

## **4.7 Science Data Archive and Distribution**

This section describes the Science Data Archive and Distribution tools used by DAAC operators.

The Data Server Subsystem (DSS) has the responsibility for storing earth science and related data in a persistent fashion, providing search and retrieval access to this data, and supporting the administration of the data, hardware devices, and software products. As part of its retrieval function, the subsystem also provides for distribution of data electronically or on physical media.

The ECS Data Server Operator GUIs provide normal operational control and insight into science data server, storage management, and data distribution subsystem operations. These views into the system are managed by means of two operational tools described in the following sections:

4.7.1 Science Data Server GUI

4.7.2 Granule Deletion Administration Tool

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### 4.7.1 Science Data Server GUI

The Science Data Server GUI provides the operator two major functions, the management of Earth Science Data Types and the management of all types of requests that the Science Data Server operator is involved with. Further details on these two functions are given in Table 4.7.1-1.

**Table 4.7.1-1. Common ECS Operator Functions Performed with the Science Data Server GUI**

Operating Function	GUI	Description	When and Why to Use
Manage Science Data Server Earth Science Data Types (ESDTs)	Data Types Tab	Allows operators to manage the ESDTs offered by the Science Data Server	As needed, to manage data type descriptor information and add and update ESDTs
Manage Data Server System Requests	System Requests Tab	Allows operators to manage all the requests within each data server component	As required, to manage requests in each data server component

#### 4.7.1.1 Quick Start Using the Science Data Server

To invoke the ECS Science Data Server GUI, enter the following:

**EcDsSdSrvGuiStart** <mode>

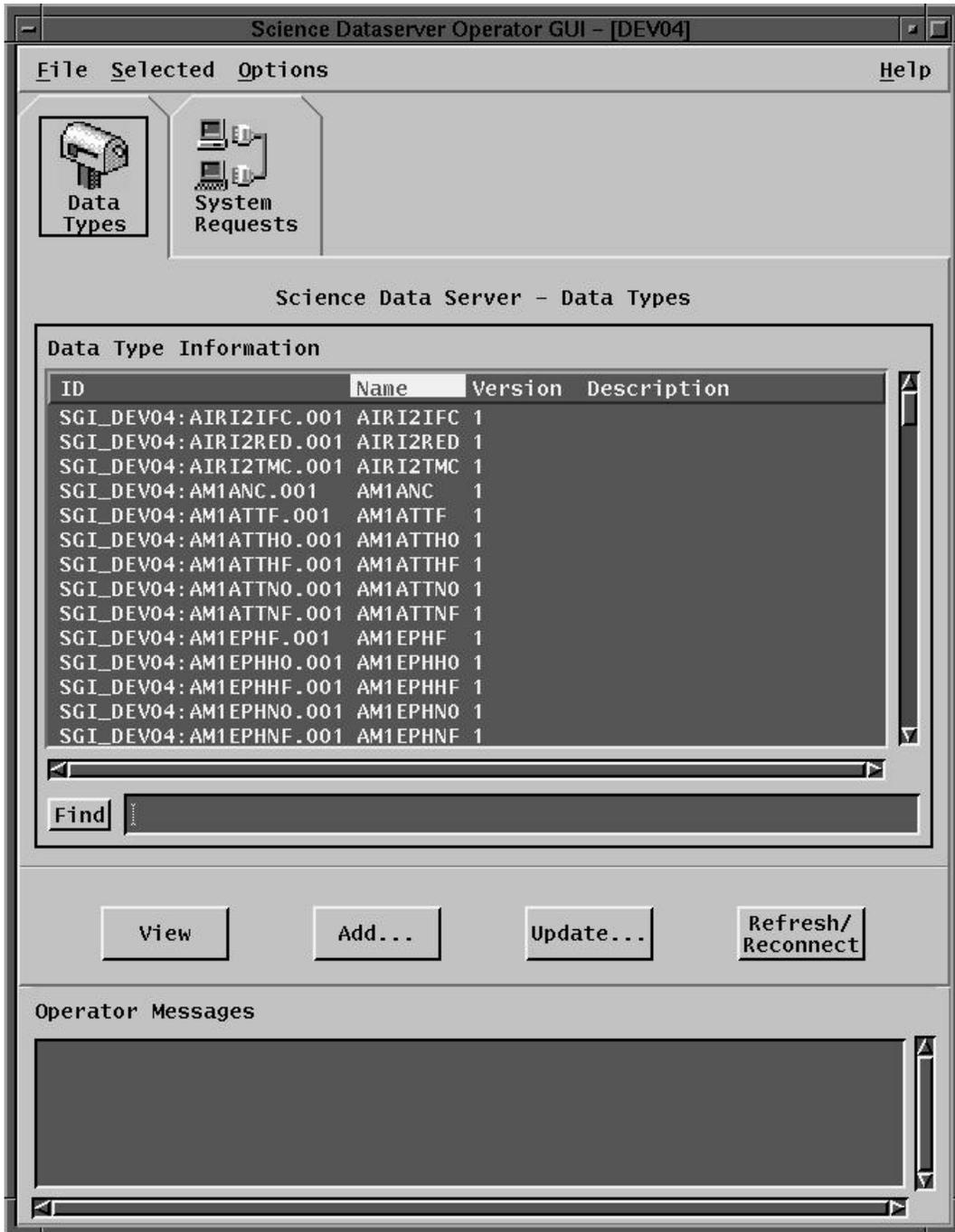
Where:

<mode> is the ECS mode for the execution (e.g., OPS, TS1 or TS2).

#### 4.7.1.2 Science Data Server Main Screen

The ECS Science Data Server GUI, shown in Figure 4.7.1-1, has two tabs that provide access to each one of the component's screens.

- The Earth Science Data Type Manager is accessed through the **Data Types** tab
- The System Request Manager is accessed through the **System Requests** tab.



**Figure 4.7.1-1. Science Data Server GUI Shown with Default Data Types Tab**

The operator can select from the menu bar items at the top of the Science Data Server GUI window for getting help and activating special functions. The menu bar capability is available on all Science Data Server GUI screens. The following options are available through the toolbar:

**File** - which includes the following item:

**Exit** (Ctrl-Q) - Exit application (graceful exit)

**Select** - which includes the following items:

**Duplicate** - Not implemented

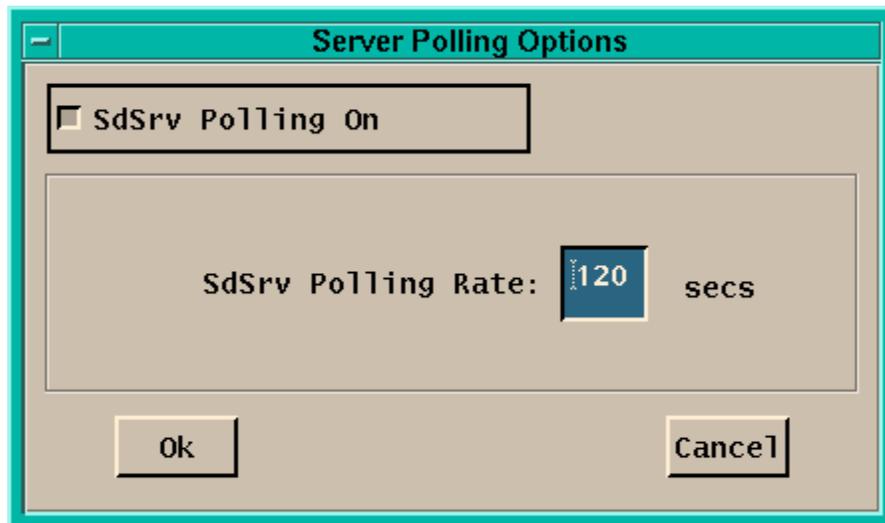
**Select All** - Not implemented

**Deselect All** - Deselects any items that were previously selected

**Change Permissions** - Not implemented

**Options** - This menu includes the *System Settings* item that opens the Server Polling Options window shown in Figure 4.7.1-2. Polling of the data server can be switched On/Off and the polling rate can be adjusted.

**Help** - which provides context sensitive help.



**Figure 4.7.1-2. Science Data Server - Server Polling Options**

Table 4.7.1-2 describes the fields used on the Server Polling Options window.

**Table 4.7.1-2. Science Data Server - Server Polling Field Description**

Field Name	Data Type	Size	Entry	Description
SdSrv Polling On	Button	N/A	Optional	Pressing this button on invokes automatic polling by the SDSRV at the time interval specified in the <i>SdSrv Polling Rate: ssss secs</i> field.
SdSrv Polling Rate	Integer	4 digits	Optional	Specify the rate at which the Science Data Server GUI is updated with data coming from the Data Server. The polling rate interval default is 120 seconds.
OK	Button	N/A	Optional	Pressing this button submits the polling rate setup for activation.
Cancel	Button	N/A	Optional	Cancels the submission of a new polling rate setup.

#### 4.7.1.2.1 Data Types Tab

The Data Types Tab is the default screen of the Science Data Server GUI shown in Figure 4.7.1-1. This window provides operations personnel at the DAAC the capability to view descriptor information, add new ESDTs and update ESDTs. A list of currently installed ESDTs is shown containing the ESDT ID, name, version number, and a brief description of the structure and services available for the ESDT. Select the data type and click on the *View* button for additional information describing the structure, contents and services for each existing ESDT.

Table 4.7.1-3 describes the Science Data Server - Data Types fields.

**Table 4.7.1-3. Science Data Server - Data Types Field Description**

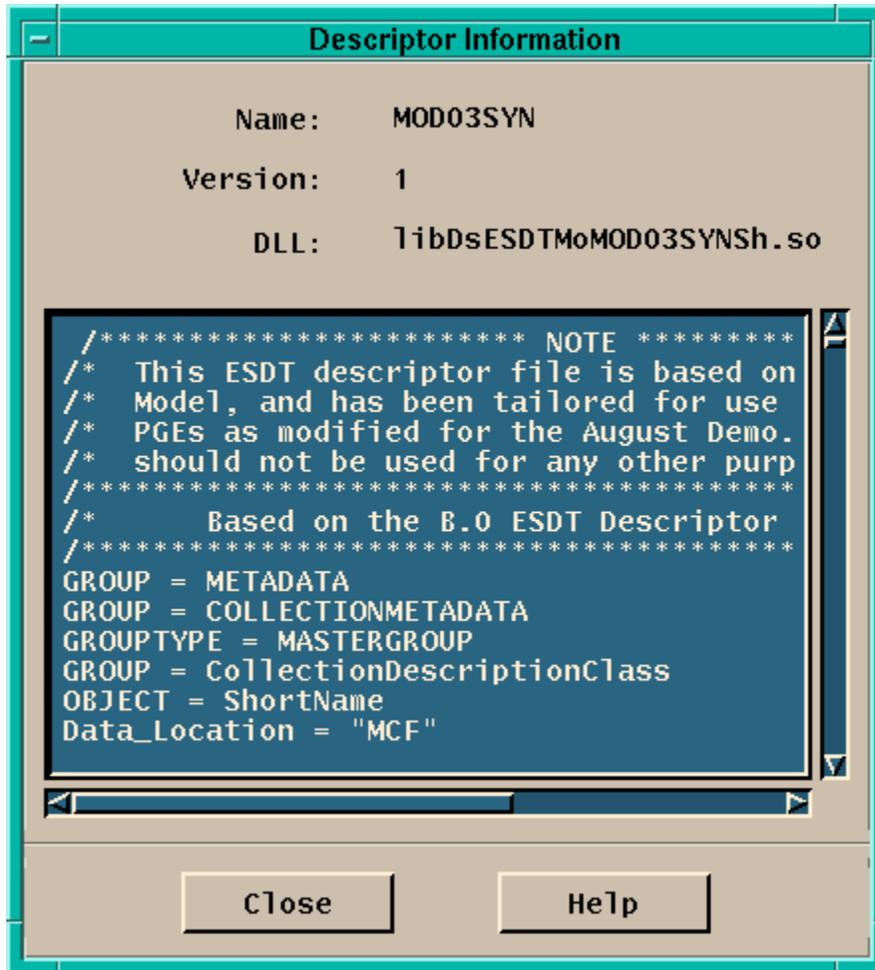
Field Name	Data Type	Size	Entry	Description
Data Type ID	Character	8	System generated	Uniquely identifies the specific type of ESDT.
Name	Character	25	System generated	Name of ESDT.
Version	Integer	3	System generated	Version number of the ESDT (assigned starting at 1).
Description	Character	255	System generated	Includes structure and services available for an ESDT.
Find	Character	255	Optional	This functionality is provided in order to help the user browsing very long ESDT lists.

In addition, the following buttons are provided:

- The **View** button on the Data Types sub-tab displays ESDT descriptor information (read-only) and it is associated dynamic Data Link Library (DLL) filename. Descriptor information consists of groups, objects, and keywords defining a ESDTs metadata, advertised services, subscribable events, data dictionary information, validation criteria, and science parameters. Descriptor information is necessary for the Science Data Server to properly configure itself to perform services related to an ESDT. A DLL is an executable library that is loaded dynamically when needed to fulfill ESDT services. The

Science Data Server - Descriptor Information Dialog (see Figure 4.7.1-3 below) provides the following buttons:

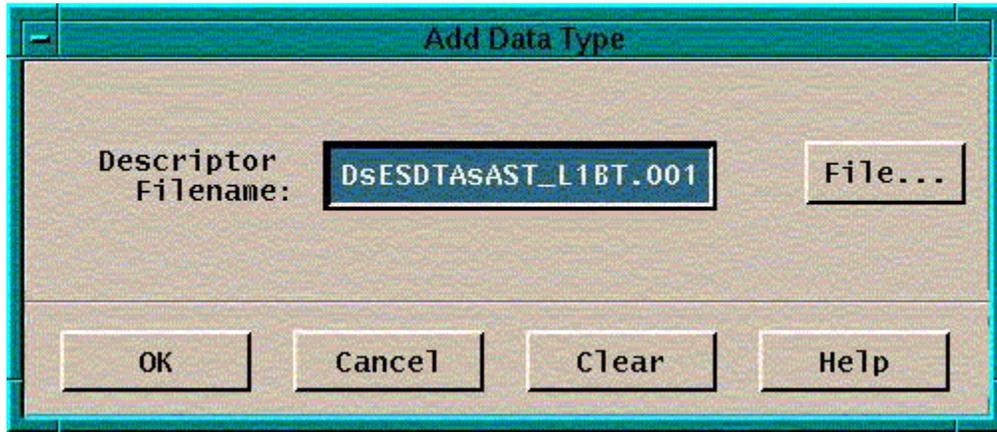
- **Close** exits the dialog
- **Help** displays on-line help information



**Figure 4.7.1-3. Science Data Server - Descriptor Information Dialog**

- The **Add...** button on the Data Types tab shown in Figure 4.7.1-1 opens the Data Type Dialog shown in Figure 4.7.1-4. This window is used to add a new ESDT to the existing installed list of data types based upon input information. The SDSRV GUI has the capability to install multiple ESDTs. Click on the **File...** button to display a list of descriptor filenames to choose from instead of typing them in. Multiple descriptor files can be selected. Click the **OK** button to add the data type. If no error messages appear, the operation has been successfully completed. Click the **Cancel** button to close the dialog without performing an operation. Click the **Clear** button to start all over again the

process of filling in new information. Click the **Help** button to display on-line help information.



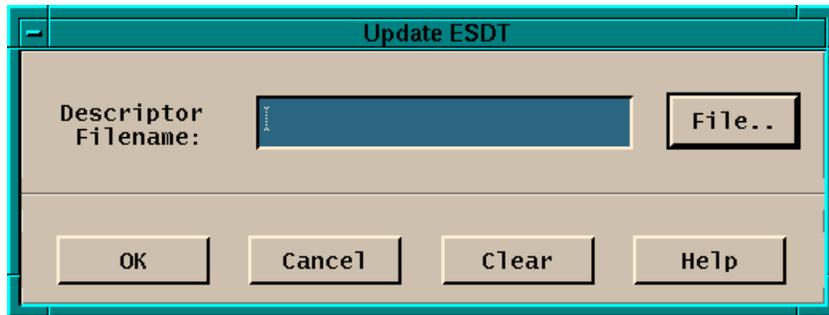
**Figure 4.7.1-4. Science Data Server - Add Data Type Dialog**

Table 4.7.1-4 describes the Science Data Server - Add Data Type Dialog fields.

**Table 4.7.1-4. Science Data Server - Add Data Type Field Description**

Field Name	Data Type	Size	Entry	Description
Descriptor Filename	Character string	25	Required	Name of an ASCII file containing the ESDT descriptor file.

- The **Update...** button on the Data Type tab in Figure 4.7.1-1 opens the Update ESDT Dialog shown in Figure 4.7.1-5. This window is used to update an ESDT to the installed list of data types based upon input information. The SDSRV GUI provides the capability to update multiple ESDTs at one time. The Science Data Server needs to be running in Maintenance mode to accept this operation. Click on the **File...** button to display a list of descriptor filenames to choose from instead of typing them in. Multiple descriptor files can be selected. Click the **OK** button to update the data type. If no error messages appear, then the operation has been successfully completed. Click the **Cancel** button to close the dialog without performing an operation. Click the **Clear** button to start all over again the process of filling in new information. Click the **Help** button to display on-line help information.



**Figure 4.7.1-5. Science Data Server - Update Data Type Dialog**

Table 4.7.1-5 describes the Science Data Server - Update Data Type fields.

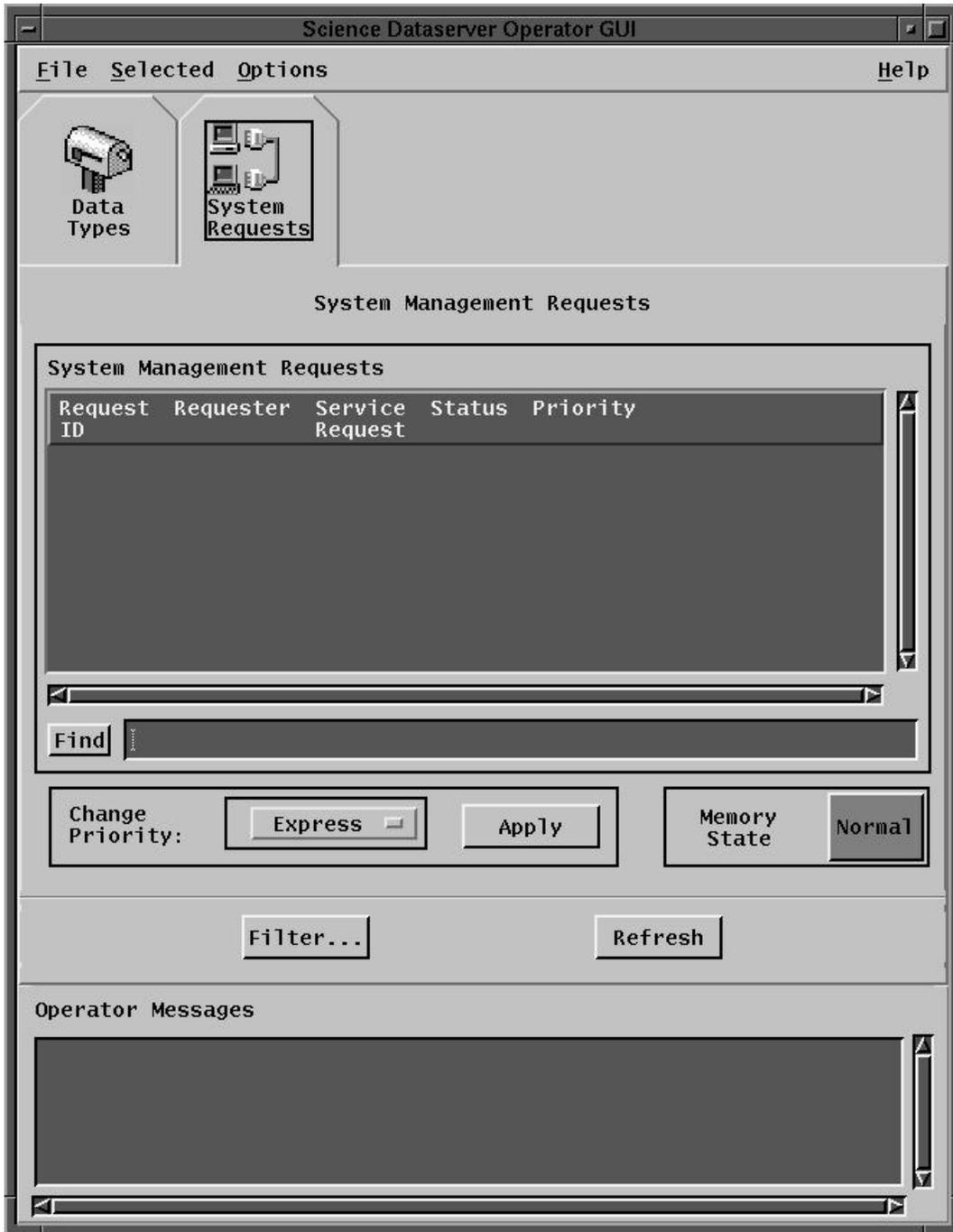
**Table 4.7.1-5. Science Data Server - Update Data Type Field Description**

Field Name	Data Type	Size	Entry	Description
Descriptor Filename	Character string	255	Required	Name of an ASCII file containing the ESDT descriptor file.

- The **Refresh/Reconnect** button on the Data Types sub-tab of Figure 4.7.1-1 updates the data type information screen with current information.
- The **Operator Messages** field on the Data Types sub-tab of Figure 4.7.1-1 displays informational and error messages.

#### **4.7.1.2.2 System Requests Tab**

Clicking the **System Requests** tab brings up the System Management Requests window (see Figure 4.7.1-6). This window provides operations personnel at the DAAC the capability to monitor requests the Science Data Server is working with. All requests within the Science Data Server are displayed. Positioning the cursor and clicking on the appropriate column of interest sorts the columns of the list. Positioning the cursor and clicking on the Filter button and entering the attributes on which to filter can filter the requests.



**Figure 4.7.1-6. System Management Requests Window**

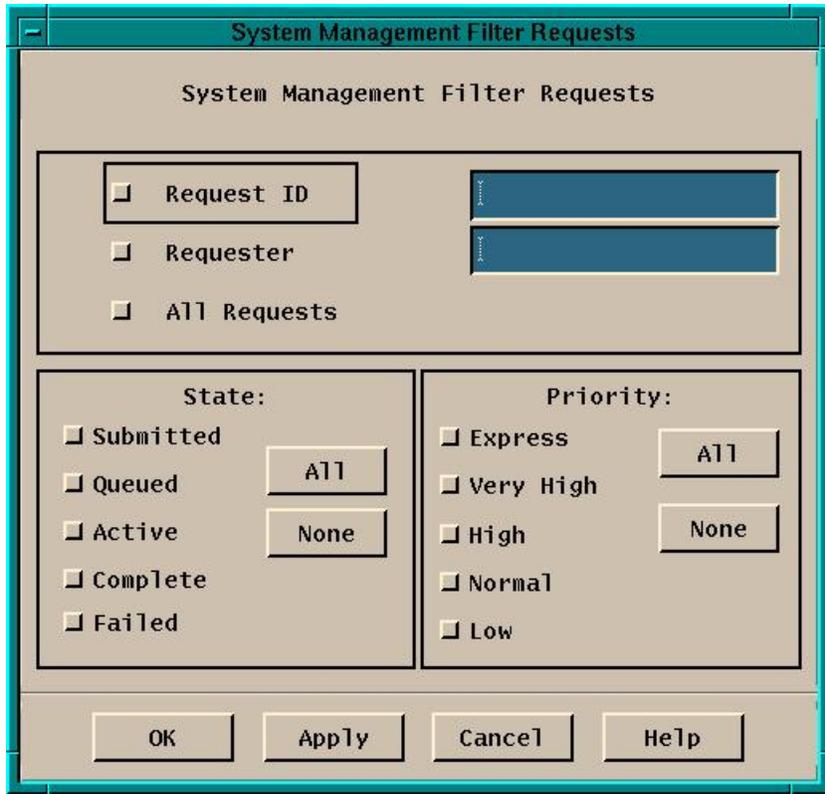
Table 4.7.1-6 describes the System Management Requests Window fields.

**Table 4.7.1-6. System Management Requests Field Description**

Field Name	Data Type	Size	Entry	Description
Request ID	Character	255	System generated	Unique identifier for the request.
Requester	Variable character	100	System generated	Identifies the user that submitted the request.
Service Request	Character	25	System generated	Types of requests handled are Insert, Acquire, and Delete.
Status	Character	20	System generated	Possible states are Submitted, Queued, Executing, Failed_Retryable, Failed_Fatal, Failed_Unknown and Done.
Priority	Variable character	20	System generated	Priority of the data server system requests, i.e., Express, Very High, High, Normal (default), Low.
Find	Character	255	Optional	If the list is too long, this field can be used to search for an entry.

In addition, the following buttons are provided:

- **Change Priority:** allows the operator to change the priority of each selected request through a pull down menu. Possible values are: Express, Very High, High, Normal (default) and Low.
- **Apply** allows the operator to commit to the priority change selected through the change priority button.
- **Filter...** (See Figure 4.7.1-7) brings up the System Management Filter Requests dialog, which provides a selection of attributes on which to filter for the list of System-wide requests. Filter on system management requests by entering the desired information, then clicking on the Request ID or Requester radio button for the desired attribute. Return to the original list of requests by clicking on the All Requests radio button. Click on other filters associated with State and Priority by clicking on the toggle button. Filter on every attribute associated with a category by clicking the **All** button or clear a category of filters by clicking on the **None** button.
- **Memory State** monitors the current memory state of the data server in regards to values that are set on the server side through configuration parameters. Possible values are: Normal (green), Low (yellow), Very Low (red) and Disabled (gray). The Memory State shows a Disabled state when this functionality has been turned off (by setting the DSSMEMORYMONITORDISABLEFLAG in the data server's configuration file).
- **Refresh** button updates the System Management Requests screen with current information.
- **Operator Messages** is an area where operators can input text related to requests.



**Figure 4.7.1-7. System Management Filter Requests Dialog**

Table 4.7.1-7 describes the System Management Filter Requests Dialog fields.

**Table 4.7.1-7. System Management Filter Requests Field Description**

Field Name	Data Type	Size	Entry	Description
Request ID	Character	255	System generated	Unique identifier for the request.
Requester	Variable character	100	System generated	Identifies the user submitting the request.

In addition, the following buttons are provided:

- **OK** implements filter criteria, and the dialog closes
- **Apply** implements filter criteria, and the dialog remains open for additional filtering
- **Cancel** closes the dialog without saving
- **Help** displays on-line help information
- Back to the System Requests tab description (Figure 4.7.1-6), **Operator Messages** provides informational and error messages to the DAAC Operator

- **Refresh** causes the Data Server to be polled for an update on Requests

### 4.7.1.3 Required Operating Environment

For information on the operating environment, tunable parameters, and environment variables refer to the 920-TDA-022 “Custom Code Configuration Parameters” documentation series.

#### 4.7.1.3.1 Interfaces and Data Types

Table 4.7.1-8 lists the supporting products that this tool depends upon in order to function properly.

**Table 4.7.1-8. Interface Protocols**

Product Dependency	Protocols Used	Comments
SDSRV and all clients	Socket	Via client libraries
SDSRV GUIs	X-11	Via client libraries

#### 4.7.1.4 Databases

The Science Data Server GUI does not include the direct managing of any database. It has an interface with the Science Data Server Data Base: however this interface is based on a simple parameter passing function. For further information of the Science Data Server Data Base refer to 311-CD-624, *Science Data Server Database Design and Schema Specifications for the ECS Project*.

#### 4.7.1.5 Special Constraints

The Science Data Server GUI runs only if the Science Data Server is running in the background. Note also that at the moment the Science Data Server GUI is started through a command line that specifies the configuration file that is used to initialize the GUI Application.

##### 4.7.1.5.1 Deleting an ESDT

The Science Data Server GUI does not provide a means of deleting an ESDT. A script command is provided for this purpose and is invoked as follows:

```
>EcDsSrRemesdt <mode> <descriptor file name> where:
<mode> is the operating mode affected (e.g., OPS, TS1 or TS2)
<descriptor file name> is the name of the ESDT's descriptor file
```

#### 4.7.1.6 Outputs

There is no processing associated with the operation of this GUI. The information provided to the operator are retrieved from the Data Server Database described in Section 4.7.1.4 and displayed through the screens discussed in Section 4.7.1.2 and the related sub-sections.

#### **4.7.1.7 Event and Error Messages**

Both event and error messages are listed in Appendix A.

#### **4.7.1.8 Reports**

This tool produces no reports.

## 4.7.2 Granule Deletion Administration Tool

The Granule Deletion Administration Tool provides the ECS Operations Staff with the ability to delete granules using a command line interface. The granules can be deleted from both the inventory and archive or just the archive. Granules are not physically deleted from the Archive. The directory entry is deleted so that the files cannot be accessed. The physical storage occupied by the deleted granules is not reclaimed through this operation.

The deletion process can involve deleting the specified granules along with associated granules, as long as any other granules do not reference the associated granules (e.g., browse, PH, QA). The deletion process can also involve deleting the specified granules even if they are inputs to other granules.

### 4.7.2.1 Quick Start Using the Granule Delete Administration Tool

Enter the following command to start the Granule Deletion Administration Tool:

```
>EcDsGranuleDelete ConfigFile
/usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG ecs_mode <MODE> <command
line parameters>
```

There are various command line parameters and they are used in combination with each other. Table 4.7.2-1 provides a description of the parameters.

**Table 4.7.2-1. Command Line Parameters of the Granule Deletion Administration Tool**

Parameter Name	Description
name	ESDT Short Name of the granules to delete.
version	ESDT Version ID of the granules to delete.
begindate	Beginning Date of the temporal range of granules to delete.
enddate	Ending Date of the temporal range of granules to delete.
insertbegin	Beginning time when granules to delete were inserted.
insertend	Ending time when granules to delete were inserted.
localgranulefile	Name of file containing ESDT ShortName, Version IDs and Local Granule Ids of the granules to delete.
geoidfile	Name of file containing geoids of the granules to delete.
log	Name of log file to record the deletion operations. This parameter is mandatory.
physical	Delete from inventory and archive.
DFA	Delete from archive only.
noprompt	Do not prompt for confirmation of the delete.
display	Display the candidate granules for deletion, but do not delete.
noassoc	Do not delete associated granules (QA, Browse, PH).
delref	Delete granules that are referenced by other granules.

There are some parameters that are mandatory. The parameter physical, DFA or display must be specified. There are several parameters used to specify the science granules to delete: name, version, begindate and enddate or name, version, insertbegin and insertend or localgranulefile or geoidfile.

#### **4.7.2.2 Granule Deletion Administration Tool Commands**

The Granule Deletion Administration Tool provides the following 44 granule deletion options:

1. Confirmed deletion of science and associated granules from the Archive and Inventory. The science granules must meet the ShortName, VersionID and temporal range criteria input by the user.
2. Unconfirmed deletion of science and associated granules from the Archive and Inventory. The science granules must meet the ShortName, VersionID and temporal range criteria input by the user.
3. Confirmed deletion of science granules from the Archive and Inventory. The science granules must meet the ShortName, VersionID and temporal range criteria input by the user.
4. Unconfirmed deletion of science granules from the Archive and Inventory. The science granules must meet the ShortName, VersionID and temporal range criteria input by the user.
5. Confirmed deletion of referenced and un-referenced science granules from the Archive and Inventory. The science granules must meet the ShortName, VersionID, and temporal range criteria input by the user.
6. Unconfirmed deletion of referenced and un-referenced science granules from the Archive and Inventory. The science granules must meet the ShortName, VersionID, and temporal range criteria input by the user.
7. Confirmed deletion of referenced and un-referenced science granules and associated granules from the Archive and Inventory. The science granules must meet the ShortName, VersionID, and temporal range criteria input by the user.
8. Unconfirmed deletion of referenced and un-referenced science granules and associated granules from the Archive and Inventory. The science granules must meet the ShortName, VersionID, and temporal range criteria input by the user.
9. Confirmed deletion of science granules from the Archive. The science granules must meet the ShortName, VersionID and temporal range criteria input by the user.
10. Unconfirmed deletion of science granules from the Archive. The science granules must meet the ShortName, VersionID and temporal range criteria input by the user.
11. Confirmed deletion of science and associated granules from the Archive and Inventory. The science granules must meet the ShortName, VersionID and insert time range input by the user.

12. Unconfirmed deletion of science and associated granules from the Archive and Inventory. The science granules must meet the ShortName, VersionID and insert time range input by the user.
13. Confirmed deletion of science granules from the Archive and Inventory. The science granules must meet the ShortName, VersionID and insert time range input by the user.
14. Confirmed deletion of science granules from the Archive and Inventory. The science granules must meet the ShortName, VersionID and insert time range input by the user.
15. Confirmed deletion of referenced and un-referenced science granules from the Archive and Inventory. The science granules must meet the Shortname, VersionID, and insert time range input by the user.
16. Unconfirmed deletion of referenced and un-referenced science granules from the Archive and Inventory. The science granules must meet the Shortname, VersionID, and insert time range input by the user.
17. Confirmed deletion of referenced and un-referenced science granules and associated granules from the Archive and Inventory. The science granules must meet the Shortname, VersionID, and insert time range input by the user.
18. Unconfirmed deletion of referenced and un-referenced science granules and associated granules from the Archive and Inventory. The science granules must meet the Shortname, VersionID, and insert time range input by the user.
19. Confirmed deletion of science granules from the Archive. The science granules must meet the ShortName, VersionID and insert time range input by the user.
20. Unconfirmed deletion of science granules from the Archive. The science granules must meet the ShortName, VersionID and insert time range input by the user.
21. Confirmed deletion of science and associated granules from the Archive and Inventory. The science granules to delete are defined in a file containing ShortName, VersionID and LocalGranuleId.
22. Confirmed deletion of science and associated granules from the Archive and Inventory. The science granules to delete are defined in a file containing ShortName, VersionID and LocalGranuleId.
23. Confirmed deletion of science granules from the Archive and Inventory. The science granules to delete are defined in a file containing ShortName, VersionID and LocalGranuleId.
24. Unconfirmed deletion of science granules from the Archive and Inventory. The science granules to delete are defined in a file containing ShortName, VersionID and LocalGranuleId.

25. Confirmed deletion of referenced and un-referenced science granules from the Archive and Inventory. The science granules to delete are defined in a file containing ShortName, VersionID and LocalGranuleId.
26. Unconfirmed deletion of referenced and un-referenced science granules from the Archive and Inventory. The science granules to delete are defined in a file containing ShortName, VersionID and LocalGranuleId.
27. Confirmed deletion of referenced and un-referenced science granules and associated granules from the Archive and Inventory. The science granules to delete are defined in a file containing ShortName, VersionID and LocalGranuleId.
28. Unconfirmed deletion of referenced and un-referenced science granules and associated granules from the Archive and Inventory. The science granules to delete are defined in a file containing ShortName, VersionID and LocalGranuleId.
29. Confirmed deletion of science granules from the Archive. The science granules to delete are defined in a file containing ShortName, VersionID and LocalGranuleId.
30. Unconfirmed deletion of science granules from the Archive. The science granules to delete are defined in a file containing ShortName, VersionID and LocalGranuleId.
31. Confirmed deletion of science and associated granules from the Archive and Inventory. The science granules to delete are defined in a file containing SDSRV Granule Ids (basetype, shortname, version ID and db ID).
32. Unconfirmed deletion of science and associated granules from the Archive and Inventory. The science granules to delete are defined in a file containing SDSRV Granule Ids(basetype, shortname, version ID and db ID).
33. Confirmed deletion of science granules from the Archive and Inventory. The science granules to delete are defined in a file containing SDSRV Granule Ids (basetype, shortname, version ID and db ID).
34. Unconfirmed deletion of science granules from the Archive and Inventory. The science granules to delete are defined in a file containing SDSRV Granule Ids (basetype, shortname, version ID and db ID).
35. Confirmed deletion of referenced and un-referenced science granules from the Archive and Inventory. The science granules to delete are defined in a file containing SDSRV Granule Ids (basetype, shortname, version ID and db ID).
36. Unconfirmed deletion of referenced and un-referenced science granules from the Archive and Inventory. The science granules to delete are defined in a file containing SDSRV Granule Ids (basetype, shortname, version ID and db ID).
37. Confirmed deletion of referenced and un-referenced science granules and associated granules from the Archive and Inventory. The science granules to delete are defined in a file containing SDSRV Granule Ids (basetype, shortname, version ID and db ID).

38. Unconfirmed deletion of referenced and un-referenced science granules and associated granules from the Archive and Inventory. The science granules to delete are defined in a file containing SDSRV Granule Ids (basetype, shortname, version ID and db ID).
39. Confirmed deletion of science granules from the Archive. The science granules to delete are defined in a file containing SDSRV Granule Ids (basetype, shortname, version ID and db ID).
40. Unconfirmed deletion of science granules from the Archive. The science granules to delete are defined in a file that contains SDSRV Granule Ids (basetype, shortname, version ID and db ID).
41. Display science granules that are candidates for deletion. The science granules must meet the ShortName, VersionID and temporal range criteria input by the user.
42. Display science granules that are candidates for deletion. The science granules must meet the ShortName, VersionID and insert time range criteria input by the user.
43. Display science granules that are candidates for deletion. The science granules to delete are defined in a file containing ShortName, VersionID and LocalGranuleId.
44. Display science granules that are candidates for deletion. The science granules to delete are defined in a file containing SDSRV Granule Ids (basetype, shortname, version ID and db ID).

#### **4.7.2.2.1 Confirmed Deletion of Science and Associated Granules from the Inventory and Archive by ESDT Short Name, Version ID and Data Temporal Coverage**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-name <ESDT ShortName>*

*-version <ESDT VersionID>*

*-begindate <date>*

*-enddate <date>*

*-physical*

This command physically deletes science granules specified by <ESDT\_Shortname> and <ESDT\_VersionID> and within the temporal range specified by parameters <begindate> and <enddate>. Associated granules are also deleted as long as other granules do not reference them.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### **4.7.2.2.2 Unconfirmed Deletion of Science and Associated Granules from the Inventory and Archive by ESDT Short Name, Version ID and Data Temporal**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-name <ESDT ShortName>*

*-version <ESDT VersionID>*

*-begindate <date>*

*-enddate <date>*

*-physical*

*-noprompt*

This command physically deletes science granules specified by <ESDT\_Shortname> and <ESDT\_VersionID> and within the temporal range specified by parameters <begindate> and <enddate>. Associated granules are also deleted as long as other granules do not reference them.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -noprompt parameter specifies the user does not want to confirm the deletion of the granules.

#### **4.7.2.2.3 Confirmed Deletion of Science Granules from the Inventory and Archive by ESDT Short Name, Version ID and Data Temporal Coverage**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile* *usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode* *<MODE>*

*-log* *<logfilename>*

*-name* *<ESDT ShortName*

*-version* *<ESDT VersionID>*

*-begindate* *<date>*

*-enddate* *<date>*

*-physical*

*-noassoc*

This command physically deletes science granules specified by *<ESDT\_Shortname>* and *<ESDT\_VersionID>* and within the temporal range specified by parameters *<begindate>* and *<enddate>*.

The *<logfilename>* parameter specifies the log file the deletion process should use to write deletion activity.

The *-physical* parameter specifies the granules are deleted from the Inventory and the Archive.

The *-noassoc* parameter specifies the associated granules are not deleted even if other granules do not reference them.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### **4.7.2.2.4 Unconfirmed Deletion of Science Granules from the Inventory and Archive by ESDT Short Name, Version ID and Data Temporal Coverage**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile* *usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode* *<MODE>*

*-log* *<logfilename>*

*-name* *<ESDT ShortName*

*-version <ESDT VersionID>*

*-begindate <date>*

*-enddate <date>*

*-physical*

*-noassoc*

*-noprompt*

This command physically deletes science granules specified by <ESDT\_Shortname> and <ESDT\_VersionID> and within the temporal range specified by parameters <begindate> and <enddate>.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -noassoc parameter specifies the associated granules are not deleted even if other granules do not reference them.

The -noprompt parameter specifies the user is not prompted to confirm the deletion.

#### **4.7.2.2.5 Confirmed Deletion of Referenced and Unreferenced Science Granules from the Inventory and Archive by ESDT Short Name, Version ID and Data Temporal Coverage**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-name <ESDT ShortName>*

*-version <ESDT VersionID>*

*-begindate <date>*

*-enddate <date>*

*-physical*

*-noassoc*

*-delref*

This command physically deletes science granules specified by <ESDT\_Shortname> and <ESDT\_VersionID> and within the temporal range specified by parameters <begindate> and <enddate>. The science granules should be deleted even if other granules reference them.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -noassoc parameter specifies the associated granules are not deleted even if other granules do not reference them.

The -delref parameter specifies the science granules should be deleted even if other granules reference them.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### **4.7.2.2.6 Unconfirmed Deletion of Referenced and Unreferenced Science Granules from the Inventory and Archive by ESDT Short Name, Version ID and Data Temporal Coverage**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-name <ESDT ShortName>*

*-version <ESDT VersionID>*

*-begindate <date>*

*-enddate <date>*

*-physical*

*-noassoc*

*-delref*

*-noprompt*

This command physically deletes science granules specified by <ESDT\_Shortname> and <ESDT\_VersionID> and within the temporal range specified by parameters <begindate> and <enddate>. The science granules should be deleted even if other granules reference them.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -noassoc parameter specifies the associated granules are not deleted even if other granules do not reference them.

The -delref parameter specifies the science granules should be deleted even if other granules reference them.

The -noprompt parameter specifies the granules should be deleted without a confirmation from the user.

#### **4.7.2.2.7 Confirmed Deletion of Referenced and Unreferenced Science Granules and Associated Granules from the Inventory and Archive by ESDT Short Name, Version ID and Data Temporal Coverage**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-name <ESDT ShortName>*

*-version <ESDT VersionID>*

*-begindate <date>*

*-enddate <date>*

*-physical*

*-delref*

This command physically deletes science granules specified by <ESDT\_Shortname> and <ESDT\_VersionID> and within the temporal range specified by parameters <begindate> and <enddate>. The science granules should be deleted even if other granules reference them. Associated granules are also deleted as long as other granules do not reference them.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -delref parameter specifies the science granules should be deleted even if other granules reference them.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### **4.7.2.2.8 Unconfirmed Deletion of Referenced and Unreferenced Science Granules and Associated Granules from the Inventory and Archive by ESDT Short Name, Version ID and Data Temporal Coverage**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-name <ESDT ShortName>*

*-version <ESDT VersionID>*

*-begindate <date>*

*-enddate <date>*

*-physical*

*-delref*

*-noprompt*

This command physically deletes science granules specified by <ESDT\_Shortname> and <ESDT\_VersionID> and within the temporal range specified by parameters <begindate> and <enddate>. The science granules should be deleted even if other granules reference them. Associated granules are also deleted as long as other granules do not reference them.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -delref parameter specifies the science granules should be deleted even if other granules reference them.

The -noprompt parameter specifies the granules should be deleted without a confirmation from the user.

#### **4.7.2.2.9 Confirmed Deletion of Science Granules from the Archive by ESDT Short Name, Version ID and Data Temporal Coverage**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-name <ESDT ShortName*

*-version <ESDT VersionID>*

*-begindate <date>*

*-enddate <date>*

*-DFA*

This command deletes from the Archive science granules specified by <ESDT\_Shortname> and <ESDT\_VersionID> and within the temporal range specified by parameters <begindate> and <enddate>.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -DFA parameter specifies the granules are deleted from the Archive.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### **4.7.2.2.10 Unconfirmed Deletion of Science Granules from the Archive by ESDT Short Name, Version ID and Data Temporal Coverage**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-name <ESDT ShortName*

*-version <ESDT VersionID>*

*-begindate <date>*

*-enddate <date>*

*-DFA*

*-noprompt*

This command deletes from the Archive science granules specified by <ESDT\_Shortname> and <ESDT\_VersionID> and within the temporal range specified by parameters <begindate> and <enddate>.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -DFA parameter specifies the granules are deleted from the Archive.

The -noprompt parameter specifies the granules should be deleted without a confirmation from the user.

#### **4.7.2.2.11 Confirmed Deletion of Science and Associated Granules from the Archive and Inventory by ESDT Short Name, Version ID and Insert Time Range**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-name <ESDT ShortName>*

*-version <ESDT VersionID>*

*-insertbegin <date>*

*-insertend <date>*

*-physical*

This command physically delete science granules specified by <ESDT\_Shortname> and <ESDT\_VersionID> and within the insert time range specified by parameters <insertbegin> and <insertend>. Associated granules are also deleted as long as other granules do not reference them.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### **4.7.2.2.12 Unconfirmed Deletion of Science and Associated Granules from the Archive and Inventory by ESDT Short Name, Version ID and Insert Time Range**

This command has the form:

### *EcDsGranuleDelete*

*ConfigFile* *usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode* *<MODE>*

*-log* *<logfilename>*

*-name* *<ESDT ShortName>*

*-version* *<ESDT VersionID>*

*-insertbegin* *<date>*

*-insertend* *<date>*

*-physical*

*-noprompt*

This command physically deletes science granules specified by *<ESDT\_Shortname>* and *<ESDT\_VersionID>* and within the insert time range specified by parameters *<insertbegin>* and *<insertend>*. Associated granules are also deleted as long as other granules do not reference them.

The *<logfilename>* parameter specifies the log file the deletion process should use to write deletion activity.

The *-physical* parameter specifies the granules are deleted from the Inventory and the Archive.

The *-noprompt* parameter specifies the user does not want to confirm the deletion of the granules.

#### **4.7.2.2.13 Confirmed Deletion of Science Granules from the Archive and Inventory by ESDT Short Name, Version ID and Insert Time Range**

This command has the form:

### *EcDsGranuleDelete*

*ConfigFile* *usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode* *<MODE>*

*-log* *<logfilename>*

*-name* *<ESDT ShortName>*

*-version* *<ESDT VersionID>*

*-insertbegin* *<date>*

*-insertend* *<date>*

*-physical*

***-noassoc***

This command physically delete science granules specified by <ESDT\_Shortname> and <ESDT\_VersionID> and within the insert time range specified by parameters <insertbegin> and <insertend>.

The <logfilefilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -noassoc parameter specifies the associated granules are not deleted even if other granules do not reference them.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

**4.7.2.2.14 Unconfirmed Deletion of Science Granules from the Archive and Inventory by ESDT Short Name, Version ID and Insert Time Range**

This command has the form:

***EcDsGranuleDelete***

***ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG***

***ecs\_mode <MODE>***

***-log <logfilefilename>***

***-name <ESDT ShortName>***

***-version <ESDT VersionID>***

***-insertbegin <date>***

***-insertend <date>***

***-physical***

***-noassoc***

***-noprompt***

This command physically delete science granules specified by <ESDT\_Shortname> and <ESDT\_VersionID> and within the insert time range specified by parameters <insertbegin> and <insertend>.

