the navigation menu. The operator may click on this to expand the menu, revealing several links. Click on “OM Queue Status” to open the **OM Queue Status** page shown in Figure in 4.7.7-32.

This screen allows the operator to monitor the current settings of all media and electronic distribution queue states, the e-mail queue, staging, processing and the acceptance queue both for HEG and external subsetters. The operator is able to stop or resume the acceptance of external subsetter requests.

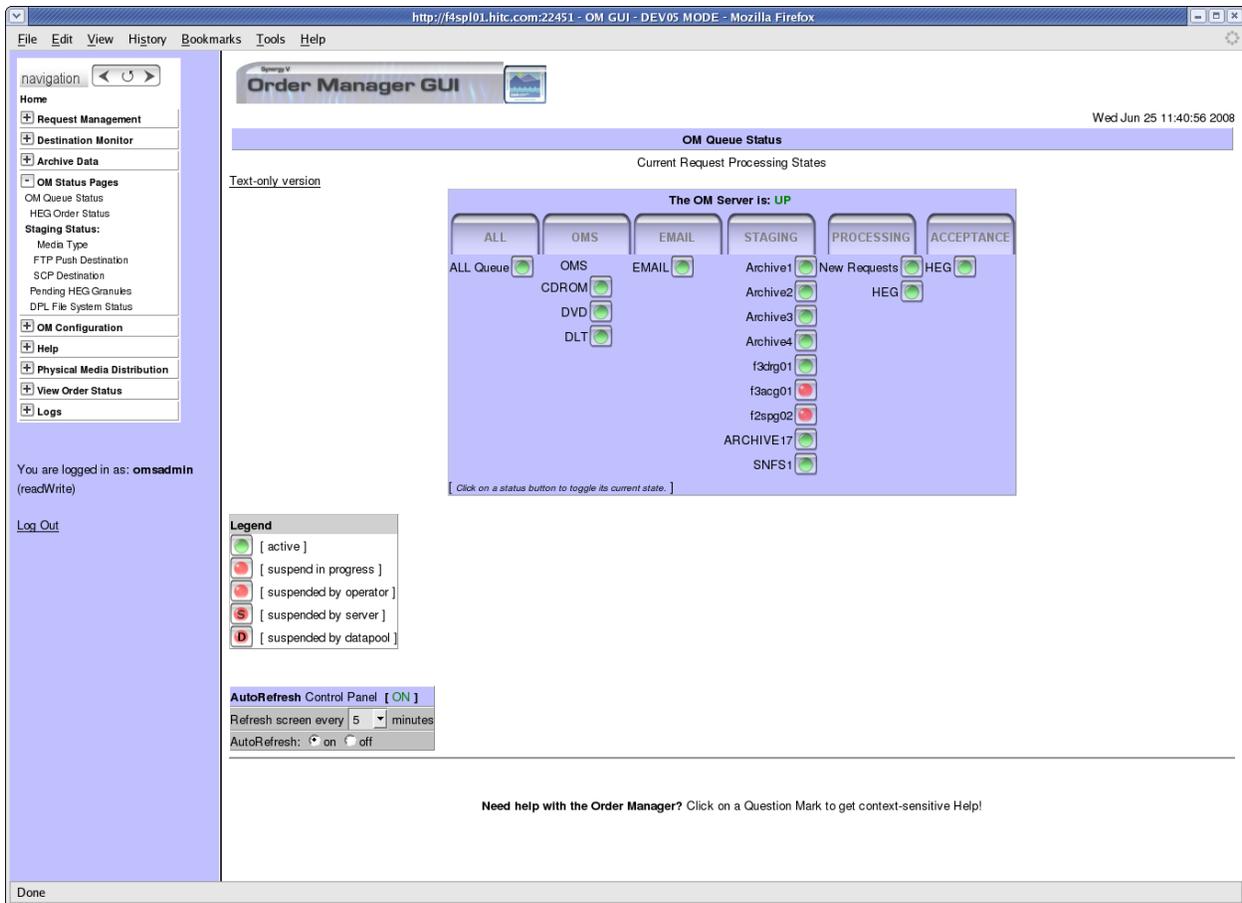


Figure 4.7.7-32. OM Queue Status Page

Table 4.7.7-15 provides a description of the OM GUI Queue Status fields.

Table 4.7.7-15. OM GUI Queue Status Field Descriptions

Field Name	Description
ALL	Suspend/Activate ALL Queues.
OMS	Suspend/Activate OMS physical media queues.
EMAIL	Suspend/Activate the EMAIL queue.
STAGING	Suspend/Activate the Staging Status for each Archive Server.
Processing	Controls processing queues: <ul style="list-style-type: none"> New Requests – Suspend/Activate processing of New Requests. HEG – Turns on and off the HEG Queue.
Acceptance	Turns on and off the acceptance of the processing requests Queue (both for HEG and external subsetters requests).

OMS Server Status

From this page the operator may also monitor whether the Order Manager Server is up or down. This page uses an external service called Sweeper to obtain this status. If Sweeper is not available or is returning an invalid status, the page may not indicate the OMS Server's true status.

Individual Queue Status Indicators

Each queue may be in any of three states (see the legend in Figure 4.7.7-33):

1. **Active** – The queue is up or was un-suspended by the operator or automatically by the OMS Server. Indicated by a green light.
2. **Suspend In Progress** – The queue is being suspended, but has not yet completed the necessary processing. Indicated by a yellow light.
3. **Suspended by Operator** – The operator manually suspended the queue from this page. Indicated by a red light.
4. **Suspended by Server** – the OMS Server suspended the queue automatically. Indicated by a red light marked with an “S”.
5. **Suspended by Datapool** – the Datapool has suspended the queue. Indicated by a red light marked with a “D”.



Figure 4.7.7-33. Queue State Legend

Changing a Queue State

To change the state of a master or individual queue, the operator would simply click on the indicator light to change its current state; this in effect works like a toggle switch. The operator is asked to confirm the change before it takes place as shown in Figure 4.7.7-34.

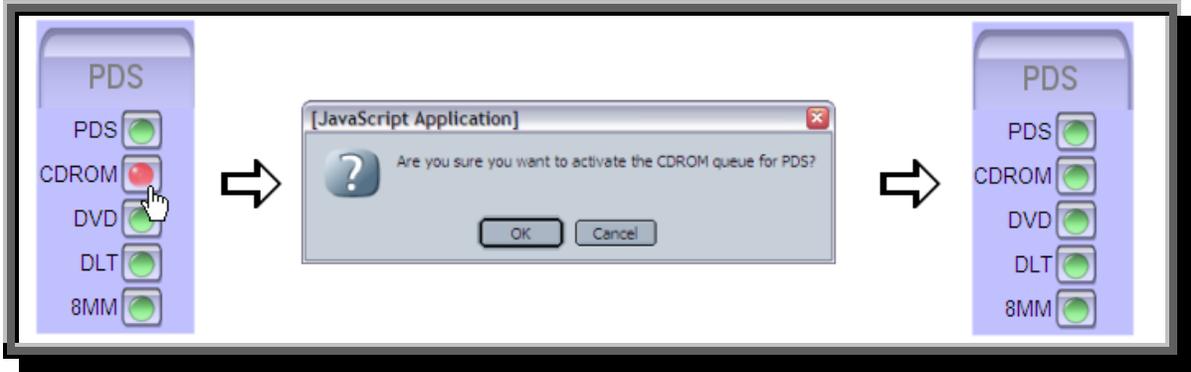


Figure 4.7.7-34. Queue State Transition

The ALL Queue

This queue suspends or activates processing for all queues across the board – that is, all queues handled by the OMS Server. The ALL queue may be active or suspended regardless of the states of the individual queues.

The EMAIL Queue

This queue controls the processing of emails that are sent by the OMS Server.

The Processing Queues

These queues control the Acceptance and Processing of all requests that come through the OMS. Suspending the New Requests queue stops the OMS from processing all new requests. Suspending the Accept HEG Req. queue stops the OMS from accepting new HEG requests. Suspending the HEG queue stops the OMS from processing existing HEG requests already in the OMS.

The Staging Queues

These queues allow the operator to Suspend/Activate the Staging Status for each Archive Server.

The OMS Queue

This queue controls the processing of physical media types handled by the OMS Physical Media Distribution system – whether validated distribution requests can be processed for sending to the OMS PMD system. Each media type handled by the OMS can be individually suspended or activated.

Automatic Page Refresh

The page is refreshed every 5 minutes by default. The operator can change the refresh rate by selecting a new rate from the drop-down list. The operator can also choose to stop automatically refreshing the page by setting AutoRefresh to *off*.

Limited Capability Operators

Limited Capability operators will see the same status indicators as Full Capability operators, except that the ability to click on the indicator to change the status will be disabled.

Accommodations for Visually Impaired Operators

A “Text-only version” link on the page loads high contrast images with clear text indicators for each queue status. The operator may toggle back and forth between the two page versions without having to reload the page (see Figure 4.7.7-35).

The status indicators are switched to the following:

1. **“A” for Active** – The queue is up or was un-suspended by the operator or automatically by the OMS Server.
2. **“O” for Suspended by Operator** – The operator manually suspended the queue from this page.
3. **“S” for Suspended by Server** – the OMS Server suspended the queue automatically.
4. **“D” for Suspended by Datapool** – Datapool processing has suspended the queue.

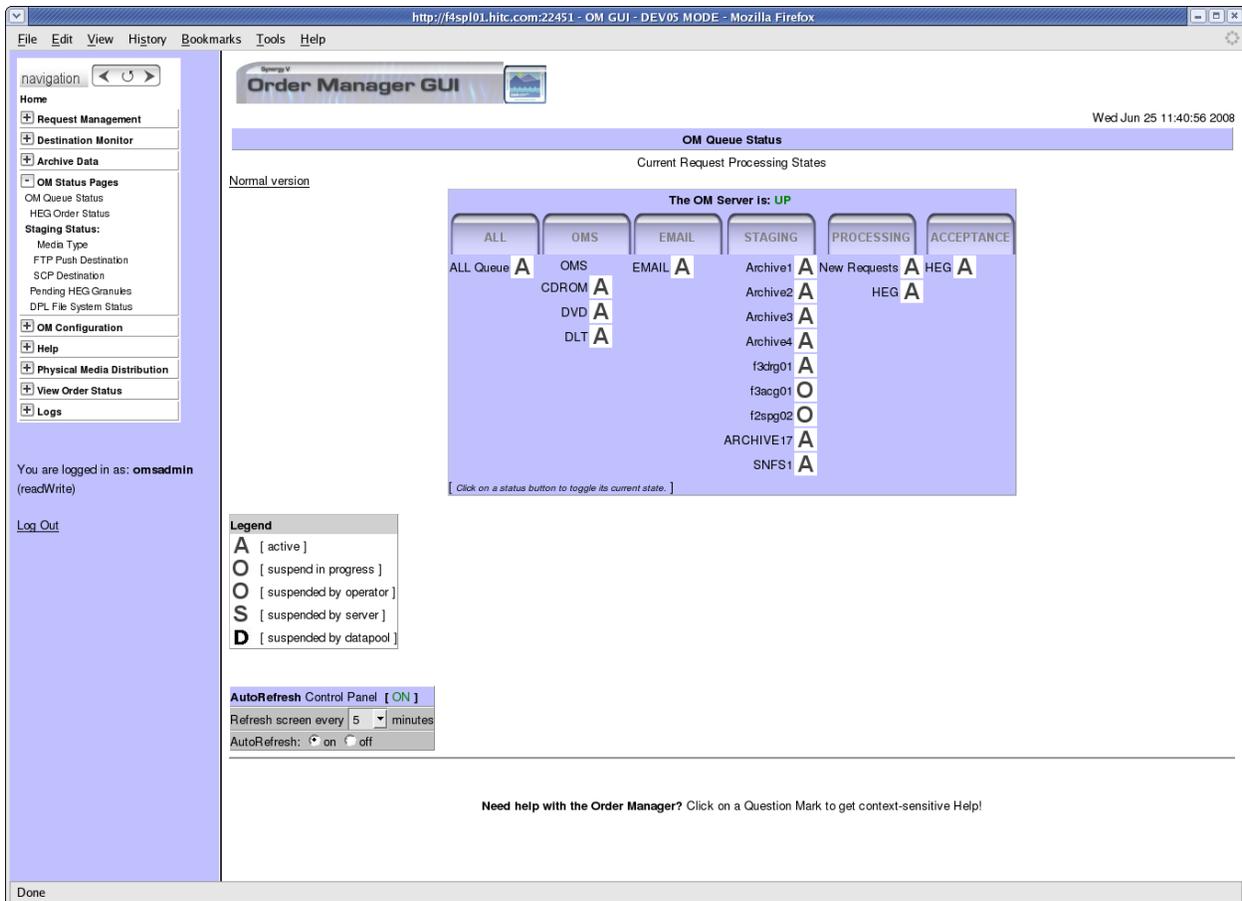


Figure 4.7.7-35. Text-only Version of Queue Status Page

4.7.7.4.1 Staging Status Pages

The Staging Status pages show a summary of the volume and number of granules that are currently in Staging. The Staging information is broken down into four categories:

- Granules waiting for Staging
- Granules in Staging
- Granules that have been Staged but not yet shipped
- Granules that have been staged and shipped

The Staging Status information is categorized by media type – one page for FtpPush, and another for all other media types (physical media and FtpPull).

Staging Status by Media Type

Click on “Media Type” under the **Staging Status Pages** subsection of **OM Status Pages**. This will show a detailed summary of number and volume of granules in their various Staging states, as shown in Figure 4.7.7-36. Next to each media type is also the target low and high Watermarks, see Table 4.7.7-16 for more details on Watermarks. These Watermarks are configurable by full-capability operators in the Media Configuration page.

The screenshot shows the Order Manager GUI interface. The main content area displays the "Staging Status by Media Type" page. A table titled "Granule Count and Volume" provides the following data:

Media Type	DHWM	DLWM	Waiting for Staging	In Staging	Staged & NOT Shipped	Staged, Shipped & in DPL
CDROM	150	1	1 0.000 MB	3 0.000 MB	120 805.774 MB	0 0 MB
DLT	143360	0.1	4 736.840 MB	0 0 MB	14 342.132 MB	0 0 MB
DVD	10	1	3 0.468 MB	0 0 MB	38 24.990 MB	0 0 MB
FlpPull	1000		1 0 MB	0 0 MB	6 33.748 MB	28 141.761 MB
SYSTEM TOTALS ?			436 22646.477 MB	13 88.034 MB	758 2148.858 MB	110 248.016 MB

Below the table is an "AutoRefresh Control Panel" with a toggle for "OFF", a refresh interval of 1 minute, and an "AutoRefresh" checkbox set to "on".

The footer of the page contains the URL: <http://f4spl01.hitc.com:22451/cgi-bin/EcOmGuiStagingStatus.pl?sessionId=omsadmin&pageType=M>

Figure 4.7.7-36. Staging Status by Media Type

Table 4.7.7-16. Watermark Descriptions

Watermark	Meaning	Description
DHWM	Data High Watermark	<p>The maximum volume of data in staging or already staged but not yet shipped. If the data volume and number of requests is above the DHWM, it is assumed the media devices have plenty of work to keep them busy.</p> <p>Generally, it is ideal to try to keep the amount of work that is in staging or staged just below the high watermark of each output queue. This achieves a good balance among FTP output connections (or in the case of physical media, their various output devices).</p> <p>The Data High watermarks can be exceeded in the interest of optimizing the use of the archive drives or to get high priority work through distribution quickly. For example, an idle archive would be dispatched even if this means the DHWM would be exceeded.</p>
DLWM	Data Low Watermark	<p>The minimum volume of data that should be in staging or already staged but not yet shipped. If the data volume is below the DLWM, the media devices may soon become idle.</p> <p>This is mainly used for dispatching high priority work. Since it is a good idea to try to keep the queues at their high water marks, the output queues generally might be fairly full. As a result, a high priority request might have to wait until some of data gets worked off and the queue falls below that high watermark. But high priority requests should go through at a fast pace.</p>

Staging Status by FTP Push Destination

Click on “Ftp Push Destination” under Staging Status Pages in the OM Status Pages menu. This page will display a list of the currently configured FTP Push destination names, along with the IP address and destination directory (see Figure 4.7.7-37). Each of these destinations has individual DHWM and DLWM settings, as well their own Staging Status numbers. This screen shows the number and volume (in MB) of granules that are:

- Waiting for Staging
- In Staging
- Staged & NOT Shipped
- Staged, Shipped & In DPL

sessionId=omsadmin Tue Jun 24 13:37:28 2008

Staging Status by FTP Push Destination

FTP Push destination: ▼

Granule Count and Volume						
Destination Name	DHWM	DLWM	Waiting for Staging	In Staging	Staged & NOT Shipped	Staged, Shipped & In DPL
OTHER	30	2	0 0 MB	0 0 MB	2 72.993 MB	0 0 MB
PushA	30	2	0 0 MB	0 0 MB	0 0 MB	0 0 MB
ftpPushArea	30	2	0 0 MB	0 0 MB	0 0 MB	0 0 MB
ftpPushArea	30	2	0 0 MB	0 0 MB	0 0 MB	0 0 MB
SYSTEM TOTALS ?			17631 123.063 MB	0 0 MB	128 7843.537 MB	0 0 MB

AutoRefresh Control Panel [OFF]
 Refresh screen every 1 minutes
 AutoRefresh: on off

Need help with the Order Manager? Click on a Question Mark to get context-sensitive Help!

http://f4oml01.hitc.com:22411/cgi-bin/EcOmGuiStagingStatus.pl?sessionId=omsadmin&pageType=F

Figure 4.7.7-37. Ftp Push Destination Listing For Staging Status

Staging Status by SCP Destination

Click on “SCP Destination” under Staging Status Pages in the OM Status Pages menu. This page will display a list of the currently configured SCP destination names. Each of these destinations has individual DHWM and DLWM settings, as well their own Staging Status numbers. This screen, as shown in Figure 4.7.7-38, shows the number and volume (in MB) of granules that are:

- Waiting for Staging
- In Staging
- Staged & NOT Shipped
- Staged, Shipped & In DPL

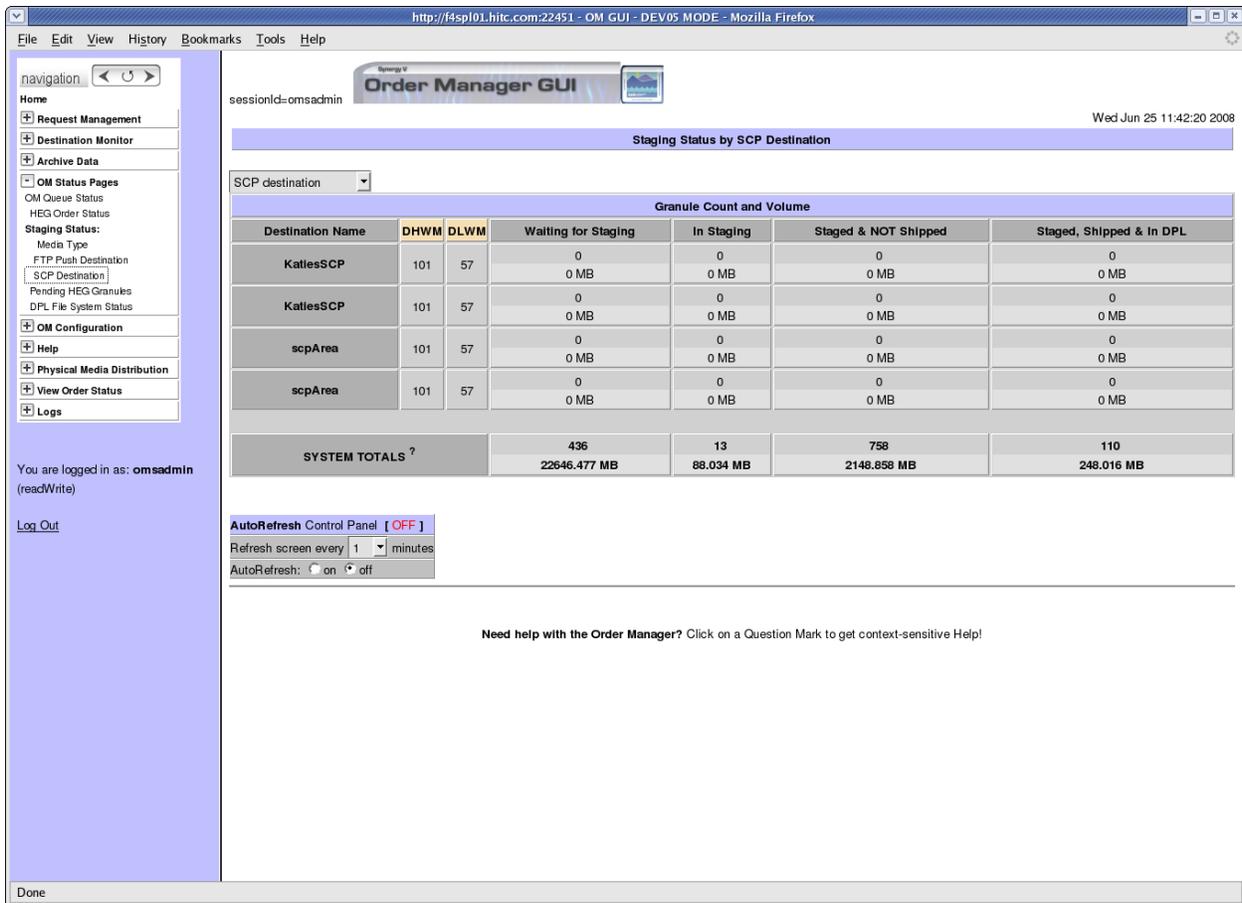


Figure 4.7.7-38. SCP Destination Listing For Staging Status

4.7.7.5 Pending HEG Granules Page

The **Pending HEG Granules** page lists the HEG granules that are currently pending with the HEG processing service in order of their submission time.

The operator may view the processing instructions for a granule by clicking the View ... link corresponding to the granule to be viewed.

The operator may cancel any of the HEG granules that are currently pending with the HEG processing service. To cancel a HEG granule, the operator clicks the Cancel button corresponding to the granule to be cancelled.

The operator may cancel multiple HEG granules that are currently pending with the HEG processing service. To cancel multiple HEG granules, the operator clicks the checkbox corresponding to each of the granules to be cancelled. Then, s/he clicks the Bulk Cancel button on the Options bar. All granules may be checked or unchecked at the same time by clicking the Select All or Select None checkboxes respectively.

Figure 4.7.7-39 shows the **Pending HEG Granules** page.