The <logfilefilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The `-noassoc` parameter specifies the associated granules are not deleted even if other granules do not reference them.

The `-noprompt` parameter specifies the user does not want to confirm the deletion of the granules.

#### **4.7.2.2.15 Confirmed Deletion of Referenced and Unreferenced Science Granules from the Archive and Inventory by ESDT Short Name, Version ID and Insert Time Range**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile* `usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG`

*ecs\_mode* `<MODE>`

*-log* `<logfilename>`

*-name* `<ESDT ShortName>`

*-version* `<ESDT VersionID>`

*-insertbegin* `<date>`

*-insertend* `<date>`

*-physical*

*-noassoc*

*-delref*

This command physically delete science granules specified by `<ESDT_Shortname>` and `<ESDT_VersionID>` and within the insert time range specified by parameters `<insertbegin>` and `<insertend>`.

The `<logfilename>` parameter specifies the log file the deletion process should use to write deletion activity.

The `-physical` parameter specifies the granules are deleted from the Inventory and the Archive.

The `-noassoc` parameter specifies the associated granules are not deleted even if other granules do not reference them.

The `-delref` parameter specifies the science granules should be deleted even if other granules reference them.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### 4.7.2.2.16 Unconfirmed Deletion of Referenced and Unreferenced Science Granules from the Archive and Inventory by ESDT Short Name, Version ID and Insert Time Range

This command has the form:

*EcDsGranuleDelete*

*ConfigFile* *usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode* *<MODE>*

*-log* *<logfilename>*

*-name* *<ESDT ShortName>*

*-version* *<ESDT VersionID>*

*-insertbegin* *<date>*

*-insertend* *<date>*

*-physical*

*-noassoc*

*-delref*

*-noprompt*

This command physically delete science granules specified by *<ESDT\_Shortname>* and *<ESDT\_VersionID>* and within the insert time range specified by parameters *<insertbegin>* and *<insertend>*.

The *<logfilename>* parameter specifies the log file the deletion process should use to write deletion activity.

The *-physical* parameter specifies the granules are deleted from the Inventory and the Archive.

The *-noassoc* parameter specifies the associated granules are not deleted even if other granules do not reference them.

The *-delref* parameter specifies the science granules should be deleted even if other granules reference them.

The *-noprompt* parameter specifies the user is not prompted to confirm the deletion.

#### **4.7.2.2.17 Confirmed Deletion of Referenced and Unreferenced Science Granules and Associated Granules from the Archive and Inventory by ESDT Short Name, Version ID and Insert Time Range**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile* *usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode* *<MODE>*

*-log* *<logfilename>*

*-name* *<ESDT ShortName>*

*-version* *<ESDT VersionID>*

*-insertbegin* *<date>*

*-insertend* *<date>*

*-physical*

*-delref*

This command physically delete science granules specified by *<ESDT\_Shortname>* and *<ESDT\_VersionID>* and within the insert time range specified by parameters *<insertbegin>* and *<insertend>*. Associated granules are also deleted as long as other granules do not reference them.

The *<logfilename>* parameter specifies the log file the deletion process should use to write deletion activity.

The *-physical* parameter specifies the granules are deleted from the Inventory and the Archive.

The *-delref* parameter specifies the science granules should be deleted even if other granules reference them.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### **4.7.2.2.18 Unconfirmed Deletion of Referenced and Unreferenced Science Granules and Associated Granules from the Archive and Inventory by ESDT Short Name, Version ID and Insert Time Range**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile* *usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode* *<MODE>*

*-log <logfilename>*  
*-name <ESDT ShortName>*  
*-version <ESDT VersionID>*  
*-insertbegin <date>*  
*-insertend <date>*  
*-physical*  
*-delref*  
*-noprompt*

This command physically delete science granules specified by <ESDT\_Shortname> and <ESDT\_VersionID> and within the insert time range specified by parameters <insertbegin> and <insertend>. Associated granules are also deleted as long as other granules do not reference them.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -delref parameter specifies the science granules should be deleted even if other granules reference them.

The -noprompt parameter specifies the user is not prompted to confirm the deletion.

#### **4.7.2.2.19 Confirmed Deletion of Science Granules from the Archive by Short Name, Version ID and Insert Time Range**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-name <ESDT ShortName>*

*-version <ESDT VersionID>*

*-insertbegin <date>*

*-insertend <date>*

*-DFA*

This command deletes from the Archive science granules specified by <ESDT\_Shortname> and <ESDT\_VersionID> and within the insert time range specified by parameters <insertbegin> and <insertend>.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -DFA parameter specifies the granules are deleted from the Archive.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### **4.7.2.2.20 Unconfirmed Deletion of Science Granules from the Archive by Short Name, Version ID and Insert Time Range**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-name <ESDT ShortName>*

*-version <ESDT VersionID>*

*-insertbegin <date>*

*-insertend <date>*

*-DFA*

*-noprompt*

This command deletes from the Archive science granules specified by <ESDT\_Shortname> and <ESDT\_VersionID> and within the insert time range specified by parameters <insertbegin> and <insertend>.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -DFA parameter specifies the granules are deleted from the Archive.

The -noprompt parameter specifies the user is not prompted to confirm the deletion.

#### **4.7.2.2.21 Confirmed Deletion of Science and Associated Granules from the Inventory and Archive by ESDT Short Name, Version ID and Local Granule Id**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile* *usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode* *<MODE>*

*-log* *<logfilename>*

*-localgranulefile* *<filename>*

*-physical*

This command physically deletes science granules defined in a file containing ESDT ShortName, ESDT Version ID and Local Granule Id. Associated granules are also deleted as long as other granules do not reference them.

The *<logfilename>* parameter specifies the log file the deletion process should use to write deletion activity.

The *-localgranulefile* parameter specifies the file that contains the science granules to delete. The file contains ESDT Short Name, ESDT Version ID and Local Granule Id.

The *-physical* parameter specifies the granules are deleted from the Inventory and the Archive.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### **4.7.2.2.22 Unconfirmed Deletion of Science and Associated Granules from the Inventory and Archive by ESDT Short Name, Version ID and Local Granule Id**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile* *usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode* *<MODE>*

*-log* *<logfilename>*

*-localgranulefile* *<filename>*

*-physical*

*-noprompt*

This command physically deletes science granules defined in a file containing ESDT ShortName, ESDT Version ID and Local Granule Id. Associated granules are also deleted as long as other granules do not reference them.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -localgranulefile parameter specifies the file containing the science granules to delete. The file contains ESDT Short Name, ESDT Version ID and Local Granule Id.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -noprompt parameter specifies the user is not prompted to confirm the deletion.

#### **4.7.2.2.23 Confirmed Deletion of Science Granules from the Inventory and Archive by ESDT Short Name, Version ID and Local Granule Id**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-localgranulefile <filename>*

*-physical*

*-noassoc*

This command physically deletes science granules defined in a file containing ESDT ShortName, ESDT Version ID and Local Granule Id.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -localgranulefile parameter specifies the file containing the science granules to delete. The file contains ESDT Short Name, ESDT Version ID and Local Granule Id.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -noassoc parameter specifies the associated granules are not deleted even if other granules do not reference them.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### **4.7.2.2.24 Unconfirmed Deletion of Science Granules from the Inventory and Archive by ESDT Short Name, Version ID and Local Granule Id**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-localgranulefile <filename>*

*-physical*

*-noassoc*

This command physically deletes science granules defined in a file containing ESDT ShortName, ESDT Version ID and Local Granule Id.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -localgranulefile parameter specifies the file containing the science granules to delete. The file contains ESDT Short Name, ESDT Version ID and Local Granule Id.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -noassoc parameter specifies the associated granules are not deleted even if other granules do not reference them.

The -noprompt parameter specifies the user does not want to confirm the deletion of the granules.

#### **4.7.2.2.25 Confirmed Deletion of Referenced and Unreferenced Science Granules from the Inventory and Archive by ESDT Short Name, Version ID and Local Granule Id**

The command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-localgranulefile <filename>*

*-physical*

*-noassoc*

*-delref*

This command physically deletes science granules defined in a file containing ESDT ShortName, ESDT Version ID and Local Granule Id.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -localgranulefile parameter specifies the file containing the science granules to delete. The file contains ESDT Short Name, ESDT Version ID and Local Granule Id.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -noassoc parameter specifies the associated granules are not deleted even if other granules do not reference them.

The -delref parameter specifies the science granules should be deleted even if other granules reference them.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### **4.7.2.2.26 Unconfirmed Deletion of Referenced and Unreferenced Science Granules from the Inventory and Archive by ESDT Short Name, Version ID and Local Granule Id**

The command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-localgranulefile <filename>*

*-physical*

*-noassoc*

*-delref*

This command physically deletes science granules defined in a file containing ESDT ShortName, ESDT Version ID and Local Granule Id.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The `-localgranulefile` parameter specifies the file containing the science granules to delete. The file contains ESDT Short Name, ESDT Version ID and Local Granule Id.

The `-physical` parameter specifies the granules are deleted from the Inventory and the Archive.

The `-noassoc` parameter specifies the associated granules are not deleted even if other granules do not reference them.

The `-delref` parameter specifies the science granules should be deleted even if other granules reference them.

The `-noprompt` parameter specifies the user is not prompted to confirm the deletion.

#### **4.7.2.2.27 Confirmed Deletion of Referenced and Unreferenced Science Granules and Associated Granules from the Inventory and Archive by ESDT Short Name, Version ID and Local Granule Id**

The command has the form:

*EcDsGranuleDelete*

*ConfigFile* `usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG`

*ecs\_mode* `<MODE>`

*-log* `<logfilename>`

*-localgranulefile* `<filename>`

*-physical*

*-delref*

This command physically deletes science granules defined in a file containing ESDT ShortName, ESDT Version ID and Local Granule Id. Associated granules are also deleted as long as other granules do not reference them.

The `<logfilename>` parameter specifies the log file the deletion process should use to write deletion activity.

The `-localgranulefile` parameter specifies the file containing the science granules to delete. The file contains ESDT Short Name, ESDT Version ID and Local Granule Id.

The `-physical` parameter specifies the granules are deleted from the Inventory and the Archive.

The `-delref` parameter specifies the science granules should be deleted even if other granules reference them.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### **4.7.2.2.28 Unconfirmed Deletion of Referenced and Unreferenced Science Granules and Associated Granules from the Inventory and Archive by ESDT Short Name, Version ID and Local Granule Id**

The command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-localgranulefile <filename>*

*-physical*

*-delref*

*-noprompt*

This command physically deletes science granules defined in a file containing ESDT ShortName, ESDT Version ID and Local Granule Id. Associated granules are also deleted as long as other granules do not reference them.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -localgranulefile parameter specifies the file containing the science granules to delete. The file contains ESDT Short Name, ESDT Version ID and Local Granule Id.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -delref parameter specifies the science granules should be deleted even if other granules reference them.

The -noprompt parameter specifies the user is not prompted to confirm the deletion.

#### **4.7.2.2.29 Confirmed Deletion of Science Granules from the Archive by ESDT Short Name, Version ID and Local Granule Id**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-localgranulefile <filename>*

### ***-DFA***

This command deletes from the Archive science granules defined in a file containing ESDT ShortName, ESDT Version ID and Local Granule Id.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -localgranulefile parameter specifies the file containing the science granules to delete. The file contains ESDT Short Name, ESDT Version ID and Local Granule Id.

The -DFA parameter specifies the granules are deleted from the Archive.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

### **4.7.2.2.30 Unconfirmed Deletion of Science Granules from the Archive by ESDT Short Name, Version ID and Local Granule Id**

This command has the form:

***EcDsGranuleDelete***

***ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG***

***ecs\_mode <MODE>***

***-log <logfilename>***

***-localgranulefile <filename>***

***-DFA***

***-noprompt***

This command deletes from the Archive science granules defined in a file containing ESDT ShortName, ESDT Version ID and Local Granule Id.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -localgranulefile parameter specifies the file containing the science granules to delete. The file contains ESDT Short Name, ESDT Version ID and Local Granule Id.

The -DFA parameter specifies the granules are deleted from the Archive.

The -noprompt parameter specifies the granules should be deleted without confirmation from the user.

#### **4.7.2.2.31 Confirmed Deletion of Science and Associated Granules from the Inventory and Archive by SDSRV Granule Id**

The command has the form:

*EcDsGranuleDelete*

*ConfigFile* *usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode* *<MODE>*

*-log* *<logfile>*

*-geoidfile* *<filename>*

*-physical*

This command physically deletes science granules specified by SDSRV Granule Id. Associated granules are also deleted as long as other granules do not reference them.

The *<logfile>* parameter specifies the log file the deletion process should use to write deletion activity.

The *-geoidfile* parameter specifies the file containing the science granules to delete. The file contains SDSRV Granule Ids.

The *-physical* parameter specifies the granules are deleted from the Inventory and the Archive.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### **4.7.2.2.32 Unconfirmed Deletion of Science and Associated Granules from the Inventory and Archive by SDSRV Granule Id**

The command has the form:

*EcDsGranuleDelete*

*ConfigFile* *usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode* *<MODE>*

*-log* *<logfile>*

*-geoidfile* *<filename>*

*-physical*

*-noprompt*

This command physically deletes science granules specified by SDSRV Granule Id. Associated granules are also deleted as long as other granules do not reference them.

The <logfile> parameter specifies the log file the deletion process should use to write deletion activity.

The -geoidfile parameter specifies the file containing the science granules to delete. The file contains SDSRV Granule Ids.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -noprompt parameter specifies the user does not want to confirm the deletion of the granules.

#### **4.7.2.2.33 Confirmed Deletion of Science Granules from the Inventory and Archive by SDSRV Granule Id**

The command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfile>*

*-geoidfile <filename>*

*-physical*

*-noassoc*

This command physically deletes science granules specified by SDSRV Granule Id.

The <logfile> parameter specifies the log file the deletion process should use to write deletion activity.

The -geoidfile parameter specifies the file containing the science granules to delete. The file contains SDSRV Granule Ids.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -noassoc parameter specifies the associated granules are not deleted even if other granules do not reference them.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### **4.7.2.2.34 Unconfirmed Deletion of Science Granules from the Inventory and Archive by SDSRV Granule Id**

The command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-geoidfile <filename>*

*-physical*

*-noassoc*

*-noprompt*

This command physically deletes science granules specified by SDSRV Granule Id.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -geoidfile parameter specifies the file containing the science granules to delete. The file contains SDSRV Granule Ids.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -noassoc parameter specifies the associated granules are not deleted even if other granules do not reference them.

The -noprompt parameter specifies the user does not want to confirm the deletion of the granules.

#### **4.7.2.2.35 Confirmed Deletion of Referenced and Unreferenced Science Granules from the Inventory and Archive by SDSRV Granule Id**

The command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-geoidfile <filename>*

*-physical*

*-noassoc*

*-delref*

This command physically deletes science granules specified by SDSRV Granule Id.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The `-geoidfile` parameter specifies the file containing the science granules to delete. The file contains SDSRV Granule Ids.

The `-physical` parameter specifies the granules are deleted from the Inventory and the Archive.

The `-noassoc` parameter specifies the associated granules are not deleted even if other granules do not reference them.

The `-delref` parameter specifies the science granules should be deleted even if other granules reference them.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### **4.7.2.2.36 Unconfirmed Deletion of Referenced and Unreferenced Science Granules from the Inventory and Archive by SDSRV Granule Id**

The command has the form:

***EcDsGranuleDelete***

***ConfigFile** `usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG`*

***ecs\_mode** <MODE>*

***-log** <logfilename>*

***-geoidfile** <filename>*

***-physical***

***-noassoc***

***-noprompt***

This command physically deletes science granules specified by SDSRV Granule Id.

The `<logfilename>` parameter specifies the log file the deletion process should use to write deletion activity.

The `-geoidfile` parameter specifies the file containing the science granules to delete. The file contains SDSRV Granule Ids.

The `-physical` parameter specifies the granules are deleted from the Inventory and the Archive.

The `-noassoc` parameter specifies the associated granules are not deleted even if other granules do not reference them.

The `-delref` parameter specifies the science granules should be deleted even if other granules reference them.

The `-noprompt` parameter specifies the user does not want to confirm the deletion of the granules.

#### **4.7.2.2.37 Confirmed Deletion of Referenced and Unreferenced Science Granules and Associated Granules from the Inventory and Archive by SDSRV Granule Id**

The command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-geoidfile <filename>*

*-physical*

*-delref*

This command physically deletes science granules specified by SDSRV Granule Id. Associated granules are also deleted as long as other granules do not reference them.

The <logfilename> parameter specifies the log file the deletion process should use to write deletion activity.

The -geoidfile parameter specifies the file containing the science granules to delete. The file contains SDSRV Granule Ids.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -delref parameter specifies the science granules should be deleted even if other granules reference them.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### **4.7.2.2.38 Unconfirmed Deletion of Referenced and Unreferenced Science Granules from the Inventory and Archive by SDSRV Granule Id**

The command has the form:

*EcDsGranuleDelete*

*ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode <MODE>*

*-log <logfilename>*

*-geoidfile <filename>*

*-physical*

*-noprompt*

This command physically deletes science granules specified by SDSRV Granule Id. Associated granules are also deleted as long as other granules do not reference them.

The <logfile> parameter specifies the log file the deletion process should use to write deletion activity.

The -geoidfile parameter specifies the file containing the science granules to delete. The file contains SDSRV Granule Ids.

The -physical parameter specifies the granules are deleted from the Inventory and the Archive.

The -delref parameter specifies the science granules should be deleted even if other granules reference them.

The -noprompt parameter specifies the user does not want to confirm the deletion of the granules.

#### **4.7.2.2.39 Confirmed Deletion of Science Granules from Archive SDSRV Granule Id**

This command has the form:

***EcDsGranuleDelete***

***ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG***

***ecs\_mode <MODE>***

***-log <logfile>***

***-geoidfile <filename>***

***-DFA***

This command deletes from the Archive science granules defined in a file containing SDSRV Granule Ids.

The <logfile> parameter specifies the log file the deletion process should use to write deletion activity.

The -geoidfile parameter specifies the file containing the science granules to delete. The file contains SDSRV Granule Ids.

The -DFA parameter specifies the granules are deleted from the Archive.

The number of candidate science granules to be deleted is displayed and the user is prompted to confirm the deletion.

#### **4.7.2.2.40 Unconfirmed Deletion of Science Granules from Archive by SDSRV Granule Id**

This command has the form:

*EcDsGranuleDelete*

*ConfigFile* *usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode* *<MODE>*

*-log* *<logfilename>*

*-geoidfile* *<filename>*

*-DFA*

*-noprompt*

This command deletes from the Archive science granules defined in a file containing SDSRV Granule Ids.

The *<logfilename>* parameter specifies the log file the deletion process should use to write deletion activity.

The *-geoidfile* parameter specifies the file containing the science granules to delete. The file contains SDSRV Granule Ids.

The *-DFA* parameter specifies the granules are deleted from the Archive.

The *-noprompt* parameter specifies the granules should be deleted without confirmation from the user.

#### **4.7.2.2.41 Display Science Granules Specified by Short Name, Version Id and Data Temporal Range**

The command has the form:

*EcDsGranuleDelete*

*ConfigFile* *usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode* *<MODE>*

*-log* *<logfilename>*

*-name* *<ESDT ShortName>*

*-version* *<ESDT VersionID>*

*-begindate* *<date>*

*-enddate* *<date>*

### ***-display***

This command displays the science granules that would be deleted if the command were executed without the *-display*. The science granules are specified by parameters *<ESDT ShortName>* and *<ESDT\_VersionID>* within the temporal range specified by parameters *<begindate>* and *<enddate>*.

The *<logfilefilename>* parameter specifies the log file where the candidate science granules are written. The SDSRV Granule Id and Local Granule Id is written to the log for each science granule that is a candidate for deletion.

The SDSRV Granule Id and Local Granule Id of each candidate granule is displayed to the user along with the total number of granules.

### **4.7.2.2.42 Display Science Granules Specified by Short Name, Version Id and Insert Time Range**

The command has the form:

***EcDsGranuleDelete***

***ConfigFile usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG***

***ecs\_mode <MODE>***

***-log <logfilefilename>***

***-name <ESDT ShortName>***

***-version <ESDT VersionID>***

***-insertbegin <date>***

***-insertend <date>***

***-display***

This command displays the science granules that would be deleted if the command were executed without the *-display*. The science granules are specified by parameters *<ESDT ShortName>* and *<ESDT\_VersionID>* within the insert time range specified by the parameters *<insertbegin>* and *<insertend>*.

The *<logfilefilename>* parameter specifies the log file where the candidate science granules are written. The SDSRV Granule Id and Local Granule Id is written to the log for each science granule that is a candidate for deletion.

The SDSRV Granule Id and Local Granule Id of each candidate granule is displayed to the user along with the total number of granules.

#### **4.7.2.2.43 Display Science Granules Specified by Short Name, Version Id and Local Granule Id**

The command has the form:

*EcDsGranuleDelete*

*ConfigFile* *usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode* *<MODE>*

*-log* *<logfilename>*

*-localgranulefile* *<filename>*

*-display*

This command displays the science granules that would be deleted if the command were executed without the *-display*. The science granules are specified by parameters *<ESDT ShortName>* and *<ESDT\_VersionID>* and Local Granule Id.

The *<logfilename>* parameter specifies the log file where the candidate science granules are written. The SDSRV Granule Id and Local Granule Id is written to the log for each science granule that is a candidate for deletion.

The *-localgranulefile* parameter specifies the file containing the science granules to delete. The file contains ESDT Short Name, ESDT Version ID and Local Granule Id.

The SDSRV Granule Id and Local Granule Id of each candidate granule is displayed to the user along with the total number of granules.

#### **4.7.2.2.44 Display Science Granules Specified SDSRV Granule Id**

The command has the form:

*EcDsGranuleDelete*

*ConfigFile* *usr/ecs/CUSTOM/<MODE>/cfg/EcDsGranuleDelete.CFG*

*ecs\_mode* *<MODE>*

*-log* *<logfilename>*

*-geoidfile* *<filename>*

*-display*

This command displays the science granules that would be deleted if the command were executed without the *-display*. SDSRV Granule Id specifies the science granules.

The *<logfilename>* parameter specifies the log file where the candidate science granules are written. The SDSRV Granule Id and Local Granule Id is written to the log for each science granule that is a candidate for deletion.

The -geoidfile parameter specifies the file containing the science granules to delete. The file contains SDSRV Granule Ids.

The SDSRV Granule Id and Local Granule Id of each candidate granule is displayed to the user along with the total number of granules.

### 4.7.2.3 Required Operating Environment

For information on the operating environment, tunable parameters, and environment variables refer to the 920-TDA-022 “Custom Code Configuration Parameters” documentation series.

#### 4.7.2.3.1 Interfaces and Data Types

Table 4.7.2-2 lists the supporting products this tool depends upon to function properly.

**Table 4.7.2-2. Interface Protocols**

Product Dependency	Protocols Used	Comments
SDSRV and all clients	Socket	Via client libraries

### 4.7.2.4 Databases

The Granule Deletion Administration tool does not include the direct managing of any database. It has an interface with the Science Data Server Data Base: however this interface is based on a simple parameter passing function. For further information of the Science Data Server Data Base refer to 311-CD-624, *Science Data Server Database Design and Schema Specifications for the ECS Project*.

### 4.7.2.5 Special Constraints

The Granule Deletion Administration Tool runs only if the Science Data Server is running in the background. Note also when the Granule Deletion Administration Tool is started through a command line, the command line specifies the configuration file used to initialize the application.

### 4.7.2.6 Outputs

None.

### 4.7.2.7 Event and Error Messages

None.

### 4.7.2.8 Reports

None.

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## **4.8 User Services Tools**

This section describes the User Services tools used by DAAC operators:

1. User Account Management GUI
2. Order Tracking
3. Data Dictionary Maintenance Tool
4. Database Installation and Maintenance Scripts
5. Database Replication Scripts
6. Restricting Access to ESDTs and Granules Scripts
7. Spatial Subscription Server GUI
8. Spatial Subscription Server Command Line Interface
9. Bulk Metadata Generation Tool
10. Data Pool Maintenance GUI
11. Order Manager GUI
12. Order Manager Command Line Utility
13. Order Manager System Configuration Command Line Interface
14. Bulk URL Utility
15. OmPdCleanup GUI

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#### 4.8.1 User Account Management GUI

DAAC and SMC operators use the User Account Management GUI to process new account requests and manage existing ones. There are two versions of the User Account Management GUI – the DAAC version and the SMC version. **Please note that both the GUIs are not to be used to create accounts starting with release 7.20; they are to be created using the EDG. These GUIs can be used to view the profiles. As originally designed,** user profiles are read-only at the DAACs and read/write at the SMC. The main difference between the two is the SMC version contains two tabs and extra buttons to allow the operator to perform various account creations and update functions. Since the GUIs are nearly identical, this section is used to describe both. A clear indication is given, however, when a specified feature is not available on the DAAC GUI. DAAC operators are able to use the SMC GUI to maintain DAAC accounts by logging into the SMC and running the SMC GUI remotely.

Figure 4.8.1-1 is the User Account Manager GUI, which contains two tabs: the **Request Account** tab and the **Profile Account** tab. The **Request Account** tab allows operators to create EMD accounts. The **Profile Account** tab allows an operator to retrieve and update an existing account, delete an account, view an entire user profile, and view any modifications made to an account. The User Account Management GUI is used to perform the operator functions listed in Table 4.8.1-1 below.

**Table 4.8.1-1. EMD Operator Functions Performed with the User Account Management GUI (1 of 2)**

Operating Function	GUI/Command	Description	When and Why to Use
Create a registered user account (only available at SMC)	<ul style="list-style-type: none"> <li>• Request Account tab</li> <li>– Fill out information (personal, addresses, account), then click Create Account button</li> </ul>	Creates an EMD account and a profile in Sybase	When a pending request is approved.
Update an existing account (Only available at SMC)	<ul style="list-style-type: none"> <li>• Profile Account tab</li> <li>– Highlight the existing account to be updated</li> <li>– Modify the information (personal, addresses, account), then click Apply Edit button</li> </ul>	<ul style="list-style-type: none"> <li>• Updates account information in Sybase</li> <li>• View Edit button allows the operator to view which information has been modified</li> </ul>	When account information needs to be updated.
Delete account (only available at SMC)	<ul style="list-style-type: none"> <li>• Profile Account tab</li> <li>– Highlight user account</li> <li>– Click Delete Account button</li> </ul>	<ul style="list-style-type: none"> <li>• Deletes a registered user account (EMD account and profile)</li> <li>• User account is deleted from the database table</li> <li>• A pop up dialog box appears to confirm the operation</li> </ul>	When an account is no longer required by the user.

**Table 4.8.1-1. Common EMD Operator Functions Performed with the User Account Management GUI (2 of 2)**

Operating Function	GUI/Command	Description	When and Why to Use
View User Account Profile	<ul style="list-style-type: none"> <li>• Profile Account tab</li> <li>– Highlight user account</li> <li>– Click View Entire Profile button</li> </ul>	Displays user’s personal and account information, mailing, shipping and billing addresses	To obtain a summary of user account information on one “page.”
Change Aster category (only available at SMC)	<ul style="list-style-type: none"> <li>• Profile Account tab</li> <li>– Select DAR information tab</li> <li>– Select new Aster category in the Aster Category Combo box</li> <li>– Click Apply Edit button</li> </ul>	Changes existing ASTER category to a new one	As necessary.
Delete Dar privilege (only available at SMC)	<ul style="list-style-type: none"> <li>• Profile Account tab</li> <li>– Select DAR information tab</li> <li>– Click Apply Edit button</li> </ul>	Delete DAR privilege	As necessary.
Sort list of user profile or Request Account	<ul style="list-style-type: none"> <li>• Click the item label of title bar in the list box</li> </ul>	Sort user profile or request list	As necessary.

#### 4.8.1.1 Quick Start Using User Account Manager

To execute the User Account Manager GUI from the command line prompt, enter:

**>EcMsAc<DAAC/SMC>RegUserGUIStart <mode>**

Where:

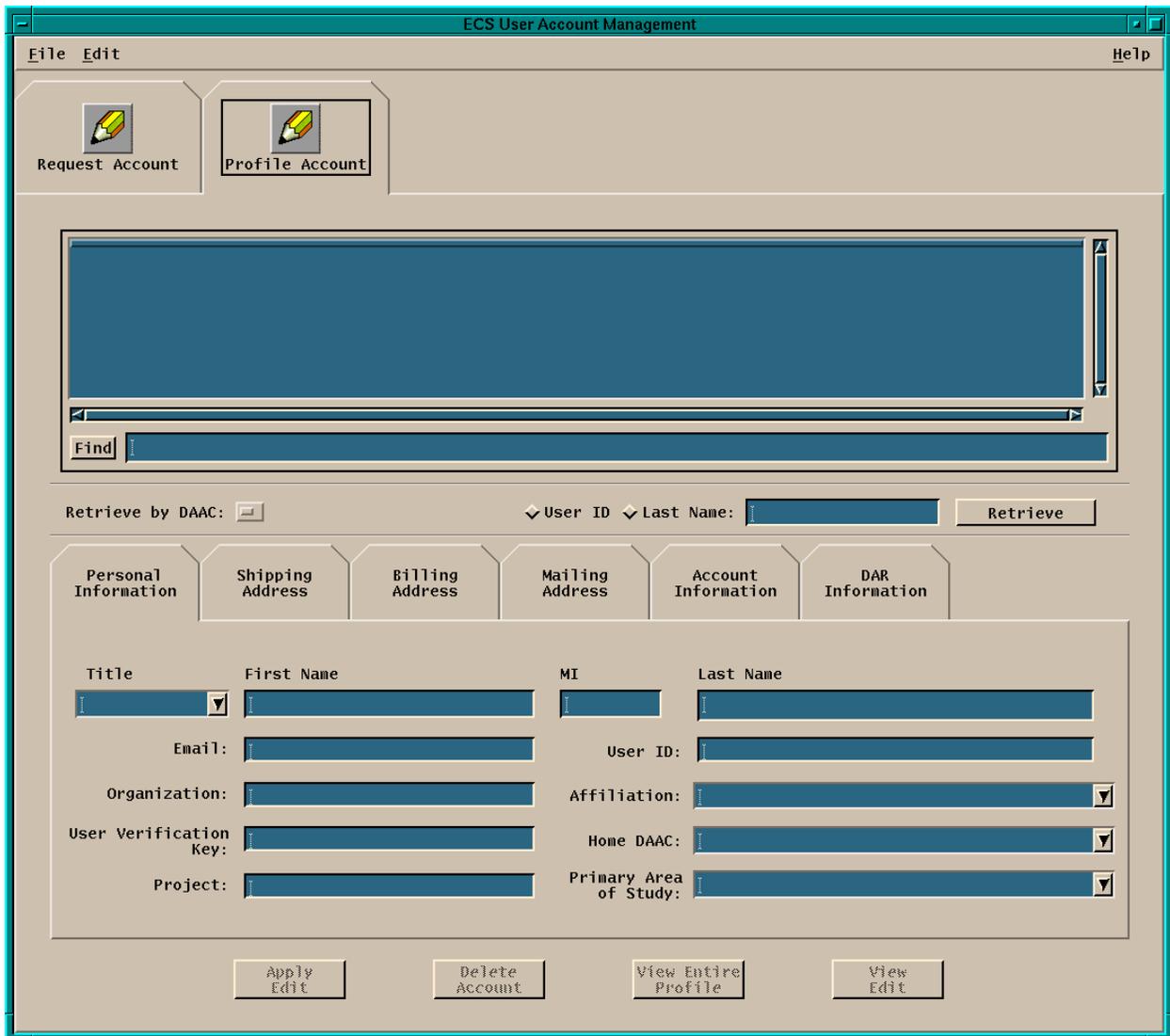
**DAAC** is used if the GUI is installed at a DAAC and **SMC** is used if the GUI is installed at the SMC

**<mode>** is the EMD mode in which to operate (e.g., **OPS, TS1 or TS2**).

Refer to the 920-TDA-022 “Custom Code Configuration Parameters” documentation series for a listing of EcMsAc<DAAC/SMC>RegUserGUIStart parameters.

#### 4.8.1.2 User Account Management Main Screen

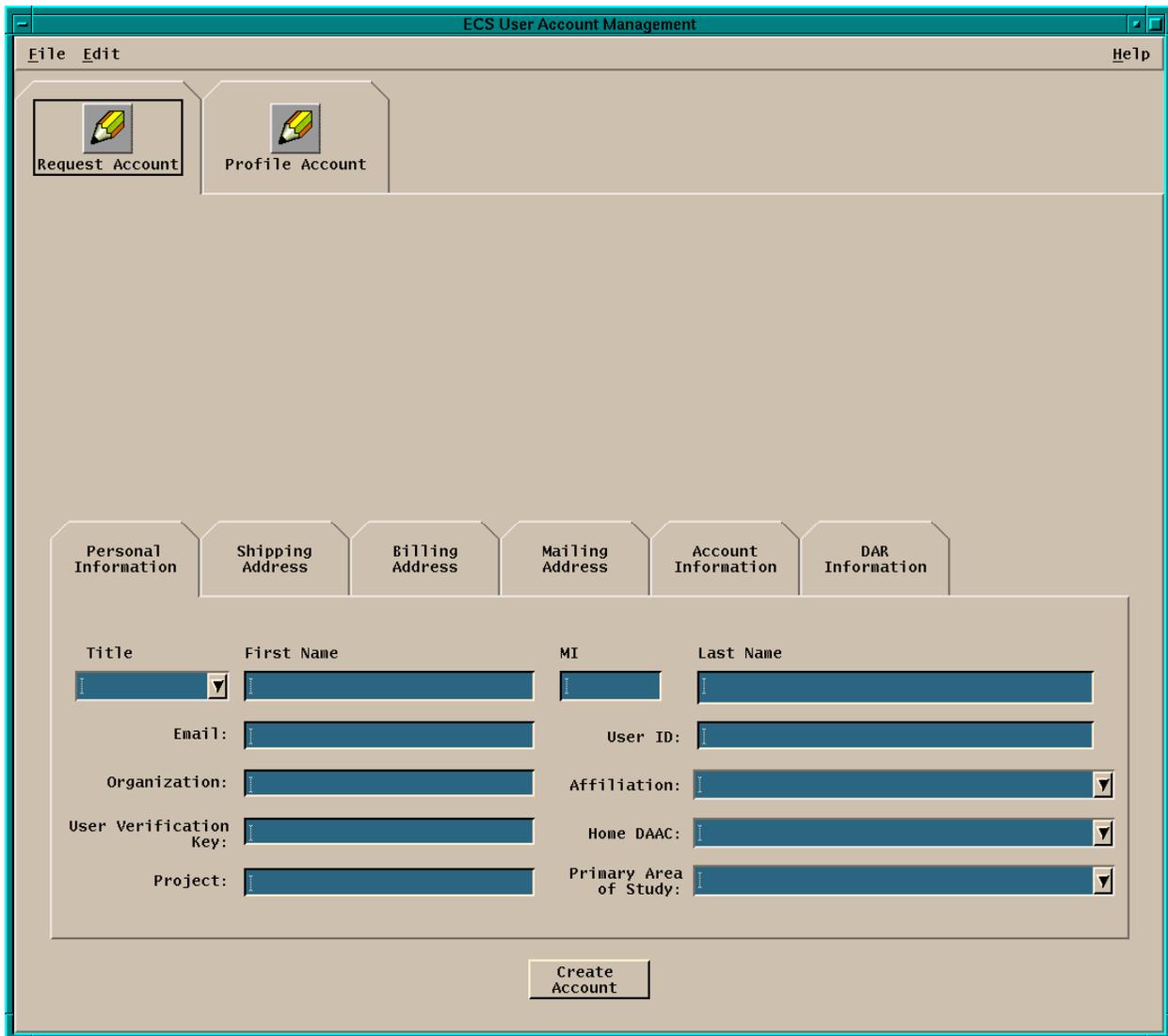
The User Account Manager GUI Main Screen is shown in Figure 4.8.1-1 with the Profile Account tab (SMC only) selected. From this screen, an operator has access to both the Request Account tab and the Profile Account tab information. The menu bar allows the operator to exit the application using the File pull-down menu or obtain additional help through the Help pulldown menu. The Edit pulldown menu is not supported as of this release.



**Figure 4.8.1-1. User Account Manager GUI Main Screen**

#### **4.8.1.2.1 Request Account Tab (SMC only)**

The Request Account tab, shown in Figure 4.8.1-2, has six sub-tabs displaying information such as personal information, shipping address, billing address, mailing address, account information, and DAR information.



**Figure 4.8.1-2. Request Account Tab with Edited Areas Highlighted**

In addition, the following pushbutton is provided for the Request Account tab at the SMC:

**Create Account** -- creates an EMD user account. An EMD login userID and V0 Client authenticator are given to the user.

#### 4.8.1.2.1.1 Personal Information Sub-tab

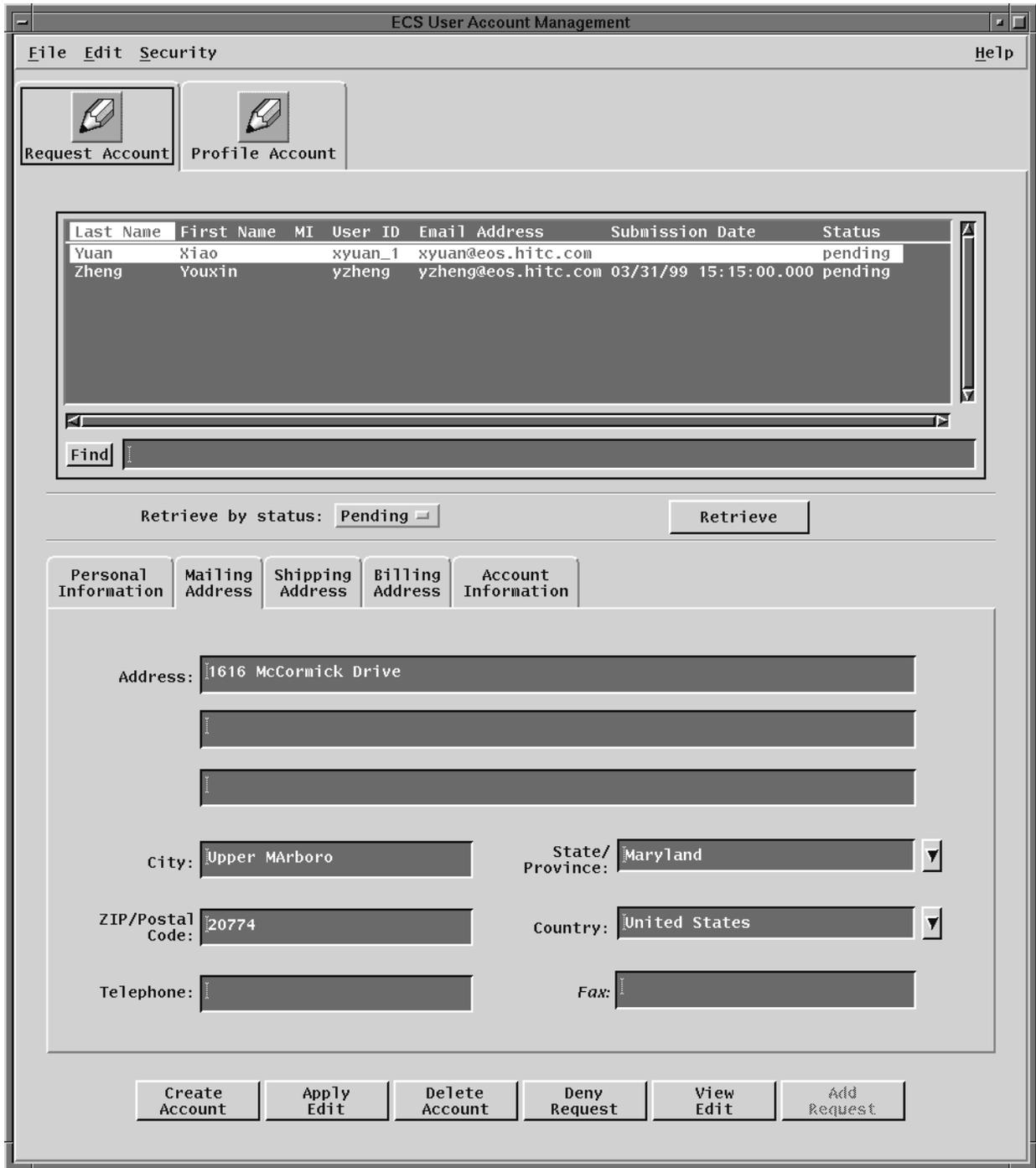
The Personal Information sub-tab of the Request Account tab, shown in Figure 4.8.1-2, is used to record personal information about the user requesting an account. Table 4.8.1-2 describes the data fields on this sub-tab.

**Table 4.8.1-2. Personal Information Sub-tab Field Description**

Field Name	Data Type	Size	Entry	Description
Retrieve	Selection	N/A	Optional	Retrieves summary information on users requesting an account by the status (selected with the <b>Retrieve by Status</b> button).
Retrieve by Status	Selection	N/A	Optional default: Pending	Retrieves summary information on users requesting an account by pending status, denied status, or all.
Title	Character	5	Optional, selection from drop-down list	Title (e.g., Mr., Dr., Mrs., Miss, etc.)
First Name	Character	20	Required	<ul style="list-style-type: none"> <li>• First name of user requesting an account.</li> <li>• Retrieved from database table.</li> </ul>
MI	Character	1	Optional	<ul style="list-style-type: none"> <li>• Middle initial of user requesting an account.</li> <li>• Retrieved from database table.</li> </ul>
Last Name	Character	20	Required	<ul style="list-style-type: none"> <li>• Last name of user requesting an account.</li> <li>• Retrieved from database table.</li> </ul>
Email	Character	256	Required	<ul style="list-style-type: none"> <li>• Email address of user requesting an account.</li> <li>• Retrieved from database table.</li> </ul>
User ID	Character	12	Optional	<ul style="list-style-type: none"> <li>• ID number of user requesting an account.</li> <li>• Retrieved from database table.</li> </ul>
Organization	Character	31	Optional	<ul style="list-style-type: none"> <li>• Organization for a user (e.g., Raytheon).</li> <li>• Retrieved from database table.</li> </ul>
Affiliation	Character	16	Optional, selection from drop-down list	<ul style="list-style-type: none"> <li>• Government, university, etc.</li> <li>• Retrieved from database table.</li> </ul>
User Verification Key	Character	20	Optional (SMC - when creating a profile do not fill this field)	<ul style="list-style-type: none"> <li>• User Verification Key.</li> <li>• Retrieved from database table.</li> </ul>
Home DAAC	Character	12	Required, selection from drop-down list	<ul style="list-style-type: none"> <li>• DAAC the user requesting an account is assigned to.</li> <li>• Retrieved from database table.</li> </ul>
Project	Character	30	Optional	<ul style="list-style-type: none"> <li>• EOS, etc.</li> <li>• Retrieved from database table.</li> </ul>
Primary Area of Study	Character	20	Optional, selection from drop-down list	<ul style="list-style-type: none"> <li>• Research field.</li> <li>• Retrieved from database table.</li> </ul>

**4.8.1.2.1.2 Address Sub-tabs (Shipping, Billing, and Mailing)**

These three sub-tabs provide fields specifying where to send the user’s mail, shipments, and bills. Figure 4.8.1-3 is a sample of the Mailing Address sub-tab. Because these sub-tabs contain identical fields to collect the different address information, only one figure is being shown.



**Figure 4.8.1-3. Mailing Address Sub-tab**

Table 4.8.1-3 describes the fields contained in the Mailing, Shipping, and Billing Address sub-tabs.

**Table 4.8.1-3. Mailing, Shipping, and Billing Address Tab Field Description**

Field Name	Data Type	Size	Entry	Description
Title	Character	5	Optional	<ul style="list-style-type: none"> <li>Title.</li> </ul>
First Name	Character	20	Optional	<ul style="list-style-type: none"> <li>First Name.</li> </ul>
Middle Initial	Character	1	Optional	<ul style="list-style-type: none"> <li>Middle initial.</li> </ul>
Last Name	Character	20	Optional	<ul style="list-style-type: none"> <li>Last Name.</li> </ul>
User ID	Character	12	Optional	<ul style="list-style-type: none"> <li>ID of user requesting an account.</li> <li>Retrieved from database table.</li> </ul>
Email Address	Character	256	Required	<ul style="list-style-type: none"> <li>Email address of user requesting an account.</li> <li>Retrieved from database table.</li> </ul>
Submission Date	n/a	n/a	System Generated	<ul style="list-style-type: none"> <li>Date and time user submitted request.</li> </ul>
Status	n/a	n/a	System Generated	<ul style="list-style-type: none"> <li>The state the request is in the system.</li> </ul>
Address (1)	Character	32	Optional	<ul style="list-style-type: none"> <li>Street name address of user requesting an account, line 1.</li> <li>Retrieved from database table.</li> </ul>
Address (2)	Character	32	Optional	<ul style="list-style-type: none"> <li>Street name address of user requesting an account, line 2.</li> <li>Retrieved from database table.</li> </ul>
Address (3)	Character	32	Optional	<ul style="list-style-type: none"> <li>Street name address of user requesting an account, line 3.</li> <li>Retrieved from database table.</li> </ul>
Organization	Character	31	Optional	<ul style="list-style-type: none"> <li>Name of Organization.</li> </ul>
City	Character	30	Optional	<ul style="list-style-type: none"> <li>City name address of user requesting an account.</li> <li>Retrieved from database table.</li> </ul>
State/Province	Character	20	Optional, selection from drop-down list	<ul style="list-style-type: none"> <li>State name address of user requesting an account.</li> <li>Retrieved from database table.</li> </ul>
Country	Character	30	Optional, selection from drop-down list	<ul style="list-style-type: none"> <li>Country name address of user requesting an account.</li> <li>Retrieved from database table.</li> </ul>
ZIP/Postal Code	Character	15	Optional	<ul style="list-style-type: none"> <li>Zip code of user requesting an account.</li> <li>Retrieved from database table.</li> </ul>
Telephone	Character	22	Optional	<ul style="list-style-type: none"> <li>Telephone number of user requesting an account.</li> <li>Retrieved from database table.</li> </ul>
Fax	Character	22	Optional	<ul style="list-style-type: none"> <li>Facsimile (fax) number of user requesting an account.</li> <li>Retrieved from database table.</li> </ul>

### 4.8.1.2.1.3 Account Information Sub-tab

The Account Information sub-tab shown in Figure 4.8.1-4 contains information such as date an account was created and revised, when the account expires, privilege level and media preference.

The screenshot displays the 'ECS User Account Management' application window in 'Mode: SMC5B'. The 'Account Information' sub-tab is active, showing a table of user accounts and a detailed form for the selected user.

Last Name	First Name	MI	User ID	Email Address	DAAC
Aldridge	Nathan	G	naldridg	naldridg@eos.hitc.com	RBD
Beasley	Johnita		johmitab	johmitab@eos.hitc.com	RBD
Boliek	Jenny	L	jboliek	jboliek@eos.hitc.com	RBD
Bories	Cristina	M	cbories	cbories@eos.hitc.com	RBD
Bryant	Keith		kbryant	kbryant@eos.hitc.com	RBD

Below the table is a search bar labeled 'Find'. The 'Retrieve by DAAC' dropdown is set to 'ALL'. Radio buttons for 'User ID' and 'Last Name' are present, with a search input field and a 'Retrieve' button.

The 'Account Information' sub-tab is selected among other tabs: Personal Information, Mailing Address, Shipping Address, Billing Address, Account Information, and DAR Information.

The account details form includes the following fields:

- Creation Date: 01/13/00
- Expiration Date: 01/13/02
- Privilege Level: NORMAL
- NASA User: Privileged
- V0 Gateway Category: [Dropdown]
- V0 Gateway User Type: ECSDEV
- V0 Gateway Password: [Text Field]
- Authorize For ASTER L1B

At the bottom of the form are buttons for: Apply Edit, Change V0GW Password, Delete Account, View Entire Profile, and View Edit.

**Figure 4.8.1-4. Account Information Sub-tab**

Table 4.8.1-4 describes the Account Information sub-tab fields.

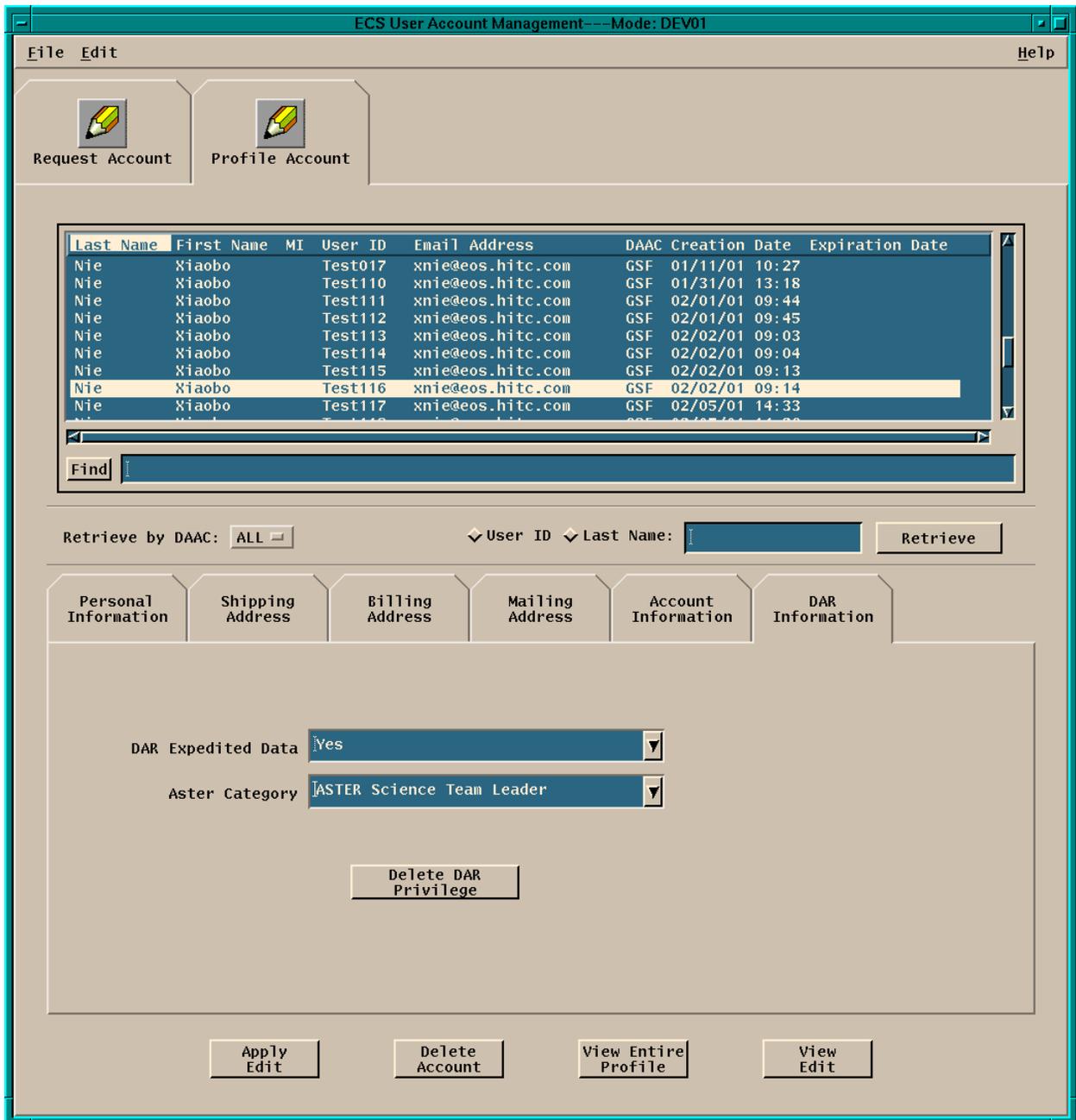
**Table 4.8.1-4. DAR Sub-tab Field Descriptions**

Field Name	Data Type	Size	Entry	Description
Creation Date	Character	20	System generated	Date the account was created.
Expiration Date	Sybase smalldatetime	See Sybase references	Operator input, optional	Date the account expires.
Account Number	Character	20	System generates from SmartStream Accounting Software	EMD account number.
Privilege Level	Character	10	Operator input, optional selection from drop-down list	The highest priority level a user can give his or her order with the valid values being: Express, vhigh, high, normal and low.
NASA User	Character	1	Operator input, optional, selection from drop-down list	Identifies whether a user works for NASA and his/her level of access to NASA data. The valid values are "P" = Privileged NASA User, "R" = Regular NASA User, "N" = Non-NASA User.
V0 Gateway Category	Character	50	Required to create an account, operator input, selection from drop-down list	V0 client gateway user type, category assigned by operator.
V0 Gateway User Type	Character	50	Required to create an account, operator input, selection from drop-down list	V0 client gateway user type, assigned by operator.
V0 Gateway Password	Character	20	Required for create an account, operator input	Used to generate V0 gateway unique authenticator, assigned by operator.
Access Privilege	Character	8	Operator input, optional selection from drop-down list	Access privilege such as access L1B data.

Figure 4.8.1-6 is the Print Dialog pop-up, which appears when an account has been created. Hitting the Ok button on this dialog generates a printout of the created account.

#### 4.8.1.2.1.4 DAR Information Sub-Tab Information

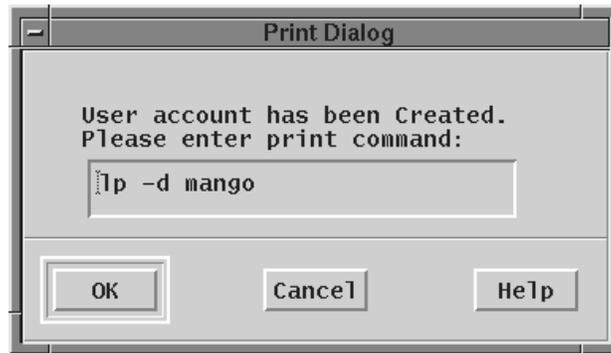
The Data Acquisition Request (DAR) Information sub-tab shown in Figure 4.8.1-5 contains information about a DAR user. Table 4.8.1-5 describes the DAR Information sub-tab fields.



**Figure 4.8.1-5. DAR Information Sub-tab**

**Table 4.8.1-5. Account Information Field Description**

Field Name	Data Type	Size	Entry	Description
DAR expedited data	Logical (Yes/No)	See Sybase for details	Display, selection from drop-down list	"Yes" indicates user can request expedited data; "No" indicates user is not authorized to request expedited data.
Aster category	Character	20	Optional, operator input, selection from drop-down list	Aster category refers to Science user categories.
Delete DAR Privilege	Push button		Optional, operator input	<ul style="list-style-type: none"> <li>Set Aster category to 0.</li> <li>Set DAR expedited data to "No."</li> <li>Send an email to Japan, which indicates Aster category is 99.</li> </ul> <p>Note: 0 is a non-valid value (e.g., a deleted privilege), but a value of 99 is sent to ASTER via Email because 0 is non-valid. See previous description.</p>



**Figure 4.8.1-6. Print Dialog Popup When Account Created**

#### 4.8.1.2.2 Profile Account Tab

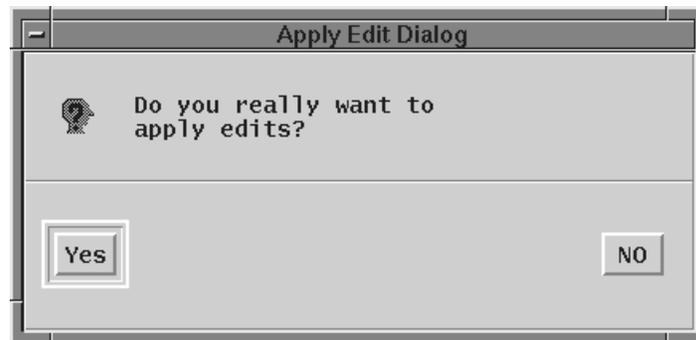
The Profile Account tab shown in Figure 4.8.1-7 provides the means for displaying/finding/sorting user information. It has six sub-tabs containing user information such as Personal Information, Mailing/Shipping/Billing Addresses, DAR Information, and Accounts Information. The menu bar allows the operator to exit the application using the File pulldown menu or obtain additional help using the Help pulldown menu.



**Figure 4.8.1-7. Profile Account Tab**

In addition the following push buttons are provided:

- **Apply Edit** (available only at SMC) -- a confirmation dialog appears as shown in Figure 4.8.1-8 before allowing the operator to update the edited information to the user profile database



**Figure 4.8.1-8. Apply Edit Dialogue Popup**

- **Delete Account** (available only at SMC) -- a confirmation dialog appears before allowing the operator to delete an EMD account, including its profile from the database. This confirmation dialogue is similar to that shown in Figure 4.8.1-8.
- **View Entire Profile** – view entire user profile in a one-page screen as shown in Figure 4.8.1-9. This screen contains the information from the Personal Information sub-tab, Mailing Address sub-tab, Shipping Address sub-tab, and Billing Address sub-tab.
- **Change DCE Password** – User can change DCE password for account.
- **Change VOGW Password** – User can change VOGW password for account.

PERSONAL INFORMATION		ACCOUNT INFORMATION	
Name:		Date Created:	
E-mail Address:		Expiration Date:	
Organization:		Privilege Level:	
User ID:		NASA User:	
User Verification Key:		Access Privilege:	
Affiliation:		V0 Gateway User Type:	
Project:		V0 Gateway Category:	
Home DAAC:			
Primary Area Of Study:			

---

MAILING ADDRESS		SHIPPING ADDRESS	
Name:		Name:	
Address:		Address:	
		Organization:	
City:		City:	
State/Province:		State/Province:	
Country:		Country:	
Zip/Postal Code:		ZIP/Postal Code:	
Telephone:		Telephone:	
Fax:		Fax:	

---

BILLING ADDRESS		DAR INFORMATION	
Name:		Aster Category:	
Address:		DAR Expedited Data:	
Organization:			
City:			
State/Province:			
Country:			
ZIP/Postal Code:			
Telephone:			
Fax:			

Close

**Figure 4.8.1-9. View Entire Profile Screen**

- **View Edit** (available only at SMC) -- is used to view modifications made to a user's account. When this button is pressed, the tabs contain information that has been edited

and highlighted. For example, Figure 4.8.1-10 indicates one or more Mailing Address and Account Information fields have been edited. Note, however, the individual fields edited but are not highlighted.



**Figure 4.8.1-10. Profile Account with Edited Areas Highlighted**

#### **4.8.1.2.2.1 Personal Information Sub-tab**

The Personal Information sub-tab of the Profile Account tab shown earlier in Figure 4.8.1-7 is used to record personal information about an existing account. Table 4.8.1-2 describes the fields on this sub-tab.

#### **4.8.1.2.2.2 Address Sub-tabs (Mailing, Shipping, and Billing)**

These three sub-tabs provide fields to fill in the mailing, shipping and billing address information for the user. The screens are identical to those shown earlier in the Request Account tab description.

#### **4.8.1.2.2.3 Account Information Sub-tab**

The Account Information sub-tab contains information similar to the information explained earlier in the Request Account tab description.

#### **4.8.1.2.2.4 DAR Information Sub-tab**

The Data Acquisition Request (DAR) Information sub-tab shown in Figure 4.8.1-5 contains information about a DAR user.

### **4.8.1.3 Required Operating Environment**

For information on the operating environment, tunable parameters and environment variables of The User Account Manager refer to the 920-TDA-022 “Custom Code Configuration Parameters” documentation series.

#### **4.8.1.3.1 Interfaces and Data Types**

User Account Manager exchanges data with Sybase, using Rogue Dbtools++ as the primary interface protocol.

#### **4.8.1.4 Databases**

The User Account Manager stores user profile data in table MsAcUsrProfile in the MSS database (Sybase). The MSS database for Release 6 is described in the *Management Support Subsystem Database Design and Schema Specifications* (311). The operator can identify individual data fields by examination of the descriptions in the documentation.

#### **4.8.1.5 Special Constraints**

There are no special constraints to running the DAAC User Account Manager. To run the SMC User Account Manager, the operator needs to have an SMC UNIX account and must be entered in the operator permissions database at the SMC. A DAAC operator is only able to view/modify records at the SMC associated with their home DAAC.

#### **4.8.1.6 Outputs**

Outputs from the Account Manager GUI are the information displayed on the screens described in Section 4.8.1.2 and error messages.

#### **4.8.1.7 Event and Error Messages**

User Account Manager issues both status and error messages to screen and log file. Both event and error messages are listed in Appendix A.

#### **4.8.1.8 Reports**

The User Account Manager application does not generate reports.

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## 4.8.2 Order Tracking

The Order Tracking tool provides the capability to track order status and its associated request status. The operator can retrieve orders by user name, order ID, or request ID. Order and request status are displayed on a graphic user interface (GUI). Operators can query orders by different states using pre-defined selections. The Order Tracking tool is used to perform the following operating functions listed in Table 4.8.2-1.

**Table 4.8.2-1. Common ECS Operator Functions Performed with the Order Tracking Tool (1 of 2)**

Operating Function	GUI	Description	When and Why to Use
Query order	<ul style="list-style-type: none"> <li>• ECS Data Order Tracking GUI</li> <li>• Query Order button</li> </ul>	Retrieves orders by Order ID, Request ID, User Name, External Request Id, External Request Id and User Id displays them in the window at the bottom of the screen. There are four types of orders that can be retrieved by using the Order Type combination box: All, Standard, On Demand, Standing on Demand or MTMGW.	To see the status of an order or its associated requests.
Filter orders	<ul style="list-style-type: none"> <li>• ECS Data Order Tracking GUI</li> <li>• Filter by Status toggle buttons</li> <li>• Select All and Deselect All pushbuttons</li> </ul>	<ul style="list-style-type: none"> <li>• Orders can be filtered by their status (e.g., pending, canceled)</li> <li>• Orders can be filtered using all status selections</li> <li>• Filter selections can be cleared</li> </ul>	To narrow the search for orders to what the operator wants.
Update order	<ul style="list-style-type: none"> <li>• ECS Data Order Tracking GUI</li> <li>• Update Order button</li> </ul>	Description of a selected order	To provide a description of a selected order.
Shipping information	<ul style="list-style-type: none"> <li>• Query Requests button from the ECS Data Order Tracking GUI</li> <li>• Shipping Information GUI</li> </ul>	Displays shipping information for an order	To determine the destination for an order.
Query request	<ul style="list-style-type: none"> <li>• Query Requests button on ECS Data Order Tracking GUI</li> </ul>	Retrieves requests for an order	To see the status of a request.

**Table 4.8.2-1. Common ECS Operator Functions Performed with the Order Tracking Tool (2 of 2)**

<b>Operating Function</b>	<b>GUI</b>	<b>Description</b>	<b>When and Why to Use</b>
Delete request	<ul style="list-style-type: none"> <li>• Delete Request button from the ECS Data Order Tracking GUI</li> </ul>	Delete a request of the order	To delete the request for an order.
Update request	<ul style="list-style-type: none"> <li>• Update request button from the ECS data Order tracking GUI</li> </ul>	Description of a request	To provide a description for a request.
Verify user selection	<ul style="list-style-type: none"> <li>• Select from user list</li> <li>• Verify User Selection GUI</li> </ul>	Displays user names and addresses	To verify the user selected is correct.
Sort list of user orders or user requests	<ul style="list-style-type: none"> <li>• Click on the item label of title bar</li> </ul>	Sort user order list or user request list	As needed.

#### **4.8.2.1 Quick Start Using Order Tracking**

##### **4.8.2.1.1 Invoking Order Tracking From the Command Line Interface**

To execute Order Tracking from the command line prompt use:

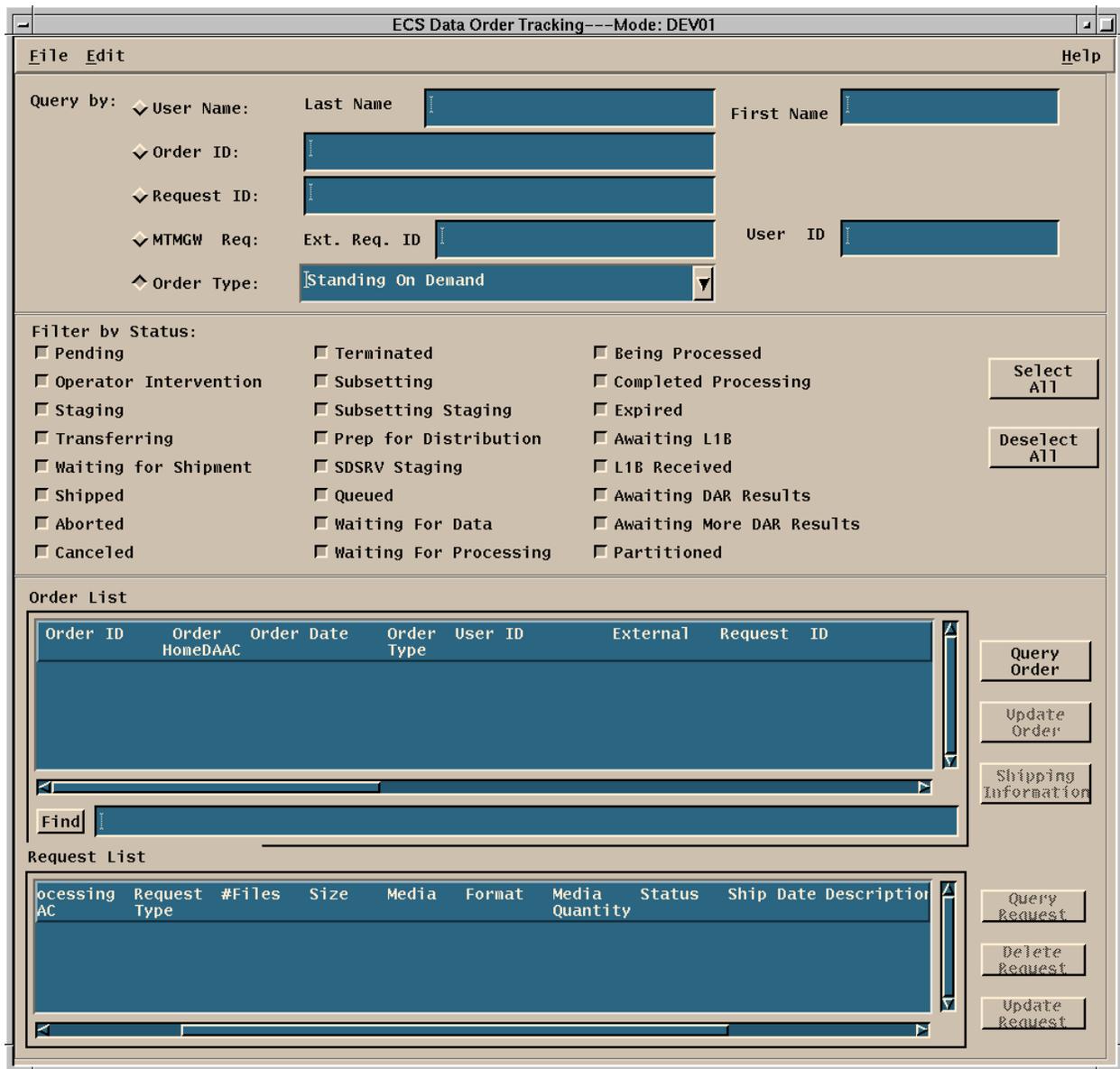
>**EcMsAcOrderGUIStart** <mode>     where:

<mode> is the ECS mode in which to run (e.g., OPS, TS1 or TS2).

Refer to the 920-TDA-022 “Custom Code Configuration Parameters” documentation series, located on the EMD Baseline Information System web page (<http://pete.hitc.com/baseline/index.html>), for a listing of EcMsAcOrderGUIStart.

##### **4.8.2.2 ECS Data Order Tracking Main Screen**

The Data Order Tracking main screen, shown in Figure 4.8.2-1, allows the operator to retrieve an order by user name, order ID, or request ID.



**Figure 4.8.2-1. ECS Data Order Tracking**

Table 4.8.2-2 describes the ECS Data Order Tracking fields.

**Table 4.8.2-2. Order Tracking Main Screen Field Descriptions**

Field Name	Data Type	Size	Entry	Description
Last Name	Character	20	Optional	User's last name.
First Name	Character	20	Optional	User's first name.
Order ID	Character	10	Optional	Unique order id.
Request ID	Character	10	Optional	Unique request id.
Ext. Request Id	Character	10	Optional	Unique external request id.
User Id	Character	10	Optional	Unique user id.
Order Type	Character	10	Optional	List of All, Standard, On Demand, Standing on Demand, MTMGW and Bundling Order.

The menu bar gives the operator the following selections: File, Edit and Help.

- **F**ile – the only option available under this pull down menu is to exit the Order Tracking tool
- **E**dit – provides “Clear Query Parameters” options to let the user clean all screen input
- **H**elp – brings up help question mark, which can point to different buttons

The user can filter an order by status. The **Filter by Status** choices include:

- Pending
- Operator Intervention
- Staging
- Transferring
- Waiting for Shipment
- Shipped
- Aborted
- Canceled
- Terminated
- Subsetting
- Subsetting Staging
- Prep for Distribution
- SDSRV Staging
- Queued
- Waiting For Data
- Waiting For Processing
- Being Processed
- Completed Processing
- Expired
- Awaiting L1B
- L1B Received
- Awaiting DAR Results
- Awaiting More DAR Results

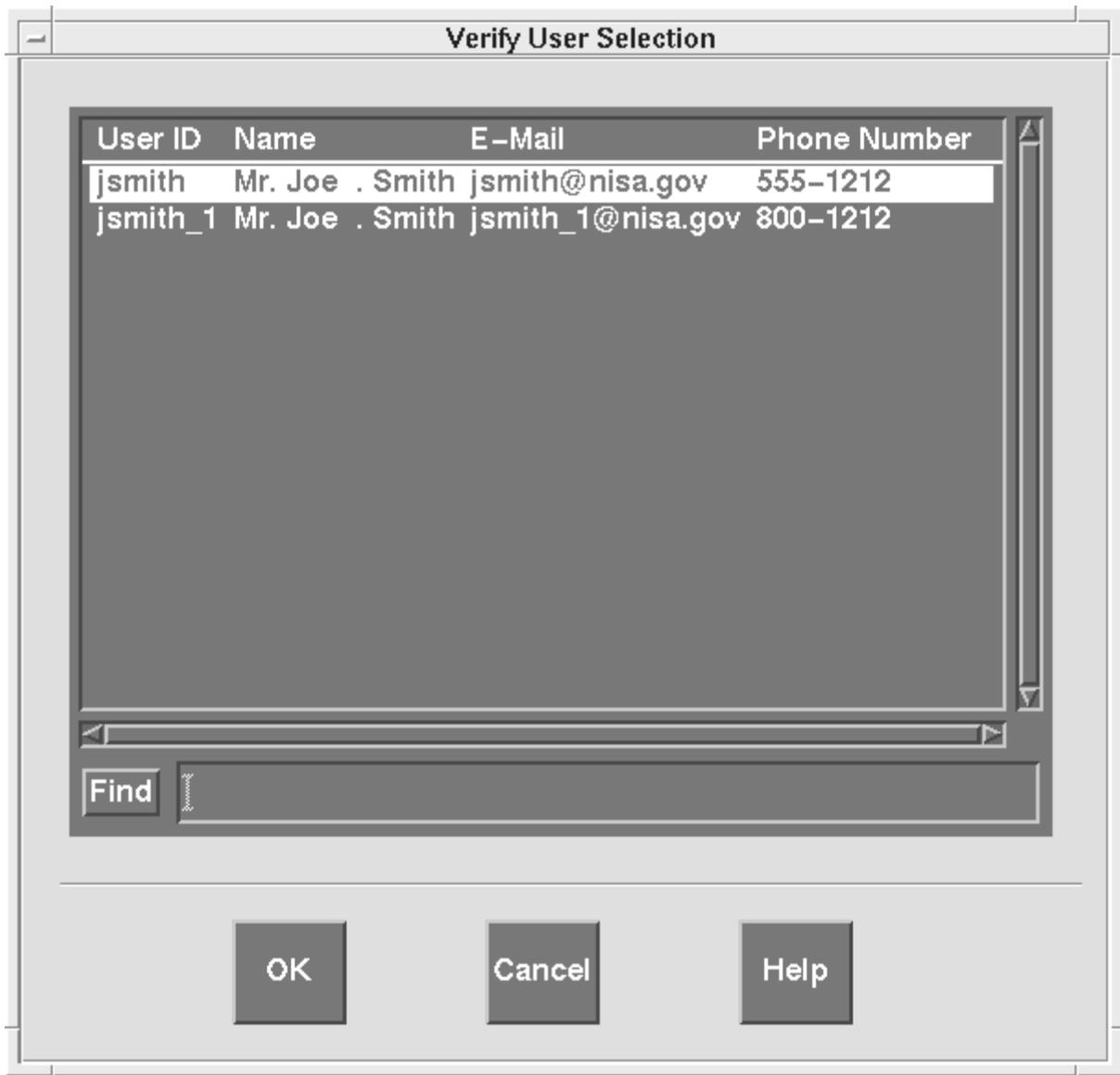
- Partitioned (Partitioned is a request status, not an order status. When Partitioned is selected, the GUI lists all the orders, which have the requests with the request status as Partitioned.)
- The **Select All** button selects all items listed above
- The **Deselect All** button removes toggle buttons that had been selected

In addition, the following pushbuttons are available:

- The **Query Orders** button searches for orders based upon the parameters selected and displays them in the Order List scrollable window at the bottom of the screen. If only one order is found, all the requests related to this order are also displayed in the Request List scrollable window.
- The **Update Order** button updates the status and description of the order.
- The **Shipping Information** button brings up the Shipping Information GUI (see section 4.8.2.2.2).
- The **Query Request** button brings up the request list to the Request List scrollable window. The function is similar to the **Query Orders** button.
- The **Delete Request** button deletes requests selected.
- The **Update Request** button updates the status and description of the request.

#### 4.8.2.2.1 Verify User Selection

When retrieving orders by user name, it is possible for identical user names to be found in the database. If the name selected is not unique in the database, the Verify User Selection screen (Figure 4.8.2-2) is displayed to pick from duplicate user names.



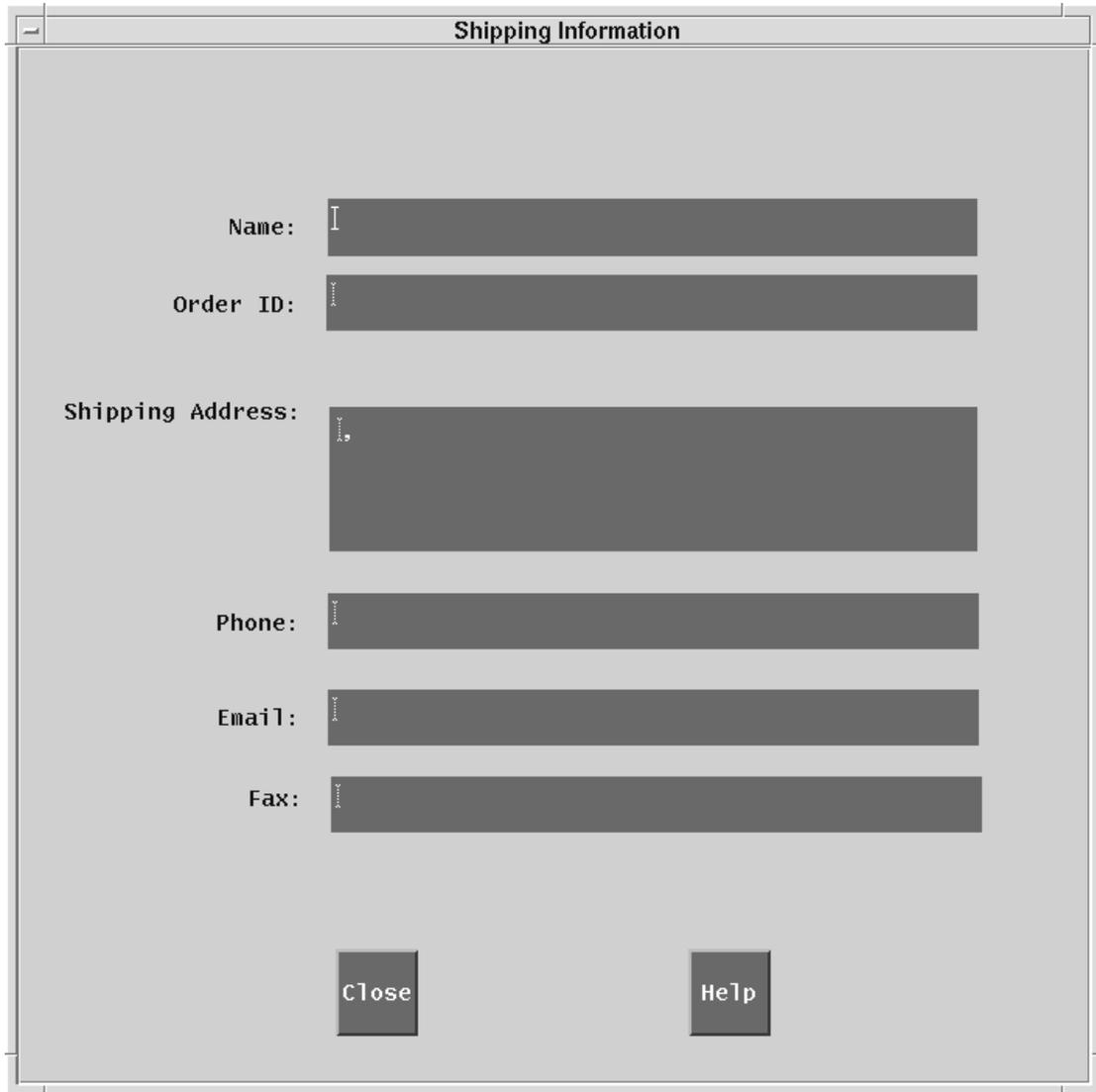
**Figure 4.8.2-2. Verify User Selection GUI**

In addition, the following pushbuttons are provided:

- The **Find** button allows the operator to search for different names
- The **OK** button accepts the highlighted section, retrieves order information and returns to the main screen
- The **Cancel** button quits the Verify User Selection screen
- The **Help** button brings up the help information box

#### 4.8.2.2.2 Shipping Information Screen

The Shipping Information screen shown in Figure 4.8.2-3 provides shipping address information for an order when the user clicks on the Shipping Information button.



The screenshot shows a window titled "Shipping Information". Inside the window, there are several input fields and two buttons. The fields are labeled "Name:", "Order ID:", "Shipping Address:", "Phone:", "Email:", and "Fax:". Each label is followed by a dark gray rectangular input field. At the bottom of the window, there are two buttons labeled "Close" and "Help".

**Figure 4.8.2-3. Shipping Information GUI**

Table 4.8.2-3 describes the Shipping Information GUI fields.

**Table 4.8.2-3. Shipping Information GUI Field Description**

Field Name	Data Type	Size	Entry	Description
Name	Character	41	System generated	Who requested the order.
Order ID	Character	10	System generated	Unique order id.
Shipping Address	Character	139	System generated	Shipping address for the order.
Phone	Character	22	System generated	Phone number.
Email	Character	64	System generated	E-mail address.
Fax	Character	22	System generated	Fax number.

In addition the following pushbuttons are provided:

- **Close** – exits the screen and returns to the ECS Order Tracking GUI
- **Help** – brings up the help information box

#### 4.8.2.3 Required Operating Environment

For information on the operating environment, tunable parameters and environment variables of the Order Tracking Tool refer to the 920-TDA-022 “Custom Code Configuration Parameters” documentation series, located on the EMD Baseline Information System web page (<http://pete.hitc.com/baseline/index.html>).

##### 4.8.2.3.1 Interfaces and Data Types

Order data comes from the V0 Gateway, V0 Client and the database server.

##### 4.8.2.4 Databases

The Order Tracking tool uses the MSS database installed at each DAAC. The database for Release 7.20 is described in the *Systems Management Subsystem Database Design and Schema Specifications*. The operator may have to identify individual data fields by examination of the descriptions in the document. The following tables are stored in the Sybase database: EcAcOrder, EcAcRequest, EcAcOrderId and EcAcRequestId. All parameters are generated and monitored by Sybase and cannot be modified by the operator.

##### 4.8.2.5 Special Constraints

None.

##### 4.8.2.6 Outputs

Outputs from the Order Tracking GUI are the information displayed on the screens described in this section and error messages. Errors are logged to a log file using the process framework.

##### 4.8.2.7 Event and Error Messages

The ECS Order Tracking GUI reports both status and error messages to the operator, and both types of messages are listed in Appendix A.

##### 4.8.2.8 Reports

The Order Tracking application does not generate reports.

### 4.8.3 Data Dictionary Maintenance Tool

The Data Dictionary Maintenance Tool (DDMT) GUI allows operators to perform common tasks associated with the upkeep of the Data Dictionary databases. The Data Dictionary is a large relational database, consisting of tables, which provide information about the data collections making up the ECS. Examples of the types of information stored in the Data Dictionary include the time and locations of data gathered, sensors and instruments used to gather the data, and locations where the data is stored. The DDMT GUI provides operators the capability to query the Data Dictionary Database in order to create, ingest, view, modify, and export data types.

The Tool is used to perform the following operator functions listed in Table 4.8.3-1.

**Table 4.8.3-1. Common ECS Operator Functions Performed with DDMT**

Operating Function	Command/Script or GUI (Tab)	Description	When and Why to Use
Modify Data Dictionary Database	Modify Data	<ul style="list-style-type: none"> <li>Select the data type (*)</li> <li>Edit the data type</li> </ul>	To find and modify items or groups of related items in Data Dictionary database, update specific attributes, and create links to other items in the database.
Check and ingest Valids (Import Valids)	Import Valids File	To check the collection descriptions for any errors and, after correction, Ingest them into the Data Dictionary database.	To gather V0 attribute definitions to be used when mapping V0 terms to ECS terms.
Map Attributes	Map Attributes/Keywords	To translate non-ECS terminology to ECS.	When non-ECS terminology must be reconciled with ECS terminology.
Export Valids	Export Valids File	To send description of ECS data collections to agencies outside of ECS system.	To create valids files for delivery to external systems such as V0.

(\*) In this context, data type is a group of related data dictionary items such as Attributes, Collections, etc.

#### 4.8.3.1 Quick Start Using Data Dictionary Maintenance

Before DDMT is used, the Data Dictionary Server must be up and running.

To execute DDMT from the command line prompt, enter:

**`/usr/ecs/<mode>/CUSTOM/utilities/EcDmDdMaintenanceToolStart <mode>`**

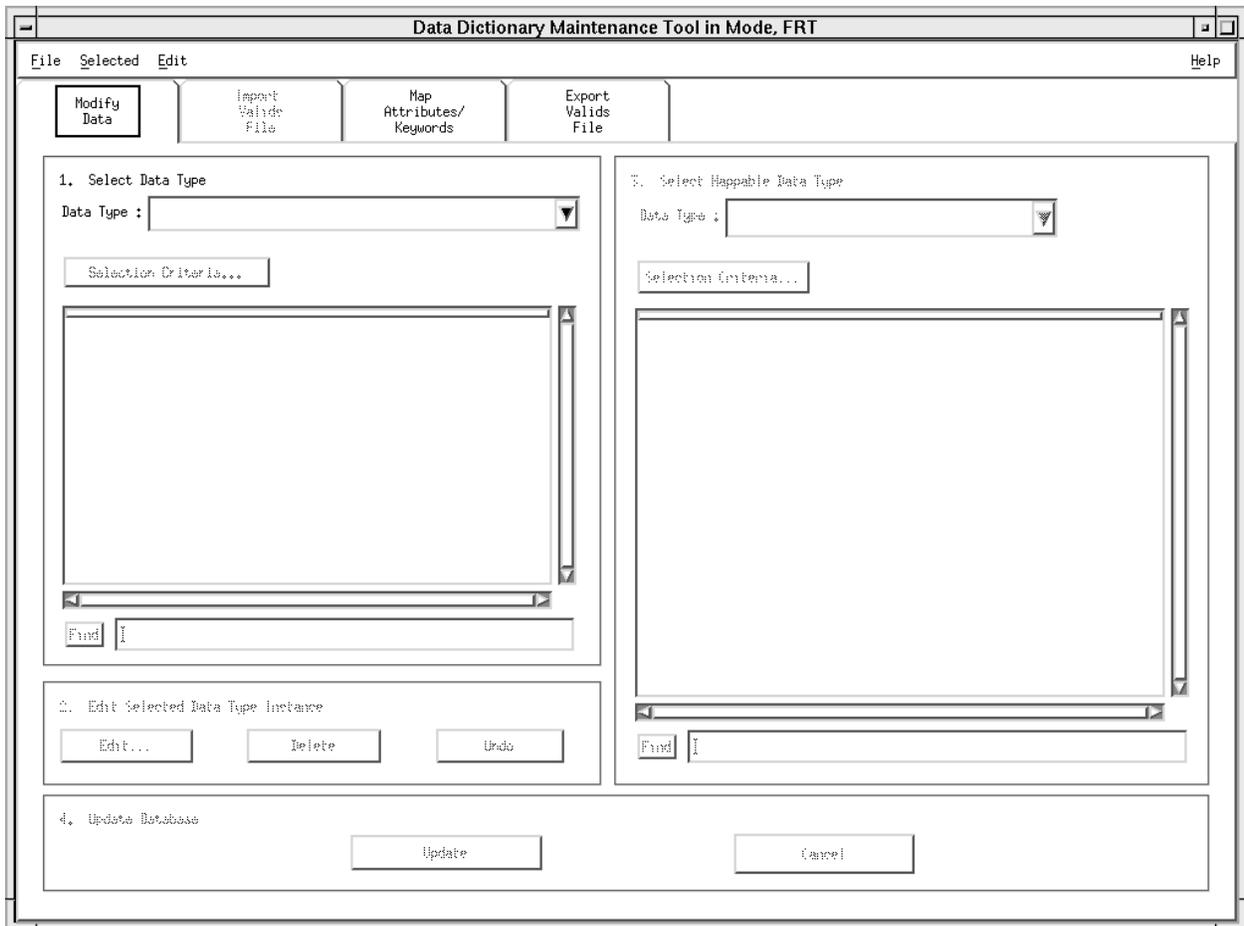
Where:

<mode> is the ECS mode under which the program is to run (e.g., OPS, TS1 or TS2).

The .csh file is the UNIX “shared” file containing parameters for the tool.

### 4.8.3.2 DDMT Main Screen

The DDMT main screen (Figure 4.8.3-1) provides access to the DDMT function tabs. The DDMT GUI tool is broken down into four tabs: Modify Data, Import Valid File, Map Attributes/Keywords, and Export Valid File. The Modify Data tab is the default tab.



**Figure 4.8.3-1. Data Dictionary Maintenance Tool Main Screen Showing the Modify Data Tab**

The operator can select from the menu bar items at the top of the DDMT window for getting help and activating less-frequently used secondary functions. The menu bar capability is available on all DDMT GUI screens. The following menus are available:

- **File** - provides a short cut for the users. This menu contains the following items:
  - **New Attribute** - Brings up the Attribute Editor screen, through which a new attribute can be inserted into the Data Dictionary database
  - **Open** - Desensitized
  - **Save and Save As** - Desensitized
  - **Exit** - Exit application
- **Selecte**d - provides operations to be performed. This menu contains the following options:
  - **Deselect All** - Desensitized
  - **Select All** - Desensitized
  - **Edit** - Desensitized
- **Edit** - allows for pasting and cutting of text. This menu contains the following options:
  - **Undo** : Available to undo the previous action while a secondary keyword is selected
  - **Cut** : Desensitized
  - **Copy** : Desensitized
  - **Paste** : Desensitized
  - Clear All** : Clears the entire list boxes and performs the first primary attribute database query
  - **Delete** : Desensitized
- **Help** - displays general and context sensitive help. This menu contains the following:
  - **On Help** - provides detailed information on using help
  - **On context** - Displays help for the control/field selected after activating this button
  - **On window** - Displays help for the window selected after activating this button
  - **On Keys** - provides help on keyboard and mouse usage, and general help on interacting with user interface components
  - **Index** Not available for Release 7
  - **Tutorial** Not available for Release 7

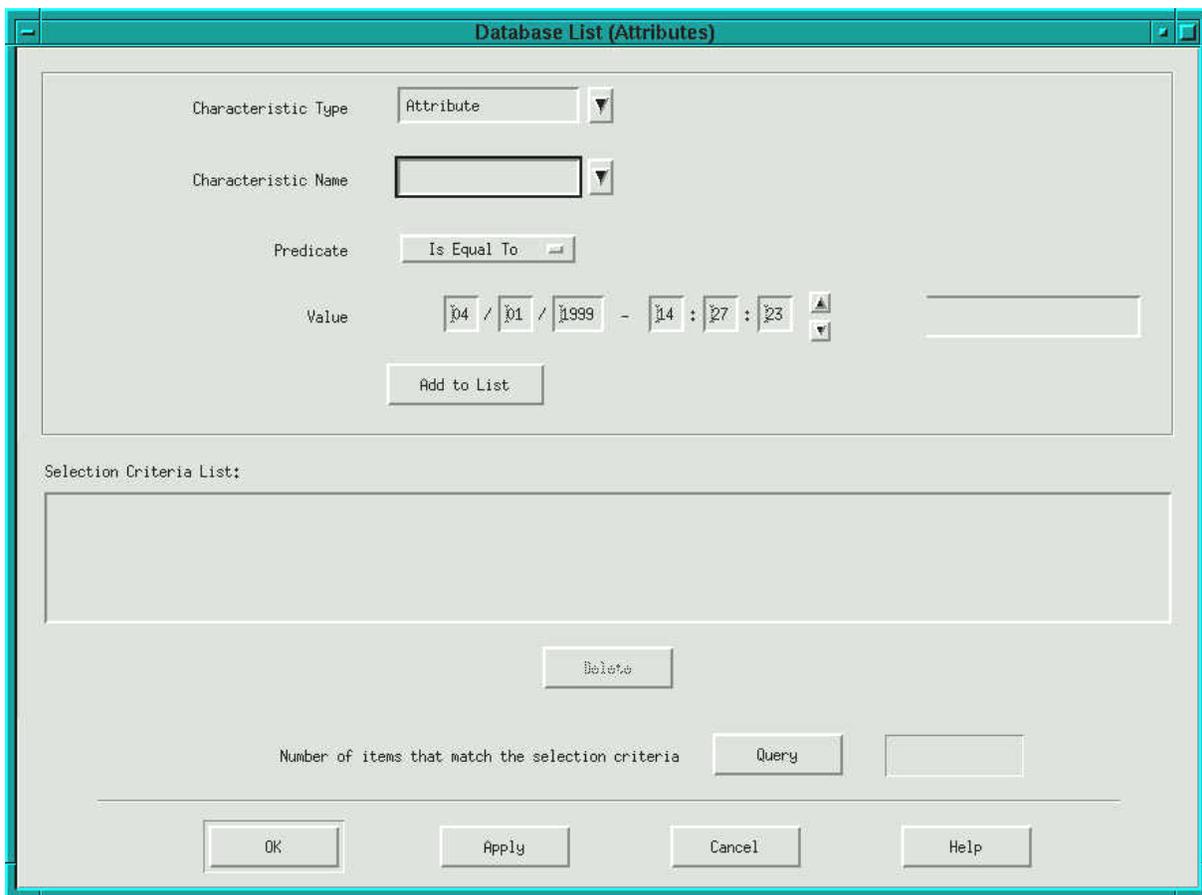
- **On Version** Not available for Release 7

**Tabs** - the Tabs open DDMT function screens (tabs) used to perform the functions associated with the tab title. These functions are described below in the sections for the tabs.

The data fields on the DDMT Main Screen are components of the individual tabs.