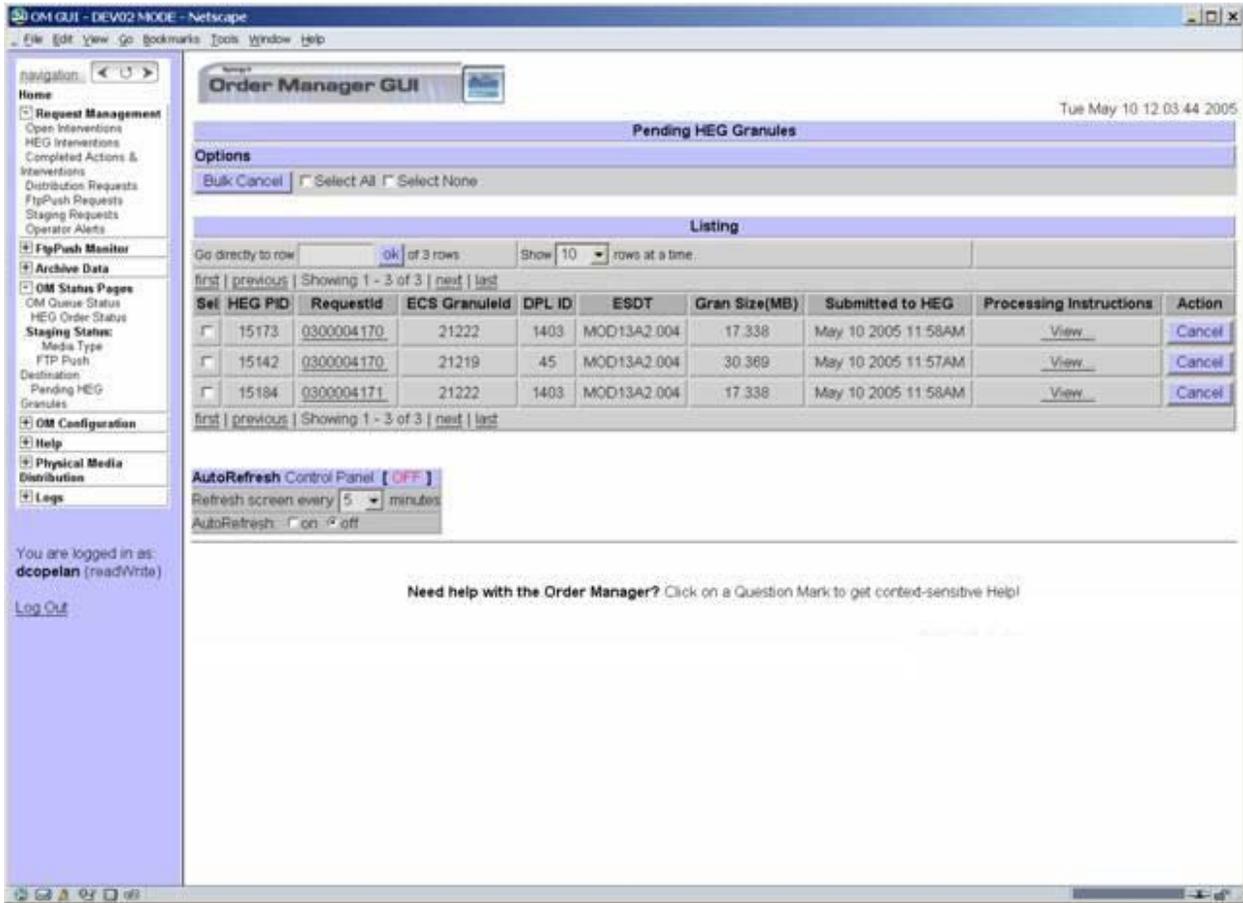


Figure 4.7.7-39. Pending HEG Granules Page

Table 4.7.7-17 describes the fields displayed on the **Pending HEG Granules** page.

Table 4.7.7-17. Pending HEG Granules Page Field Descriptions

Field Name	Data Type	Size	Description
Sel	Checkbox	n/a	Checkbox to select a granule for bulk cancel.
HEG PID	Integer	5	ProcessId of the HEG processor for this granule.
RequestId	Link/Integer	10	UID for a request. This is a link to the Request Detail page.
ECS GranuleId	Integer		The ECS Granule ID for the granule. This is not the full Granule ID as stored in the MSS or Order Manager Database, rather it is the 16-digit ID as stored in the Data Pool database.
DPL ID	Integer		The Data Pool Granule ID, if applicable. These cannot be changed.
ESDT	Character	12	Earth science data type.
Gran Size(MB)	Float	all	The input size in MB of the granule, before any processing.
Submitted to HEG	Date/Time	19	Date/time the granule was submitted to the HEG processor.
Processing Instructions	Link	n/a	Link to view the processing instructions details, if any.
Action	Button	n/a	Button which, when clicked, will cancel HEG processing for the granule.

4.7.7.6 OM Configuration Pages

Note: For all types of configuration pages, Limited Capability operators can only view configuration parameters. The ability to update parameters will be disabled.

Aging Parameters

To access this page, click “Aging Parameters” under the **OM Configuration** menu. This page displays parameters that affect how Distribution Requests are aged over time (see Figure 4.7.7-40). The aging parameters are configurable for each ECS Priority Level (XPRESS, VHIGH, HIGH, NORMAL, and LOW). Below is a description of each parameter.

Age Step: The aging rate by which the effective priority of a request increases for every hour it has been waiting. The range is 0-100, including decimal fractions. If this parameter is set to 0, waiting requests will never increase in priority.

For example, if the Age Step is set to 5.5 and a request with an initial priority of 100 waits 10 hours to be pushed, then the request will increase in priority by a factor of 5.5 every hour until it has been delivered:

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

Maximum Priority The maximum priority a request can attain through this aging process. For example, if Maximum Priority were set to 130, then in the example above, once the request had reached a priority of 130, it would not go any higher (i.e., at Hour 10 it would still be 130).

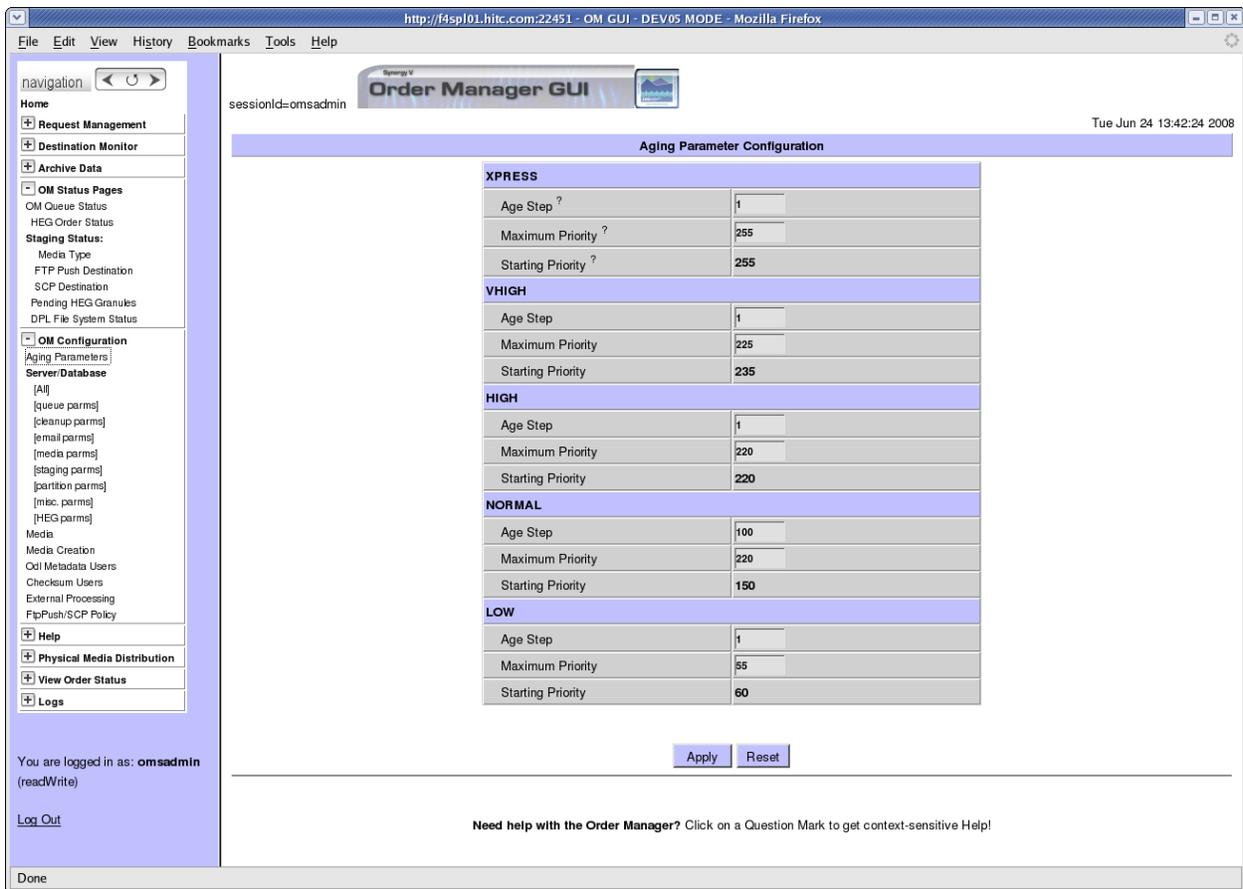


Figure 4.7.7-40. Aging Parameter Configuration

Server/Database Configuration

These are values that affect how the OM Server and Database run (see Figure 4.7.7-41 and Figure 4.7.7-42). The page displays the current value of the configuration parameters and provides a text input box to change them. To the far right is a description of each parameter.

These parameters are dynamically loaded into the page, meaning that the parameters displayed are those that the operator can modify. If a configuration parameter is added in the Database, it will also be displayed on the screen. See Table 4.7.7-18 for a description of these parameters.

Drop-Down Lists

Some parameters are not editable text fields, but drop-down lists containing the possible values for that field. This is to protect the OMS Server from acting in an undesirable way as a result of using an unexpected value. For example Global Staging Status is one such field – it *must* be “S” or “A” for the OMS Server to function properly.