#### 4.8.3.2.1 Modify Data Tab

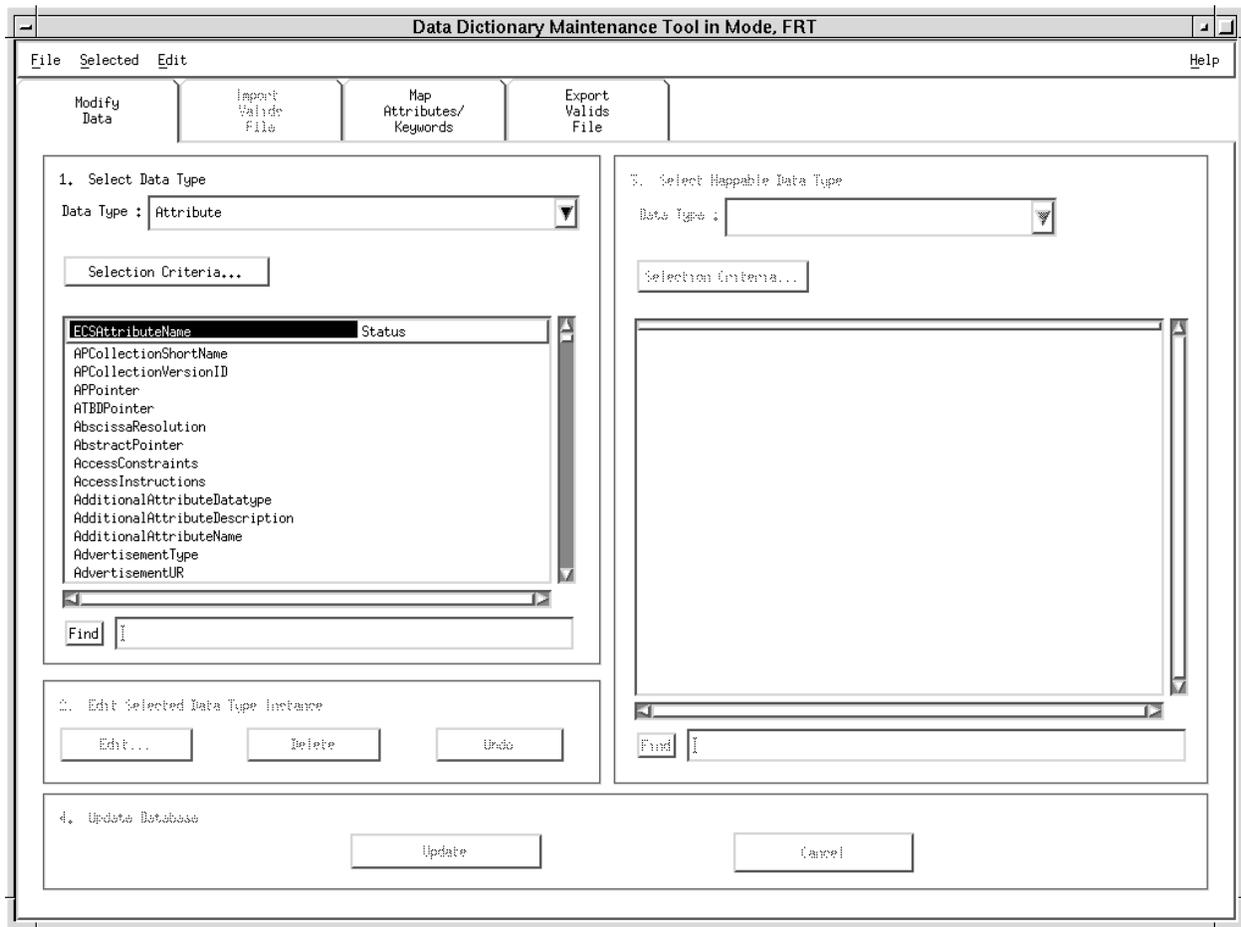
The Modify Data tab allows the operator to edit ECS Core Attributes. Upon selecting 'Attribute' from the Data Type drop down list (Figure 4.8.3-1), the Selection Criteria button becomes sensitized. When this button is pushed, the Database List (Attributes) Screen (Figure 4.8.3-2) is displayed.



**Figure 4.8.3-2. Database List (Attributes) Screen**

### 4.8.3.2.1.1 Editing ECS Core Attributes

On entering/setting the values for the fields appropriately, based on what attribute the operator would like to edit, and clicking the OK button at the bottom, a list of attributes is displayed on the Main Screen (Figure 4.8.3-3). The operator after selecting an attribute can click an edit or delete button. The Attribute Editor screen (Figure 4.8.3-4), which is displayed when the operator clicks on the edit button, allows the operator to edit the values of the attribute. To delete an attribute the operator has to click on the delete button. The edited or the deleted attributes are not written to the database until the update button is clicked. The operator can either undo a single action by clicking on the undo button, or can undo all the action by clicking on the cancel button. The attribute(s) edited can be committed to the database by clicking the update button.



**Figure 4.8.3-3. Modify Data Tab with Attribute List**

Attribute Editor

Attribute Type :

Collection :

Name :

Description :

Size :

Searchable :

Group Id :

Domain Type :

OK Cancel Clear Help

**Figure 4.8.3-4. Attribute Editor Screen**

### 4.8.3.2.2 Import Valids File Tab

Figure 4.8.3-5 shows the Import Valids File tab of the Data Dictionary Maintenance window.

The screenshot shows the 'Data Dictionary Maintenance Tool' window with the 'Import Valids File' tab selected. The window has a menu bar with 'File', 'Selected', 'Edit', and 'Help'. Below the menu bar are four buttons: 'Modify Data', 'Import Valids File' (which is selected), 'Map Attributes/ Keywords', and 'Export Valids File'. The main area contains five numbered steps: 1. 'Select Import Protocol' with a dropdown menu showing 'ASTER GDS'; 2. 'Load Valids File.' with a 'File Name' input field and a 'Browse...' button; 3. 'Check File Syntax.' with a 'Check' button; 4. '3. Save Syntax Errors.' with a 'File Name' input field, a 'Browse...' button, and a 'Save' button; 5. '4. Available Collections.' with a list box; and 6. '5. Update Database.' with 'Update' and 'Cancel' buttons.

**Figure 4.8.3-5. Import Valids File Tab**

This screen is used to check the database and ingest valids files. The information about new collections is sent to the operator in the form of a file containing collection descriptions. This is a “Valids” file, which contains the information about one or more collections. This GUI allows the operators to read in the files and run an error checking function. If there are no errors, the collection description is ingested into the Data Dictionary. If any errors are found, a list of all errors is saved to file to be sent to the source for the valids and keyword definitions files, so corrections can be made. Figure 4.8.3-5 shows the Import Valids File tab.

Click on the **Check** File Syntax button to check the file for syntactic errors.

The Ingest Errors window displays any error that occurred during the error checking function. If there are any fatal errors within the file syntax, the Update button is not sensitized. This means the operator cannot ingest the file. The operator can select the Save button to save the list of all errors to a file. If there are no errors, the Update button is sensitized and the Valid File can be ingested into the database by clicking on that button.

The Import Valid File tab provides the following drop-down menu options:

- **File** - provides a short cut for the expert users. This menu contains the following items:
  - New** - Desensitized
  - **Open** - Opens the specified file only in the Read Valid File
  - Save and Save As** - Saves the Error Dialog to the specified file, without closing the file
  - **Exit** - Exit application
- **Selecte**d - provides operations to be performed. This menu contains the following options:
  - **Deselect All** - Desensitized
  - **Select All** - Desensitized
  - **Edit** - Desensitized
- **Edit** - allows for pasting and cutting of text. This menu contains the following options:
  - **Undo** : Available to undo the previous action while a secondary keyword is selected
  - **Cut** : Desensitized
  - **Copy** : Desensitized
  - **Paste** : Desensitized
  - **Clear All** : Clears all the content of the field within the tabs
  - **Delete** : Desensitized
- **Help** - displays general and context sensitive help. This menu contains the following:
  - **On Help** - provides detailed information on using help
  - **On context** - Displays help for the control/field selected after activating this button
  - **On window** - Displays help for the window selected after activating this button

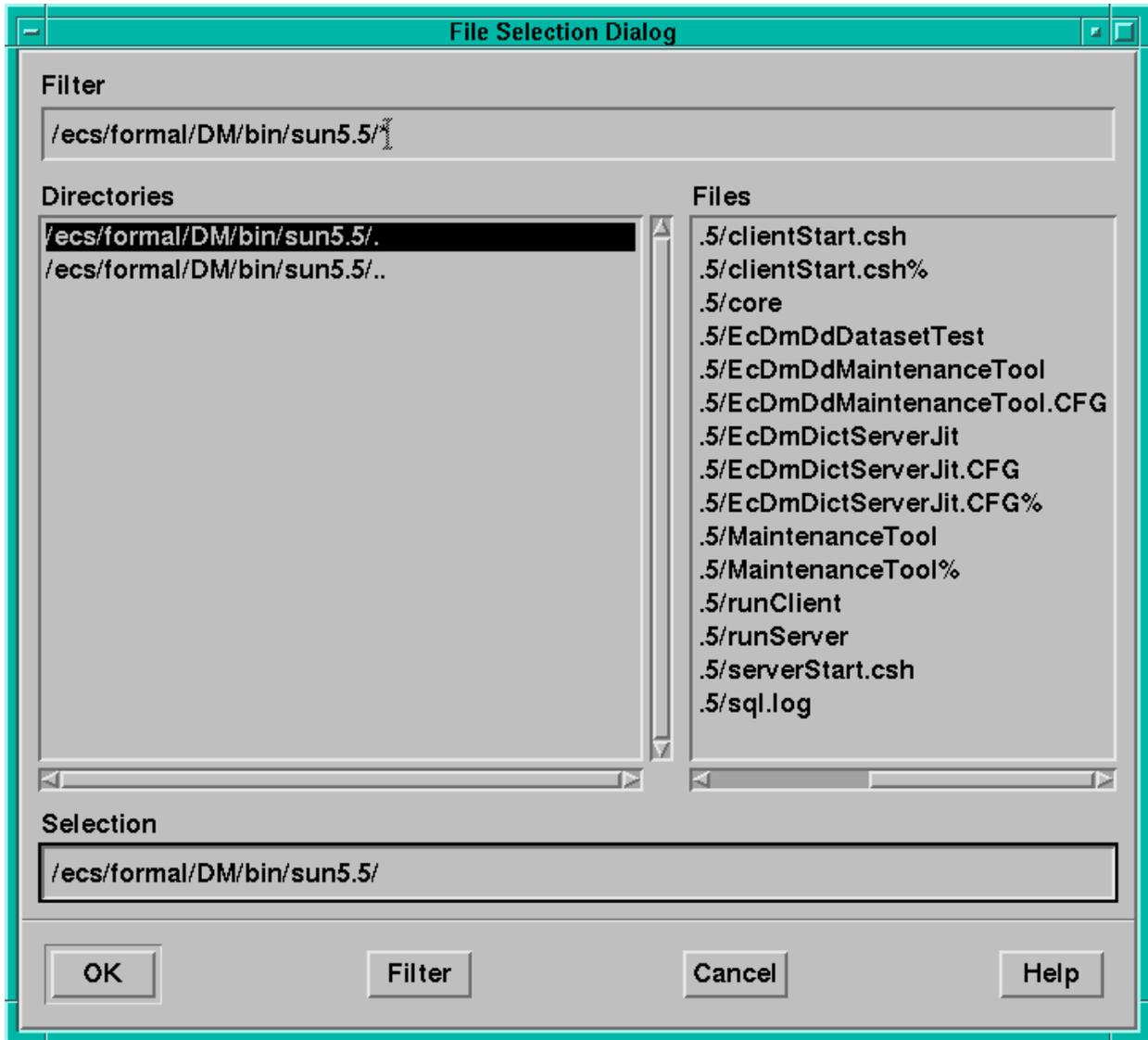
- **On Keys** - provides help on keyboard and mouse usage, and general help on interacting with user interface components
- **Index**                      Not available for Release 7
- **Tutorial**                      Not available for Release 7
- **On Version**                Not available for Release 7

The detailed description of this tab is in the Table 4.8.3-2.

**Table 4.8.3-2. The Import Validates File Field Description**

Field Name	Data Type	Size	Entry	Description
Valid File	TEXT	100	Keyboard	Valid file to be ingested by tool.
Ingest Error	TEXT	N/A	NOT INPUT	Instance of syntax error.
Available Service	TEXT	N/A	NOT INPUT	A list of available services for collection.
Error File	TEXT	100	Keyboard	Output file for errors in input file syntax.

The operator can specify in the Valid File window, the ASCII valid file that needs to be inserted in the Data Dictionary Database. Or by clicking the Browse button, which brings up the File Select Pop-up shown in Figure 4.8.3-6. The detailed field description of this screen is in Table 4.8.3-3.



**Figure 4.8.3-6. File Select Pop-up**

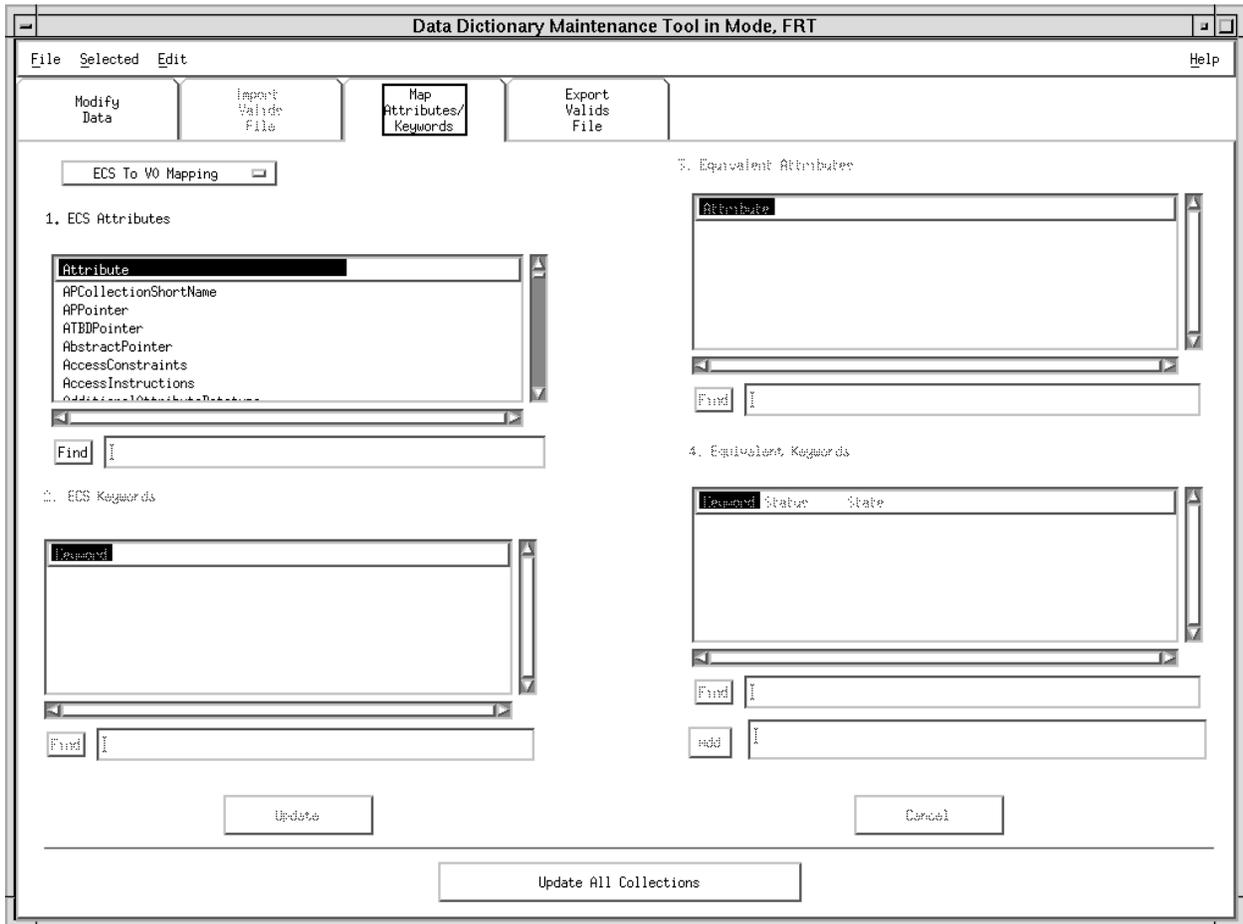
The operator can use the Filter window to limit the selected files to be displayed. Select the desired directory and the corresponding file from the Directories and Files window. The selected file is displayed on the Selection window. By clicking the OK button the File Selection Dialog pops down and the selected file is displayed in the Valids File window.

**Table 4.8.3-3. The File Selection Field Descriptions**

Field Name	Data Type	Size	Entry	Description
Filter	TEXT	100	Keyboard	Wild-card search criteria.
Directories	LIST	N/A	Click	Select directory to browse.
Files	LIST	N/A	Click	Select file to read.
Selection	TEXT	100	Keyboard	Select file to read.

### 4.8.3.2.3 Map Attributes/Keywords Tab

The Data Dictionary database contains descriptions of collections from ECS and sources outside ECS. All ECS collections use a standard set of terms to describe their data, but non-ECS collections can contain non-ECS terminology. The Map Attributes/Keywords tab allows the operator to set up an association between ECS and non-ECS attributes and keywords. An operator can choose non-ECS terms from a list and map to the correct corresponding ECS term. Figure 4.8.3-7 shows the Map Attribute/Keywords Tab.



**Figure 4.8.3.7. Map Attributes/Keywords Tab**

Once the operator is satisfied with the mappings they have set up they can commit these mappings to the database using the update button. To relate these mappings to collections the operator should click on the update all collections button.

The Map Attributes/Keywords tab provides the following drop-down menu options:

- **File** - provides a short cut for the expert users. This menu contains the following items:
  - New** - Desensitized
  - Open** - Desensitized
  - Save and Save As** - Desensitized
  - Exit** - Exit application
- **Selected** - provides operations to be performed. This menu contains the following options:
  - **Deselect All** - Deselects all Attributes and Keywords displayed on the tab
  - **Select All** - Selects all Attributes and Keywords displayed on the Tab
  - **Edit** - Desensitized
- **Edit** - allows for pasting and cutting of text. This menu contains the following options:
  - **Undo** : Desensitized
  - **Cut** : Desensitized
  - **Copy** : Desensitized
  - **Paste** : Desensitized
  - **Clear All** : Clears all the contents of the field within the tabs
  - **Delete** : Desensitized
- **Help** - displays general and context sensitive help. This menu contains the following:
  - **On Help** - provides detailed help on using help
  - **On context** - Displays help for the control/field selected after activating this button
  - **On window** - Displays help for the window selected after activating this button
  - **On Keys** - provides help on keyboard and mouse usage, and general help on interacting with user interface components
  - **Index** - Not available for Release 7

- **Tutorial -** Not available for Release 7
- **On Version -** Not available for Release 7

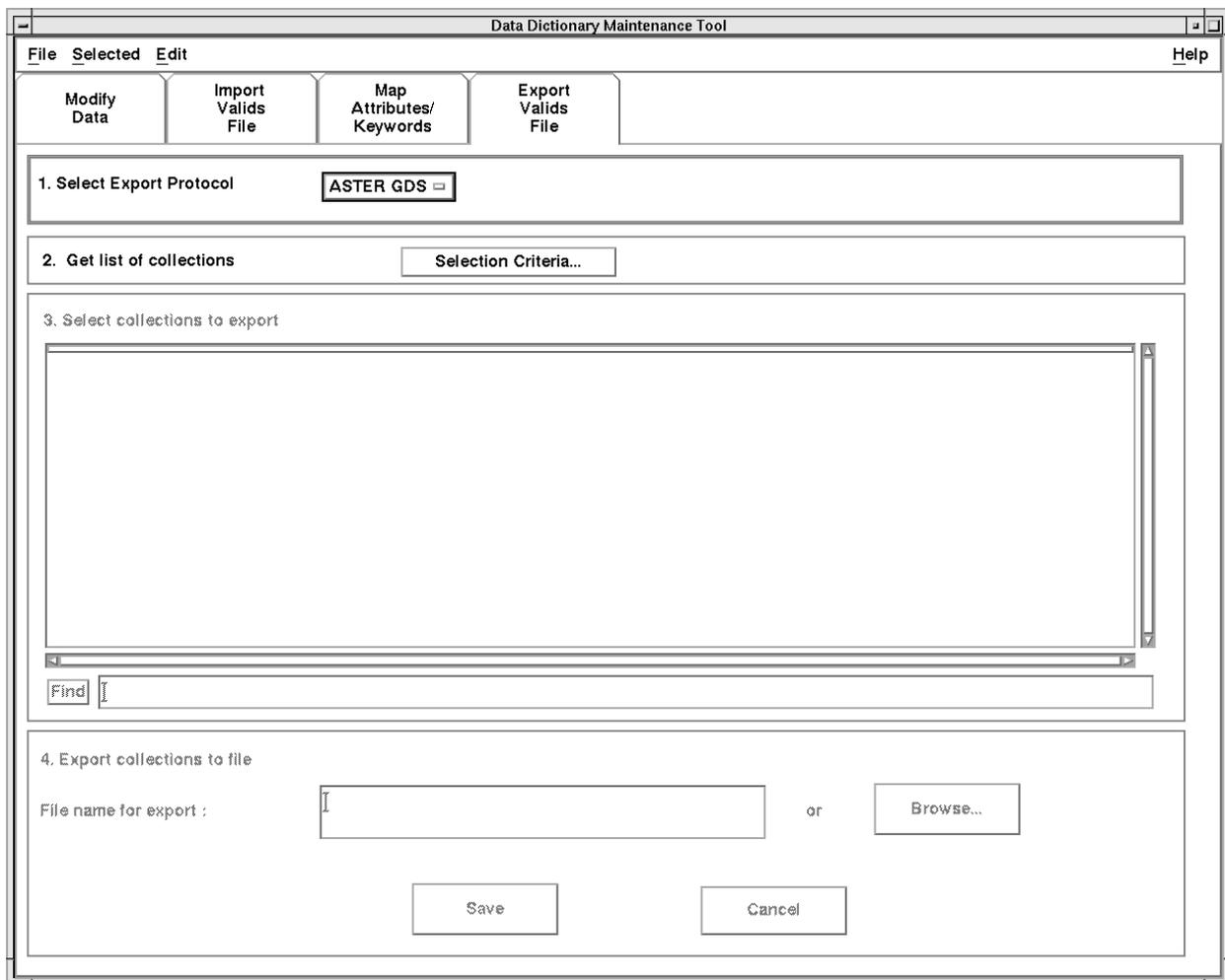
Table 4.8.3-4 describes the fields on the Map Attributes/Keywords tab.

**Table 4.8.3-4. The Map Attributes/Keywords Field Description**

Field Name	Data Type	Size	Entry	Description
Attributes	TEXT	N/A	Click	ECS attributes or equivalent (V0) attributes.
Keywords	TEXT	N/A	Click	ECS keywords or equivalent (V0) keywords.

#### 4.8.3.2.4 Export Valid File Tab

The Export Valid File Tab shown in Figure 4.8.3-8 allows operators to send descriptions of data collections existing in the database to outside of the ECS. Valid files are used for this purpose. This tab allows the operators to select the desired collection and specify the name/locations for the file to be written.



**Figure 4.8.3-8. Export Valid File Tab**

Clicking on the Selection Criteria button brings up the Database list dialog. By clicking on the OK button a list of collections is displayed on the Collections List. By double clicking on the collection(s), the operator wishes to export, export status is attached to the collection(s). Then the operator can specify where to write the valid file to, in the Valid File text box, or by clicking the Browse button the operator can choose the location/path. By clicking on the Save button the valids are written to the specified file.

The Export Valid File tab provides the following drop-down menu options:

- **File** - provides a short cut for the expert user. This menu contains the following items:
  - New** - Desensitized
  - Open** - Desensitized

**Save and Save As** - Saves the Error Dialog to the specified file, without closing the file

**Exit** - Exit application

- **S**Selected - provides operations to be performed. This menu contains the following options:
  - **Deselect All** - Desensitized
  - **Select All** - Desensitized
  - **Edit** - Desensitized
- **E**dit - allows for pasting and cutting of text. This menu contains the following options:
  - **Undo** : Available to undo the previous action while a secondary keyword is selected
  - **Cut** : Desensitized
  - **Copy** : Desensitized
  - **Paste** : Desensitized
  - **Clear All** : Clears all the content of the field within the Tabs
  - **Delete** : Desensitized
- **H**elp - displays general and context sensitive help. This menu contains the following:
  - On Help** - provides detailed information on using help
  - On context** - Displays help for the control/field selected after activating this button
  - On window** - Displays help for the window selected after activating this button
  - On Keys** - provides help on keyboard and mouse usage, and general help on interacting with user interface components
  - Index** - Not available for Release 7
  - Tutorial** - Not available for Release 7
  - On Version** - Not available for Release 7

Table 4.8.3-5 describes the fields on the Export Valids File screen.

**Table 4.8.3-5. The Export Validates File Field Descriptions**

Field Name	Data Type	Size	Entry	Description
Collections	LIST	N/A	Click	List of possible collections.
Collection to Write	LIST	N/A	Click	List of collections to export.
Validates File	TEXT	100	Keyboard	File name for generated validates file.

#### **4.8.3.2.5 Release Collection Tab (*not part of Release 7*)**

The Release Collection function is not to be available in the ECS Release 7.

#### **4.8.3.2.6 Create Multiple Collection Tab (*not part of Release 7*)**

The Create Multiple Collection function is not available in the ECS Release 7.

### **4.8.3.3 Required Operating Environment**

DDMT runs on Linux 2.x platforms.

For information on the operating environment, tunable parameters and environment variables of DDMT refer to the 920-TDA-022 “Custom Code Configuration Parameters” documentation series, located on the EMD Baseline Information System web page (<http://pete.hitc.com/baseline/index.html>).

#### **4.8.3.3.1 Interfaces and Data Types**

DDMT exchanges data of various types through interfaces with the Data Dictionary Server, which runs in the background.

#### **4.8.3.4 Database Schema**

The DDMT process uses the Data Management database. Documentation for this database for Release 7.20 is in the Systems Management Subsystem Database Design and Schema Specifications (311). The operator can identify individual data fields by examination of the descriptions in the documentation. Some data can be directly accessible through the database software.

#### **4.8.3.5 Special Constraints**

The Data Dictionary Server must be running.

#### **4.8.3.6 Outputs**

Output from the DDMT consists of the data displayed on the screens described in Section 4.8.3.2, database updates or additions to the database referenced in Section 4.8.3.4, and error and event messages described in Section 4.8.3.7.

#### **4.8.3.7 Event and Error Messages**

DDMT uses the ECS Process Framework error logging.

#### **4.8.3.8 Reports**

None.

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#### 4.8.4 Database Installation and Maintenance Scripts

A set of eleven standard database scripts have been created for the DPLINGEST, MSS, and SDSRV subsystems to facilitate database installation and database administration activities. These scripts are designed to be accessible from both the command line and the Stage Install function of ECS Assist. The scripts follow a standard naming convention across each subsystem consisting of a prefix, of the format *EcXXXX*, identifying the subsystem component and a root identifying the primary database command or purpose performed by the script. For example a script to define login IDs used by the Ingest subsystem would be called *EcInDbLogin*.

A description of each of the suggested standard scripts is given Table 4.8.4-1. Details on the applicable scripts for each subsystem can be found in the corresponding subsystem-specific 311-database documentation.

**Table 4.8.4-1. Common ECS Operator Functions Performed with Database Installation and Maintenance Scripts (1 of 2)**

Operating Function	Command	Description	When and Why to Use
Add Login	DbLogin	Add existing system login to the SQL server.	Use when installing an ECS custom application to add the pre-defined set of Unix logins used by the application to the appropriate SQL server.
Add User	DbUser	Add user ID to a database.	Use when installing an ECS custom application to add the pre-defined set of User IDs used by the application to the appropriate database.
Create Database	DbBuild	Build a new empty database and load with initial start-up data.	Use when installing an upgraded Release/drop or an ECS custom application into a mode where there is no existing data that needs to be retained.
Upgrade Database	DbPatch	Upgrade tables to new schema while retaining existing data.	Use when installing an upgraded Release/Drop of an ECS custom application into a mode containing existing data that needs to be retained.
Drop objects	DbDrop	Remove all database objects (tables, triggers, stored procedures, domains, rules, user-defined data types) from a database.	Should not be used independently by the Operator. Used by DbBuild script during installation to remove obsolete objects from the database.

**Table 4.8.4-1. Common ECS Operator Functions Performed with Database Installation and Maintenance Scripts (2 of 2)**

Operating Function	Command	Description	When and Why to Use
Backup database	DbDump	Create a backup file for the database.	Use to create a backup of the database that can be used in the event of database corruption or disk failure.
Restore database	DbLoad	Restore a database from a backup file.	Use to recover from database corruption or disk failure.
Update database statistics	DbStat	Updates the database statistics used by the Sybase query optimizer.	Use on a regular frequency to update database statistics to optimize query response times.
Remove ESDT	DbClean	Removes all data for a single ESDT from the database.	Use to de-install an ESDT from a subsystem database.
Purge data	DbPurge	Removes and/or archived expired data.	Use on a periodic basis to delete expired.
Check install	EcDsDesc	Verifies database install.	Use after running DbBuild or DbPatch to confirm the subsystem database was properly installed.

#### 4.8.4.1 Quick Start Using Database Installation and Maintenance Scripts

The database installation and maintenance scripts are a custom developed utility and should be used only by database administration personnel.

To execute Database Installation and Maintenance Scripts from the command line prompt use:

**Scriptname** *<mode>* *<dbo\_id>* *<passwd>* *<sqlserver>* *<dbname>* where:

**Scriptname** specifies the name of the database script to be executed.

The *<mode>* parameter specifies the mode (e.g., OPS, TS1, or TS2) in which the database to be used is found.

The *<dbo\_id>* parameter specifies the user ID of the database owner for the database to be used.

The *<passwd>* parameter specifies the password of the database owner for the database to be used.

The *<sqlserver>* parameter specifies the name of the SQL server under which the database to be used is found.

The *<dbname>* parameter specifies the name of the database to be used.

#### 4.8.4.1.1 Invoking Database Installation and Maintenance Scripts using ECS Assist

All scripts, except EcDbDesc, can be invoked using the ECS Assist installation tool using the DATABASE command button. Further information on using ECS Assist can be found elsewhere in this document (see sub-section 4.1.9).

#### 4.8.4.3 Required Operating Environment

The Database Installation and Maintenance Scripts can run on Linux 2.x platforms.

For information on the operating environment, tunable parameters and environment variables of Database Installation and Maintenance Scripts refer to the 920-TDA-022 “Custom Code Configuration Parameters” documentation series located on the EMD Baseline Information System Web page (<http://pete.hitc.com/baseline/index.html>).

Table 4.8.4-2 identifies the supporting products this tool depends upon to function properly.

**Table 4.8.4-2. Support Products for Database Installation and Maintenance Scripts**

Interface (facility)
Sybase SQL Server

#### 4.8.4.3.1 Interfaces and Data Types

None.

#### 4.8.4.4 Databases

The Database Installation and Maintenance Scripts use the DM, DPLINGEST, MSS or SDSRV database as applicable. Description of each of these databases is found in the following documents:

311-EMD-100, *INGEST (INS) Database Design and Schema Specifications for the EMD Project*

311-EMD-103, *Systems Management Support Subsystem Database Design and Schema Specifications for the EMD Project*

311-EMD-101, *Science Data Server Database Design and Schema Specifications for the EMD Project*

311-EMD-102, *Storage Management and Data Distribution Subsystems Database Design and Schema Specifications for the EMD Project*

311-EMD-105, *Spatial Subscription Server Database Design and Schema Specifications for the EMD Project*

#### **4.8.4.5 Special Constraints**

None.

#### **4.8.4.6 Outputs**

None.

#### **4.8.4.7 Event and Error Messages**

The Database Installation and Maintenance Scripts issues error messages, which are reported on the Sybase error log.

#### **4.8.4.8 Reports**

None.

#### 4.8.5 Database Replication Scripts

A set of replication scripts has been created for the MSS subsystem to facilitate installation and administration activities. These scripts are designed to be accessible from the command line only. The scripts follow a standard naming convention across each subsystem consisting of a prefix, of the format *EcXXXX*, identifying the subsystem component and a root identifying the primary command or purpose performed by the script. For example, a script to define replication login IDs used by the MSS would be called *EcMsRsLogin*.

A description of each of the suggested standard scripts is given in Table 4.8.5-1. Details about the applicable scripts can be found in the appropriate subsystem-specific DID 311 database specification document.

**Table 4.8.5-1. Common ECS Operator Functions Performed with Database Replication Scripts**

Operating Function	Command	Description	When and Why to Use
Add Login	RsLogin	Add existing system login to the SQL server.	Use when installing an ECS custom application to add the pre-defined set of Unix logins used by the application to the appropriate SQL server.
Add User	RsUser	Add user ID to a database.	Use when installing an ECS custom application to add the pre-defined set of User IDs used by the application to the appropriate database.
Install Replication Objects	RsBuild	Install a new copy of scripts and replication objects necessary for database replication.	Use when installing an upgraded Release/drop or an ECS custom application into a mode where there is no existing data needing to be retained.
Upgrade Replication Objects	RsPatch	Installs replicate database patch wrapper, or modifications to existing replication objects.	Use when installing an upgraded Release/Drop of an ECS custom application into a mode containing existing data needing to be retained.
Replicate MSS Databases	RsMsDb	Create a backup file for the database.	Use to create a backup of the database used in the event of database corruption or disk failure.

### 4.8.5.1 Quick Start Using Database Replication Scripts

The database replication installation and maintenance scripts are a custom developed utility and should be used only by database administration personnel.

### 4.8.5.2 Database Replication Script User Interface

To execute database replication installation and maintenance scripts from the command line prompt use:

>**Scriptname** <*mode*>

Where:

**Scriptname** specifies the name of the database script to be executed.

<*mode*> specifies the mode in which the databases to be used are found (e.g., OPS, TS1 or TS2).

### 4.8.5.2.1 Invoking Database Replication Scripts using ECS Assist.

There are no scripts to invoke the Database Replication Servers using the ECS Assist tool.

### 4.8.5.3 Required Operating Environment

The Database Replication Scripts can be run on Linux 2.x platforms.

For information on the operating environment, tunable parameters and environment variables of Database Replication Scripts refer to the 920-TDA-022 “Custom Code Configuration Parameters” documentation series.

Table 4.8.5-2 identifies the supporting products this tool depends upon to function properly.

**Table 4.8.5-2. Support Products for Database Replication Scripts**

Interface (facility)
Sybase SQL Server
rs_subcmp (Sybase Replication Server utility)

### 4.8.5.3.1 Interfaces and Data Types

None.

### 4.8.5.4 Databases

The Database Replication Scripts use the MSS database as applicable. A description of this database is found in the following document:

311-CD-627, *System Management Support Subsystem Database Design and Schema Specifications*

#### **4.8.5.5 Special Constraints**

None.

#### **4.8.5.6 Outputs**

None.

#### **4.8.5.7 Event and Error Messages**

The Database Replication Scripts issues error messages, which are reported to the script's error log.

#### **4.8.5.8 Reports**

None.

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## 4.8.6 Restricting Access to ESDTs and Granules Scripts

The two scripts *EcDsSrUpdateESDTAccess* and *EcDsSrUpdateQATimeRange* provide DAAC operations staff the capability to adjust how the Science Data Server restricts *Acquire* access to granules. When evaluating a user's permission to *Acquire* a granule, the Science Data Server uses the value of the NASA user attribute stored in the User Profile system. The first script, *EcDsSrUpdateESDTAccess*, allows the DAAC operator to restrict an entire ESDT/Data Collection to one or more of the specific NASA user types stored in the User Profile system. The second script, *EcDsSrUpdateQATimeRange*, allows individual granules to be restricted based upon the granule's QA flag values and the type of NASA user making the request. These scripts are delivered as part of the Science Data Server package and are installed in the */usr/ecs/<mode>/CUSTOM/dbms/DSS* directory.

### 4.8.6.1 Quick Start Using Restricted Access to ESDTs and Granules Scripts

Both of the scripts, *EcDsSrUpdateESDTAccess* and *EcDsSrUpdateQATimeRange*, require the environment variables described in Table 4.8.6-1 to be set up.

**Table 4.8.6-1. Environment Variables for Restricted Access to ESDTs and Granules Scripts Commands**

Variable	Description
DSQUERY	Contains the name of the Sybase SQL server where the ScienceDataServerdatabase is stored.
DBUSERNAME	Contains the Sybase login name for the owner of the Science Data Server database.
DBPASSWD	Contains the password for the Sybase login.
DBNAME	Contains the name of the Science Data Server database within the SQL server.

These can be set temporarily at the command prompt or they can be added to the operators .cshrc file. For example, to set the DBNAME environment variable using the csh, at the prompt, the operator would type:

> **setenv DBNAME EcDsScienceDataServer1** (and press *<Enter>*).

### 4.8.6.2 Quick Start Using Restricted Access to ESDTs and Granules Scripts Commands

After initializing the required environment variables, the following command scripts can be invoked.

#### 4.8.6.2.1 EcDsSrUpdateESDTAccess Command Script

The script "*EcDsSrUpdateESDTAccess*" should be invoked as:

>**EcDsSrUpdateESDTAccess <ShortName> <VersionID>**

Where **ShortName** is a string of up to eight characters and **VersionID** is a positive numeric value between 1 and 255. Together **ShortName** and **VersionID** identify the ESDT to be modified.

This script prompts the operator for the combination of NASA user types who should be allowed access to the ESDT.

The valid NASA user types are:

- P** – privileged NASA user
- R** – regular NASA user
- N** – non-NASA user

The Operator should type in a combination of one or more of the letters “**PRN**” and press Enter. For example, typing in the letter “**P**” restricts the ESDT to privileged NASA users only. Entering the letters “**PR**” restricts the ESDT to privileged and regular NASA users only. *Acquire* requests from NASA users not listed in the ESDT’s access list (set by this script) are rejected. When an *Acquire* request is rejected, an access violation entry is written to the Science Data Server log file indicating the user and the UR of the granule.

These restrictions are independent of the values of the QA flags. By default, each ESDT allows *Acquire* access to all NASA user types. This script should be executed if the DAAC operations staff wishes to impose a restriction on the entire ESDT.

#### **4.8.6.2.2 EcDsSrUpdateQATimeRange Command Script**

The script “*EcDsSrUpdateQATimeRange*” should be invoked as:

```
>EcDsSrUpdateQATimeRange <ShortName> <VersionID>
```

This script prompts the operator for the number of days to be used when measuring the QA time range of a granule. An integer value greater than or equal to zero should be entered. The Science Data Server uses this integer value when it determines the access status of a granule during an *Acquire* request. The integer number of days entered for the ESDT is added to the ProductionDate attribute of the granule to determine the granule’s QA time period. If the current time of the *Acquire* request is before the end of the QA time period then a restrictive set of access rules is used to determine the users access to the granule. If the time of the *Acquire* request is beyond the granule’s QA period, then a less restrictive set of rules is applied.

The rules work by comparing the values of the OperationalQualityFlag and the ScienceQualityFlag attributes against a list of NASA user types having access to the flag value. For example, during the QA period, a non-NASA user can only *Acquire* a granule with QA Flag values of “null” or “Passed.” However outside the QA period of the granule, the same non-NASA user can *Acquire* the granule as long as the QA flags are not “Failed” or “Under Investigation.”

By default each ESDT has the QA Temporal range/period set to null, which is interpreted as an infinite QA period. If this script is not used to update the ESDT, the most restrictive rules are applied to all *Acquire* requests for the ESDT.

Setting the QA period to zero has special meaning. A period of zero causes the less restrictive rules to always be used to determine the access to a granule. The ESDT is considered to have no QA period.

#### **4.8.6.3 Required Operating Environment**

For information on the operating environment, tunable parameters, and environment variables refer to the 920-TDA-022 “Custom Code Configuration Parameters” documentation series.

#### **4.8.6.4 Interfaces and Data Types**

These two scripts use the Sybase program “isql” to interface with the Science Data Server database. The “isql” program should be installed and operational before executing these scripts.

#### **4.8.6.5 Databases**

The Restricting Access to ESDTs and Granules Scripts do not include the direct managing of any database. They have an interface with the Science Data Server Database: however this interface is based on a simple parameter passing function. For further information on the Science Data Server Database refer to 311-CD-624, *Science Data Server Database Design and Schema Specifications for the EMD Project*.

#### **4.8.6.6 Special Constraints**

The Restricting Access to ESDTs and Granules Scripts do not require any servers to be running. The Science Data Server must be restarted for the database changes made by these scripts to become effective.

#### **4.8.6.7 Outputs**

None.

#### **4.8.6.8 Event and Error Messages**

None.

#### **4.8.6.9 Reports**

None.

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## 4.8.7 Using the Spatial Subscription Server (NBSRV) GUI

The NBSRV GUI provides an operator interface to place a standing order (hereinafter called “subscription”) on an ECS event. Capabilities provided to an operator depends on operator access level. A full capability operator has access to all NBSRV GUI features while a read only operator has access to all non management features. Specifically, the capabilities of NBSRV GUI are as follows:

- List the types of subscribable events.
- Add a subscription with an action for distribution of standard ECS products from the ECS archive holding or email notification. The subscription can be qualified with spatial, temporal, integer, string and floating point qualifiers <sup>⊖</sup>
- Associate a Data Pool insert action with a subscription. <sup>⊖</sup>
- Associate a Data Pool theme with a Data Pool insert action (Available to only full capability Operator).
- List the subscriptions which have been previously entered.
- View an existing subscription.
- Update and Delete an existing subscription. <sup>⊖</sup>
- Suspend and Resume an existing subscription. <sup>⊖</sup>
- Suspend, resume, or delete the subscriptions associated with a Data Pool theme. <sup>\*\*</sup>
- Add, update, or cancel a bundling order. <sup>⊖</sup>
- Associate a bundling order with a subscription. <sup>⊖</sup>
- List the bundling orders associated with a user.
- List the subscriptions associated with a bundling order.
- Determine the number of subscribed events left to dequeue.
- Determine the number of actions left to dequeue.
- List the status of email notification and distribution actions in the action queue. <sup>⊖</sup>
- List statistics relating to Spatial Subscription Server performance.

### 4.8.7.1 Starting the NBSRV GUI

Pre-conditions:

- Javascript must be enabled for the Web Browser.
- The designated size of the Web Browser cache should be at least 5000 kbytes for Disk and Memory cache.

Consult with your Web Administrator, if you have any problems verifying or setting these parameters.

Bring up a Web Browser and then access the URL for the NBSRV GUI web page.

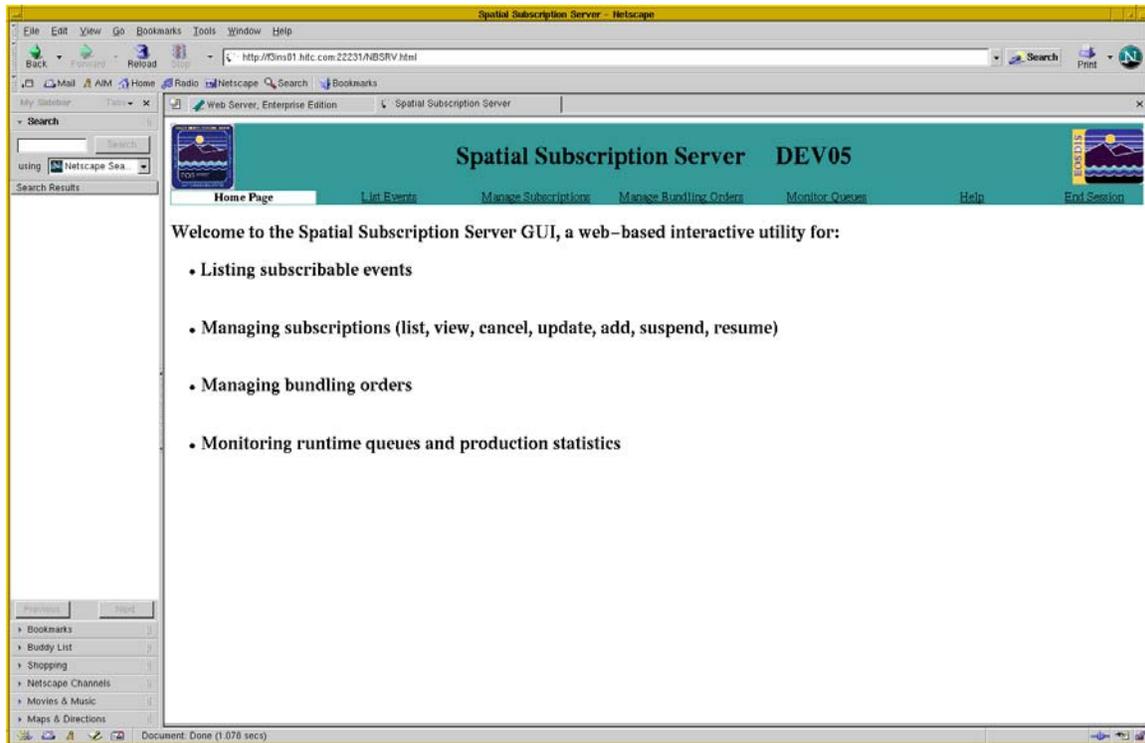
**For example: <http://yourserver.domain/NBSRV.html>**

---

<sup>⊖</sup> Only available to full capability operators.

### 4.8.7.2 NBSRV Home Page

The NBSRV Home Page screen, shown in Figure 4.8.7.2-1 allows the operator to navigate to the List Events, Manage Subscriptions, Manage Bundling Orders, Monitor Queues and Help pages. See Table 4.8.7.2-1 for a brief description of the functions.