Parameter	Description	Units	Value
Num Of Allowed Email Submissions	Max Number of concurrent submissions to PDS		50
Child Process Time Limit	Amount of time to wait to kill child process before retrying action	seconds	10
Delete Complete Interventions After	Time in hours Completed Interventions are maintained	hours	0
Delete Complete Actions After	Time in hours Completed Actions are maintained	hours	0
Max Request Granules	Maximum number of granules a request may contain		4
Max Subset Granules	Maximum number of granules a request may contain if it specifies subsetting		2
Delay Partition	Time delay in hours each successive partition is supposed to be dispatched	hours	1.0
Max Action Retries	Maximum number of times an action can be retried before the request is FAILED		4
Idle Sleep Time	Length of time between OM Server checks for config parameters	seconds	8
Action Retry Wait	Time in seconds the OmServer waits before attempting to re-dispatch an action	seconds	22
Num Of Allowed Validations	Number of threads the OmServer uses for performing request validations action	threads	10
Action Check Interval	Time in seconds the OmServer waits before checking on actions	seconds	2
Cleanup Check Interval	Time in seconds the OmServer waits before performing cleanup activities	seconds	30
Suspend Check Interval	Time in seconds the OmServer waits before performing checking suspended queues	seconds	5
Max Concurrent Requests Processed	Number of concurrent requests the Om Server will process at one time	integer	80
Notify User For Partition Requests	Whether or not user want to receive notification when partition happens yes or no	none	Y (Yes)
Global Staging Status	Synergy IV Staging Mode Status	none	A (Active)
Global Configured Email	Configured email account to send actions to when an alert or intervention is generated		cmsts2@f4e101.hitc.com
Cleanup Orphan Req Period	How often to cleanup orphaned requests	hours	0
Forward Dn Email	Configured email account for forwarded DN Email		cmsts2@f4e101.hitc.com

Figure 4.7.7-41. Server/Database Configuration —Part 1

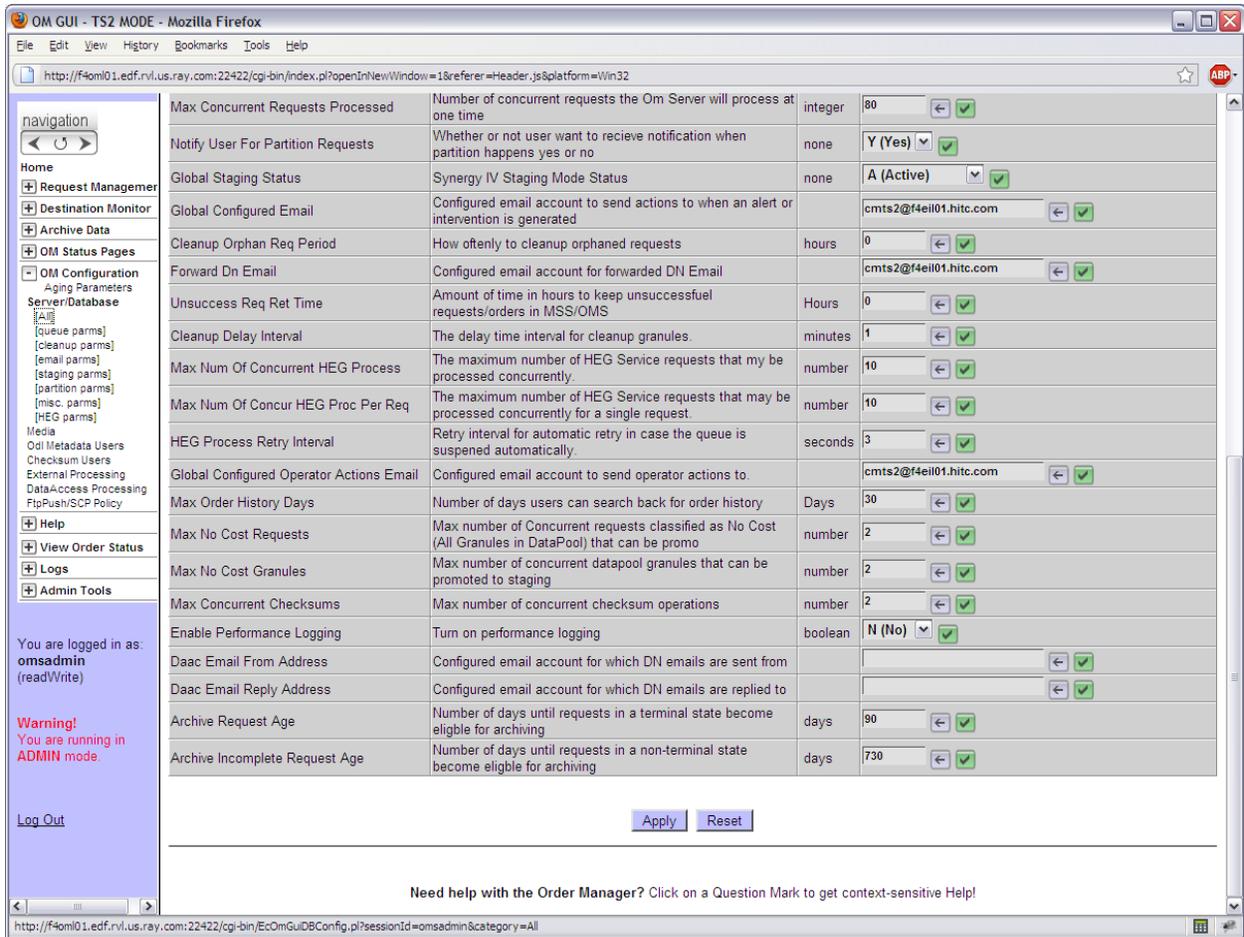


Figure 4.7.7-42. Server/Database Configuration – Part 2

Media Configuration

To access this page, click on “Media” under the **OM Configuration** menu. These configuration parameters are specific to each media type, and are dynamically loaded just as the Server/Database Configuration parameters. The page displays the current value of the parameter and provides a text box input to change it. Figure 4.7.7-43 shows an example of some of the Media Configuration Parameters. See Table 4.7.7-18 for a description of these parameters.

Media Configuration	
Parameter Name	Value
FtpPull <input checked="" type="checkbox"/> [rule]	
MediaCapacity (GB)	20.0000
PartitionGranuleLimit	3000
PartitionSizeLimit (GB)	54.0000
MinDaysBetweenChecksum	1
MinRequestSize (GB)	0.0000
MaxRequestSize (GB)	61.0000
MinBundleSize (GB)	55.0000
Request High Water Mark	10
Data High Water Mark (MB)	1000000
Pull Gran Dpl Time (days) [...]	1
Pull Gran Dpl Ret Pri (number) [...]	6
Min Pri To Preempt (number) [...]	5
FtpPush <input checked="" type="checkbox"/> [rule]	
MediaCapacity (GB)	5.0000
PartitionGranuleLimit	40
PartitionSizeLimit (GB)	40.0000
MinDaysBetweenChecksum	0
MinRequestSize (GB)	0.0000
MaxRequestSize (GB)	45.0000
MinBundleSize (GB)	40.0000
CDROM <input checked="" type="checkbox"/> [rule]	
MediaCapacity (GB)	0.5000
PartitionGranuleLimit	1000
PartitionSizeLimit (GB)	21.0000
MinDaysBetweenChecksum	30
MinRequestSize (GB)	0.0000
MaxRequestSize (GB)	40.0000
MinBundleSize (GB)	1.0000

Figure 4.7.7-43. Media Configuration Page

Table 4.7.7-18. OM GUI Configuration Parameters Descriptions (1 of 2)

Field Name	Data Type	Description
Num Of Allowed Email Submissions		Max Number of concurrent submissions to Email.
Child Process Time Limit	seconds	Amount of time to wait to kill child process before retrying action.
Delete Complete Interventions After	hours	Time in hours Completed Interventions are maintained.
Delete Complete Actions After	hours	Time in hours Completed Actions are maintained.
Max Request Granules		Maximum number of granules a request may contain.
Max Subset Granules		Maximum number of granules a request may contain if it specifies subsetting.
Delay Partition	hours	Time delay in hours each successive partition is supposed to be dispatched.
Max Action Retries		Maximum number of times an action can be retried before the request is FAILED.
Idle Sleep Time	seconds	Length of time between OM Server checks for config parameters.
Action Retry Wait	seconds	Time in seconds the OmServer waits before attempting to re-dispatch an action.
Num Of Allowed Validations	threads	Number of threads the OMServer uses for performing request validations action.
Action Check Interval	seconds	Time in seconds the OmServer waits before checking on actions.
Cleanup Check Interval	seconds	Time in seconds the OmServer waits before performing cleanup activities.
Suspend Check Interval	seconds	Time in seconds the OmServer waits before performing checking suspended queues.
Max Concurrent Requests Processed		Number of concurrent requests the OmServer will process at one time.
Notify User For Partition Requests		Whether or not user want to receive notification when partition happens yes or no.
Global Staging Status		Staging Mode Status.
MinDaysBetweenChecksum		Checksum files that haven't been checksummed for this many days.
Max Failure Archive		Allowable number of failures prior to suspending Archive.
Global Configured Email		Configured email account to send actions to when an alert or intervention is generated.
Max Orphan Req Age	hours	How long to keep an orphaned request in system before it is qualified for removal.
Cleanup Orphan Req Period	hours	How often to cleanup orphaned requests.
Forward Dn Email		Configured email account for forwarded DN Email.

Table 4.7.7-18. OM GUI Configuration Parameters Descriptions (2 of 2)

Field Name	Data Type	Description
Unsuccess Req Ret Time	hours	Amount of time in hours to keep unsuccessful requests/orders in OMS.
Cleanup Delay Interval	minutes	The delay time interval for cleanup granules.
Max Num Of Concurrent HEG Process		The maximum number of HEG Service requests that may be processed concurrently.
Max Num Of Concur HEG Proc Per Req		The maximum number of HEG Service requests that may be processed concurrently for a single request.
HEG Process Retry Interval	seconds	Retry interval for automatic retry in case the queue is suspended automatically.
Due Date For Media Request	hours	Number of hours from the time the request finished staging that request is due for distribution.
Global Configured Operator Actions Email		Configured email account to send operator actions to.
MediaCapacity (GB)	Float	Size in GB that will fit on 1 volume.
MinRequestSize (GB)	Float	Size in GB for the smallest order to be processed.
MaxRequestSize (GB)	Float	Size in GB for the largest order to be processed.
PartitionSizeLimit (GB)	Float	Size in GB for orders to be partitioned.
MinBundleSize (GB)	Float	Size in GB for smallest bundle.
PartitionGranuleLimit	Int	Number of granules per partition.
Request High Water Mark	Int	The maximum number of requests in staging or already staged but not yet shipped.
Data High Water Mark (MB)	Int	The maximum volume of data in staging or already staged but not yet shipped.
Pull Gran Dpl Time (days)	Int	For FtpPull only. Number of days to keep granule in Data Pool.
Pull Gran Dpl Ret Pri (number)	Int	For FtpPull only. Retention Priority.
Min Pri To Preempt (number)	Int	For FtpPull only. Minimum priority to preempt.

ODL Metadata Users Configuration

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

This page can be accessed by clicking “Metadata File Users” under the **OM Configuration** menu as displayed in Figure 4.7.7-44. This page allows the full-capability operators to configure a list of Email addresses that signifies users that need to receive metadata in ODL .met file format: Whenever the Email address for a Distribution Notice contains one of these addresses, the metadata will be distributed in ODL .met file format. Note that if the list is changed, currently active requests’ metadata format will not change. For example, if a user’s email address is deleted from the list, active requests issued for that user subsequent to the deletion will still distribute the metadata files in ODL format.

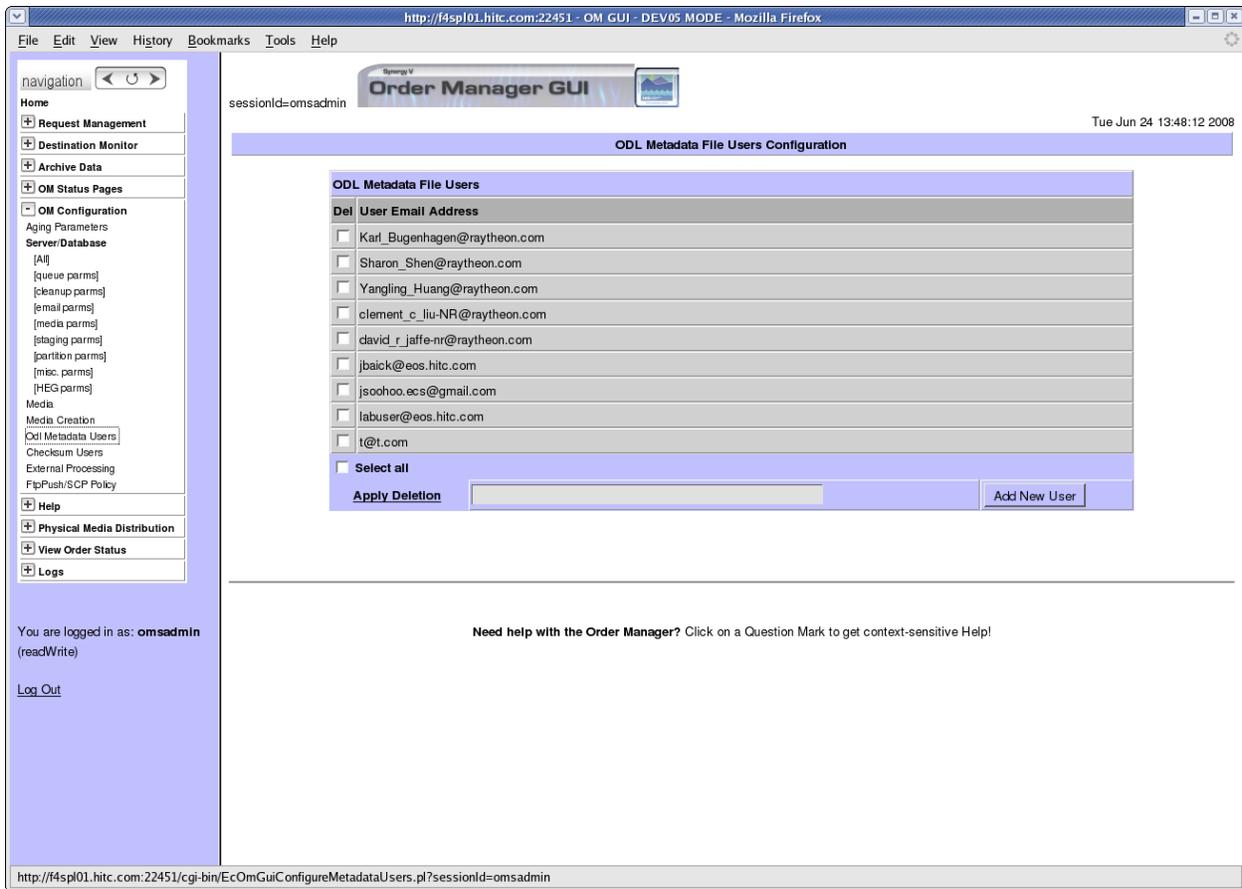


Figure 4.7.7-44. ODL Metadata File Users Configuration Page

Adding a User Email Address

Enter the email address of the user and Click on the “Add New User” button to submit changes to the database. A popup window will ask you to confirm the addition, click on “OK’ button to do so as displayed in Figure 4.7.7-45.

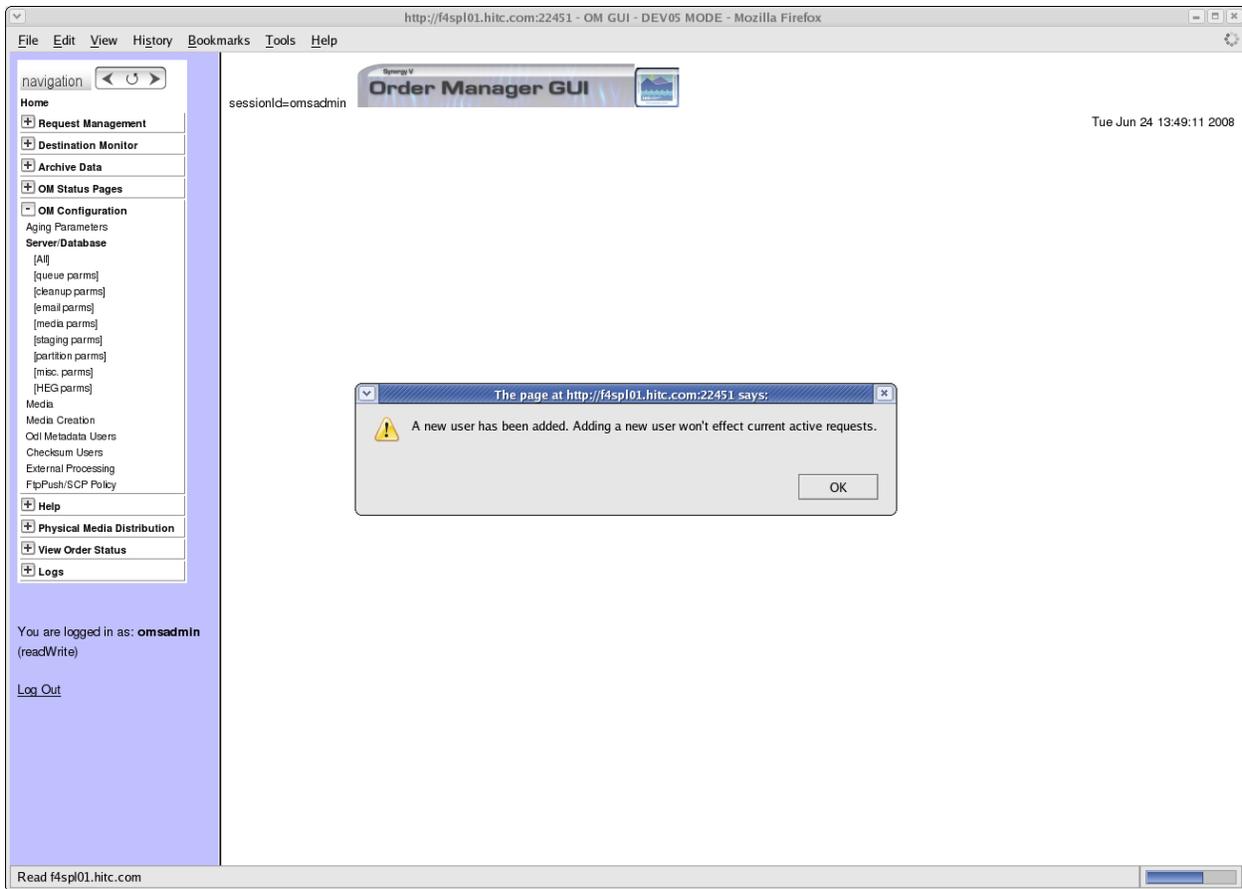


Figure 4.7.7-45. Adding a Metadata User

Deleting User Email Address(es)

Click “Select All” to check User email addresses. In addition, specific users can be selected by clicking their checkboxes individually. Then, click the “Apply Deletion” button to submit changes to the database. A popup window will ask you to confirm the deletion, click on “OK” button to do so. Otherwise, click “Cancel” button. This is shown in Figure 4.7.7-46.

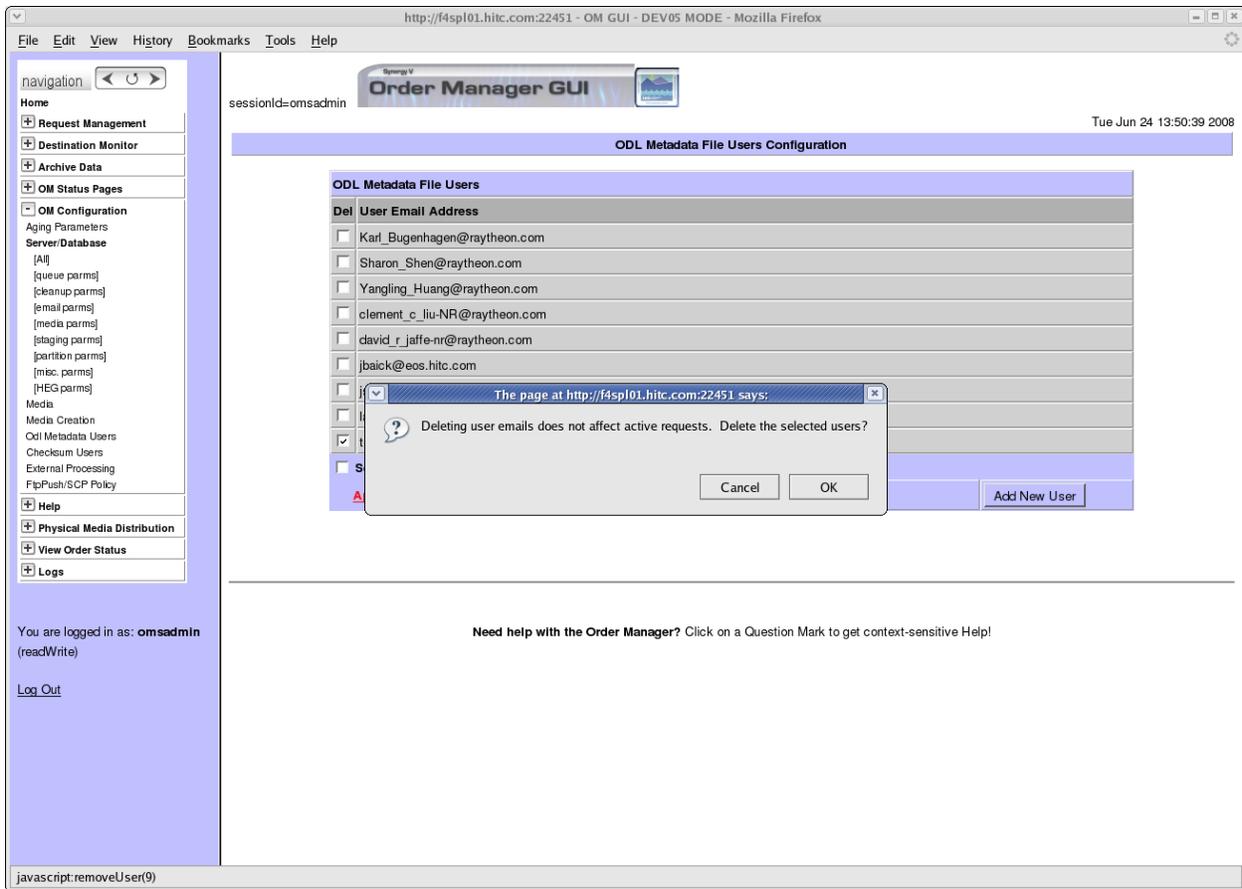


Figure 4.7.7-46. Deleting a Metadata User

External Subsetting Configuration

Note: Limited Capability operators are limited to viewing External Subsetting configuration only. They cannot edit, add, or delete destinations.

This page can be accessed by clicking “External Subsetting” under the **OM Configuration** menu. This page allows the full-capability operators to define and configure the parameters of an external subsetter.

Special configuration parameters that control external subsetting requests are displayed in the **External Subsetting Configuration** page (see Figure 4.7.7-47). Table 4.7.7-19 explains these options in detail.