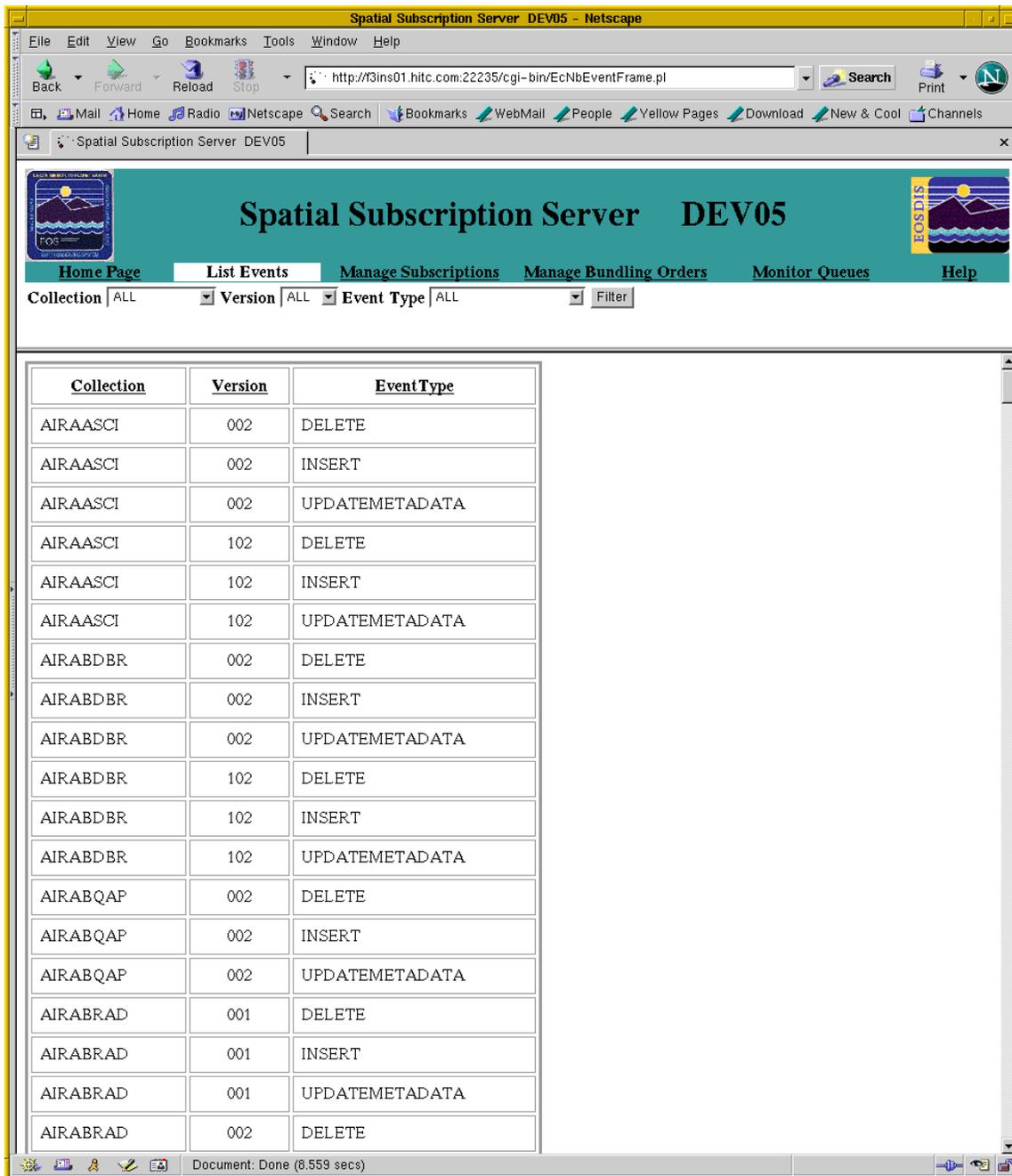
**Figure 4.8.7.2-1. NBSRV Home Page**

**Table 4.8.7.2-1. Spatial Subscription Server (NBSRV) GUI Operator Functions**

<b>GUI/Command</b>	<b>Description</b>	<b>When and Why to Use</b>
List Events tab	View the types of subscribable events.	If operator needs to view ECS events before entering a subscription.
Manage Subscriptions tab	List, view, add, cancel, update subscriptions.	If operator needs to view, add, change, suspend, resume or delete subscriptions.
Manage Bundling Orders tab	List, view, add, cancel, update bundling orders.	If operator needs to view, add, change, cancel bundling orders or list the subscriptions for a bundling order.
Monitor Queues tab	View action queue or statistics relating to Spatial Subscription Server performance.	If operator needs to view statistics or look at the action queue.
Help tab	Describes the NBSRV GUI functions.	If operator needs help in navigating through the NBSRV GUI.
End Session	Allows Operator to End a session.	Whenever an Operator wishes to end the current session.

### **4.8.7.3 List Events Tab**

The List Events screen shown in Figure 4.8.7.3-1 allows the operator to view the subscribable events in the ECS system. The operator can sort the list by Collection, EventType or Version by clicking on the **Collection**, **Version** or **Event Type** link. The operator can also filter the list by any combination of Collection, Version and EventType. After selecting the filtering criteria from the pull-down list(s), click on the **Filter** button.



**Figure 4.8.7.3-1. SSS – List Events**

#### 4.8.7.4 Manage Subscriptions Tab

The Manage Subscriptions screen shown in Figure 4.8.7.4-1 allows the operator to list the subscriptions in the NBSRV database. The list can be sorted by clicking on the **Subscription Id**, **User**, **Collection**, **Status**, **TimeLastUpdated** or **Expiration Date** link. The operator can also

filter the list by any combination of User, Collection and Status. After selecting the filtering criteria from the pull-down list(s), click on the **Filter** button.

The operator can view the contents of a subscription by clicking on the **View** button associated with that subscription and pressing the **Apply** button. This will take the operator to the screens shown in Figures 4.8.7.4-2a and 4.8.7.4-2b.

The operator can cancel a subscription by clicking on the **Cancel** button associated with that subscription and pressing the **Apply** button. This will take the operator to the deletion confirmation screen shown in Figure 4.8.7.4-3. If the operator clicks on the Yes button, the screen shown in Figure 4.8.7.4-4 will be displayed. If the operator clicks on the No button, the screen shown in Figure 4.8.7.4-1 will be displayed.

The operator can update a subscription by clicking on the **Update** button associated with the subscription and pressing the **Apply** button. This will take the operator to the screens in Figures 4.8.7.4-5a through 4.8.7.4-5d, followed by screen in Figure 4.8.7.4-6a or 4.8.7.4-6b.

The operator can add a new subscription by clicking on the **Add Subscriptions** tab. This will take the operator to the screens in Figures 4.8.7.4-7 through 4.8.7.4-13. Tables 4.8.7.4-1 through 4.8.7.4-5 lists the field descriptions for the identified screens used in this activity.

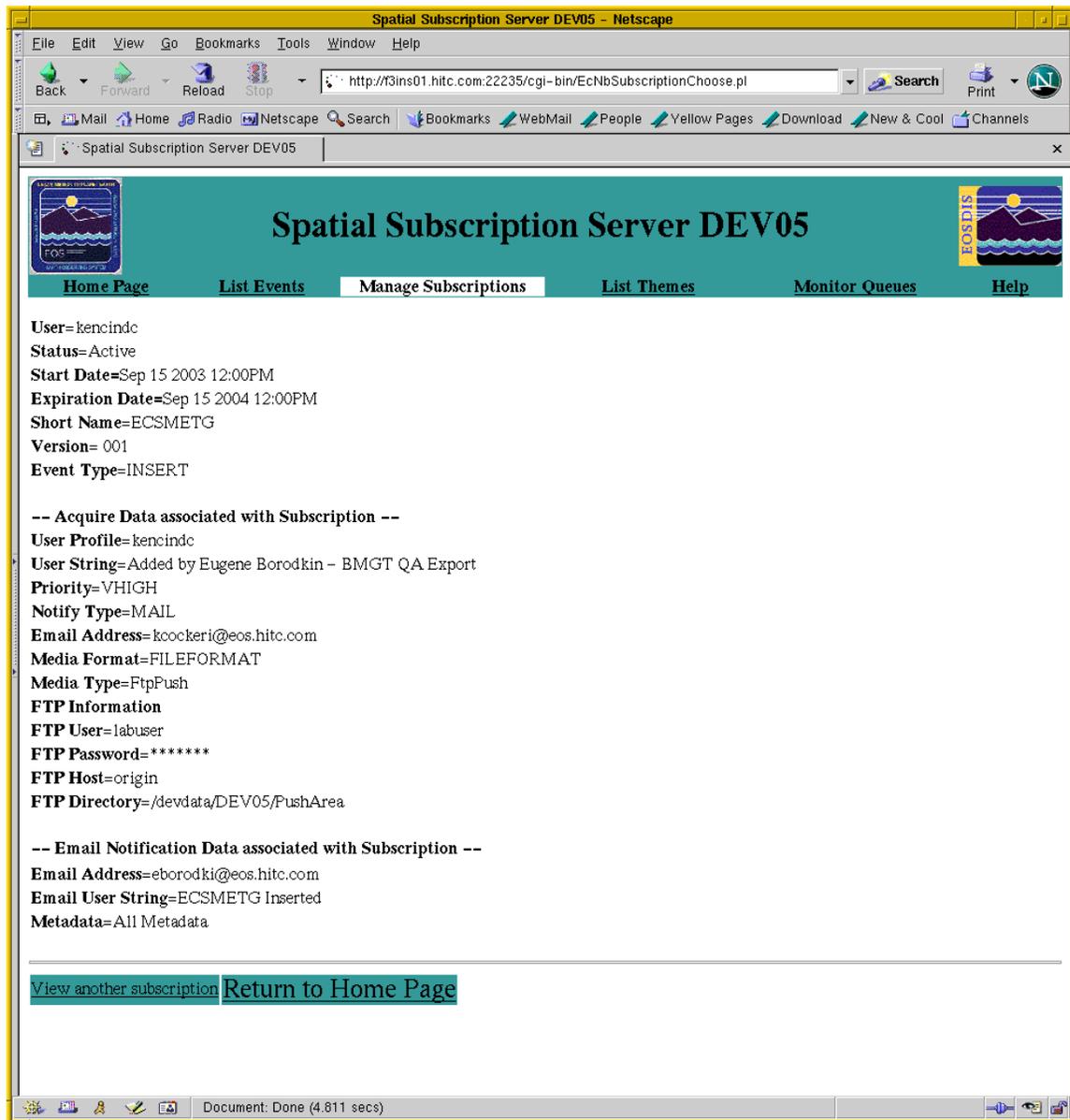
Please note that **Cancel, Update and Add Subscriptions** functionality is accessible to only full capability Operators.

Subscription Id	User	Collection	Version	Event Type	Status	DataPool	Start Date	Expiration Date	Time Last Updated	Choose Subscription Action
62	bencindc	AST_EXP	001	INSERT	Active	No	Jul 2 2003 12:00PM	Jul 2 2004 12:00PM	Jul 7 2003 10:30AM	<input type="button" value="View"/> <input type="button" value="Update"/> <input type="button" value="Cancel"/> <input type="button" value="Apply"/>
69	bencindc	MISL0DF	001	INSERT	Active	Yes	Jul 16 2003 12:00PM	Jul 16 2004 12:00PM	Nov 15 2003 12:20PM	<input type="button" value="View"/> <input type="button" value="Update"/> <input type="button" value="Cancel"/> <input type="button" value="Apply"/>
78	labuser	AST_04	001	INSERT	Active	Yes	Jul 24 2003 12:00AM	Jul 24 2004 12:00AM	Not Updated	<input type="button" value="View"/> <input type="button" value="Update"/> <input type="button" value="Cancel"/> <input type="button" value="Apply"/>
81	bencindc	AST_04	002	INSERT	Active	Yes	Sep 5 2003 12:00AM	Sep 5 2004 12:00AM	Not Updated	<input type="button" value="View"/> <input type="button" value="Update"/> <input type="button" value="Cancel"/> <input type="button" value="Apply"/>
82	bencindc	ECSMETU	001	INSERT	Active	No	Sep 15 2003 12:00PM	Sep 15 2004 12:00PM	Oct 3 2003 4:10PM	<input type="button" value="View"/> <input type="button" value="Update"/> <input type="button" value="Cancel"/> <input type="button" value="Apply"/>
85	bencindc	ECSMETC	001	INSERT	Active	No	Sep 15 2003 12:00PM	Sep 15 2004 12:00PM	Oct 1 2003 10:32AM	<input type="button" value="View"/> <input type="button" value="Update"/> <input type="button" value="Cancel"/> <input type="button" value="Apply"/>
86	bencindc	ECSMETV	001	INSERT	Active	No	Sep 15 2003 12:00PM	Sep 15 2004 12:00PM	Oct 1 2003 10:31AM	<input type="button" value="View"/> <input type="button" value="Update"/> <input type="button" value="Cancel"/> <input type="button" value="Apply"/>

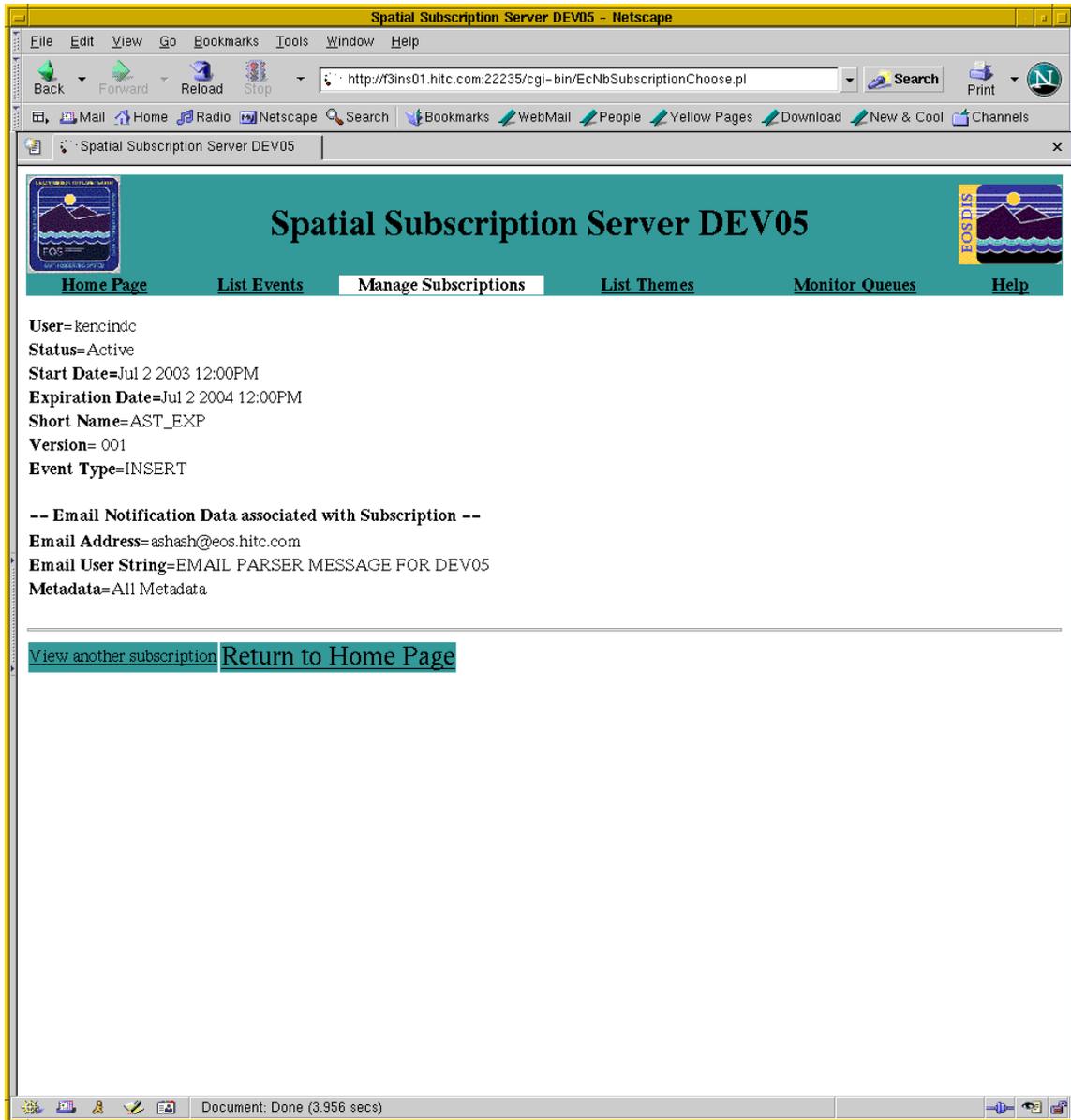
**Figure 4.8.7.4-1. Manage Subscriptions: List of All the Subscriptions in the NBSRV Database. Note that Cancel, Update and Add Functionality is Accessible Only to Full Capability Operators.**

## Limited Capability Users

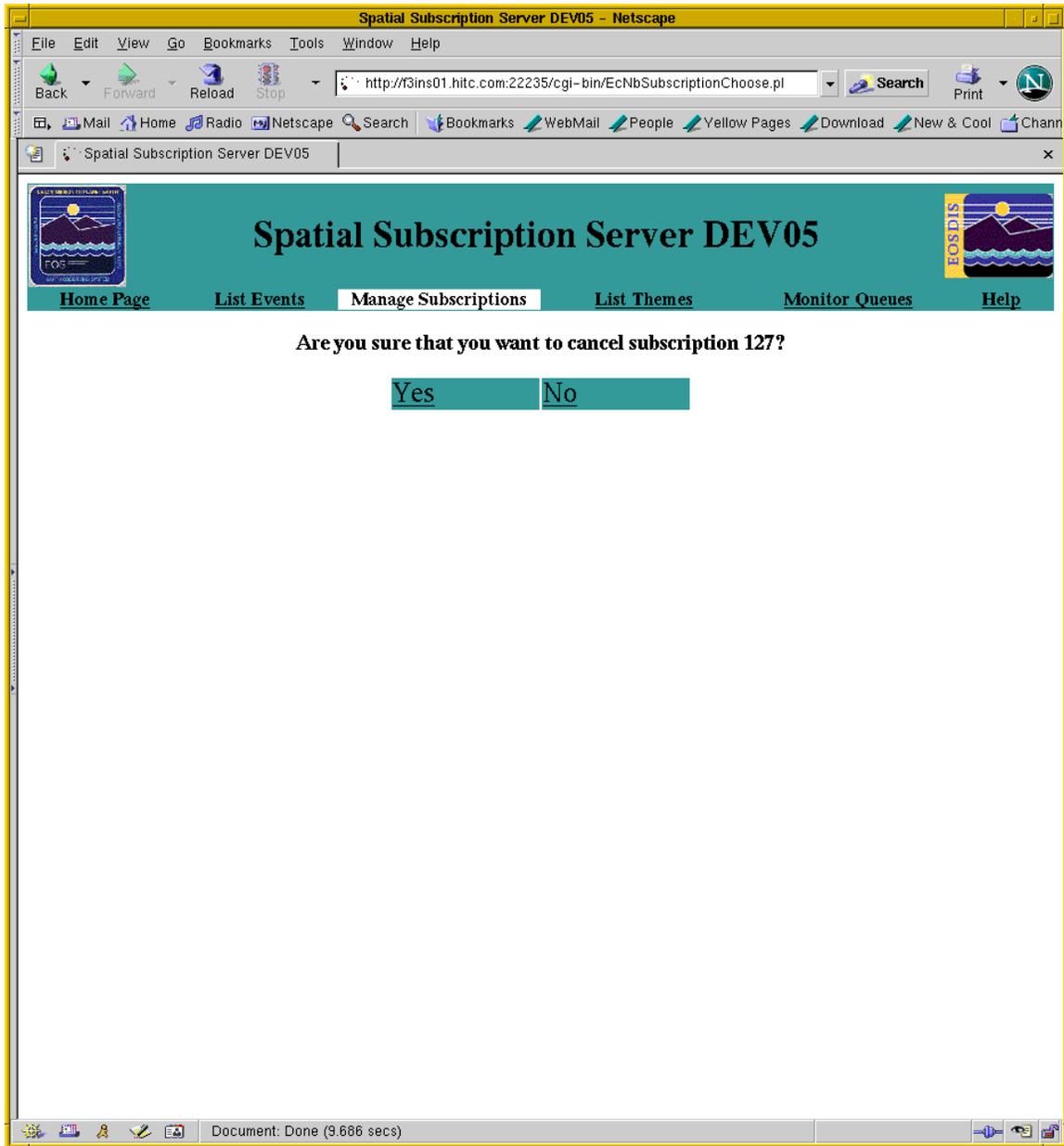
Limited Capability users cannot use **Cancel**, **Update** and **Add** functionality.



**Figure 4.8.7.4-2a. View Contents of a Subscription in the NBSRV Database**



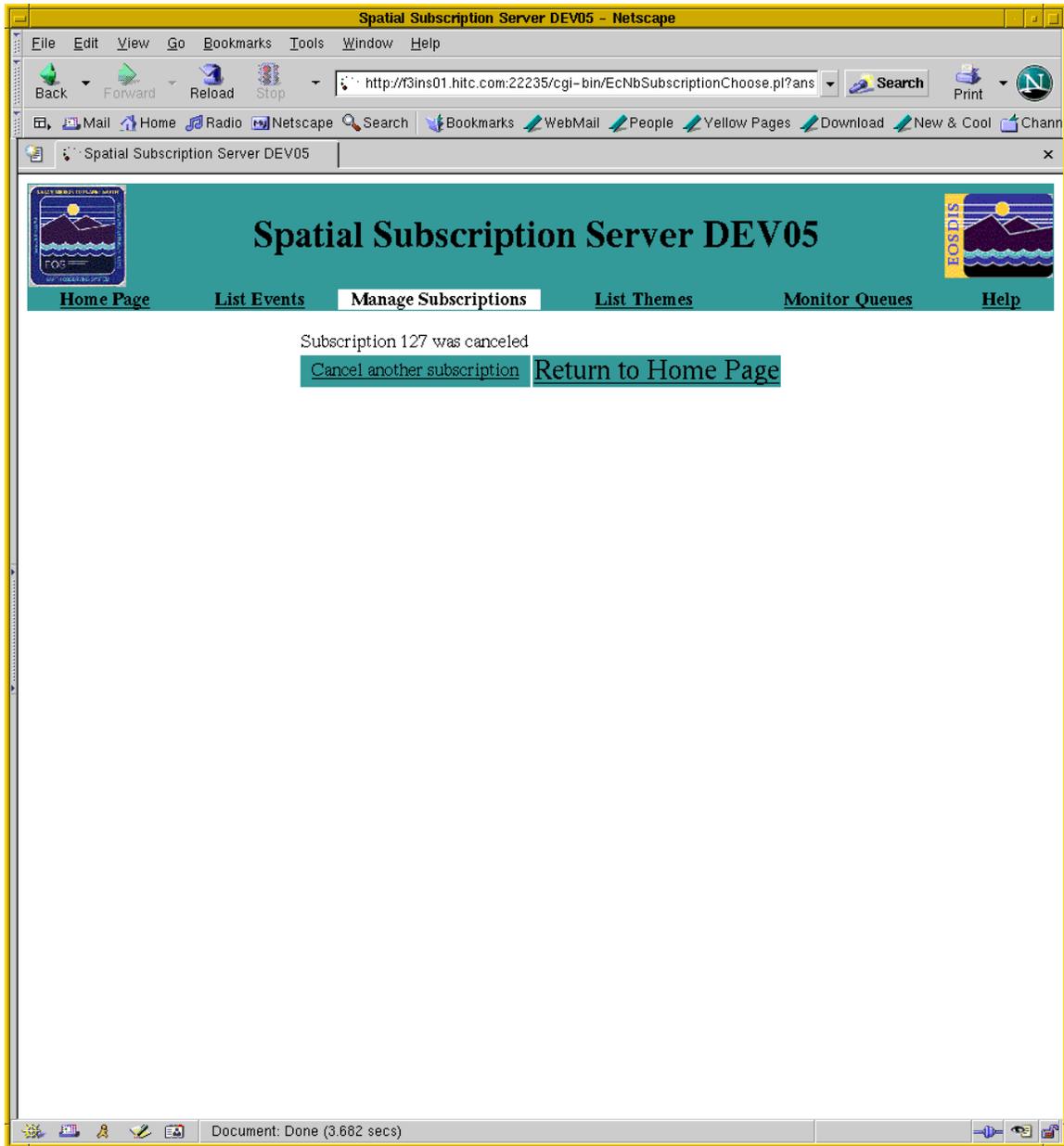
**Figure 4.8.7.4-2b. View Contents of a Subscription with Associated Email Notification Action (Continuation)**



**Figure 4.8.7.4-3. Cancel Subscription Confirmation Request. Note that Cancel Functionality is Accessible to Only Full Capability Operator.**

### **Limited Capability Operators**

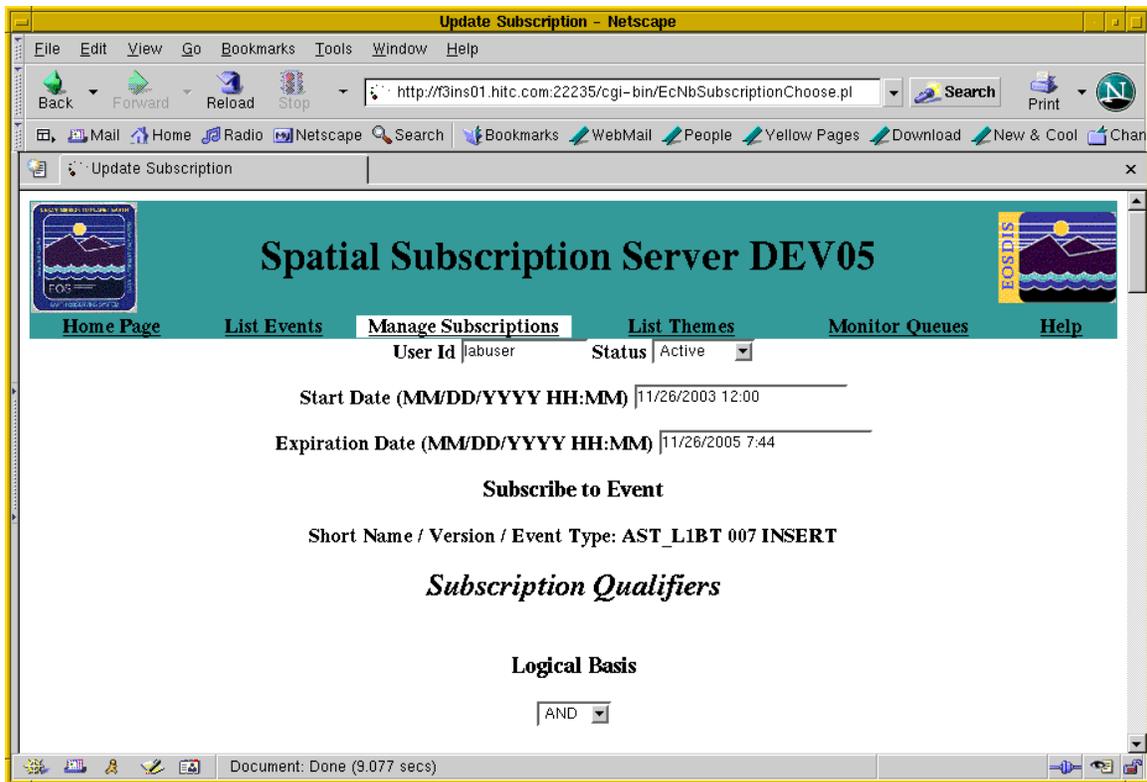
Limited Capability operators cannot use/access this functionality.



**Figure 4.8.7.4-4. Cancel Subscription Confirmation Acknowledgement. Note that This Functionality is Accessible Only to Full Capability Operator.**

### **Limited Capability Users**

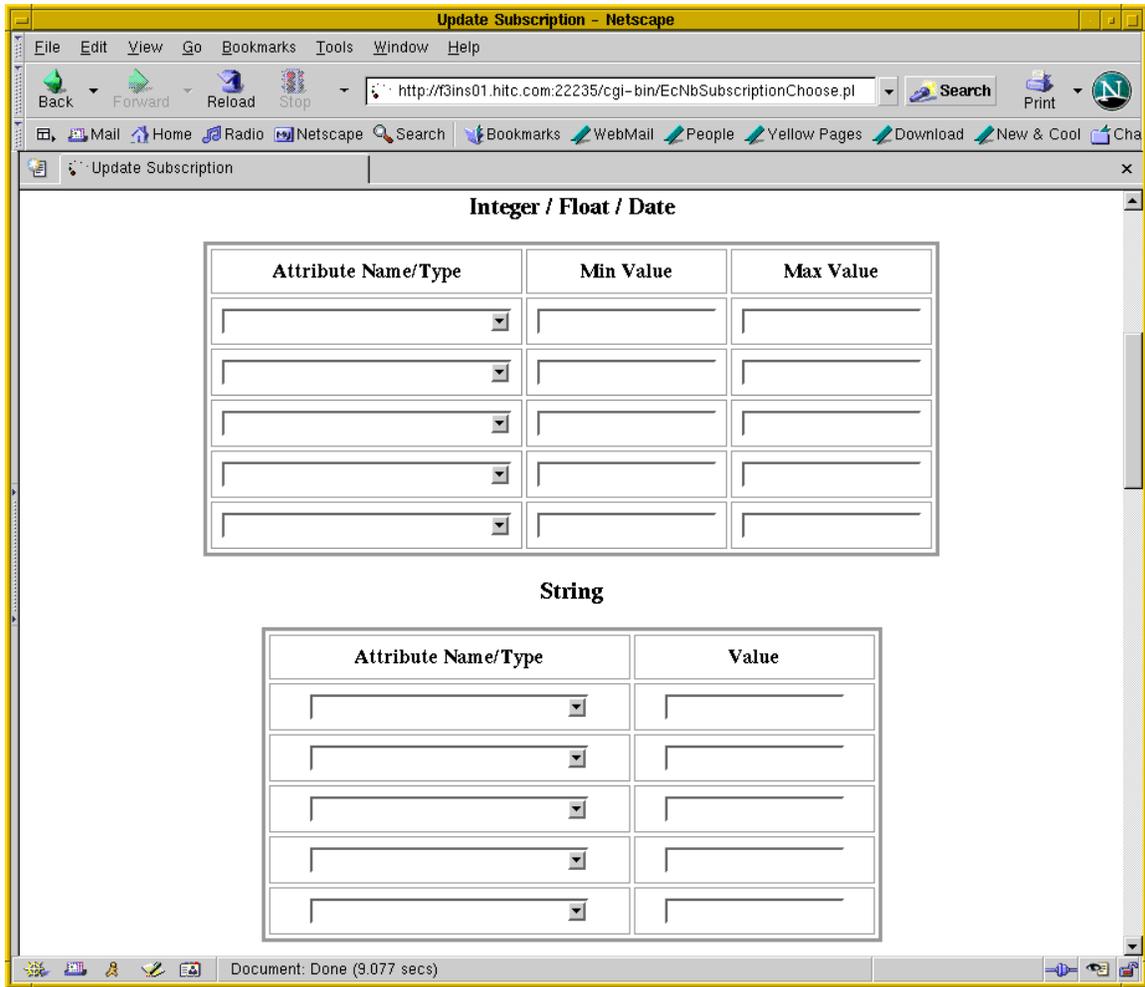
Limited Capability users cannot use this functionality.



**Figure 4.8.7.4-5a. Update a Subscription in the NBSRV Database. Note that This Functionality is Available Only to Full Capability Operator.**

### **Limited Capability Users**

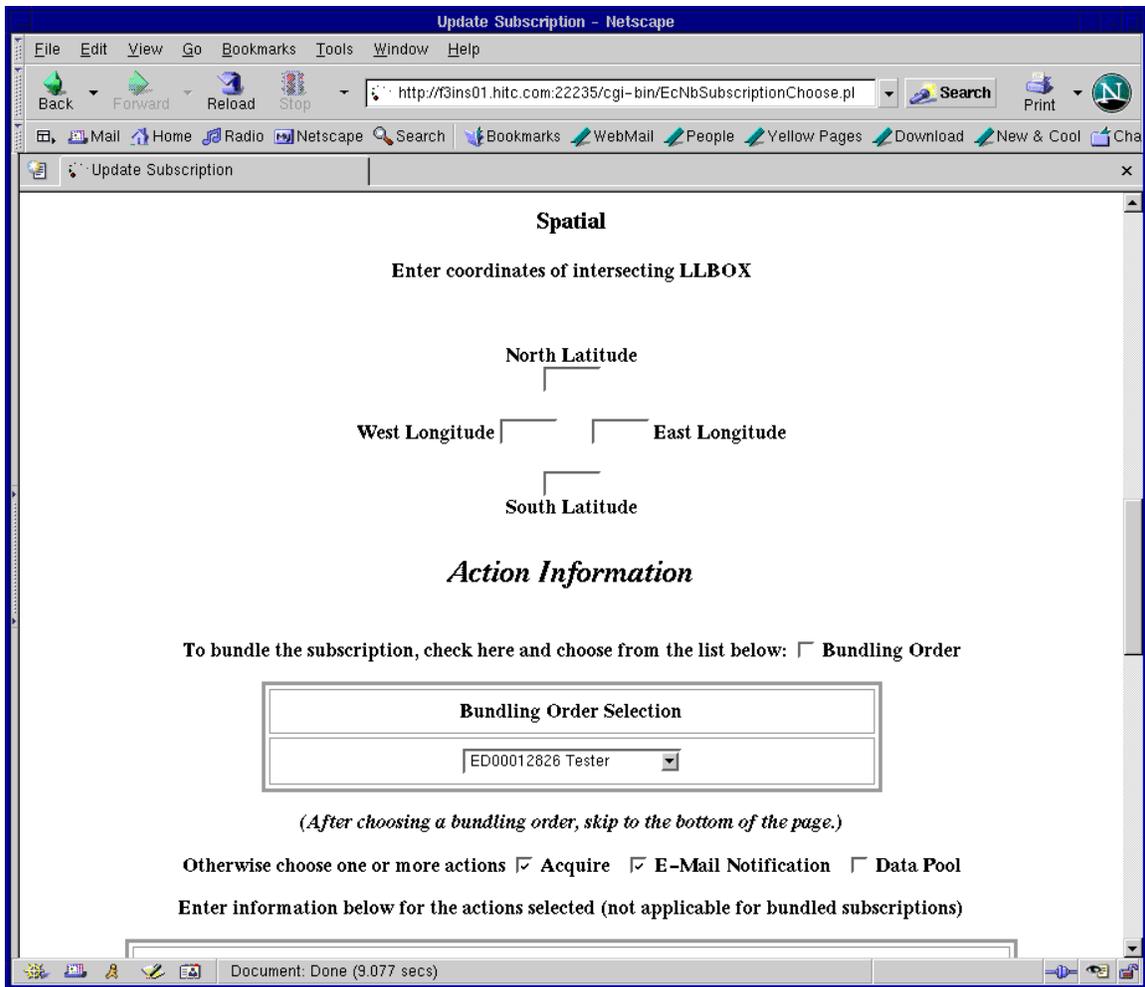
Limited Capability users cannot use this functionality.



**Figure 4.8.7.4-5b. Update a Subscription in the NBSRV Database. Note that This Functionality is Available Only to Full Capability Operator. (Continuation to Add or Modify String or Spatial Qualifiers Associated with an Existing Subscription)**

**Limited Capability Users**

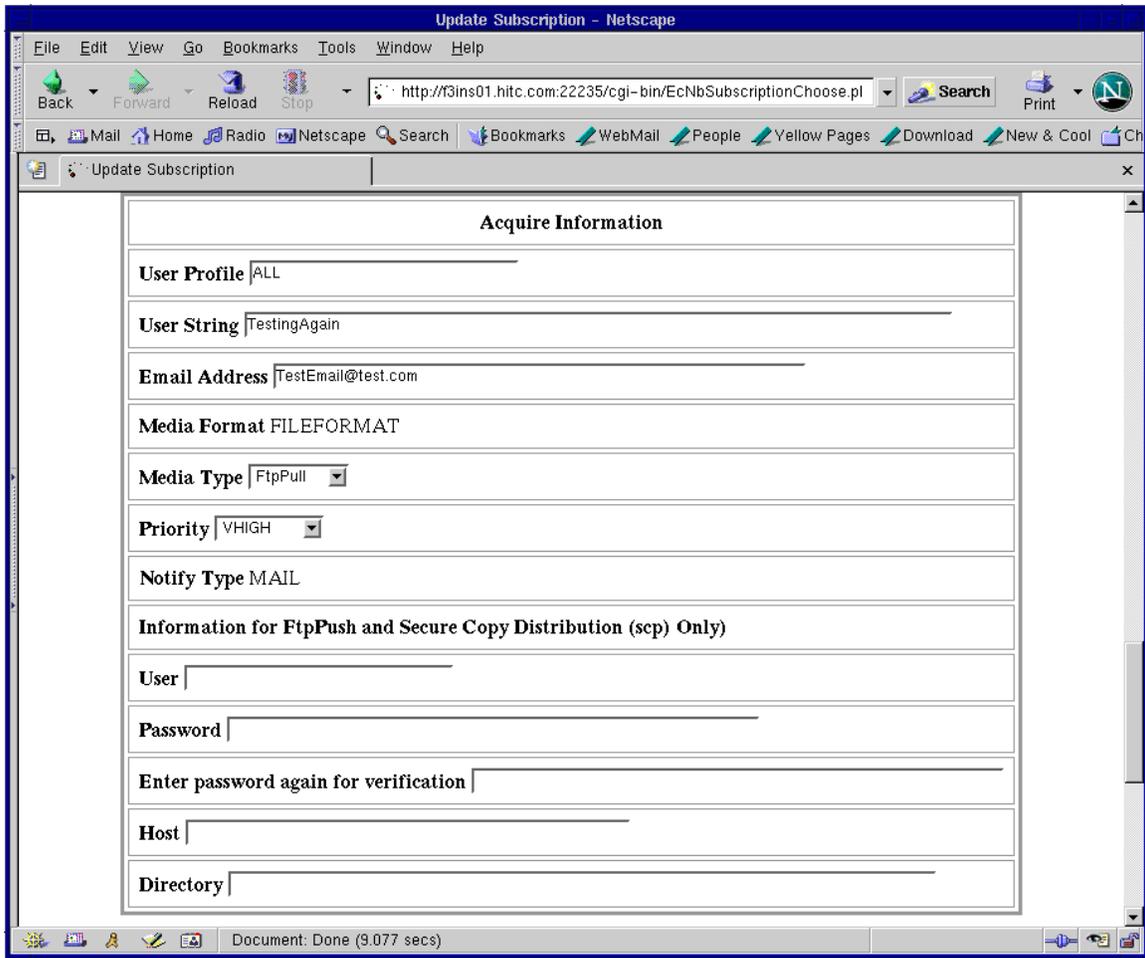
Limited Capability users cannot use this functionality.



**Figure 4.8.7.4-5c. Update a Subscription in the NBSRV Database. Note that This Functionality is Only Available to Full Capability Operators. (Continuation to Add or Update Action Information for an Existing Subscription)**

### Limited Capability Users

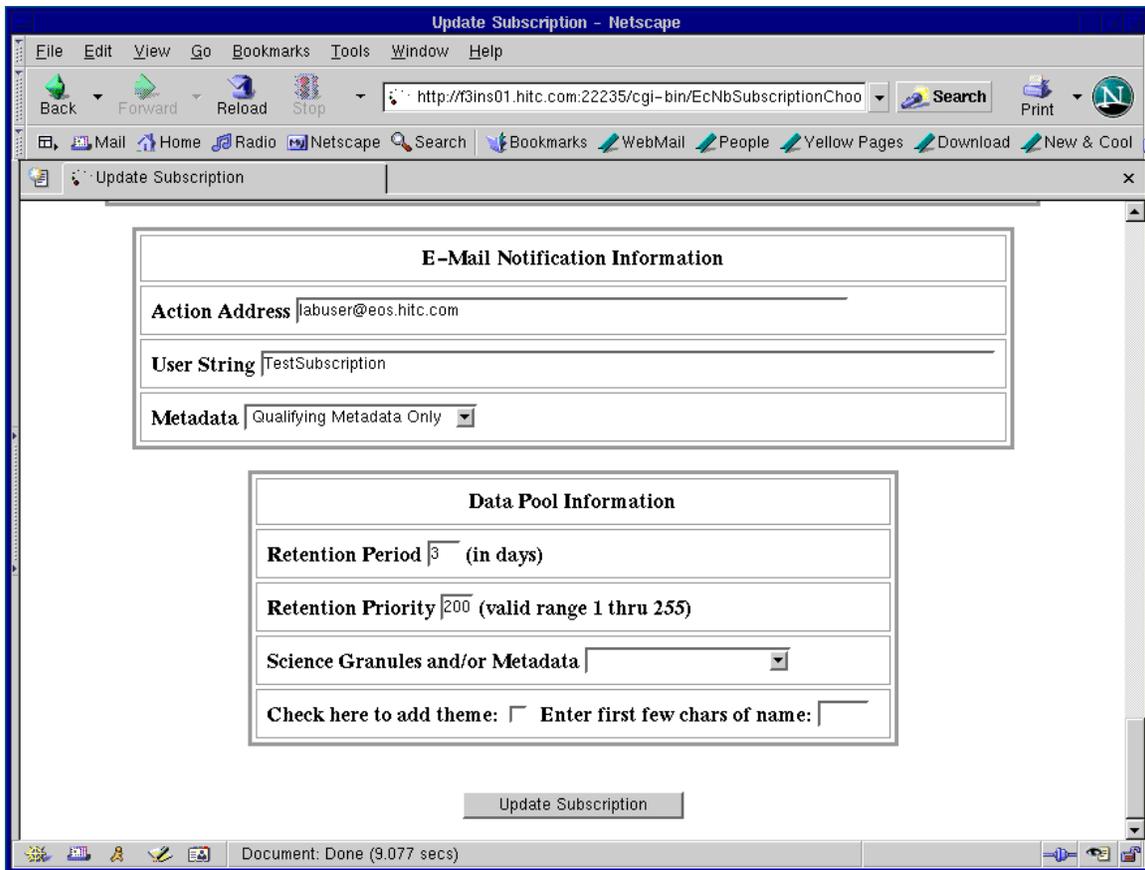
Limited Capability users cannot use this functionality.



**Figure 4.8.7.4-5d. Update a Subscription in the NBSRV Database. Note that This Functionality is Available to Only Full Capability Operators. (Continuation to Update Ftp Action Information for an Existing Subscription.)**

### Limited Capability Users

Limited Capability users cannot use this functionality.

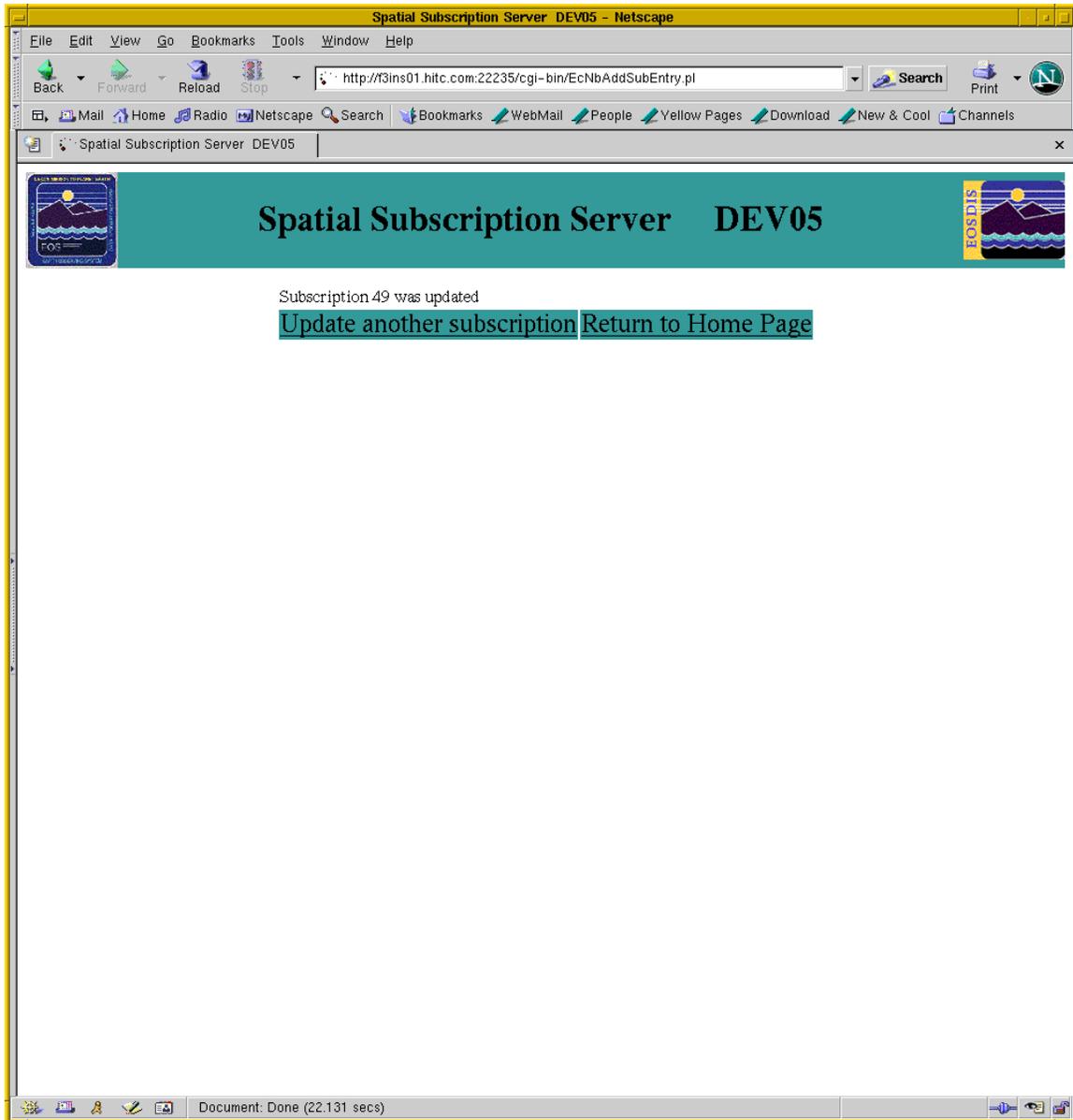


**Figure 4.8.7.4-5e. Update a Subscription in the NBSRV Database (Continuation to Update E-Mail Action Information, Data Pool Information, or the Bundling Order Selection for an Existing Subscription)**

**Note:** The operator must click on the Update Subscription button to initiate the updating of a subscription.

**Limited Capability Users**

Limited Capability users cannot use this functionality.