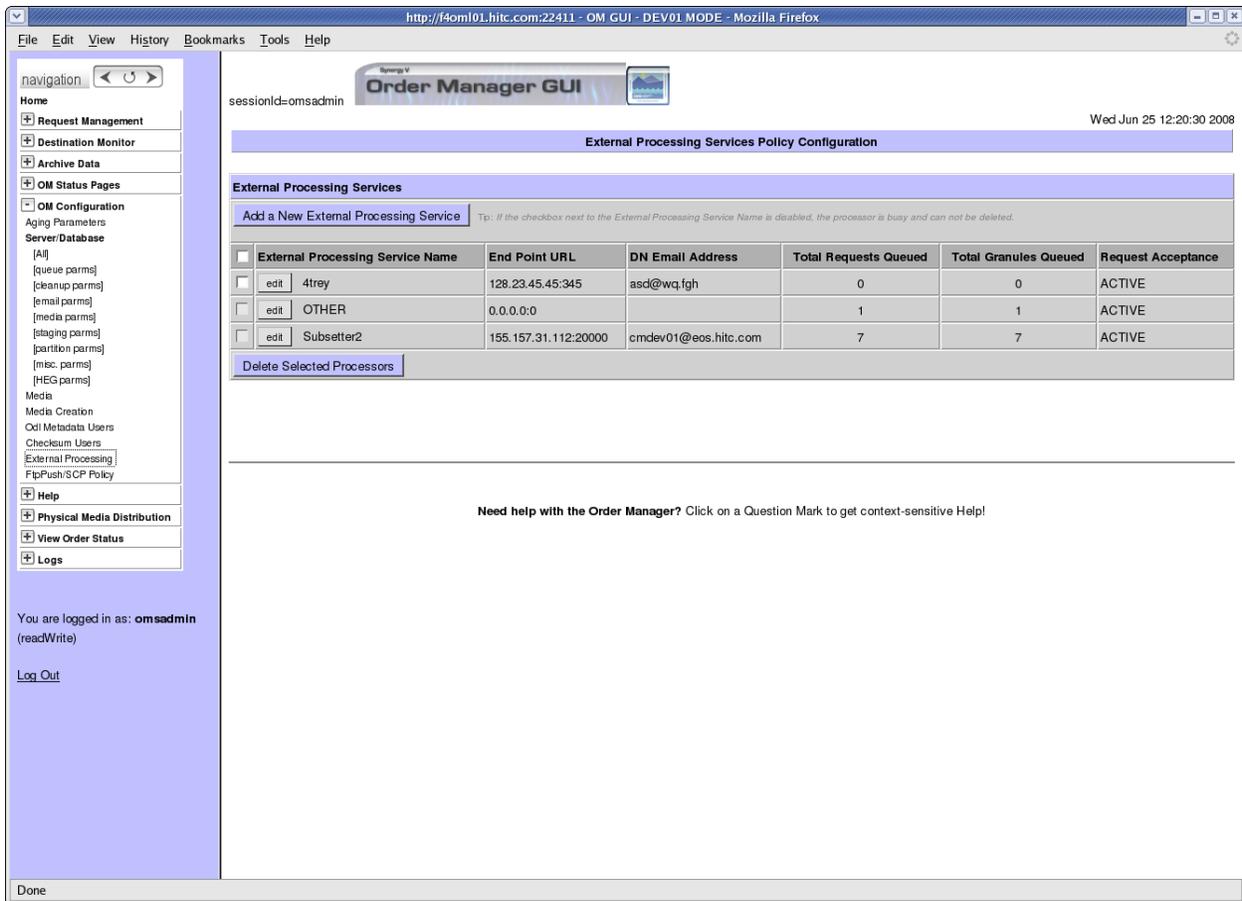


Figure 4.7.7-47. External Subsetting Configuration Page

Figure 4.7.7-47 allows an authorized operator to do the following actions:

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

Add External Subsetting Configuration

The screenshot displays the 'Add External Processing Configuration' page in the Order Manager GUI. The browser address bar shows 'http://f4spl01.hitc.com:22451 - OM GUI - DEV05 MODE - Mozilla Firefox'. The session ID is 'omsadmin' and the date is 'Tue Jun 24 13:52:30 2008'. The main content area features a table with the following parameters:

Parameter	Description	Units	Value
Processor Name	An identification for the processing service		<input type="text"/>
End Point URL	URL for external processor		<input type="text"/>
FTP Pull Expiration	Ftp Pull Expiration Time	Hours	<input type="text"/>
DN Email Address	Email address used to send distribution notice		<input type="text"/>
Additional Preamble Text	Text to include as part of DN preamble		<input type="text"/>

Below the table are buttons for 'Save', 'Done', and 'Reset'. A message at the bottom of the main area reads: 'Need help with the Order Manager? Click on a Question Mark to get context-sensitive Help!'. The left navigation menu includes options like 'Request Management', 'Destination Monitor', 'Archive Data', 'OM Status Pages', 'OM Configuration', 'Server/Database', 'Physical Media Distribution', 'View Order Status', and 'Logs'. The status bar at the bottom indicates 'You are logged in as: omsadmin (readWrite)' and a 'Log Out' link.

Figure 4.7.7-48. Add External Subsetting Configuration

Figure 4.7.7-48 allows an authorized operator to add a new external processing service using the parameters in Table 4.7.7-19.

Table 4.7.7-19. External Subsetting Configuration Parameters Descriptions

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

View/ Edit External Subsetting Configuration

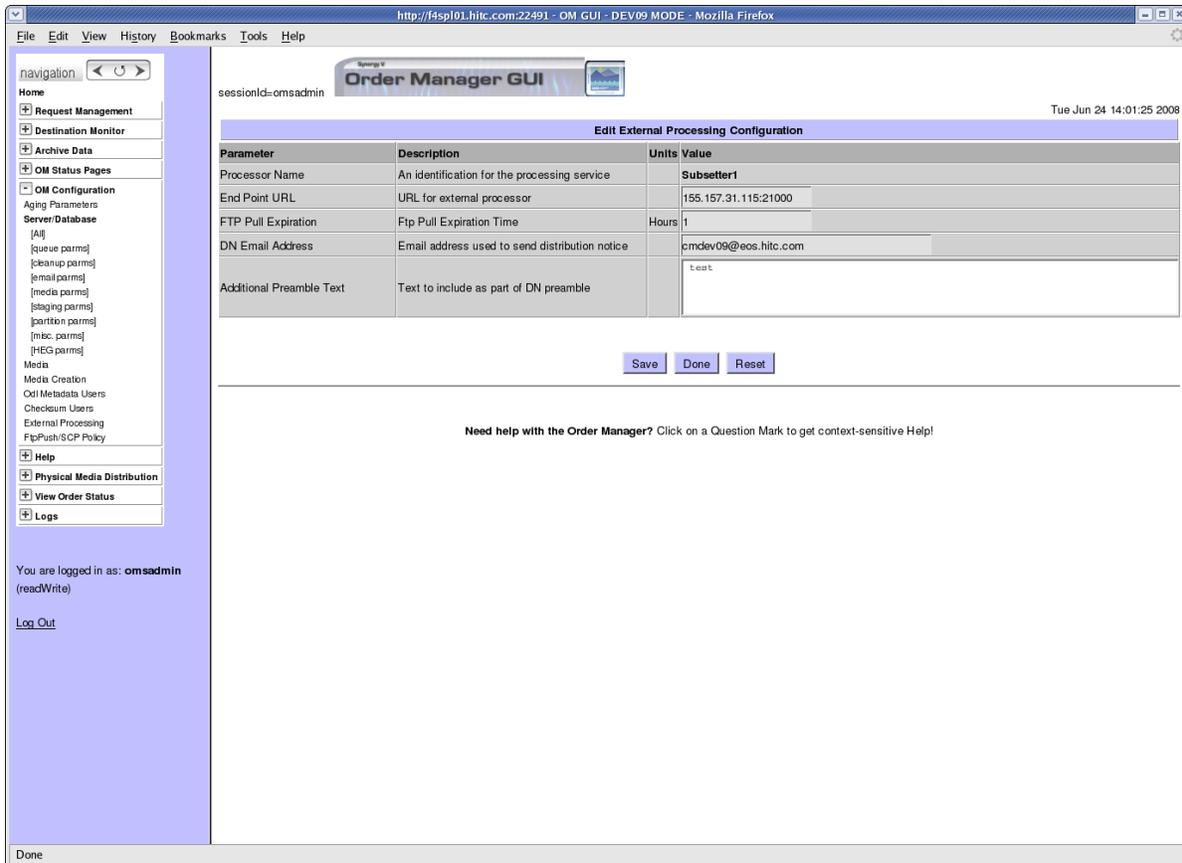


Figure 4.7.7-49. View/ Edit External Subsetting Configuration

Figure 4.7.7-49 allows the authorized operator either view or edit the existing external processing service configuration. Processor Name does not allow to be edited.

4.7.7.6.1 Data Access Processing

Configuration parameters on the **Data Access Services Configuration** page are grouped by service (Figure 4.7.7-51).

To add a new service:

- ▶ Enter in the service name into the Service box. Examples include HEG, GDAL, etc.
- ▶ Enter the endpoint URL of the service that is being added into the box under the column labeled Endpoint.
- ▶ To set the maximum jobs allowed, enter in a value to the box under the column labeled Max Jobs.
- ▶ To set the timeout for communications between the configured service and OMS enter in a value (seconds) under the column labeled Timeout.
- ▶ To set the number of times to retry requests sent to the service, enter in a value under the column labeled Retry Interval.
- ▶ To finish, select the Add button on the far right side of the row.

In order to edit the values for service that is already configured, first delete the service then add a new service using the steps above using the desired configuration values.

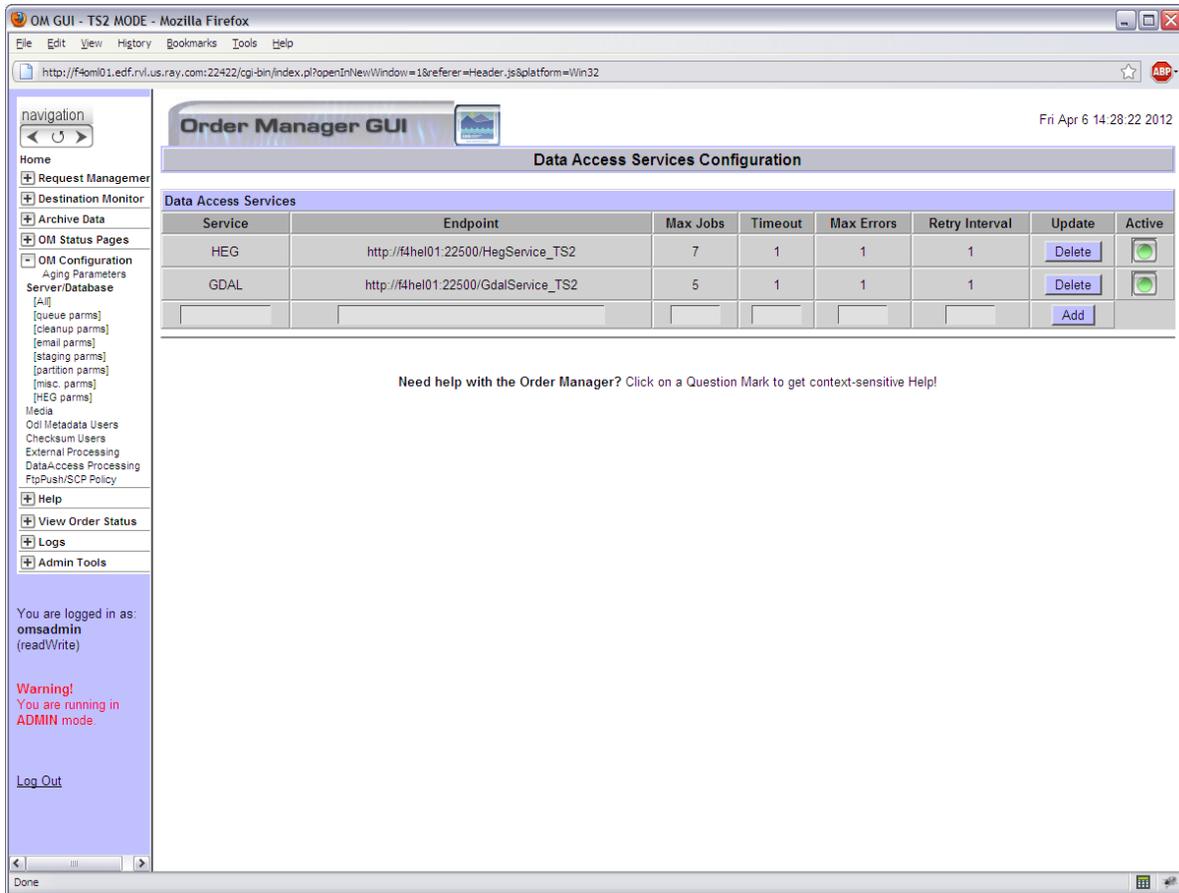


Figure 4.7.7-50. Data Access Processing Configuration

4.7.7.6.2 FTP Push / SCP Policy Configuration

Note: Limited Capability operators are limited to viewing FTP Push / SCP Policy configuration only. They cannot edit, add, or delete destinations.