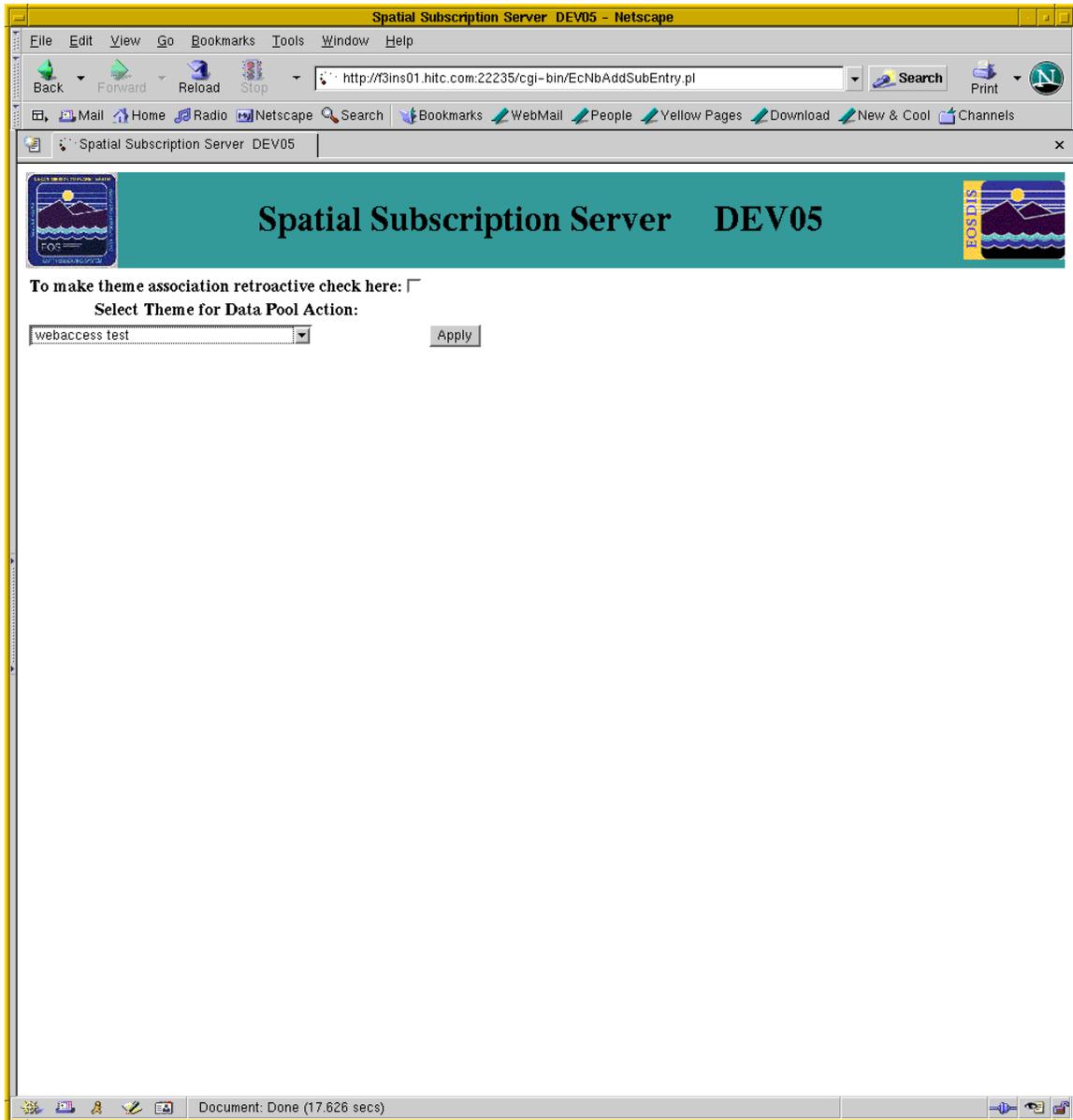


**Figure 4.8.7.4-6a. Update Confirmation Screen. Note that This Screen is Seen by Only Full Capability Operator (Confirms Successful or Unsuccessful Updating of the Subscription)**

**Note:** If invalid or missing data is detected for the subscription the errors will be displayed to the operator for correction. If a theme was to be associated with a data pool action, the screen will appear as in Figure 4.8.7.4-6b.

#### **Limited Capability Users**

Limited Capability users cannot use this functionality.

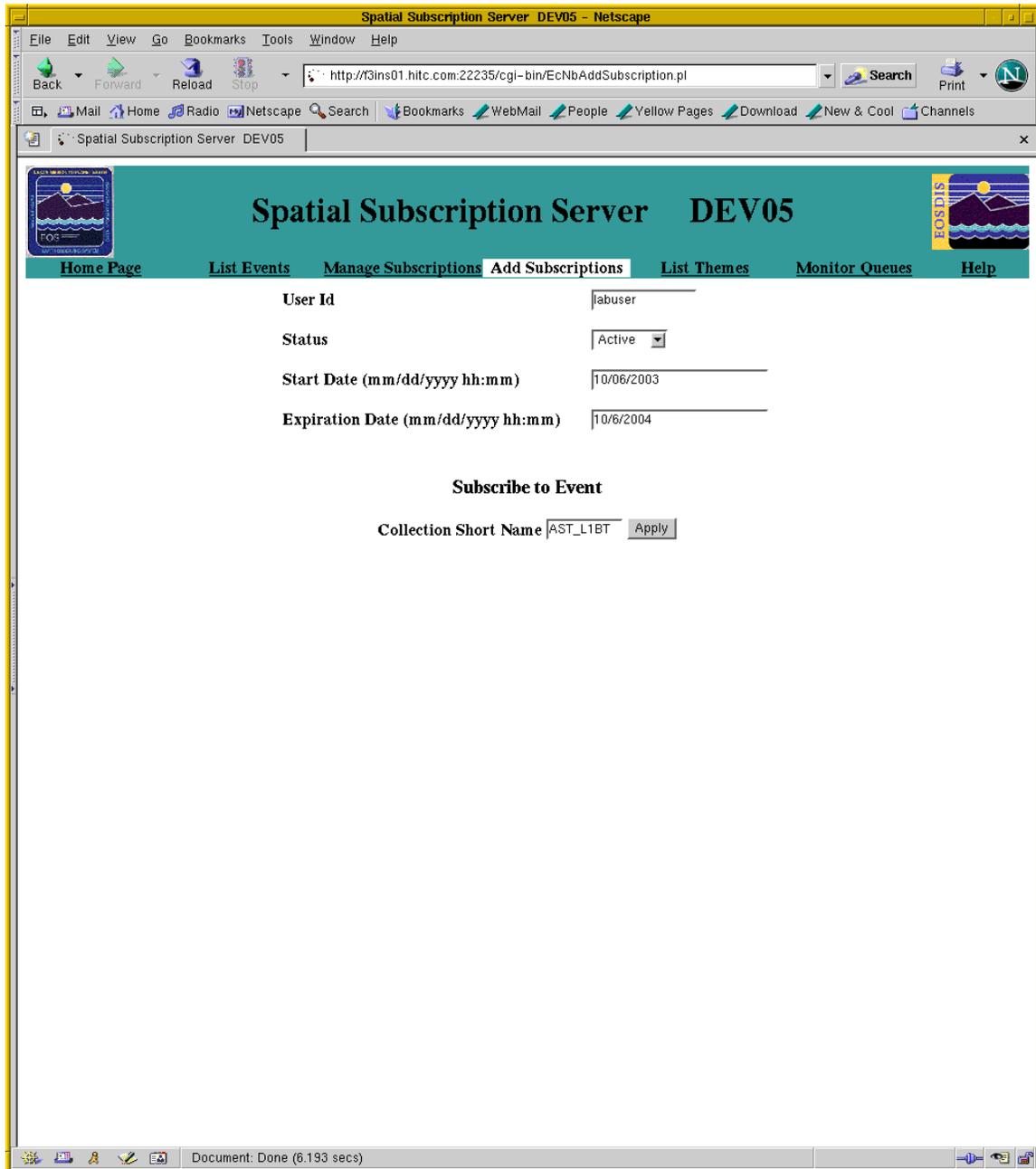


**Figure 4.8.7.4-6b. Data Pool Action Associated with a Theme. Note that This Screen is Seen by Only Full Capability Operator. (Alternative to Update Confirmation Screen Figure 4.8.7.4-6a)**

**Note:** The user first indicates whether the association is to be retroactive. Retroactive means that any granules already in the Data Pool due to the subscription being updated will be associated with the theme. The user then selects a theme from the pulldown list and clicks on Apply. The screen in Figure 4.8.7.4-6a will be displayed, signaling a successful update.

## Limited Capability Users

Limited Capability users cannot use this functionality.



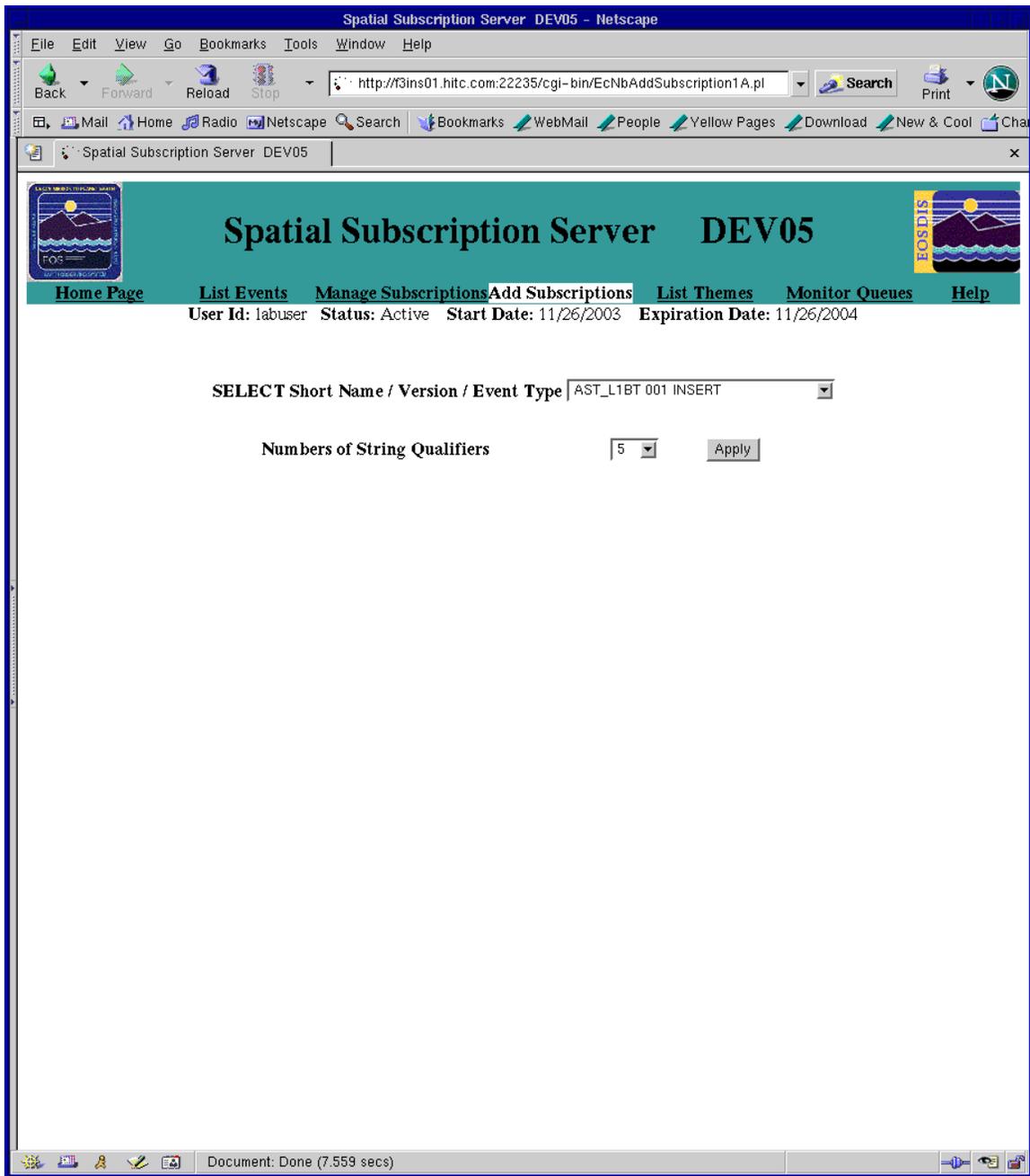
**Figure 4.8.7.4-7. Add a New Subscription for a Valid ECS User. Note that This Functionality is Accessible to Only Full Capability Users.**

## Limited Capability Users

Limited Capability users cannot use this functionality.

**Table 4.8.7.4-1. Add Subscriptions Screen Field Description**

Field Name	Data Type	Size	Entry	Description
User Id	character	14	required	Allows the operator to enter a valid ECS user.
Status	n/a	n/a	required, selection from dropdown list	Allows the operator to select 'Active', 'Inactive' or "Canceled". Normally, the operator will choose 'Active'. 'Inactive' means that the subscription exists but has been temporarily suspended. 'Canceled' means that the subscription has been planned for deletion and will be deleted by the Deletion Driver once a configurable amount of time has passed. The default value for the status field is 'Active'.
Expiration Date	dateTime	12	required	Allows the operator to enter the date on which the subscription will expire. The default is one year from the current date (although this is configurable).
Collection Short Name	character	10	optional	Allows the operator to enter the first few characters of the Collection for the event that will be subscribed to. If left blank all Collections will be retrieved. The operator must click on the <b>APPLY</b> button to obtain a pull-down list of collection, version, event type combinations.

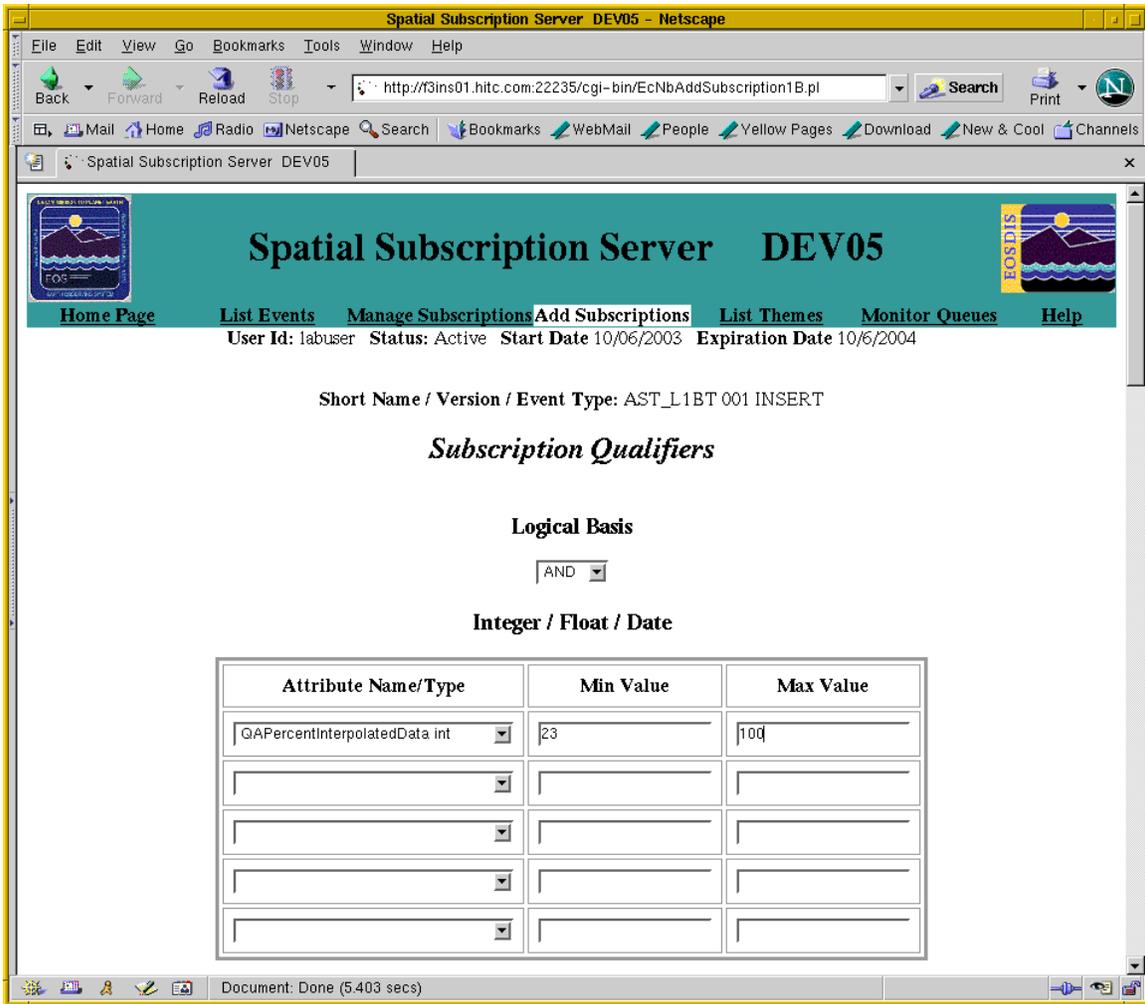


**Figure 4.8.7.4-8. Event Selection (Continuation of Figure 4.8.7.4-7). Note that This Functionality is Accessible to Full Capability Operators.**

**Note:** This screen depicts the operator selecting the ‘AST\_L1BT 001 INSERT’ event from the pull-down list.

### **Limited Capability Users**

Limited Capability users cannot use this functionality.



**Figure 4.8.7.4-9. Add Subscription Continuation Information. Note that This Functionality is Accessible to Only Full Capability Operators.**

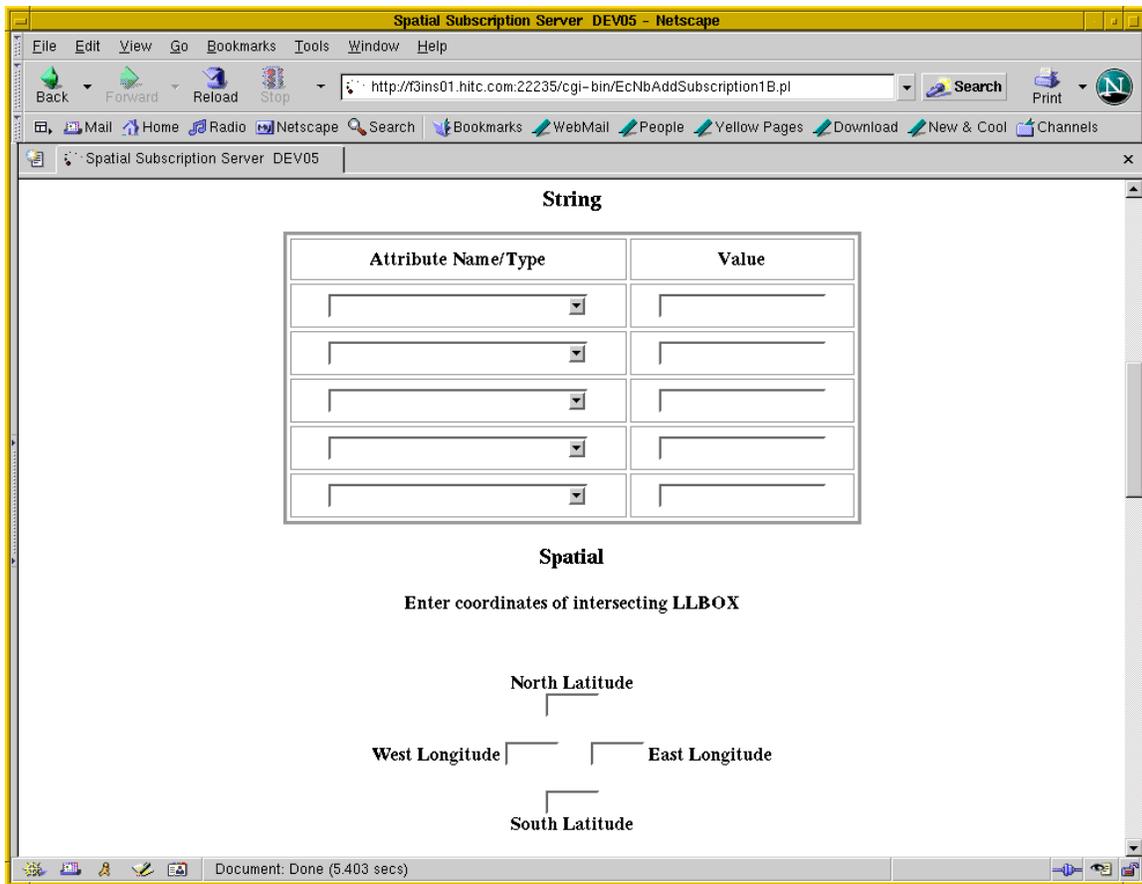
**Note:** This screen is displayed after the operator clicks on the Apply button in Figure 4.8.7.4-8. It depicts the operator adding an integer qualifier to the new subscription.

**Limited Capability Users**

Limited Capability users cannot use this functionality.

**Table 4.8.7.4-2. Add Subscriptions Screen Continuation Field Description**

Field Name	Data Type	Size	Entry	Description
Attribute Name/ Type	n/a	n/a	optional, selection from dropdown list	Allows the operator to select Integer, Float or date qualifier. Note that only attributes associated with the current collection will be displayed. If the measured Parameter QAPercentCloudCover is valid for the Collection and the operator elects to qualify on it as part of the subscription, a pop-up window will be displayed requesting that the operator enter a valid parameter name for the attribute.
Min Value	character	20	optional	Allows the operator to enter valid minimum value for the qualifier selected.
Max Value	character	20	optional	Allows the operator to enter valid maximum value for the qualifier selected. For exact matching, enter the same value for the minimum and maximum.



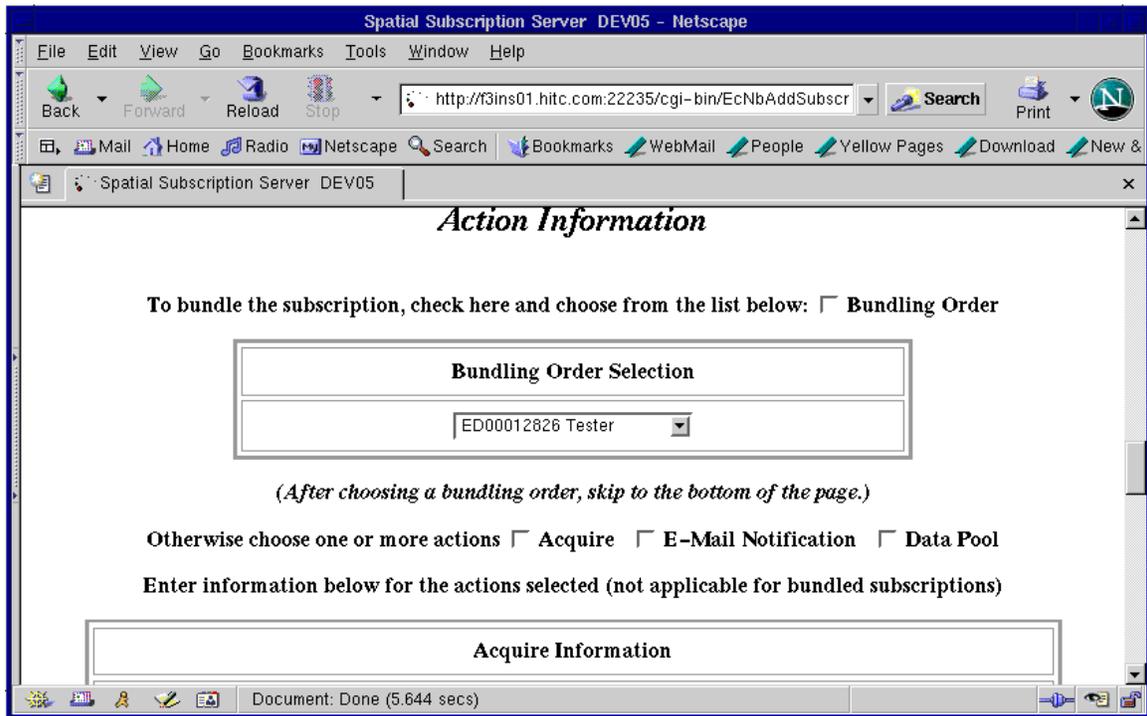
**Figure 4.8.7.4-10. Add Subscription Screen Continuation (Adding String and Spatial Qualifiers)**

### Limited Capability Users

Limited Capability users cannot use this functionality.

**Table 4.8.7.4-3. Add Subscriptions Continuation Field Description**

Field Name	Data Type	Size	Entry	Description
Attribute Name / Type	n/a	n/a	optional, selection from dropdown list	Allows the operator to select String qualifier.
Value	character	20	optional	Allows the operator to enter valid string value for qualifier selected.
Lat/Long Coordinates	character	6	optional	Allows the operator to define the latitude and longitude coordinates for an intersecting LLBOX. The coordinates are entered in degrees.



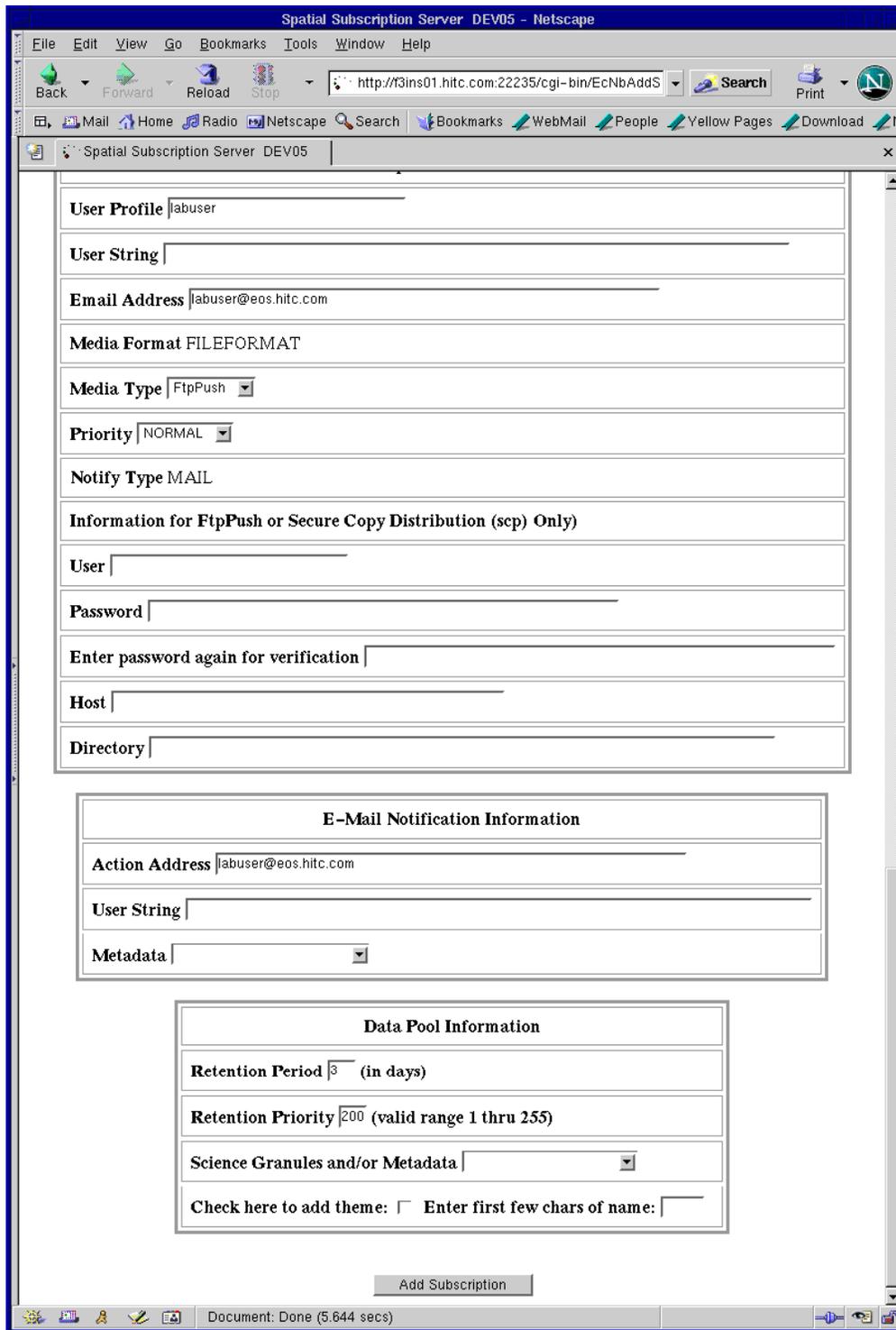
**Figure 4.8.7.4-11. Add Subscription Screen Continuation (Bundling Order). Note that This Functionality is Accessible to Only Full Capability Operators.**

### Limited Capability Users

Limited Capability users cannot use this functionality.

**Table 4.8.7.4-4. Add Subscriptions Continuation Field Description**

Field Name	Data Type	Size	Entry	Description
User Profile	character	30	required, for Acquire	This will default to the User Id from the Add Subscriptions form and must correspond to a user profile already entered in the MSS accounting database.
User String	character	30	optional, for Acquire	A secondary qualifier used to distinguish this request from others with the same user profile. The user string will appear in the distribution notice.
Email Address	character	50	required, for Acquire	The e-mail address used by the Data Distribution to e-mail notification of the acquire. NOTE: a granule will be distributed at most once to a given email address, regardless of the number of matching subscriptions.
Media Format	n/a	n/a	required, for Acquire	The format of the Media. The only default value is FILEFORMAT.
Media Type	n/a	n/a	required, for Acquire	The type of the Media. The valid values are FtpPull, FtpPush and Secure Copy. The default value is FtpPush.
Priority	n/a	n/a	required, for Acquire	The distribution priority of the acquire. The valid values are VHIGH, HIGH, NORMAL, LOW, XPRESS. The default priority value is the distribution priority in the user profile of the userID associated with the subscription.
Notify Type	n/a	n/a	required, for Acquire	The method of notification for the acquire. The only default value is MAIL. (When the Media Type is scp, notifications are also sent via scp).
FTP User	character	30	optional, for Acquire	The Unix login ID of the FTP recipient. <b>Required for FtpPush and SecureCopy.</b>
FTP Password	character	16	optional, for Acquire	The Unix password for the FTP recipient. <b>Required for FtpPush and SecureCopy.</b>
FTP Password Verification	character	16	optional, for Acquire	The Unix password verification for the FTP recipient. <b>Required for FtpPush and SecureCopy.</b>
FTP Host	character	80	optional, for Acquire	The Unix hostname of the FTP recipient. <b>Required for FtpPush and SecureCopy.</b>
FTP Directory	character	80	optional, for Acquire	The pathname of the Unix directory where the acquired files are to be stored. <b>Required for FtpPush and SecureCopy.</b>



**Figure 4.8.7.4-12. Add Subscription Screen Continuation. Note that This Functionality is Accessible to Only Full Capability Operators. (Information for the E-Mail Notification or Data Pool Actions)**

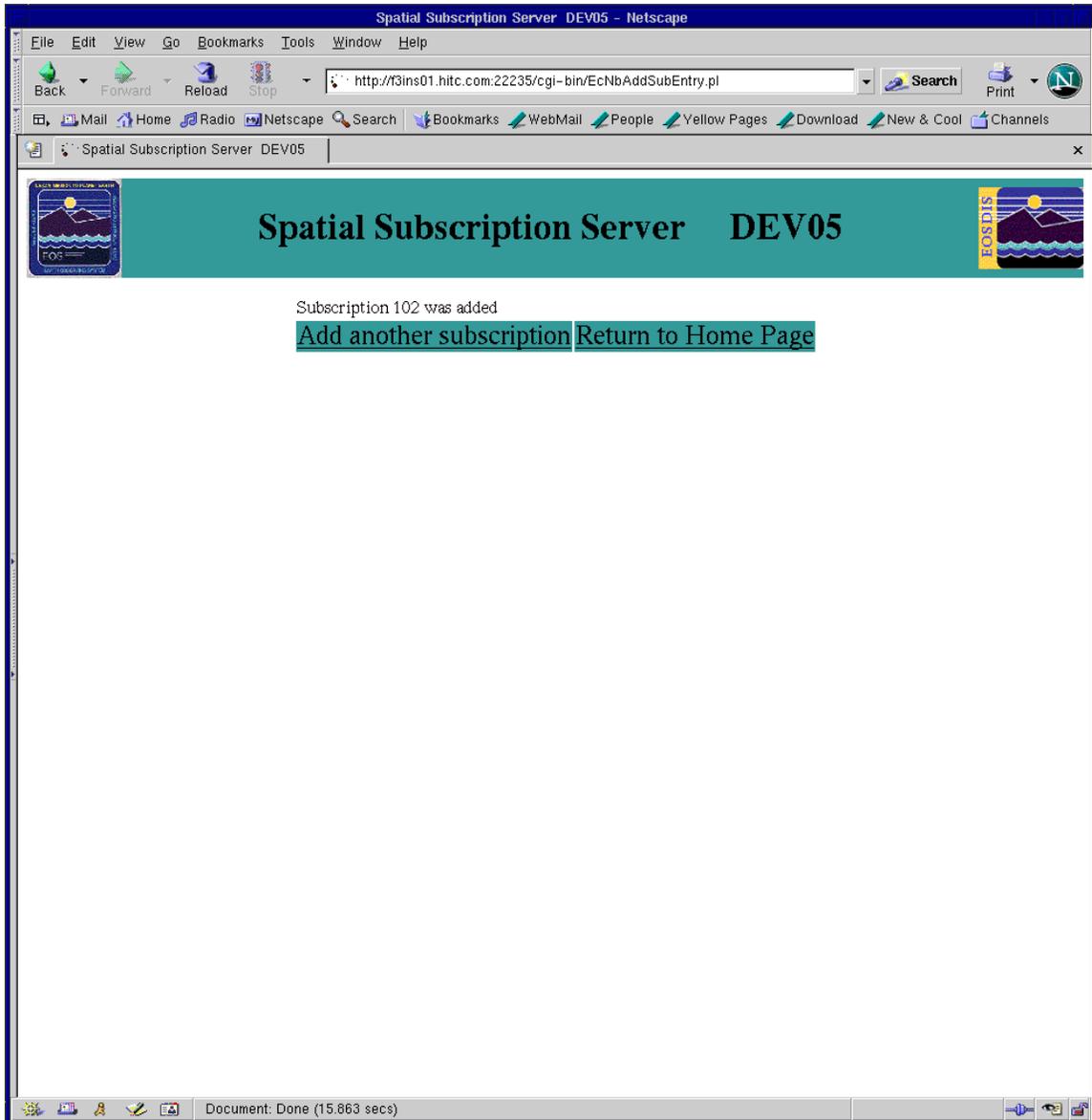
### **Limited Capability Users**

Limited Capability users cannot use this functionality.

**Note:** A data pool action may be associated with a theme by clicking the theme box. The theme will be chosen in the next screen. The operator can optionally enter the first few characters of the theme name in order to shorten the list of possibilities. The operator must click on the Add Another Subscription button to initiate the addition of the subscription to the NBSRV database.

**Table 4.8.7.4-5. Add Subscriptions Continuation Field Description**

<b>Field Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Entry</b>	<b>Description</b>
Action Address	character		required for Notify	The email address of the registered ECS user associated with the subscription.
User String	n/a	n/a	optional, for Notify	The user string to be included in the message text for each email notification.
Metadata	n/a	n/a	required, for Notify	Allows the operator to include names and values for all metadata attributes or only include names and values for the metadata attributes associated with the subscription qualifiers in the email notification text. The valid values are Qualifying Metadata Only and All Metadata.
Retention Period	integer		required	The retention period, in days, in the Data Pool. Default value is 3 days.
Retention Priority	integer		required	The retention priority in the Data Pool. Default value is 200.
Science Granules and/or Metadata	enumeration		required	Indicates whether both the granule and its metadata are to be inserted into the Data Pool or just the metadata.
Associated Theme	character	40	optional	Theme associated with the subscription.
Bundling Order	character	10	optional	Associates the subscription with a previously defined bundling order. The pulldown list display the bundling order ID followed by its user string, if defined.
Check Here To Add Theme	checkbox	n/a	optional	Add theme associated with the subscription.
Enter First Few Chars of Name	character	5	optional	The first few characters of the associated theme's name.

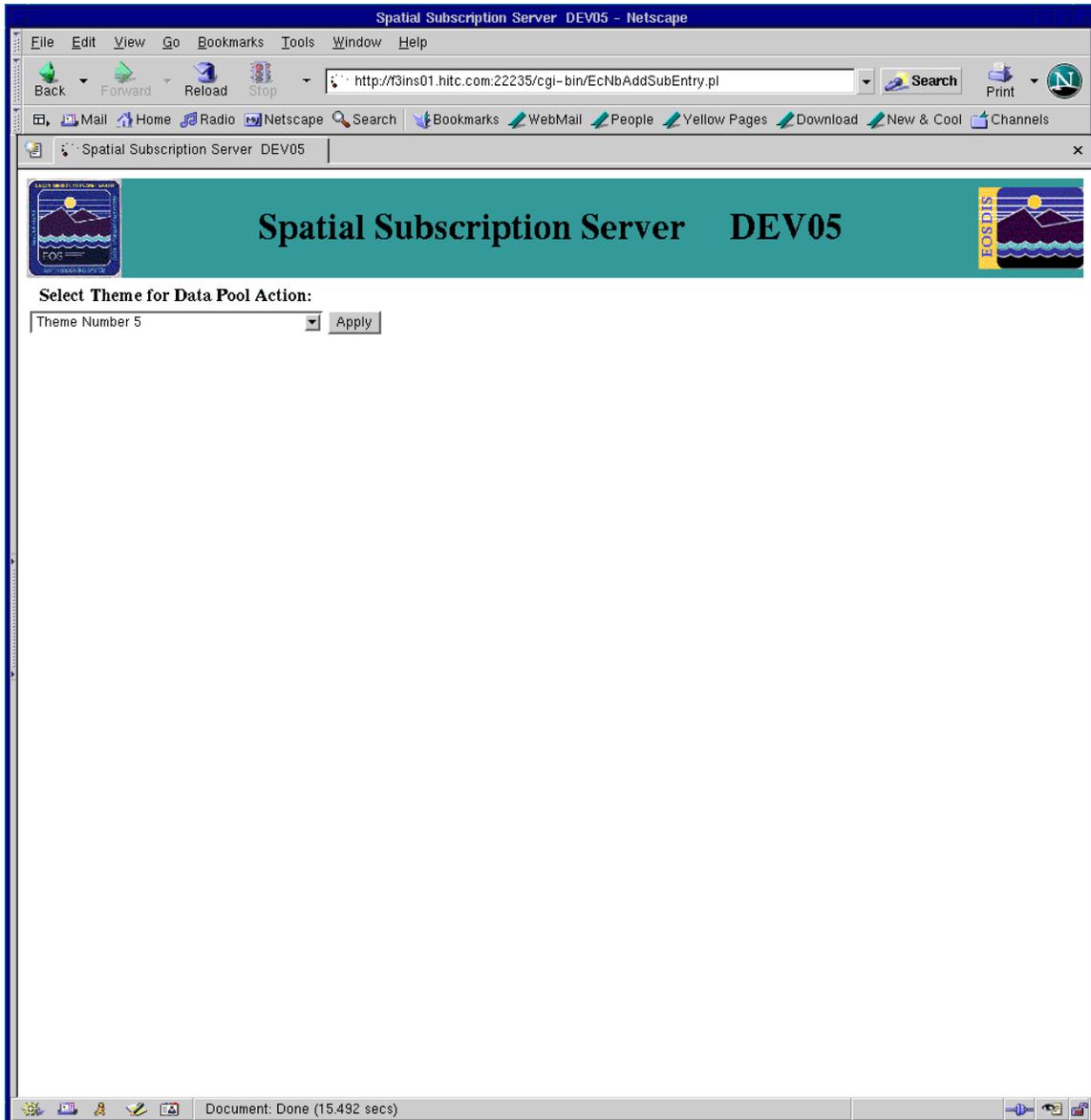


**Figure 4.8.7.4-13a. Add Confirmation Screen. Note that This Functionality is Accessible to Only Full Capability Operators. (Confirms Successful or Unsuccessful Adding of the Subscription)**

### **Limited Capability Users**

Limited Capability users cannot use this functionality.

**Note:** If invalid or missing data is detected for the subscription, the errors will be displayed to the operator for correction.



**Figure 4.8.7.4-13b. Data Pool Action Associated with a Theme (Alternative to Add Confirmation Screen Figure 4.8.7.4-13a). Note that This Functionality is Accessible to Only Full Capability Operators.**

### **Limited Capabiltity Users**

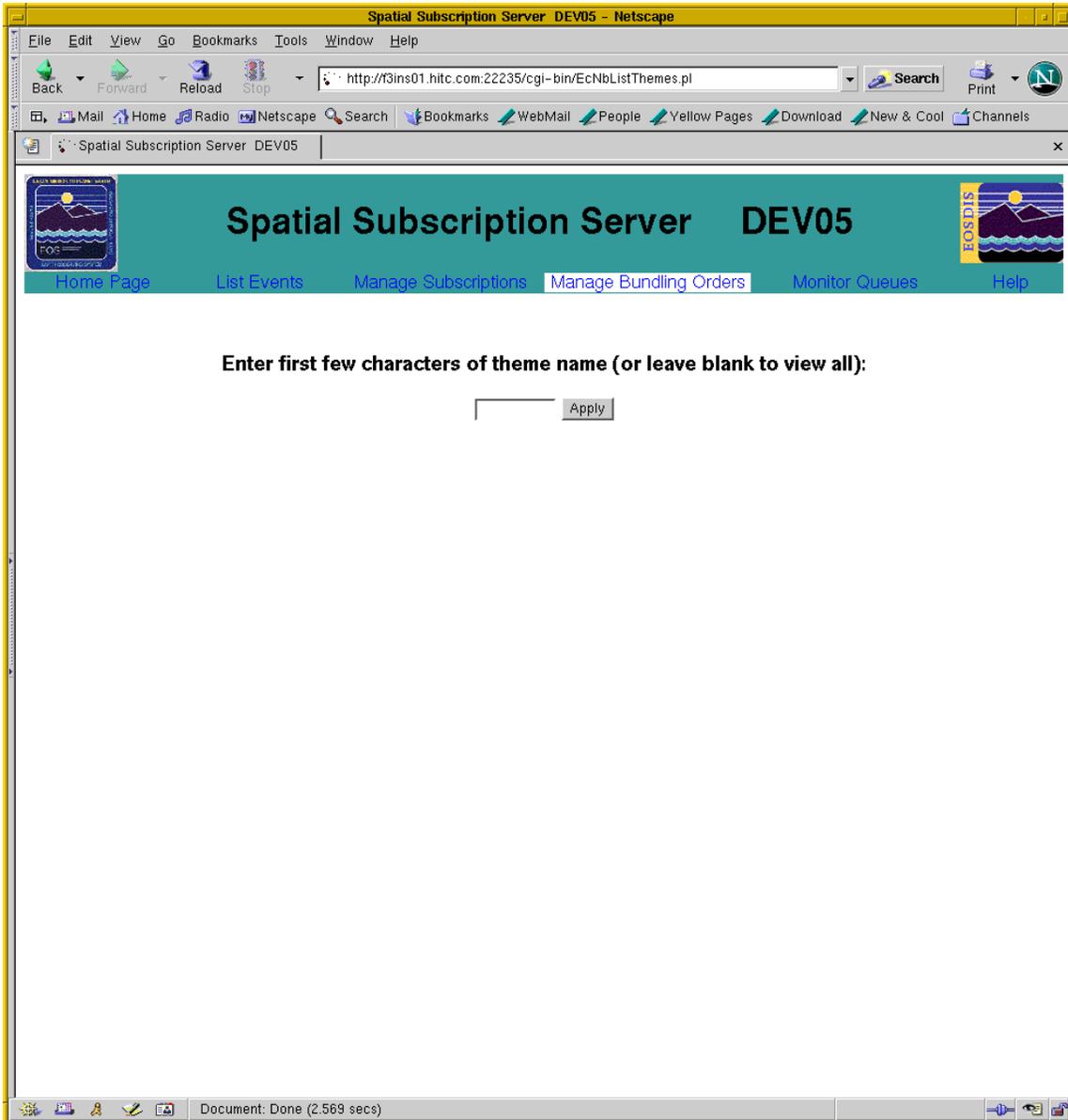
Limited Capability users cannot use this functionality.

**Note:** The operator selects a theme name from the pulldown list and clicks on the Apply button. Confirmation that the subscription was successfully added appears as in Figure 4.8.7.4-13a.

**NOTE:** The subscription is actually created prior to displaying this screen, and the association of the theme with the subscription is implemented as an update operation.

#### 4.8.7.5 List Themes Tab

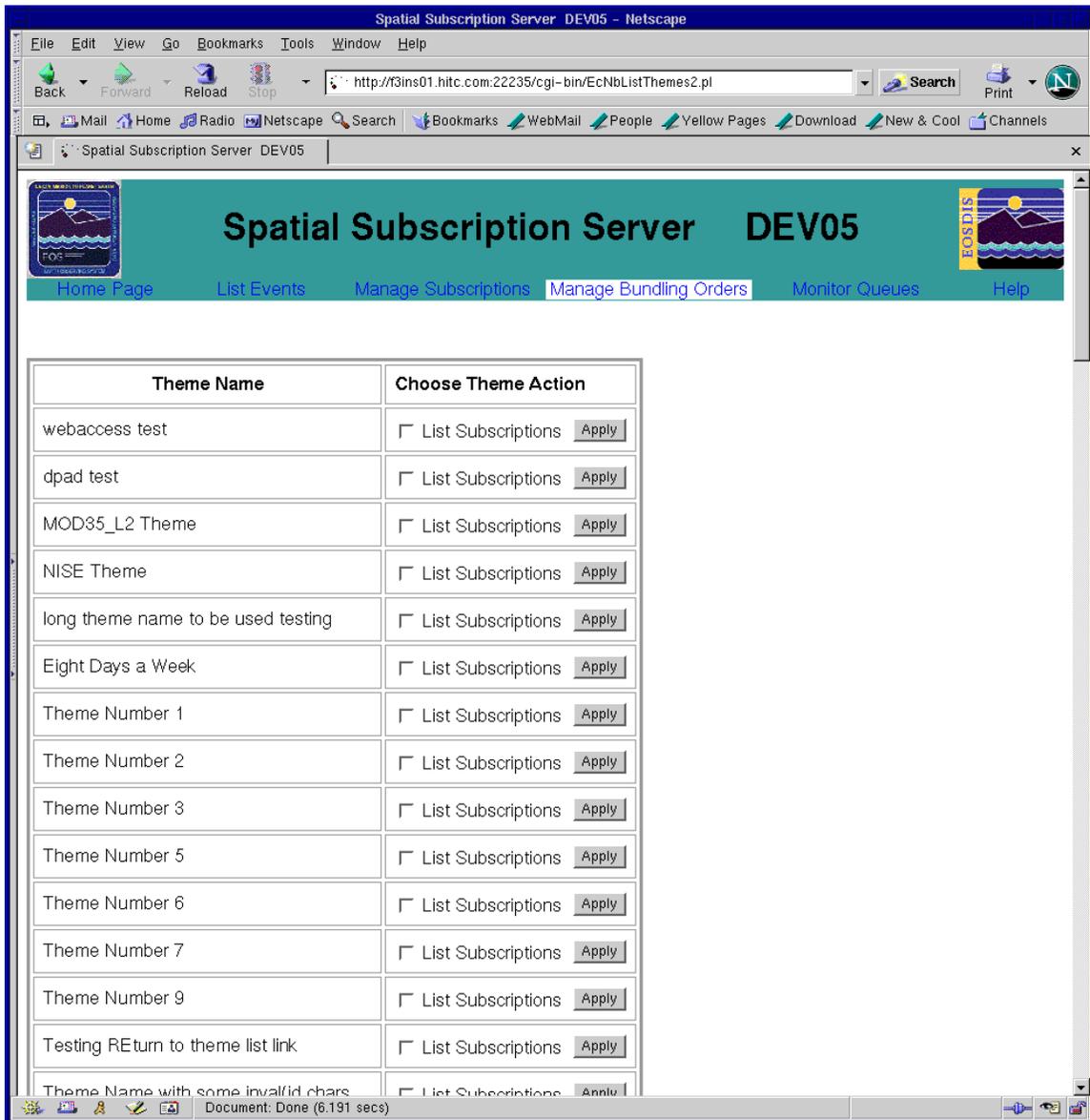
The List Themes screen, called from Monitor Subscriptions and shown in Figure 4.8.7.5-1 allows the operator to see a list of known themes which are enabled for insert. Table 4.8.7.5-1 lists the field descriptions for the List Themes Request screen.



**Figure 4.8.7.5-1. List Themes Screen Request**

**Note:** The list may be filtered by entering the first few characters of the theme name.

Figure 4.8.7.5-2 below is the screen that is displayed after the operator enters information in the list themes screen (Figure 4.8.7.5-1).



**Figure 4.8.7.5-2. Theme List and Associated Action**

**Note:** This screen allows the operator to see the list of themes enabled for insert and to view the list of subscriptions associated with a particular theme.

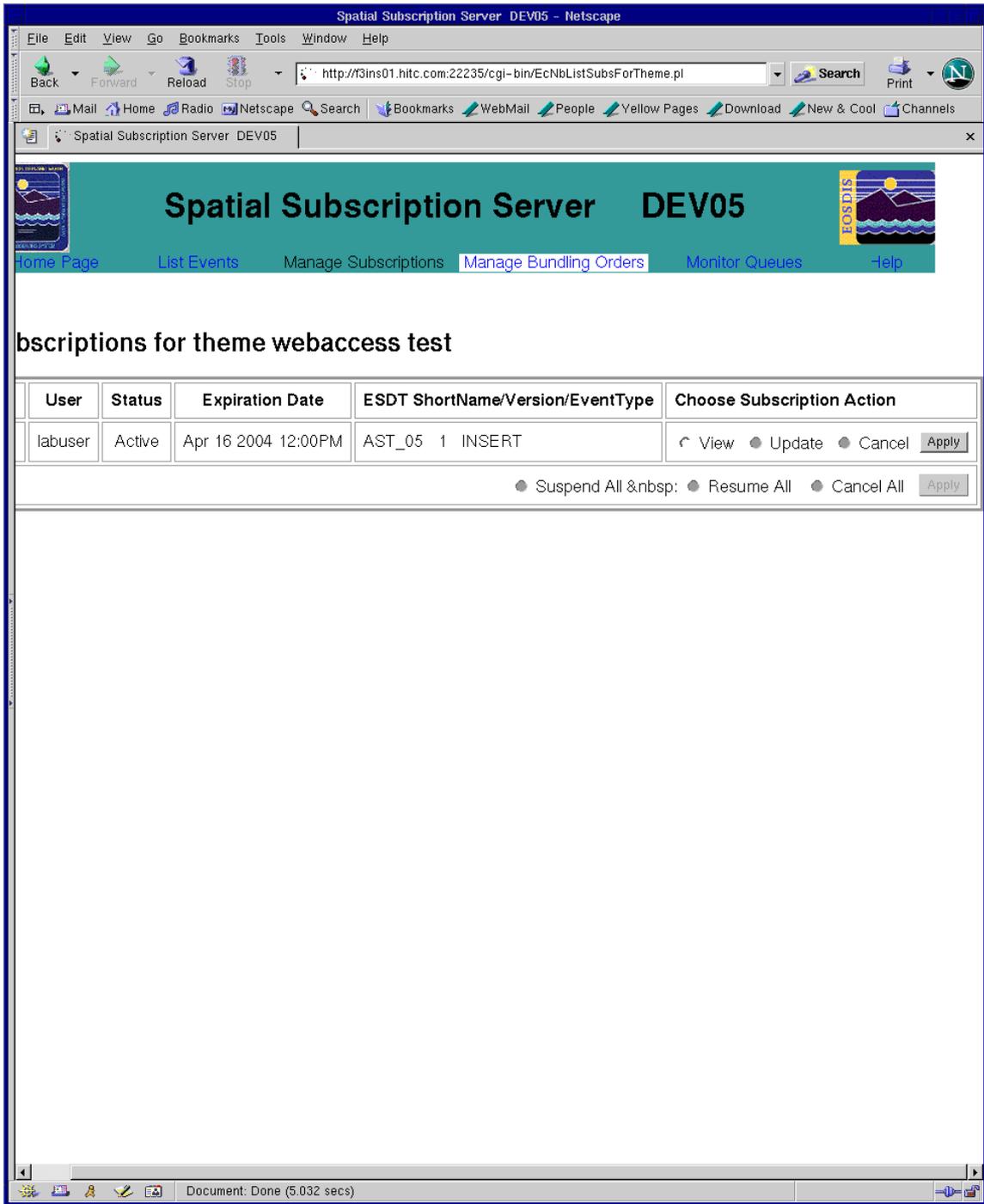
**Table 4.8.7.5-1. Theme List Field Description**

<b>Field Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Entry</b>	<b>Description</b>
Choose Theme Action	checkbox	1	optional	To view the subscriptions associated with a particular theme, check the box and click on Apply.
Continue	link	n/a	optional	To continue viewing the list of theme names, click on the continue link.

#### **4.8.7.6 List Subscriptions box**

The List Subscriptions for Theme screen, called from List Themes and shown in Figure 4.8.7.6-1 allows the operator to see a list of subscriptions associated with a particular theme.

Please note that **Update**, **Cancel**, **Suspend All**, **ResumeAll** and **Cancel All** functionality is accessible only to full capability Operators.



**Figure 4.8.7.6-1. Theme and Associated Subscriptions**

**Note:** This screen allows the operator to see the list of subscriptions associated with a particular theme and to select one of them for View, Update, or Cancel. The operator also has the option to suspend, resume, or cancel all subscriptions by clicking on the appropriate link.

#### 4.8.7.7 Manage Bundling Orders tab

The Manage Bundling Orders screen shown in Figure 4.8.7.7-1 allows the operator to View, Update, or Cancel bundling orders or to create new bundling orders. The operator can also list the subscriptions associated with a particular bundling order.

Please note that **Update** and **Cancel** functionality can only be performed by an Operator with full capability access.

The screenshot displays the 'Spatial Subscription Server DEV05' web application. The main content area is titled 'Bundling Order List|Add Bundling Order|Configure Defaults'. Below the title, there are filter options: 'User' (labuser3), 'MediaType' (ALL), and 'Status' (ALL), along with a 'Filter' button. The main data is presented in a table with the following columns: Bundling Order, User, Creation Date, Expiration Date, Media Type, Status, and Choose Bundling Order Action. The table contains 11 rows of data, each with a unique Bundling Order ID and associated details.

Bundling Order	User	Creation Date	Expiration Date	Media Type	Status	Choose Bundling Order Action
0400007756	labuser	Jul 7 2003 3:38PM	Jul 6 2004 12:00AM	DVD	ACTIVE	View Update Cancel List Subs Apply
0400007757	labuser	Jul 7 2003 3:46PM	Jul 8 2003 12:00AM	DLT	EXPIRED	View Update Cancel List Subs Apply
0400011767	labuser	Aug 4 2003 5:07PM	Aug 3 2004 12:00AM	FtpPush	ACTIVE	View Update Cancel List Subs Apply
0400012034	labuser3	Sep 5 2003 10:15AM	Mar 3 2004 12:00AM	FtpPull	ACTIVE	View Update Cancel List Subs Apply
0400012041	labuser	Sep 16 2003 5:36PM	Sep 17 2003 12:00AM	CDROM	EXPIRED	View Update Cancel List Subs Apply
0400012042	labuser	Sep 16 2003 5:40PM	Mar 14 2004 12:00PM	DVD	ACTIVE	View Update Cancel List Subs Apply
0400012043	labuser	Sep 16 2003 5:43PM	Mar 14 2004 12:00AM	DLT	ACTIVE	View Update Cancel List Subs Apply
0400012045	labuser	Sep 25 2003 10:10AM	Mar 23 2004 12:00AM	DLT	ACTIVE	View Update Cancel List Subs Apply
0400012056	labuser	Sep 25 2003 1:50PM	Mar 23 2004 12:00AM	8MM	ACTIVE	View Update Cancel List Subs Apply
0400012084	labuser	Sep 30 2003 9:40AM	Mar 28 2004 12:00AM	DLT	ACTIVE	View Update Cancel List Subs Apply

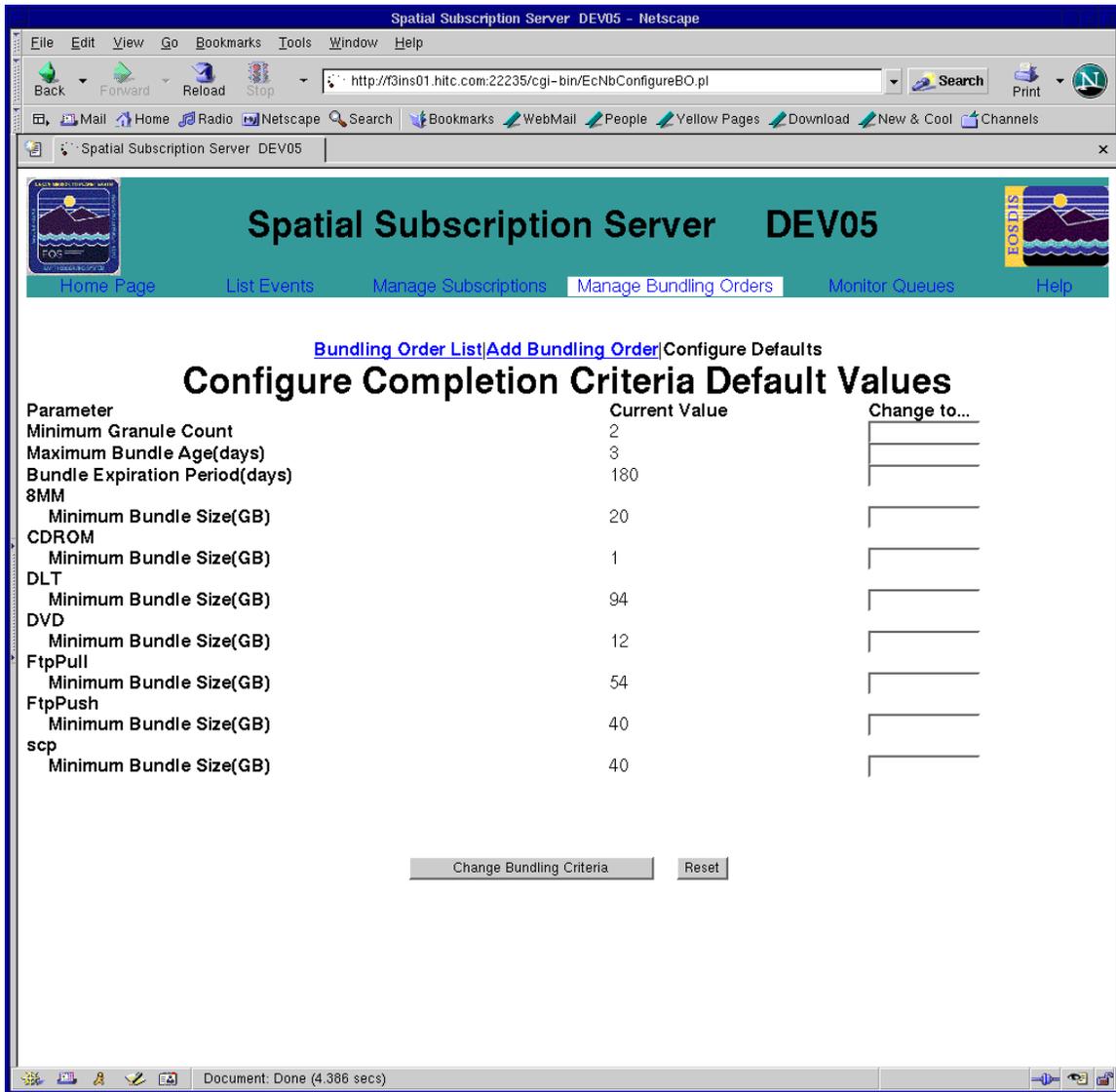
Figure 4.8.7.7-1. Bundling Orders List

#### Limited Capability Users

Limited Capability users use **Update** and **Cancel** functionality.

**Note:** This screen allows the operator to view previously defined bundling orders; to view, update, or cancel a particular bundling order; or to list the subscriptions associated with a particular bundling order.

Figure 4.8.7.7-2 displays the configure defaults for bundling order, which is accessible to full capability operators.



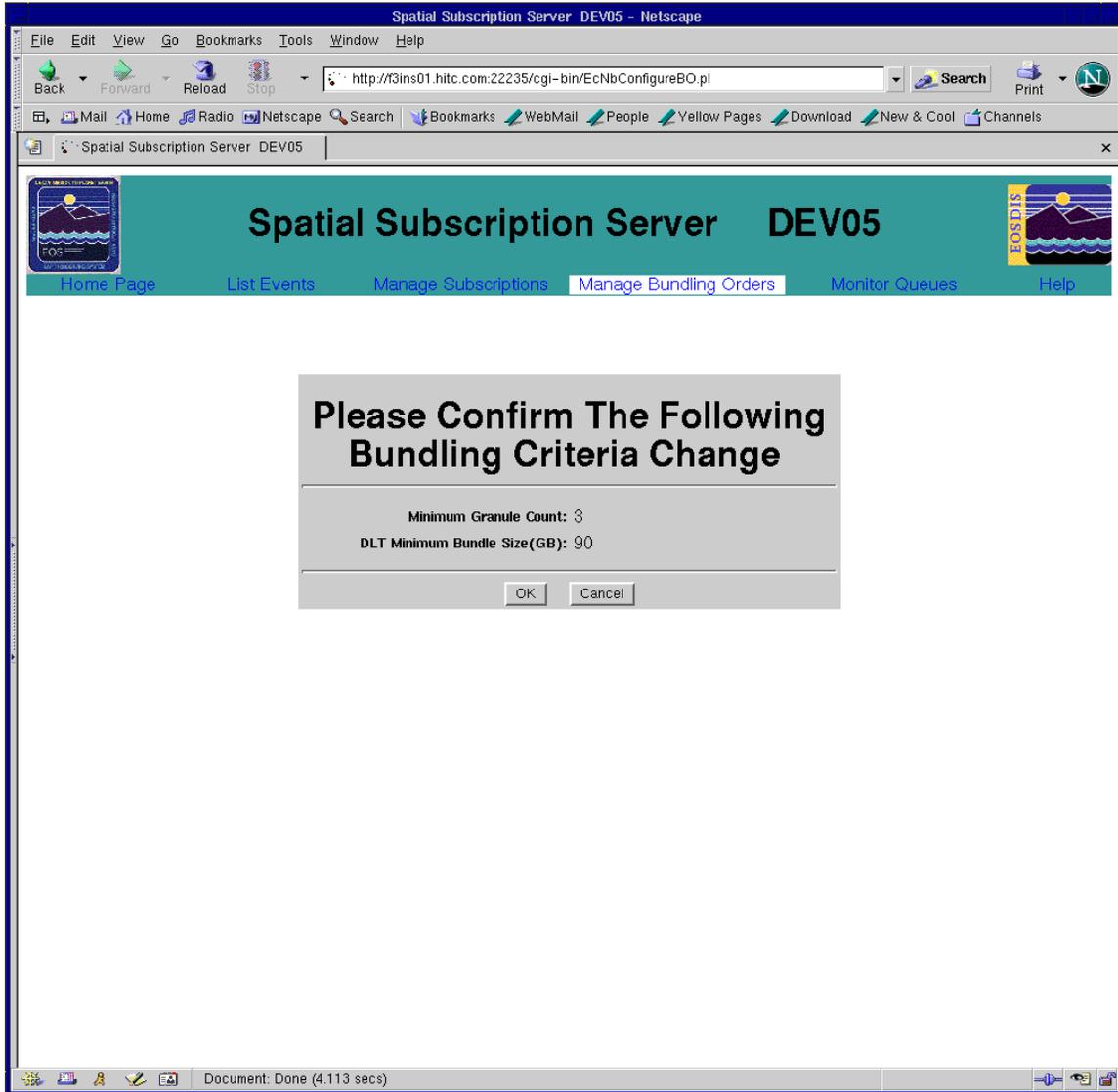
**Figure 4.8.7.7-2. Configure Defaults for Bundling Order. This Screen is Only Accessible to Full Capability Operator.**

### Limited Capability Users

Limited Capability users cannot use this functionality.

**Note:** This screen is called from Figure 4.8.7.7-1 when the operator selects the Configure Defaults tab. It allows the operator to configure default values for bundling orders. The completion criteria values may vary among media types. To change a value the operator enters the new value in the Change to... column. When all changes have been made the operator clicks the Change Bundling Criteria button.

Figure 4.8.7.7-3 displays the bundling criteria change confirmation screen, which is accessible to full capability operators.



**Figure 4.8.7.7-3. Bundling Criteria Change Confirmation Screen. This Screen is Only Accessible to Full Capability Operators.**

### **Limited Capability Users**

Limited Capability users cannot use this functionality.

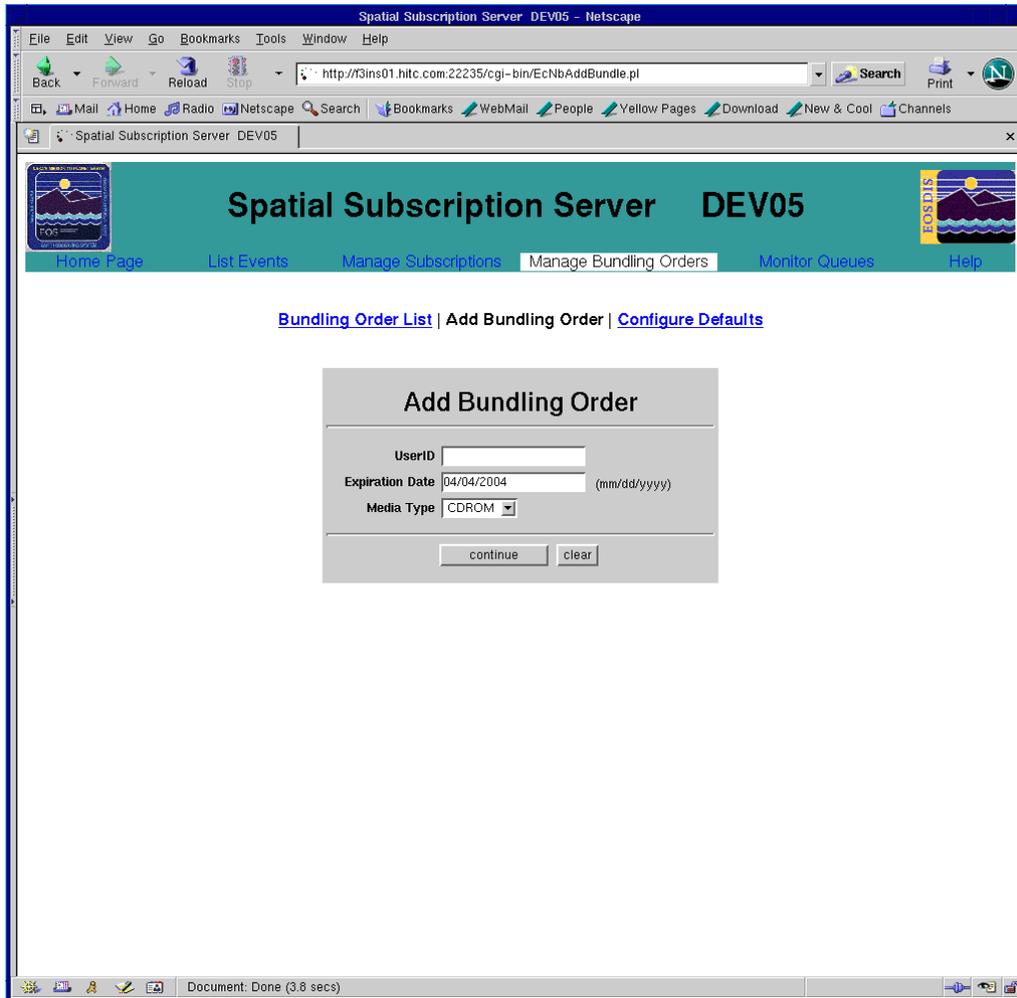
**Note:** This screen asks for confirmation for the new configuration value(s). The operator would click OK to confirm. The configuration page will appear again after the parameter has been updated.

#### **4.8.7.8 Add Bundling Order**

The Add Bundling Order screen shown in Figure 4.8.7.8-1 allows the operator to create a new bundling order. There are two screens involved. In the first screen (Figure 4.8.7.8-1), the user enters name, an expiration date (a default is provided), and the physical media type. Based on this information, further information is requested in the second screen (Figure 4.8.7.8-2). Figures 4.8.7.8-3 and 4.8.7.8-4 show the screen provided when media types FTPPULL and FTPPUSH, respectively, are selected. Table 4.8.7.8-1 lists the description of the fields associated with the bundling order screens.

When the applicable bundling order information has been entered, the operator clicks the Add Bundling Order button. The screen in Figure 4.8.7.8-5 is displayed when the result is successful and Figure 4.8.7.8-6 is displayed when errors occurred.

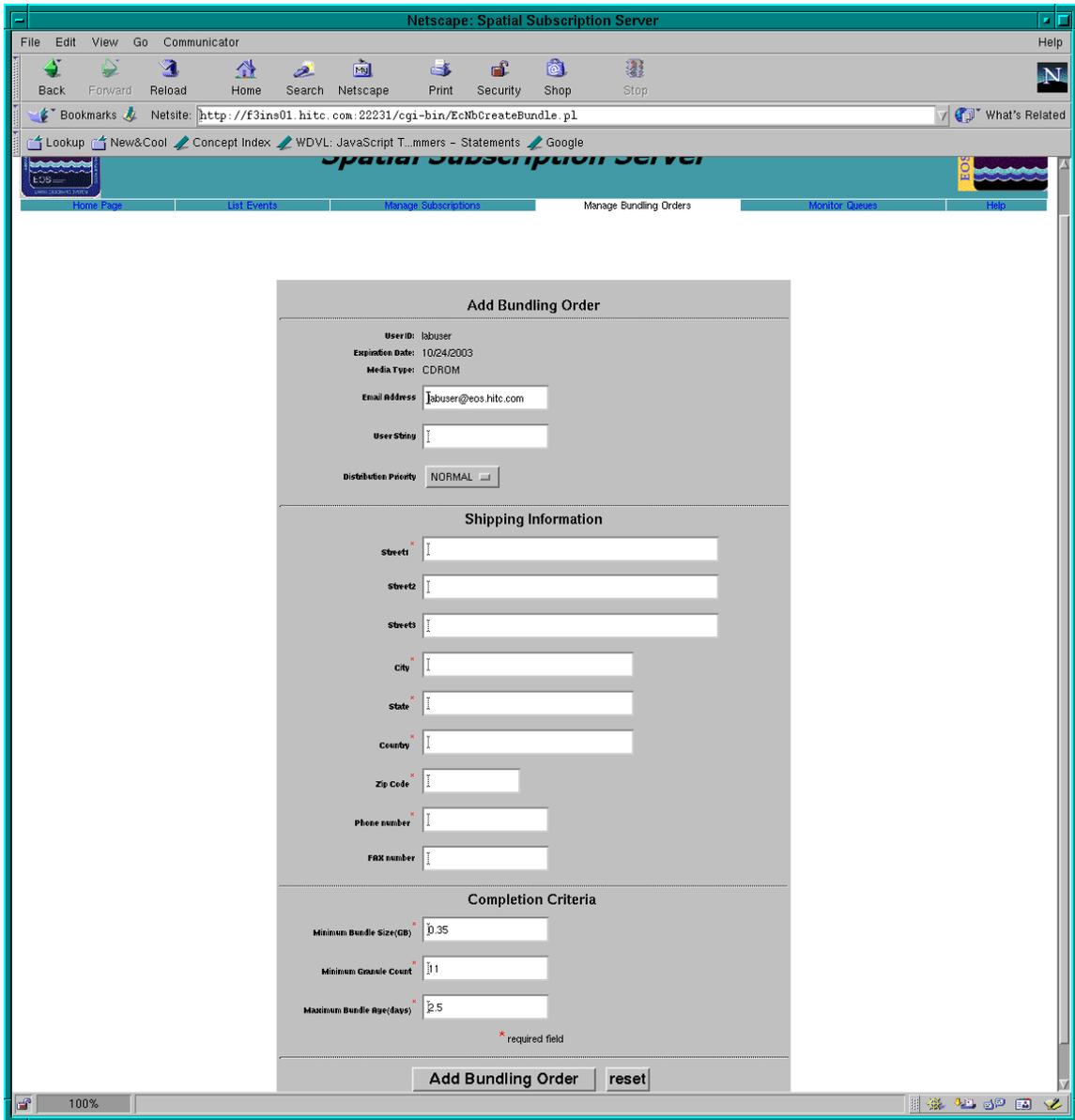
Please note that **Add Bundling Order** functionality is only accessible to full capability Operators.



**Figure 4.8.7.8-1. Add New Bundling Order Screen (Part 1). This Screen is Only Accessible to Full Capability Operators.**

### **Limited Capability Users**

Limited Capability users cannot use this functionality.

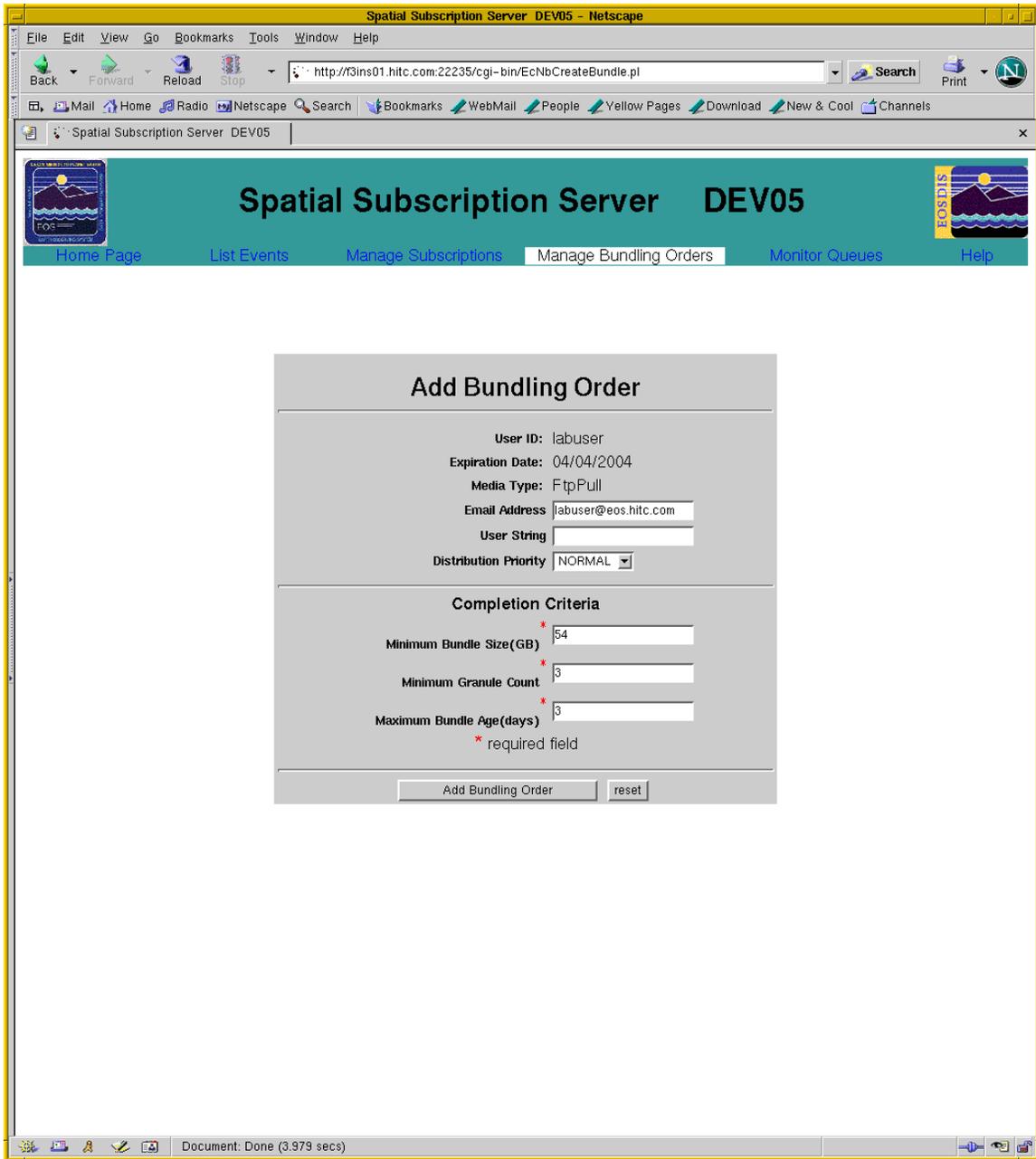


**Figure 4.8.7.8-2. Add New Bundling Order Screen (Part 2). This Screen is Only Accessible to Full Capability Operators.**

### **Limited Capability Users**

Limited Capability users cannot use this functionality.

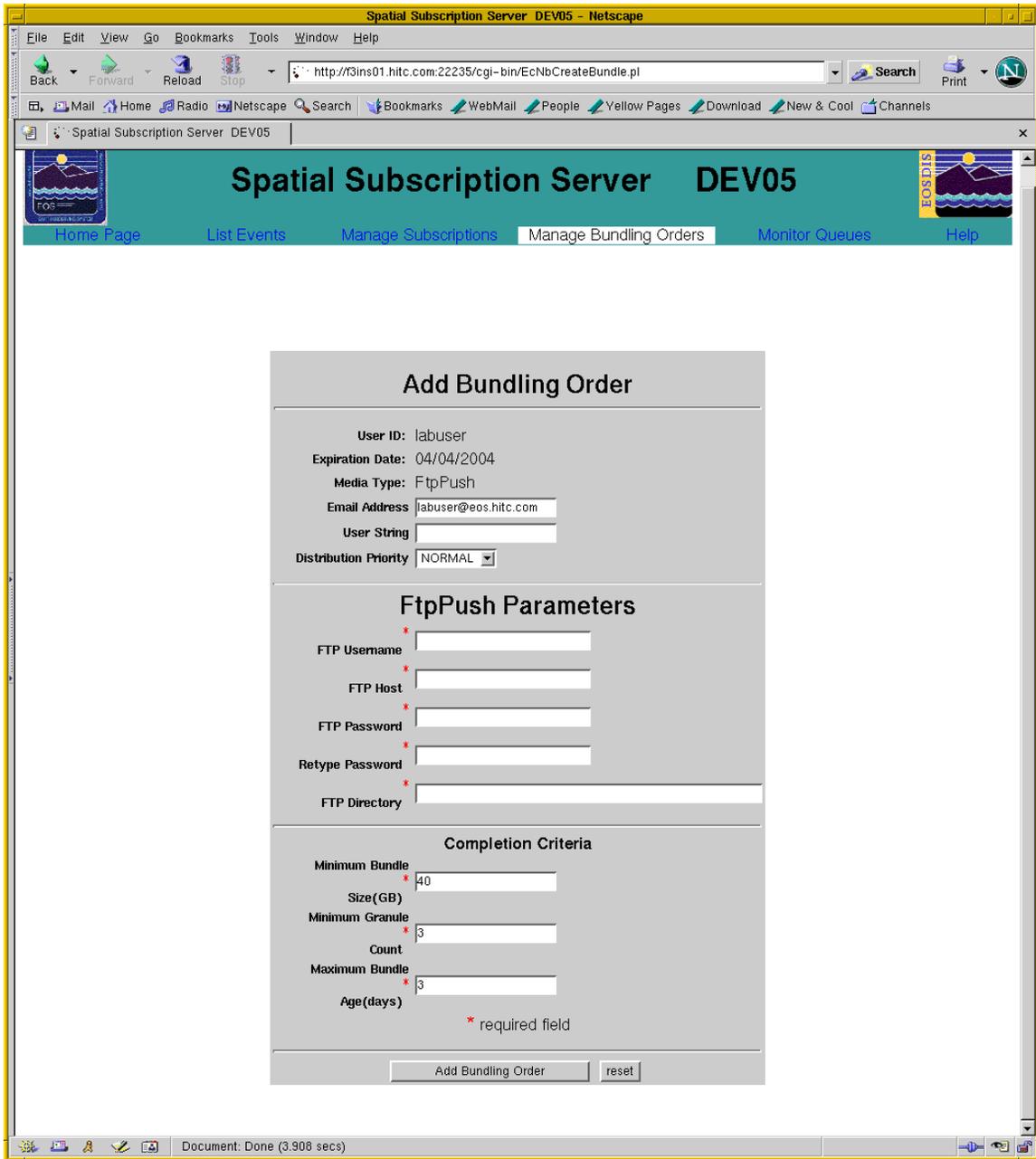
**Note:** Information entered in the previous screen is used to provide options in the current screen. For example, for a physical media type, shipping information will be displayed.



**Figure 4.8.7.8-3. Add Bundling Order - Media Type Selected is FTPULL. This Screen is Only Accessible to Full Capability Operators.**

### **Limited Capability Users**

Limited Capability users cannot use this functionality.



**Figure 4.8.7.8-4. Add Bundling Order - Media Type Selected is FTPUSH. This Screen is Only Accessible to Full Capability Operators.**

### **Limited Capability Users**

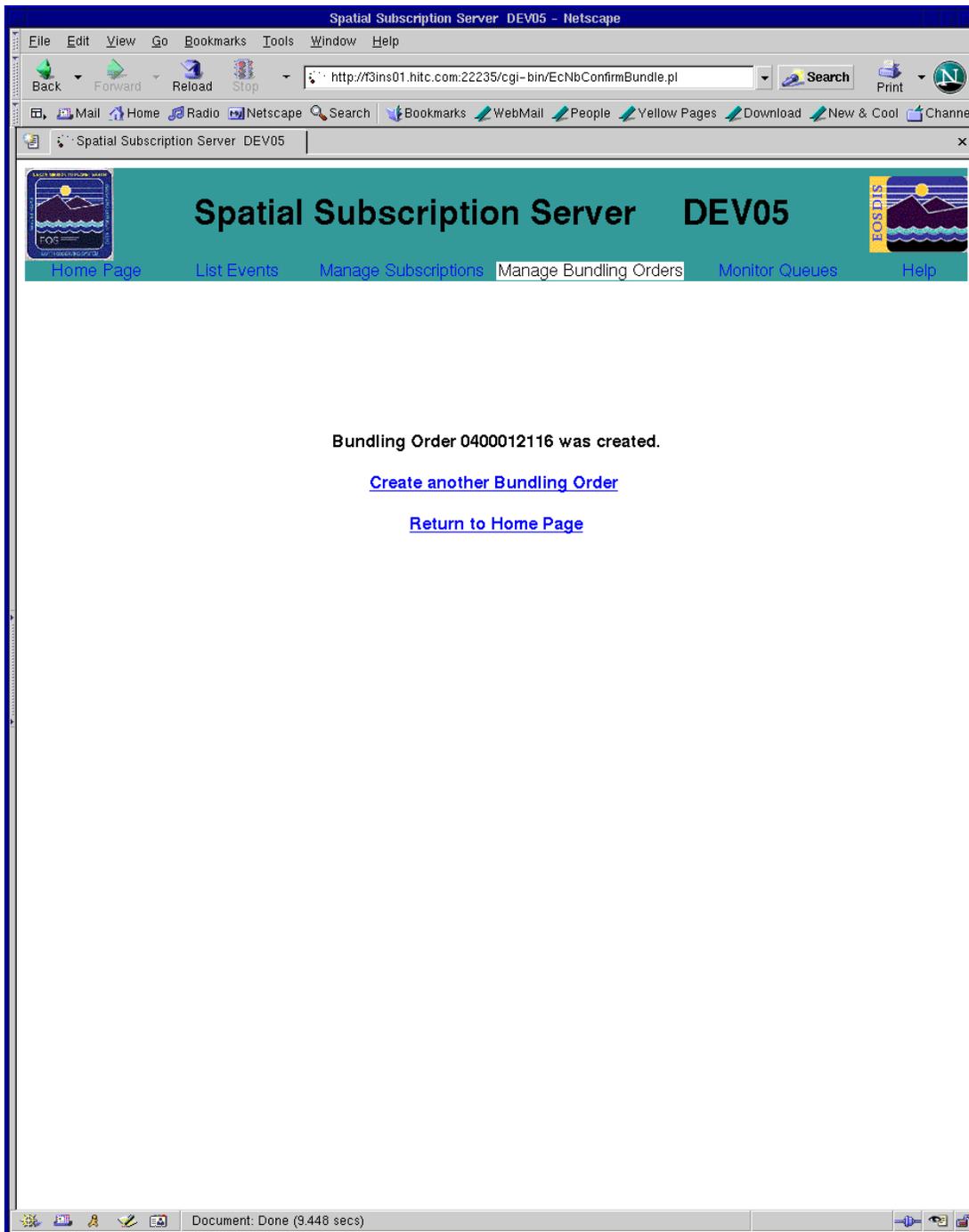
Limited Capability users cannot use this functionality.

**Table 4.8.7.8-1. Field Descriptions for the Bundling Order Screens (1 of 2)**

<b>Field Name</b>	<b>Description</b>	<b>When and Why to Use</b>
User Id	Name of the owner of the bundling order	Required for creating a bundling order.
Expiration Date	Date of expiration for the bundling order.	The bundling order and any associated subscriptions will be canceled after this date.
Media Type	The type of media on which the granules will be stored.	The bundle of granules will be delivered in this format.
Email Address	User's email notification.	Notification will be sent to this address when the bundle is complete.
User String	An optional string associated with the bundling order.	This string will be included in the email notification. It is also used as a secondary identifier when listing bundling orders to associate with a subscription.
Distribution Priority	The priority level associated with the distribution of the order.	Defaults to the priority found in the user profile.
Street1	Street address where media is to be shipped.	Shipping information is required for physical media distributions.
Street2	A continuation of the Street1 field.	Shipping information is required for physical media distributions.
Street3	A continuation of the Street2 field.	Shipping information is required for physical media distributions.
City	City where media is to be shipped.	Shipping information is required for physical media distributions.
State	State where media is to be shipped.	Shipping information is required for physical media distributions.
Country	Country where media is to be shipped.	Shipping information is required for physical media distributions.
Zip Code	The zip code for the shipping address.	Shipping information is required for physical media distributions.
Phone Number	Phone number of recipient.	Shipping information is required for physical media distributions.
FAX Number	FAX number of recipient.	Shipping information is required for physical media distributions.
FTP Username	For an FTP Push, the user login name to be used.	Required for FTP Push distributions.
FTP Host	For an FTP Push, the hostname to be used.	Required for FTP Push distributions
FTP Password	For an FTP Push, the password for the user/host.	Required for FTP Push distributions
Retype Password	Same as FTP password.	The password is typed twice for validation purposes.

**Table 4.8.7.8-1. Field Descriptions for the Bundling Order Screens (2 of 2)**

<b>Field Name</b>	<b>Description</b>	<b>When and Why to Use</b>
FTP Directory	For an FTP Push, the directory on the host where the data is to be pushed.	Required for FTP Push distributions
Minimum Bundle Size (GB)	The minimum total size of all granules before the bundle can be considered complete.	See the Order Manager design documentation for further details.
Minimum Granule Count	The minimum number of individual granules before the bundle can be considered complete.	See the Order Manager design documentation for further details
Maximum Bundle Age (days)	The maximum length of time that any granule can remain in the bundle before the bundle is considered complete.	See the Order Manager design documentation for further details



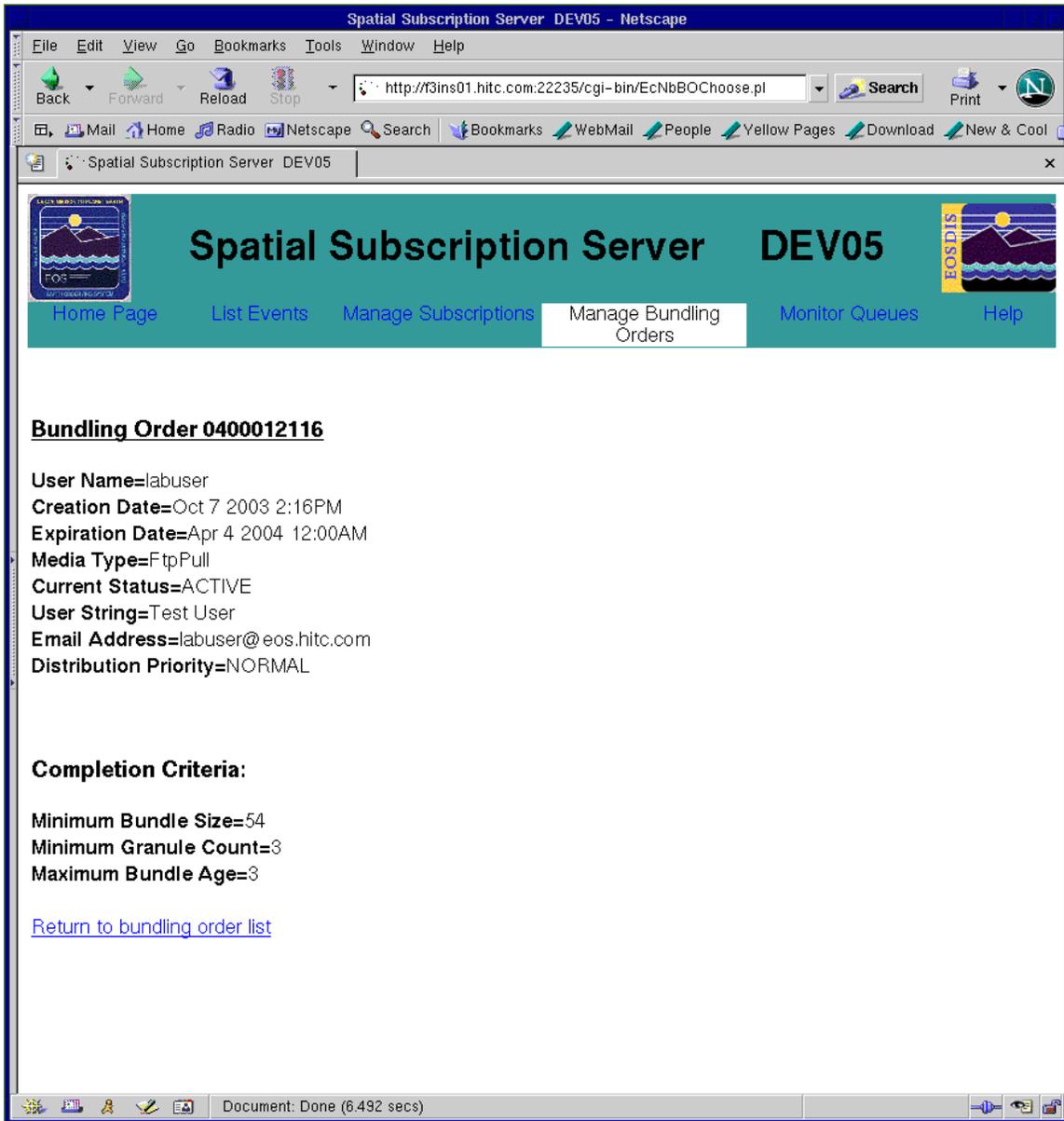
**Figure 4.8.7.8-5. Successful Results for Bundling Order. This Screen is Only Accessible to Full Capability Operator.**

### **Limited Capability Users**

Limited Capability users cannot use this functionality.

### 4.8.7.9 View Bundling Order

The View Bundling Order screen shown in Figure 4.8.7.9-1 allows the operator to view the details of a particular bundling order.



**Figure 4.8.7.9-1. Bundling Order Detailed Information**

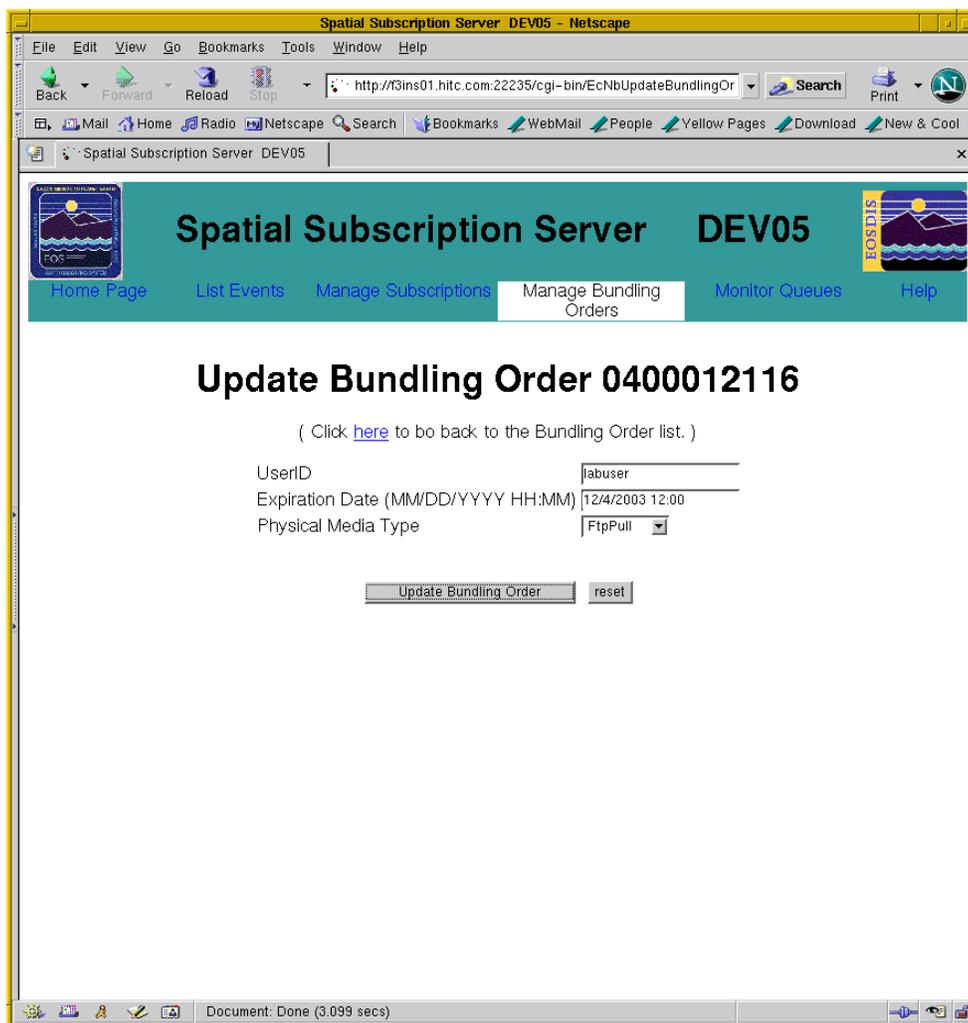
**Note:** From this screen, the operator may choose to return to the list of bundling orders.