This page can be accessed by clicking “FTP Push / SCP Policy” under the **OM Configuration** menu. This page allows the full-capability operators to define and configure the fine-tuning parameters of an FTP Push / SCP destination.

Frequently Used vs. Non-configured Destinations

All FTP Push destinations belong to either the Frequently Used group, or the general non-configured group and all SCP destinations belong to the Frequently used group. All FTP Push destinations not specifically defined as a Frequently Used destination are configured on the front page (see Figure 4.7.7-51) under “Settings for Non-Configured Destinations”. These settings also serve as default values for new destinations.

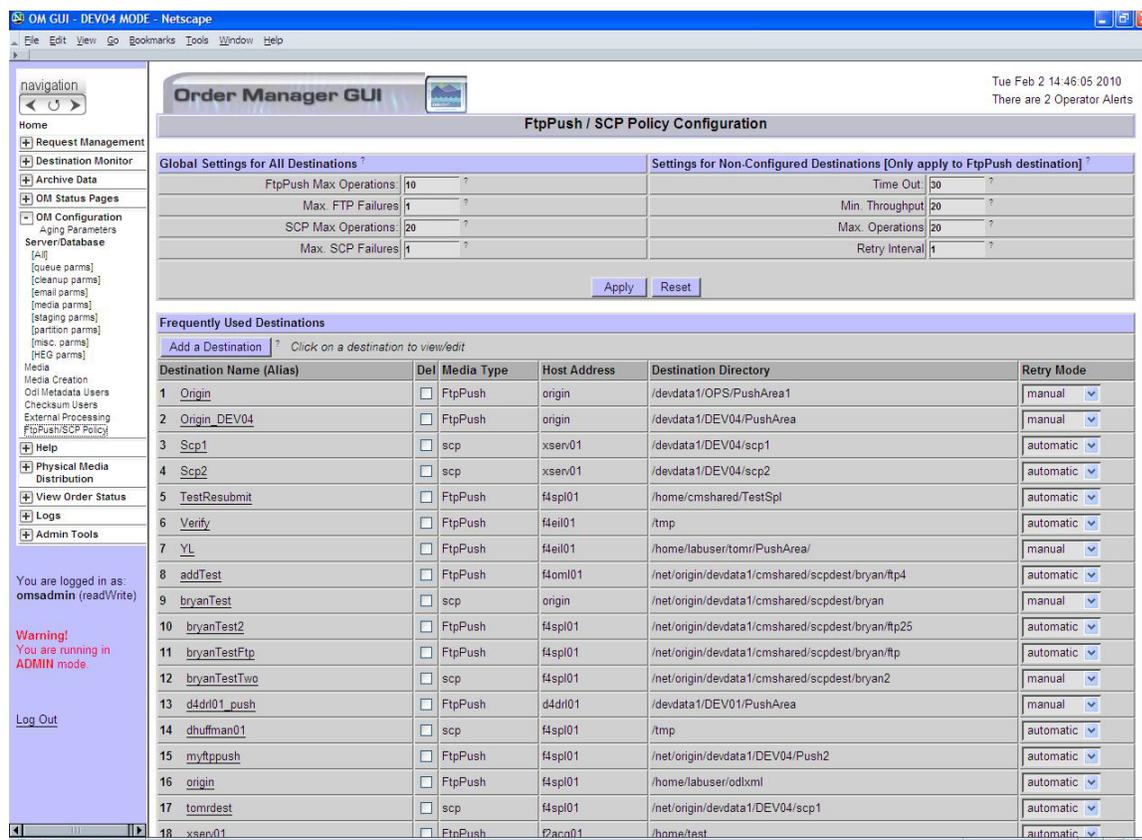


Figure 4.7.7-51. FtpPush/SCP Policy Configuration (Main Page)

Global Settings for All Ftp Push / SCP Destinations

These are two parameters that apply to all destinations regardless of their individual settings: Max Operations and Max Failures for FtpPush and SCP, respectively. Non-configured destination settings only apply to FtpPush destinations.

Adding a Destination

Click on the “Add a Destination” button under the Frequently Used Destinations section of the main page. This will open up a page, shown in Figure 4.7.7-52, which will allow the operator to define and configure a destination for either FtpPush or SCP. A destination must already exist (i.e., it must be a destination that is currently in use by one or more Orders).

The definition of a destination is:

- a) Name (Alias): A descriptive name or handle by which the destination can be easily identified. Aliases must be unique.
- b) Target Directory: The directory on the remote host to which files will be pushed.

- c) Host/IP Address: The remote machine name or IP address.
- d) Media Type: FtpPush or SCP

The combination of these attributes constitutes a Frequently Used Destination. All destinations *must* have exclusive attributes and an exclusive Alias.

The configuration parameters for the destination are already preloaded with default values from the non-configured destinations (only apply to FtpPush). The configuration parameters are described in Table 4.7.7-21.

The screenshot shows the 'Add New Destination' configuration window in the Order Manager GUI. The window title is 'Add New Destination' and the date/time is 'Fri Mar 20 13:51:21 2009'. The session ID is 'omsadmin'. The configuration is divided into two main sections: 'Destination Details' and 'Settings for this Destination (Default values loaded)'. The 'Destination Details' section includes fields for 'Name (Alias)', 'Target Directory', 'Host/IP Address', and 'Media Type' (set to 'FtpPush'). The 'Settings for this Destination' section includes 'Max. Operations' (20), 'Time Out' (300), 'Disable Checksum' (No), 'Min. Throughput' (1), 'Retry Interval' (10), and 'Retry Mode' (Automatic). A 'Notes' field is also present with a character count of 0 of 255. At the bottom of the window are 'Save', 'Reset', and 'Done' buttons.

Figure 4.7.7-52. FtpPush/SCP Policy Configuration: Add New Destination

Configuring a Destination

To configure a defined Frequently Used Destination, click on the Destination Name on the main FtpPush/SCP Policy Configuration Page. This will display the details of the configuration for that destination, as shown in Figure 4.7.7-53. From there, you can modify the destination attributes (Target Directory, Host/IP Address) and the configuration parameters for that destination. The (Name (Alias) field cannot be modified. Once you are finished, click “Save” at the bottom of the screen. Click “Done” to move back to the main FtpPush/SCP Policy Configuration page. **Note:** The “Done” button will *not* save any changes made to the destination – always click “Save”.

sessionId=omsadmin **Order Manager GUI**  Fri Mar 20 13:26:36 2009

FTPPush / SCP Destination Details

Destination Details

Name (Alias):	PushArea ?
Target Directory:	/home/labuser ?
Host/IP Address:	xsen01 ?
Media Type	FtpPush

Settings for this Destination

Max. Operations:	2 ?	Time Out:	300 ?
Disable Checksum:	No ▾	Min. Throughput	1 ?
Retry Interval:	10 ?	Retry Mode	Automatic ▾

Notes
1 of 255 Max. characters

Figure 4.7.7-53. FtpPush Policy Configuration: FtpPush Destination Detail

Removing a Destination

To remove a destination from the Frequently Used Destination group, go to the main FtpPush/SCP Policy Configuration page and select the destination you wish to delete by checking the box next to the destination name in the Del column. Once you have selected the destinations you wish to remove, click on “Delete Selected Destinations” at the bottom of the screen. You will be prompted for confirmation.

Removing a destination does not actually delete the destination. Rather, it moves that destination to the non-configured group and erases its individual configuration parameters.

Table 4.7.7-20. FtpPush/SCP Policy Configuration Parameters (1 of 2)

Parameter	Scope	Data Type	Description
Max Operations	Global	Int	The maximum number of concurrent FTP Push Operations for <i>all</i> destinations added together.
Max. FTP Failures	Global	Int	The maximum number of consecutive FTP transfer failures for any destination, which, when exceeded, causes the suspension of that destination.
Max. SCP Operations	Global	Int	The maximum number of concurrent SCP Operations for all destinations added together.

Table 4.7.7-20. FtpPush/SCP Policy Configuration Parameters (2 of 2)

Parameter	Scope	Data Type	Description
Max. SCP Failures	Global	Int	The maximum number of consecutive SCP transfer failures for any destination, which, when exceeded, causes the suspension of that destination.
Disable Checksum	Destination	Yes/No	Allows user to disable checksumming of file distributed to this destination.
Time Out	Destination	Int	An extra time allotment that is applied to the expected throughput, such that: expected throughput = min. throughput + timeout.
Min. Throughput	Destination	Float	The minimum data throughput in MB/sec for a particular destination.
Max. Operations	Destination	Int	The maximum number of concurrent FTP Push Operations for a particular destination (exclusive of but subject to the global Max Operations).
Retry Interval	Destination	Int	The waiting period, in minutes, before FTP Push operations for a suspended destination are automatically retried.
Retry Mode	Destination	n/a	Specifies whether this destination should retry automatically or manually. For Non-Configured Destinations, this is always Automatic.

4.7.7.8 Help Page

The operator can view the help information on a particular page by clicking on the **Need help with the Order Manager?** link at the bottom of the page which will display a small pop-up window for help on that page. The operator may also click on the **Help** tab at the top of the page. The help information is indexed and also contains links to help on related topics. The index to available topics includes:

- About The Order Manager GUI
- Recently Added Features
- Request Management
 - Open Interventions
 - Viewing Intervention Details
 - Working an Intervention
 - Operator Alerts
 - Completed Interventions
 - Distribution Requests

- FtpPush Monitor
 - FtpPush Distributions Requests
 - FtpPush Operations
 - FtpPush Destinations
 - Staging Requests
- OM Status Pages
 - OM Queue Status
 - Staging Operations
 - Staging Status by Media Type
 - Staging by FtpPush Destination
- OM Queue Status
- OM Configuration
 - Aging Parameters
 - Server/Database Configuration
 - Media Configuration
 - FtpPush Policy Configuration
 - Archive Resources
- OM Server Statistics
- OM Log Viewer

Figure 4.7.7-54 displays a sample Help Page.

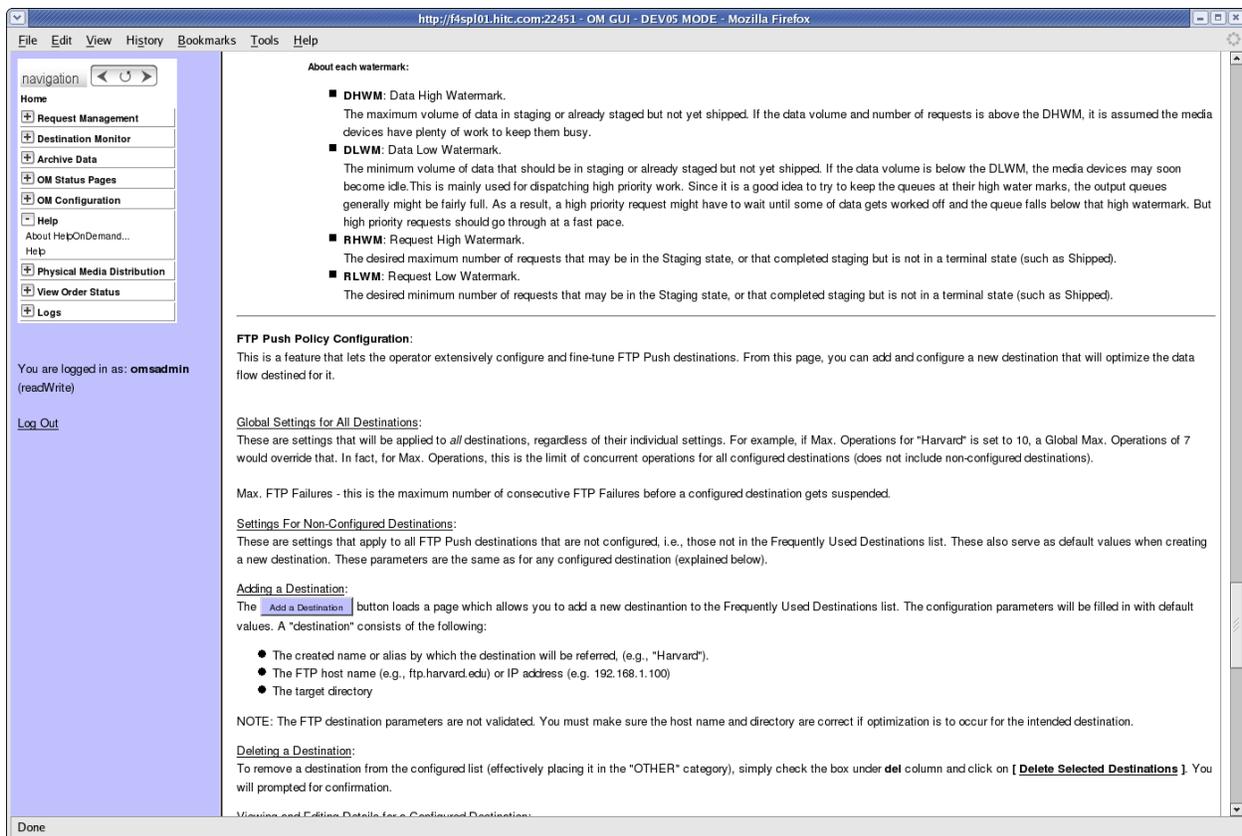


Figure 4.7.7-54. Sample Help Page

HelpOnDemand

This is a feature that gives the operator context-sensitive help for each page, but more specifically for particular controls or parameters that may not be entirely self-descriptive. Anywhere there is little question mark next to a button or text field, click on it and a dialog box describing that item will appear. Figure 4.7.7-55 shows an example of HelpOnDemand for the Time Out parameter on the FtpPush Policy Configuration page.

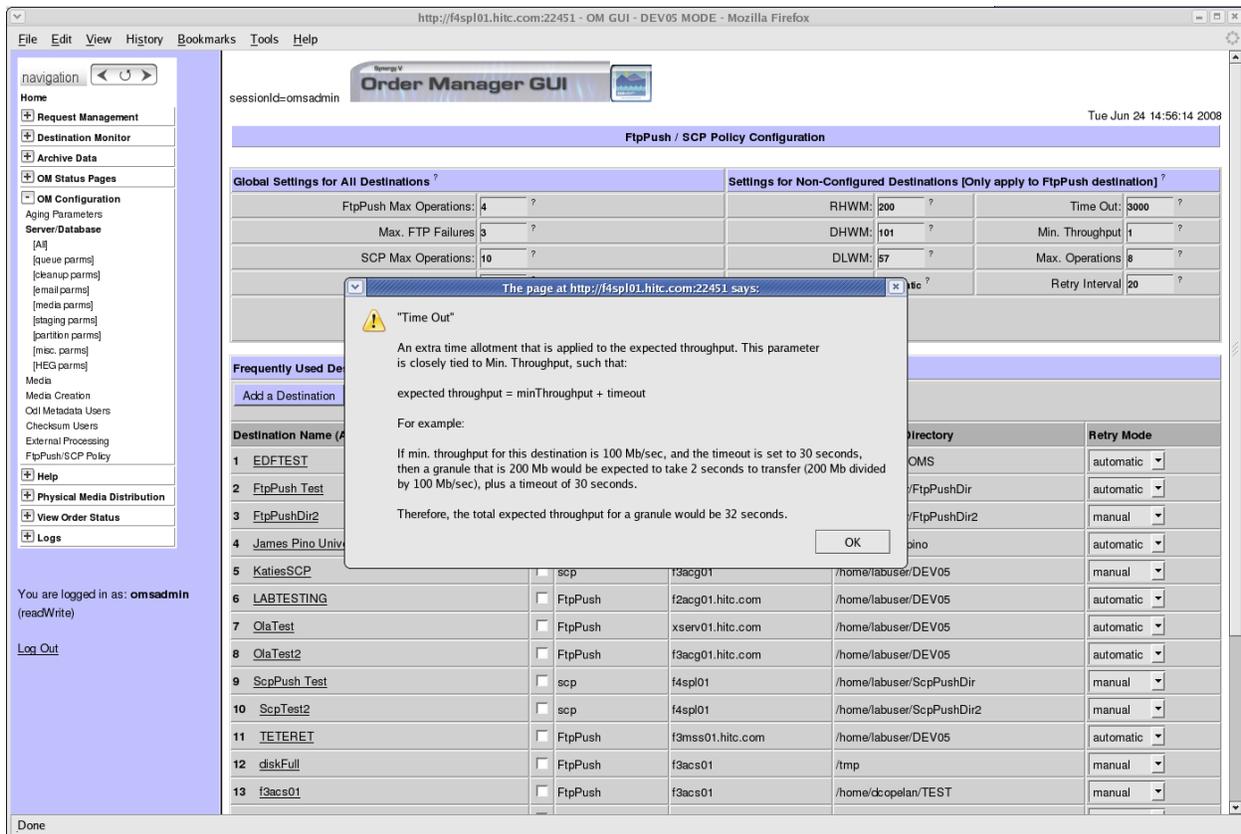


Figure 4.7.7-55. HelpOnDemand Example

4.7.7.9 OM GUI Log Viewer

The Log viewer, shown in Figure 4.7.7-56, is a simple diagnostics tool to aid the operator when an error occurs. It lets you view part or the entire Order Manager Page log file, which is a file specifically generated for the OM GUI by the OM GUI. It is usually sufficient to view the last 200-500 lines for recent activity. Simply enter the last number of lines of the log file you wish to view and click "OK". The entire log may be viewed by leaving the text box empty (or entering 0, or a number greater than or equal to the total number of lines in the file) and clicking on "OK".

Since the log file can grow to a very large size after continued use of the Order Manager Page, it is not recommended to load the entire log file all at once.

A helpful feature is included that shows or hides the line numbers, so that the log text can be easily cut and pasted to other places. This is especially useful for SQL:

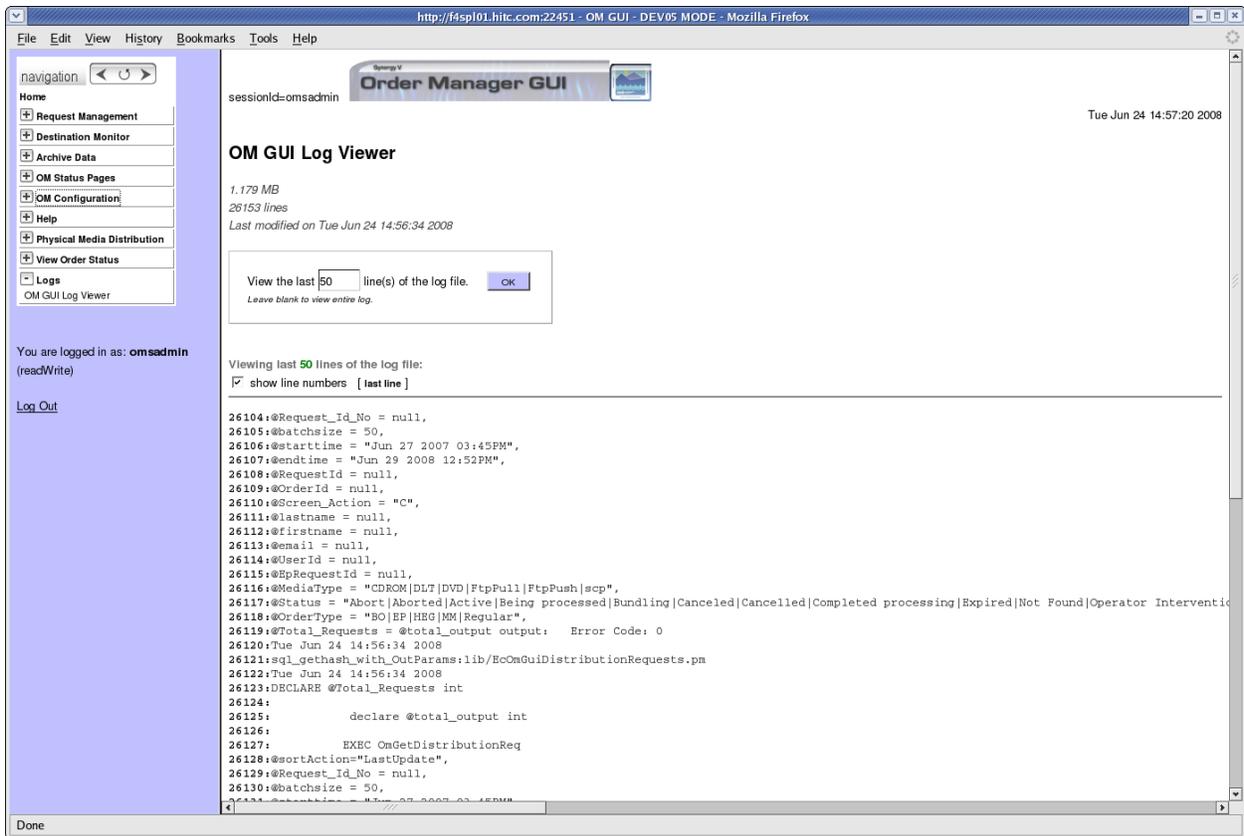


Figure 4.7.7-56. OM GUI Log Viewer Example

4.7.7.10 Required Operating Environment

The following environment is required for the OM GUI to work properly.

The O/S requirements are Linux.

The OM GUI requires the installation of Netscape 7.0 or higher.

4.7.7.11 Interfaces and Data types

The OM GUI exchanges data between the Web Browser and Sybase, using Perl CGI and DBI Modules for the interface.

4.7.7.12 Databases

The OM GUI accesses the OMS database.

4.7.7.13 Special Constraints

There are no special constraints to running the OM GUI.

4.7.7.14 Outputs

There are no outputs from the OM GUI except for status and error messages.

4.7.7.15 Events and Messages

The OM GUI writes status and error messages to the EcOmGui.log file in the directory /usr/ecs/<MODE>/CUSTOM/WWW/OMS/cgi-bin/logs.

4.7.7.16 Reports

The OM GUI does not generate reports.

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