#### 4.8.7.10 Update Bundling Order

The Update Bundling Order screen shown in Figure 4.8.7.10-1 allows the operator to update an existing bundling order. There are two screens involved. In the first screen (Figure 4.8.7.10-1), the user selects the physical media type for the order selected. Based on the media type, a second screen is displayed (Figure 4.8.7.10-2). Figures 4.8.7.10-3 and 4.8.7.10-4 show the specific screen provided when media types FТПULL and FТПUSH, respectively, are identified

When the applicable update bundling order information has been entered, the operator clicks the Update Bundling Order button. The screen in Figure 4.8.7.10-5 is displayed when the result is successful.

Please note that **Update Bundling Order** functionality is only available to full Capability Operators.



**Figure 4.8.7.10-1. Update Existing Bundling Order (Part 1). This Screen is Only Accessible to Full Capability Operator.**

## Limited Capability Users

Limited Capability users cannot use this functionality.

Spatial Subscription Server DEV05 - Netscape

File Edit View Go Bookmarks Tools Window Help

Back Forward Reload Stop http://f3ins01.hitc.com:22235/cgi-bin/EcNbModBundlingOrder Search Print

Spatial Subscription Server DEV05

**Spatial Subscription Server DEV05**

Home Page List Events Manage Subscriptions Manage Bundling Orders Monitor Queues Help

### Update Bundling Order 0400012116

UserID labuser  
Expiration Date 12/4/2003 12:00  
Media Type FtpPull  
Email Address labuser@eos.hitc.com  
User String Test User  
Distribution Priority NORMAL

Completion Criteria:

Minimum Bundle Size(GB) \* 54  
Minimum Granule Count \* 3  
Maximum Bundle Age(days) \* 3  
\* required field

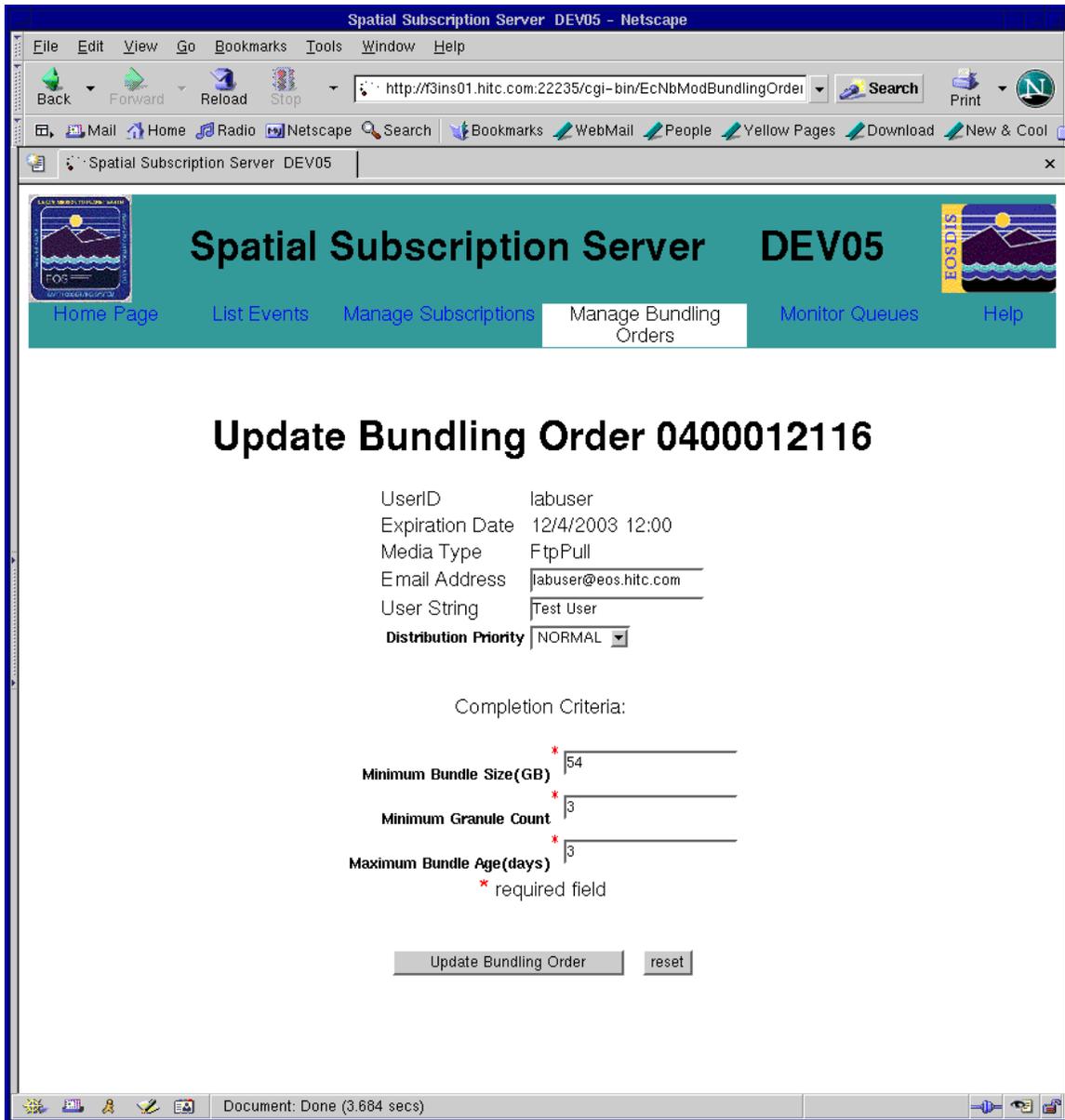
Update Bundling Order reset

Document: Done (3.684 secs)

**Figure 4.8.7.10-2. Update Existing Bundling Order (Part 2). This Screen Is Only Accessible to Full Capability Operator.**

## Limited Capability Users

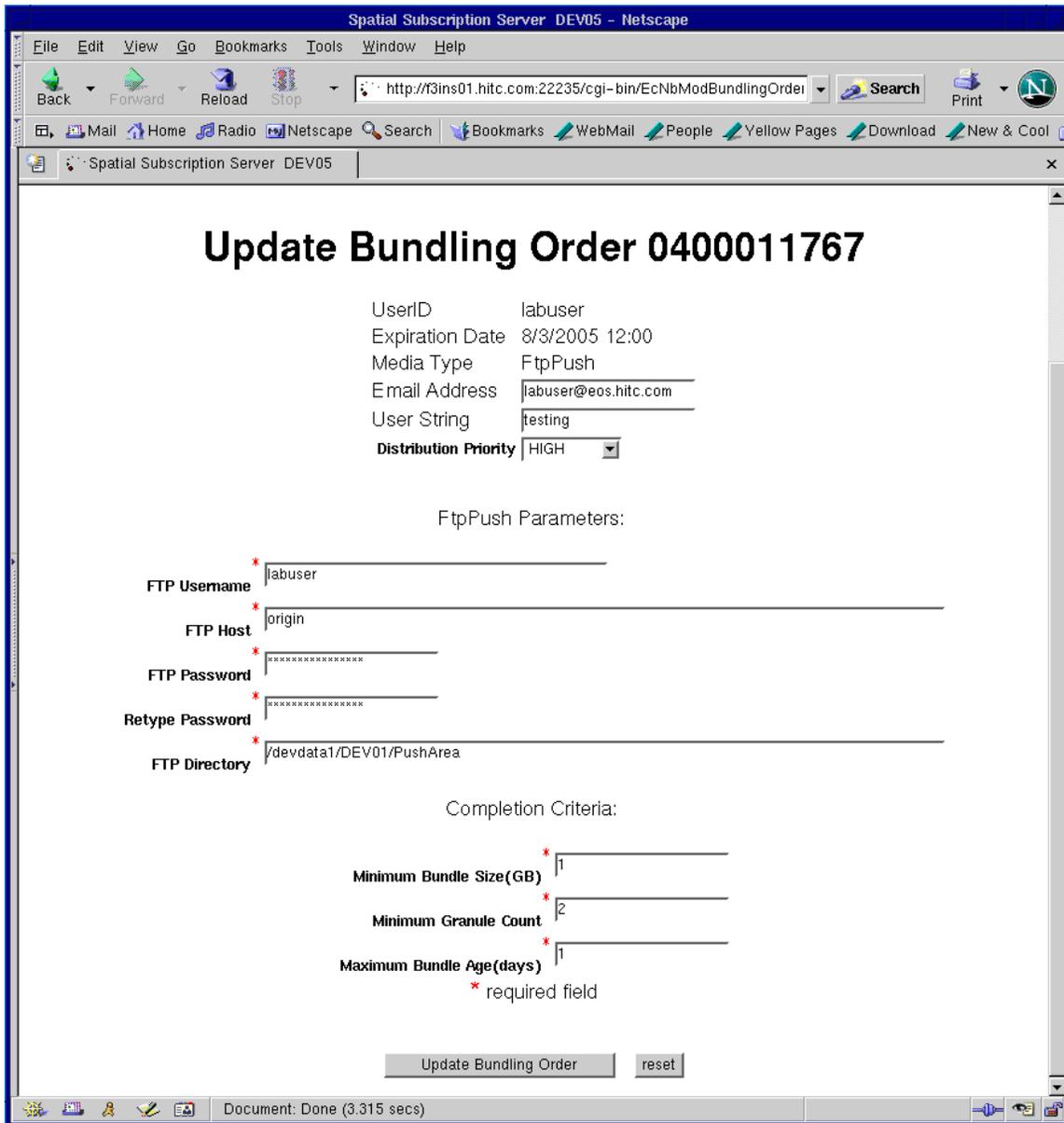
Limited Capability users cannot use this functionality.



**Figure 4.8.7.10-3. Update Existing Bundling Order (Media Type is FTP PULL). This Screen is Accessible to Only Full Capability Operator.**

### **Limited Capability Users**

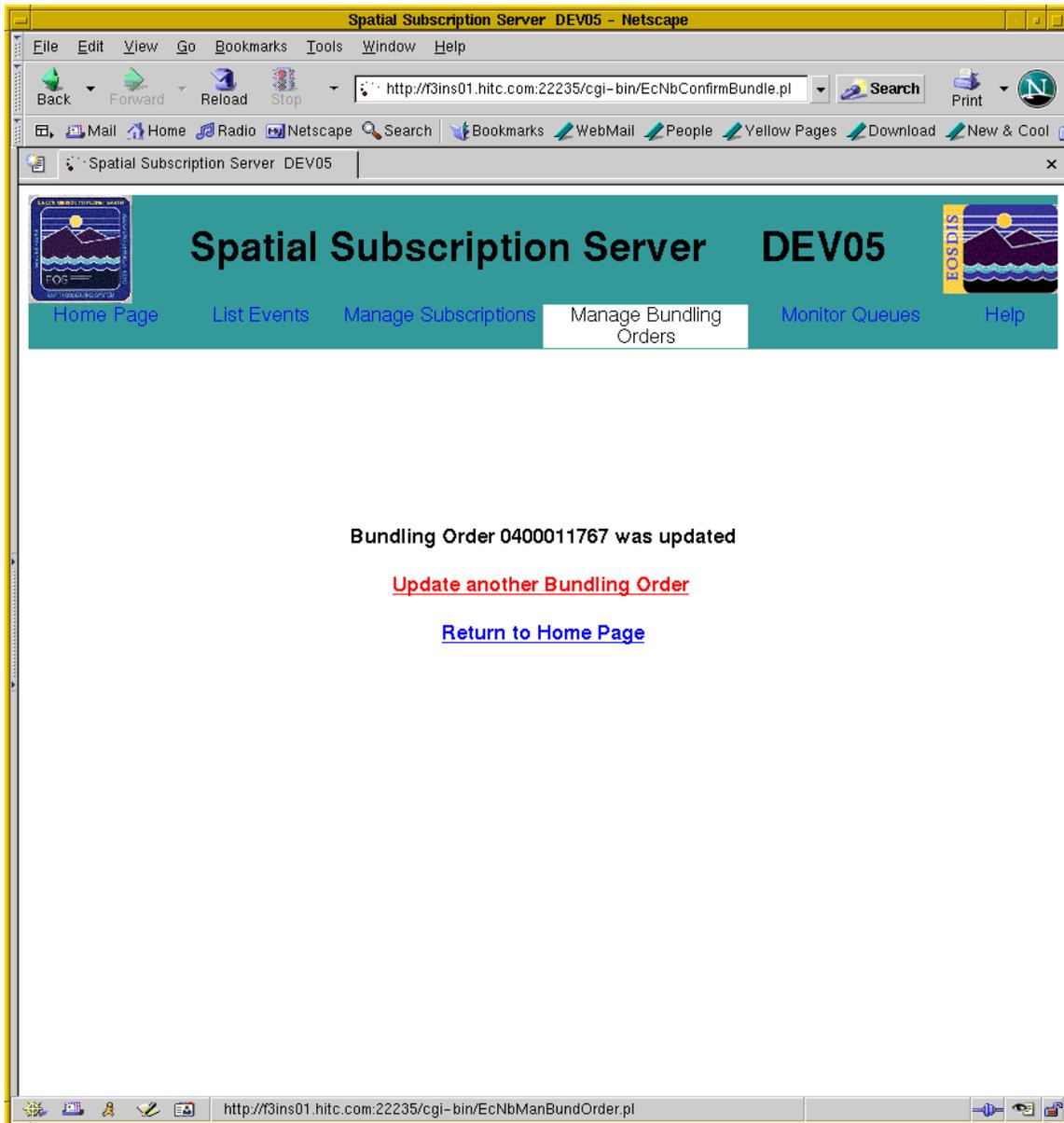
Limited Capability users cannot use this functionality.



**Figure 4.8.7.10-4. Update Existing Bundling Order (Media Type is FTP PUSH). This Screen is Accessible to Only Full Capability Operator.**

**Limited Capability Users**

Limited Capability users cannot use this functionality.



**Figure 4.8.7.10-5. Update Existing Bundling Order (Successful Update). This Screen is Accessible to Only Full Capability Operator.**

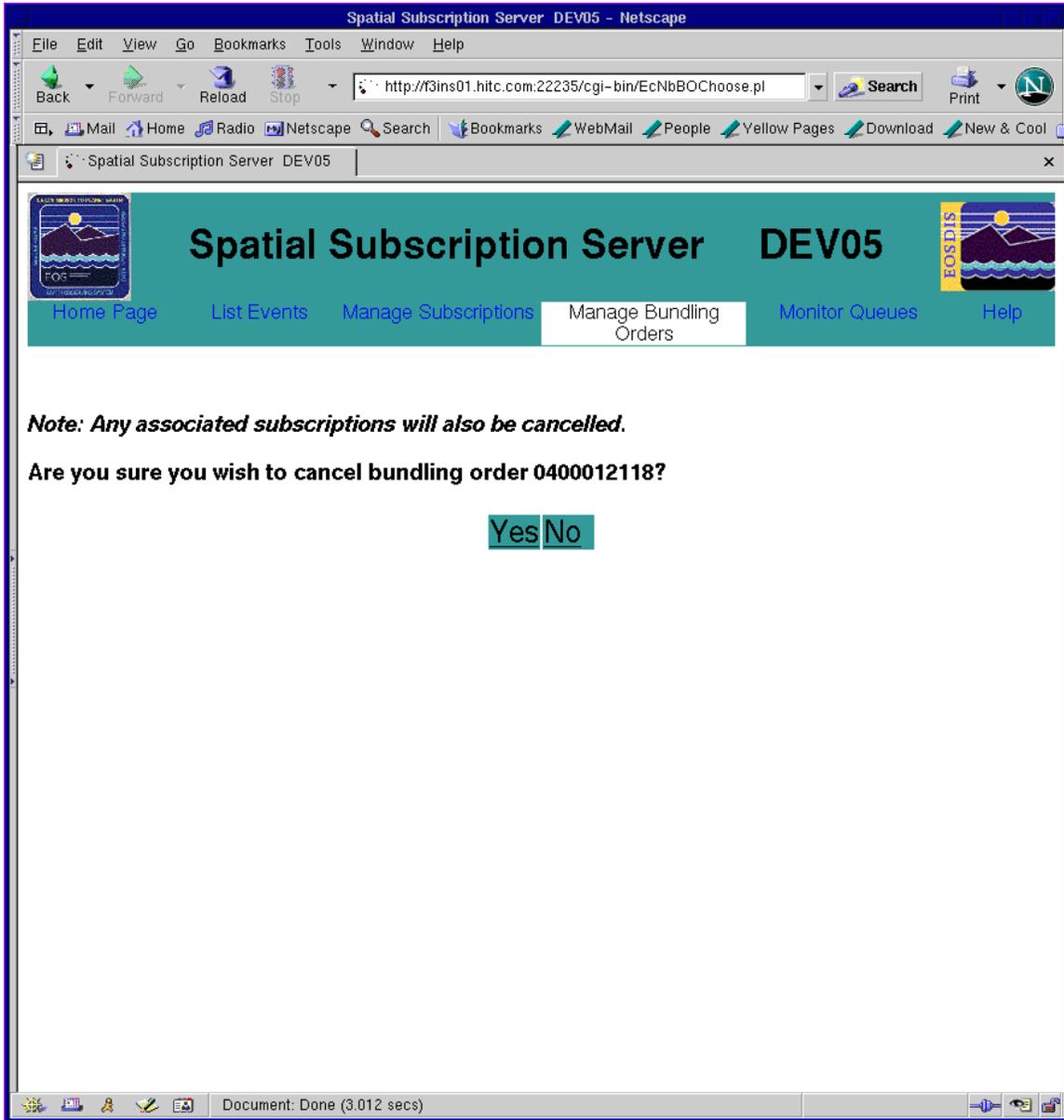
### **Limited Capability Users**

Limited Capability users cannot use this functionality.

#### 4.8.7.11 Cancel Bundling Order

The Cancel Bundling Order screen shown in Figure 4.8.7.11-1 requests confirmation from the operator when the cancel option has been selected. If the operator selects **Yes**, the screen in Figure 4.8.7.11-2 is displayed if the cancellation was successful.

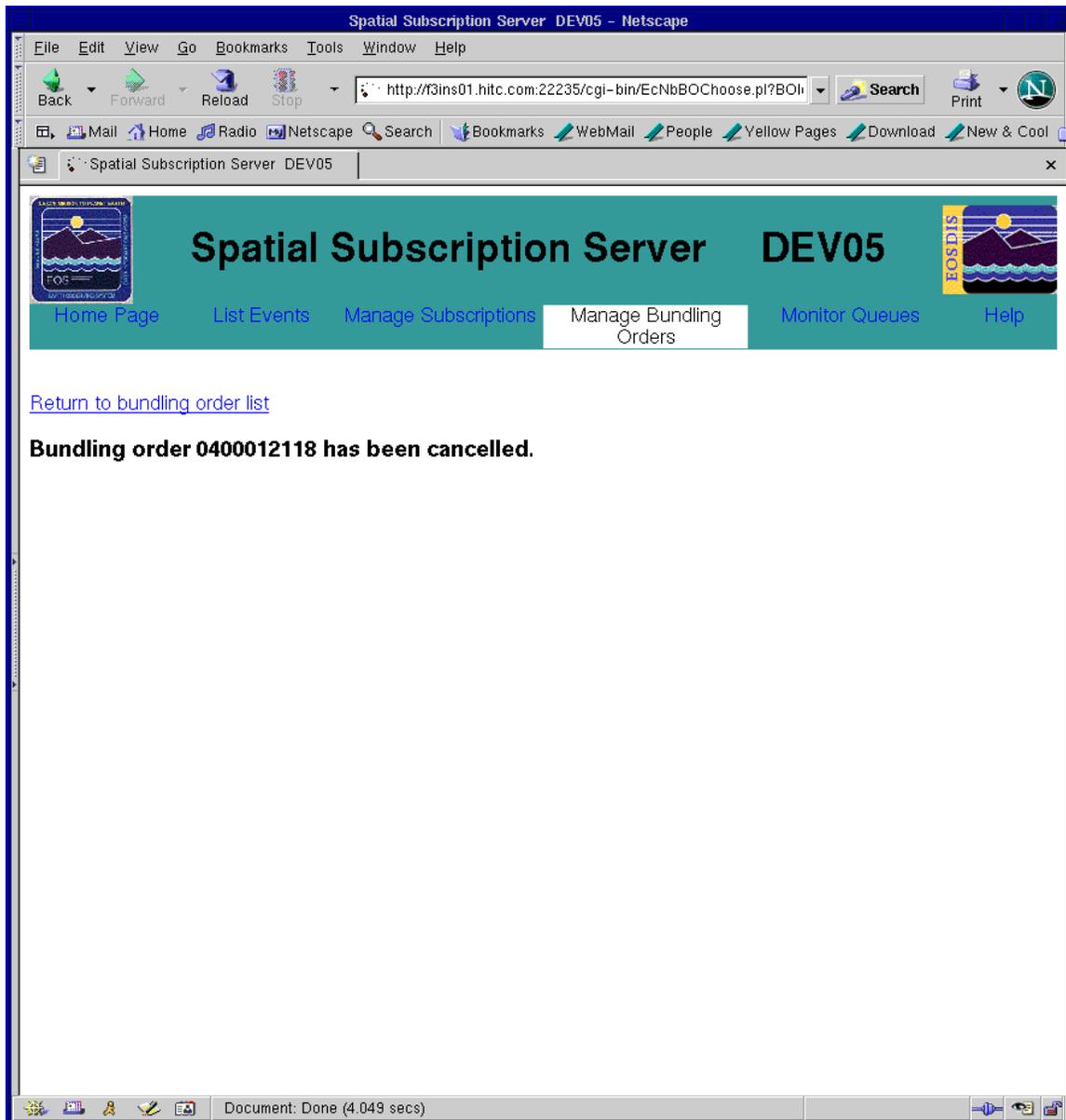
Please note Cancel Bundling Order functionality is only available to full capability Operators.



**Figure 4.8.7.11-1. Cancel Bundling Order Request. This Screen is Accessible to Only Full Capability Operator.**

## Limited Capability Users

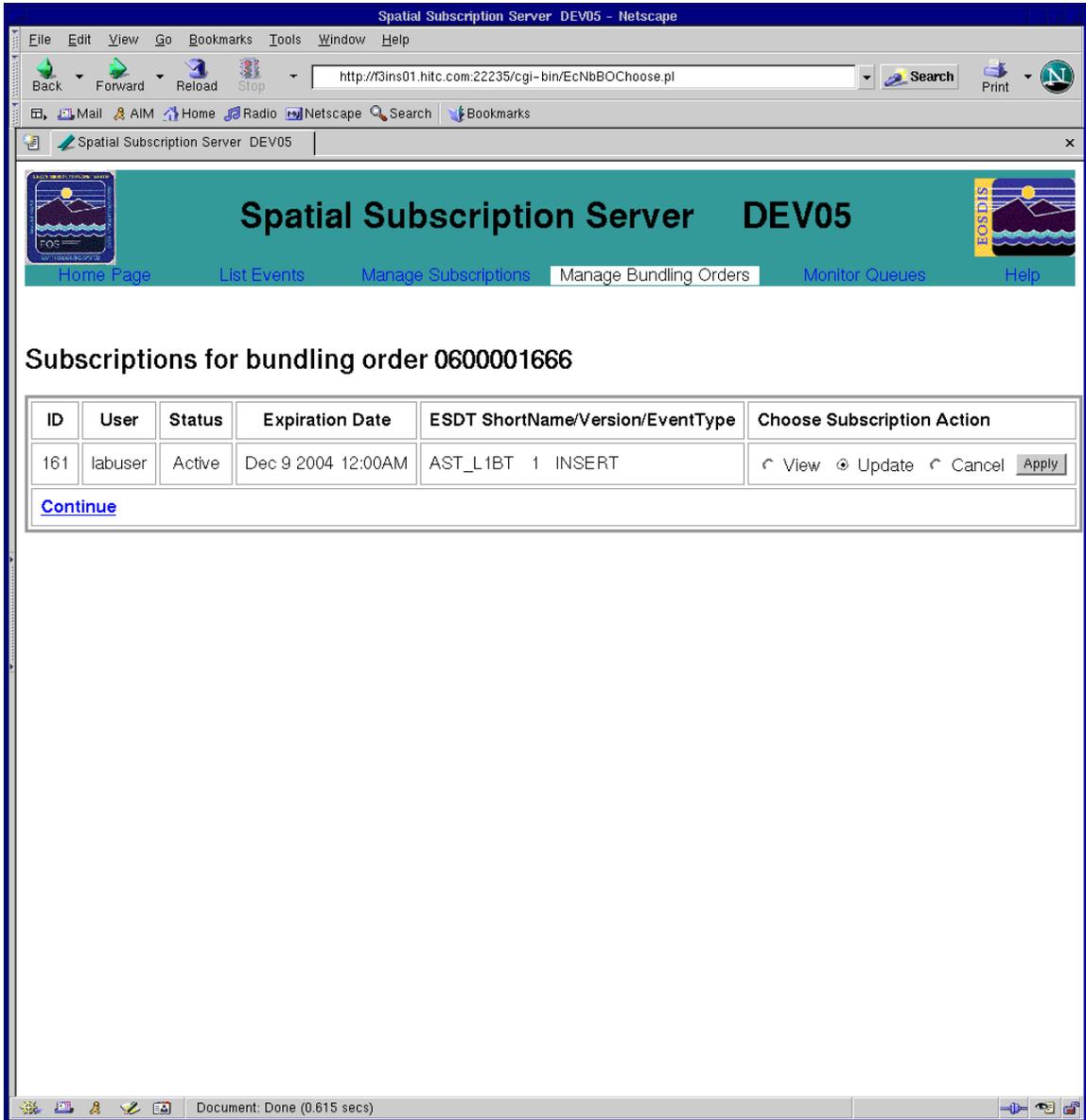
Limited Capability users cannot use this functionality.



**Figure 4.8.7.11-2. Cancel Bundling Order (Successful Cancellation). This Screen Is Accessible to Only Full Capability Operator.**

#### 4.8.7.12 List Subscriptions Associated with Bundling Order

The list subscriptions screen shown in Figure 4.8.7.12-1 Lists the subscriptions associated with a bundling Order. Note that selecting “View” or “Update” or “Cancel” button and clicking on “Apply” would provide similar functionality as in Section 4.8.7.4.



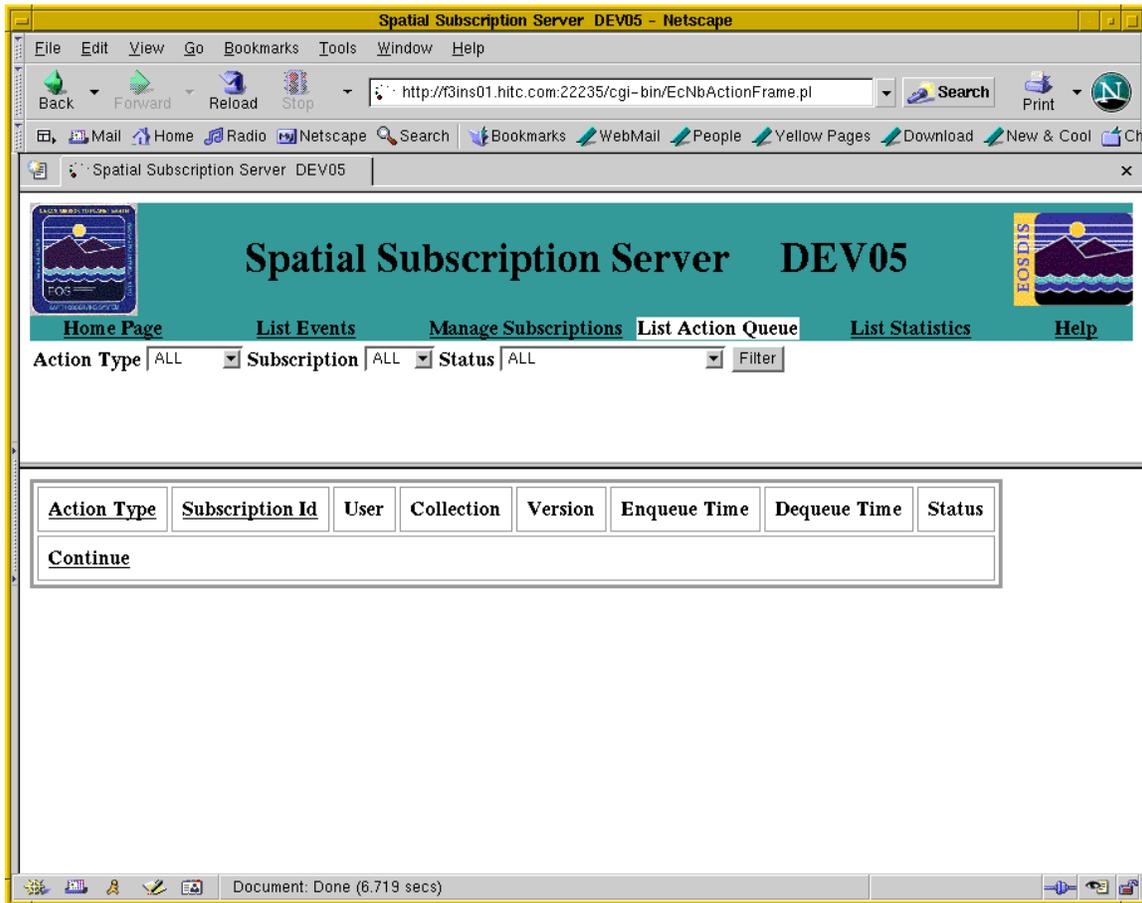
**Figure 4.8.7.12-1. List Subscriptions Associated with a Bundling Order**

### 4.8.7.13 Monitor Queues Tab

When the operator selects the Monitor Queues tab, the List Action Queue page (see Section 4.8.7.14) will be displayed by default. From this page, the operator can view production statistics by selecting the List Statistics tab.

### 4.8.7.14 List Action Queue tab

The List Action Queue screen shown in Figure 4.8.7.14-1 allows the operator to view the Acquire and E-Mail Notification actions that are being processed. The operator can sort the list by Action Type and Subscription Id by clicking on the **Action Type** or **Subscription Id** link. The operator can also filter the list by any combination of **Action Type**, **Subscription** and **Status**. After selecting the filtering criteria from the pull-down list(s), click on the **Filter** button.

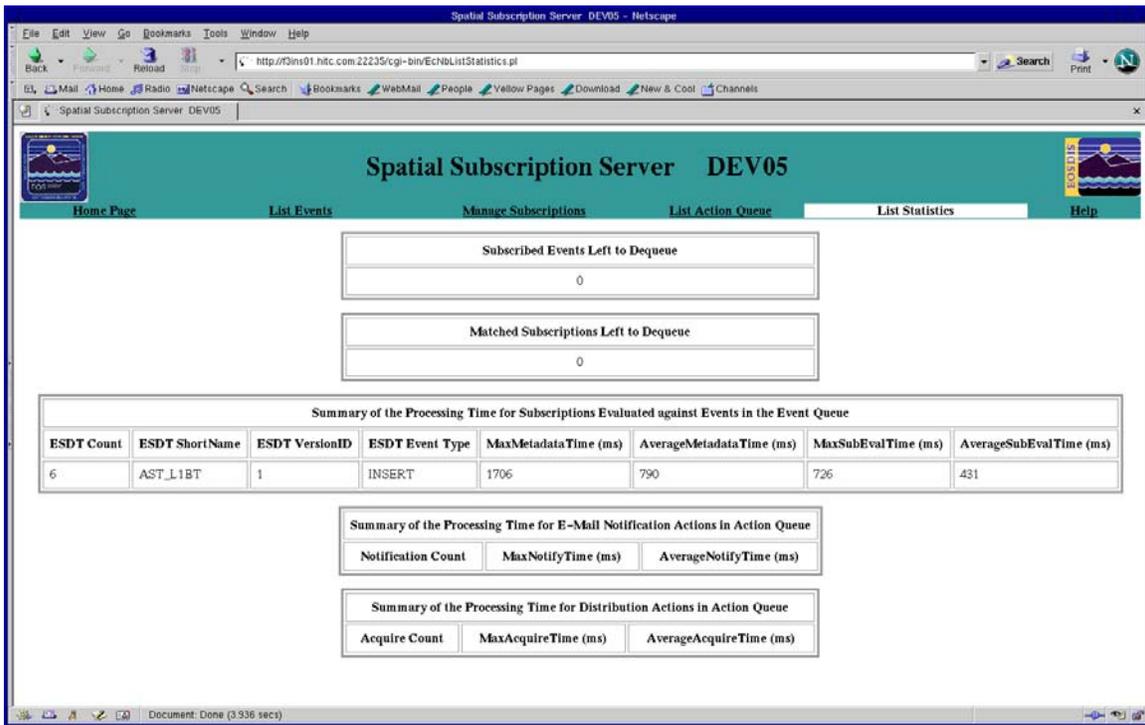


**Figure 4.8.7.14-1. List Action Queue (Acquire and E-mail Notifications)**

### 4.8.7.15 List Statistics tab

The List Statistics screen shown in Figure 4.8.7.15-1 allows the operator to view the statistics relating to subscribed events and matched subscriptions. Note that the statistics are based only on data in the NBSRV database at the time the GUI page is displayed. The subscription statistics

are retained in the NBSRV database only until they are cleaned up by the Deletion Driver. The Deletion Driver runs periodically at an interval specified in its configuration parameters.



**Figure 4.8.7.15-1. List Statistics Screen**

**Note:** This screen will allow the operator to view statistics relating to subscribed events and matched subscriptions. The statistics will also reflect the processing time for e-mail notification and distribution actions.

#### 4.8.7.16 List Failed Actions

Figure 4.8.7.16-1 displays failed actions present within the system. Figure 4.8.7.16-2 shows the screen displayed on clicking on “**Remove Action**”.

Spatial Subscription Server ??? DEV09 - Netscape

File Edit View Go Bookmarks Tools Window Help

Back Forward Reload Stop <http://f0dps01.hitc.com:22239/cgi-bin/EcNbListFailedAction.pl> Search Print

Mail AIM Home Radio Netscape Search Bookmarks Connections BizJournal SmartUpdate Mktplace Members WebM

Spatial Subscription Server DE...



## Spatial Subscription Server DEV09

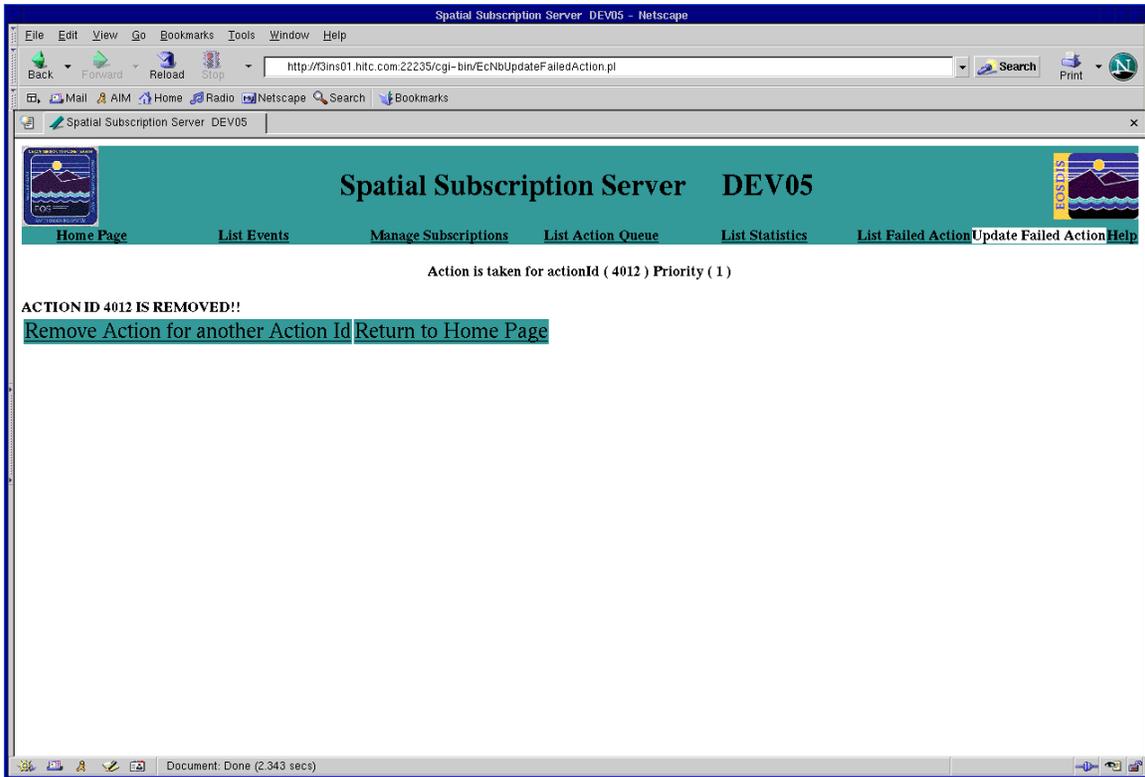


Home Page [List Events](#) [Manage Subscriptions](#) [List Action Queue](#) [List Statistics](#) [List Failed Action](#) [Help](#)

Userid	Priority	Actionid	ActionQueueid	Eventid	Subscriptionid	granUR	EnqueueTime	Remove Action
labuser	1	33	39	17	14	UR.40.DISHESDTR.VR.45.DISHS:(iServer)UR.43.[PNR.DSSSDSL.V]20.SC.AST_L1BT.001.4135	Jun 14 2004 4:10 PM	<a href="#">Remove Action</a>
labuser	1	37	40	22	14	UR.40.DISHESDTR.VR.45.DISHS:(iServer)UR.43.[PNR.DSSSDSL.V]20.SC.AST_L1BT.001.4151	Jun 20 2004 12:40 PM	<a href="#">Remove Action</a>
labuser	1	38	42	23	14	UR.40.DISHESDTR.VR.45.DISHS:(iServer)UR.43.[PNR.DSSSDSL.V]20.SC.AST_L1BT.001.4152	Jun 20 2004 1:05 PM	<a href="#">Remove Action</a>
labuser	1	43	47	24	14	UR.40.DISHESDTR.VR.45.DISHS:(iServer)UR.43.[PNR.DSSSDSL.V]20.SC.AST_L1BT.001.4156	Jun 20 2004 2:40 PM	<a href="#">Remove Action</a>
labuser	1	45	50	25	14	UR.40.DISHESDTR.VR.45.DISHS:(iServer)UR.43.[PNR.DSSSDSL.V]20.SC.AST_L1BT.001.4157	Jun 20 2004 2:05 PM	<a href="#">Remove Action</a>
labuser	1	46	51	26	14	UR.40.DISHESDTR.VR.45.DISHS:(iServer)UR.43.[PNR.DSSSDSL.V]20.SC.AST_L1BT.001.4158	Jun 21 2004 10:24 AM	<a href="#">Remove Action</a>
labuser	1	52	60	27	14	UR.40.DISHESDTR.VR.45.DISHS:(iServer)UR.43.[PNR.DSSSDSL.V]20.SC.AST_L1BT.001.4170	Jun 21 2004 5:24 PM	<a href="#">Remove Action</a>
labuser	1	53	61	28	14	UR.40.DISHESDTR.VR.45.DISHS:(iServer)UR.43.[PNR.DSSSDSL.V]20.SC.AST_L1BT.001.4173	Jun 21 2004 5:41 PM	<a href="#">Remove Action</a>
labuser	1	54	62	29	14	UR.40.DISHESDTR.VR.45.DISHS:(iServer)UR.43.[PNR.DSSSDSL.V]20.SC.AST_L1BT.001.4174	Jun 21 2004 5:41 PM	<a href="#">Remove Action</a>

Document: Done (1.802 secs)

Figure 4.8.7.16-1. List of Failed Actions



**Figure 4.8.7.16-2. Removing a Failed Action**

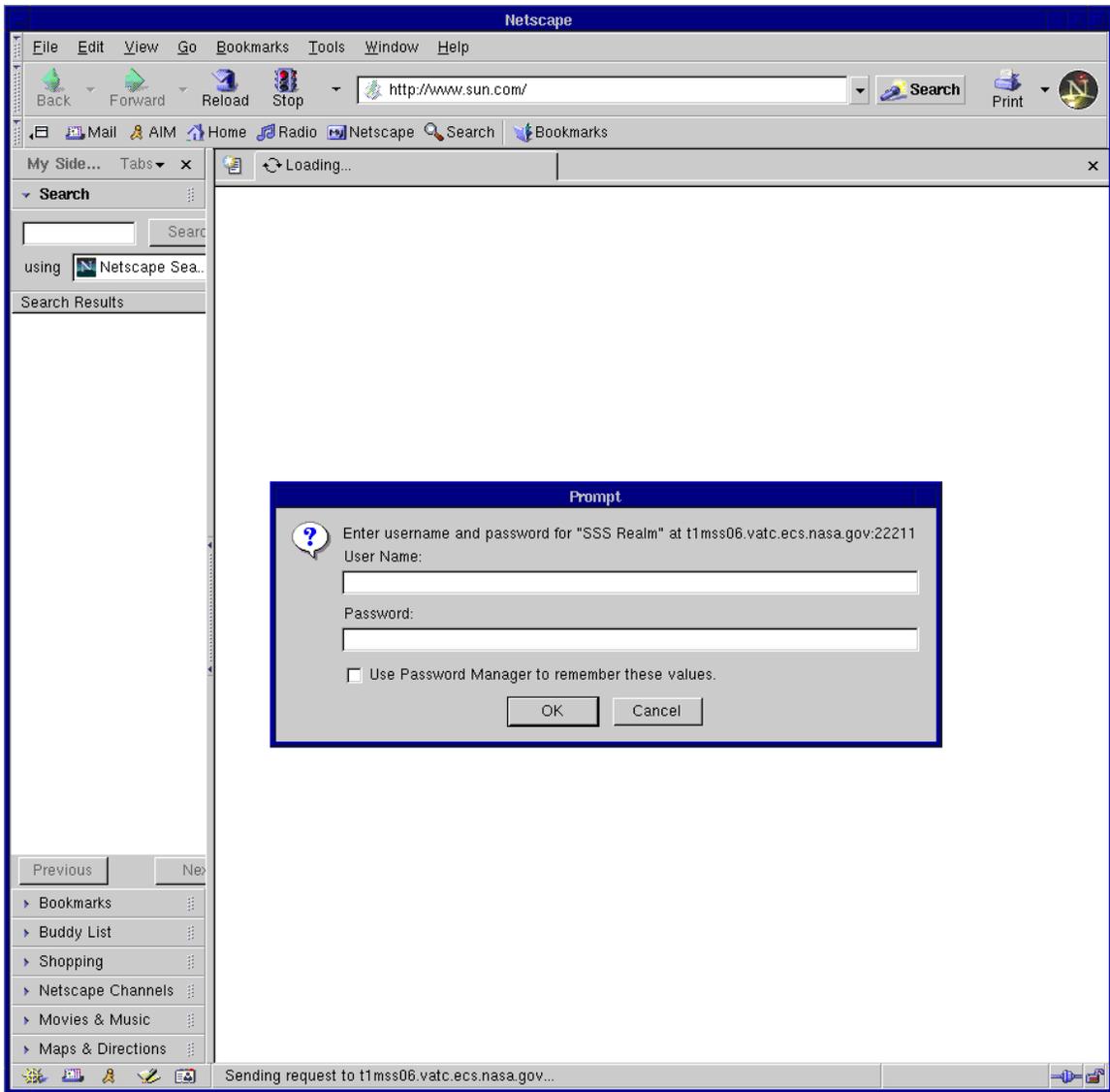
#### **4.8.7.17 Security Considerations.**

With Security Enabled, Figure 4.8.7.17-1 is displayed anytime a user logs in for the first time. On selecting End Session tab on NBSRV.html page, Figure 4.8.7.17-2 is displayed. Clicking on ShutDown button in Figure 4.8.7.17-2 closes the Browser.

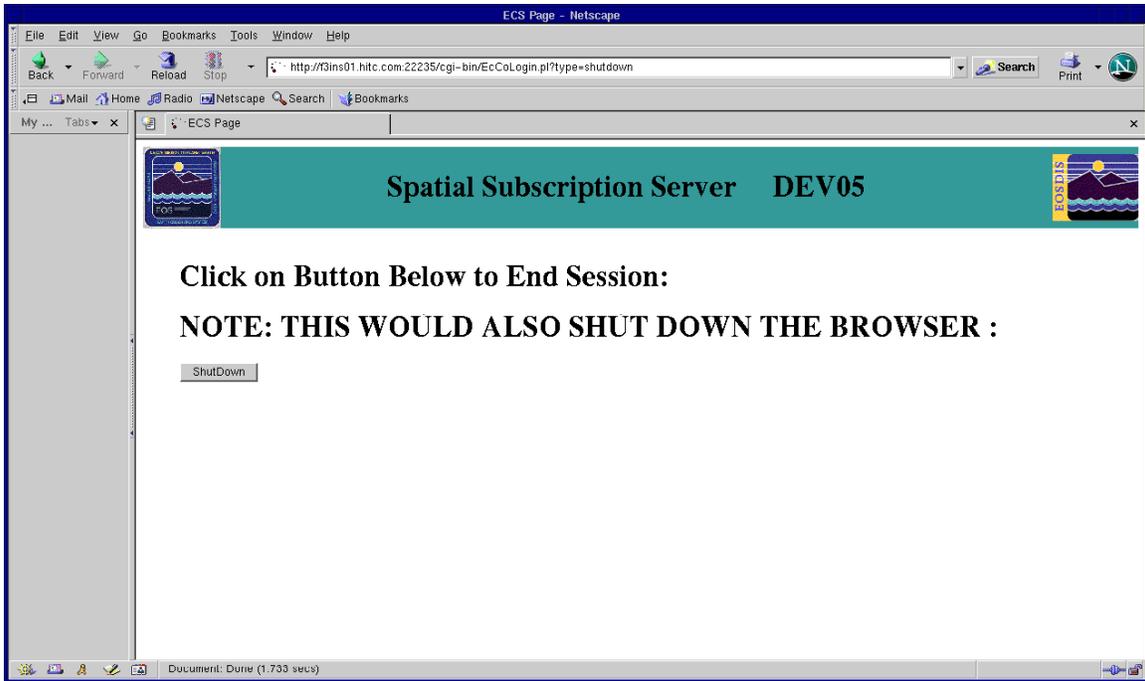
The session time out page shown in Figure 4.8.7.17-3 is displayed anytime a user session times out. Note that session time out is part of the security feature.

After a session times out and an invalid password is entered by the Operator, page shown in Figure 4.8.7.17-4 is displayed.

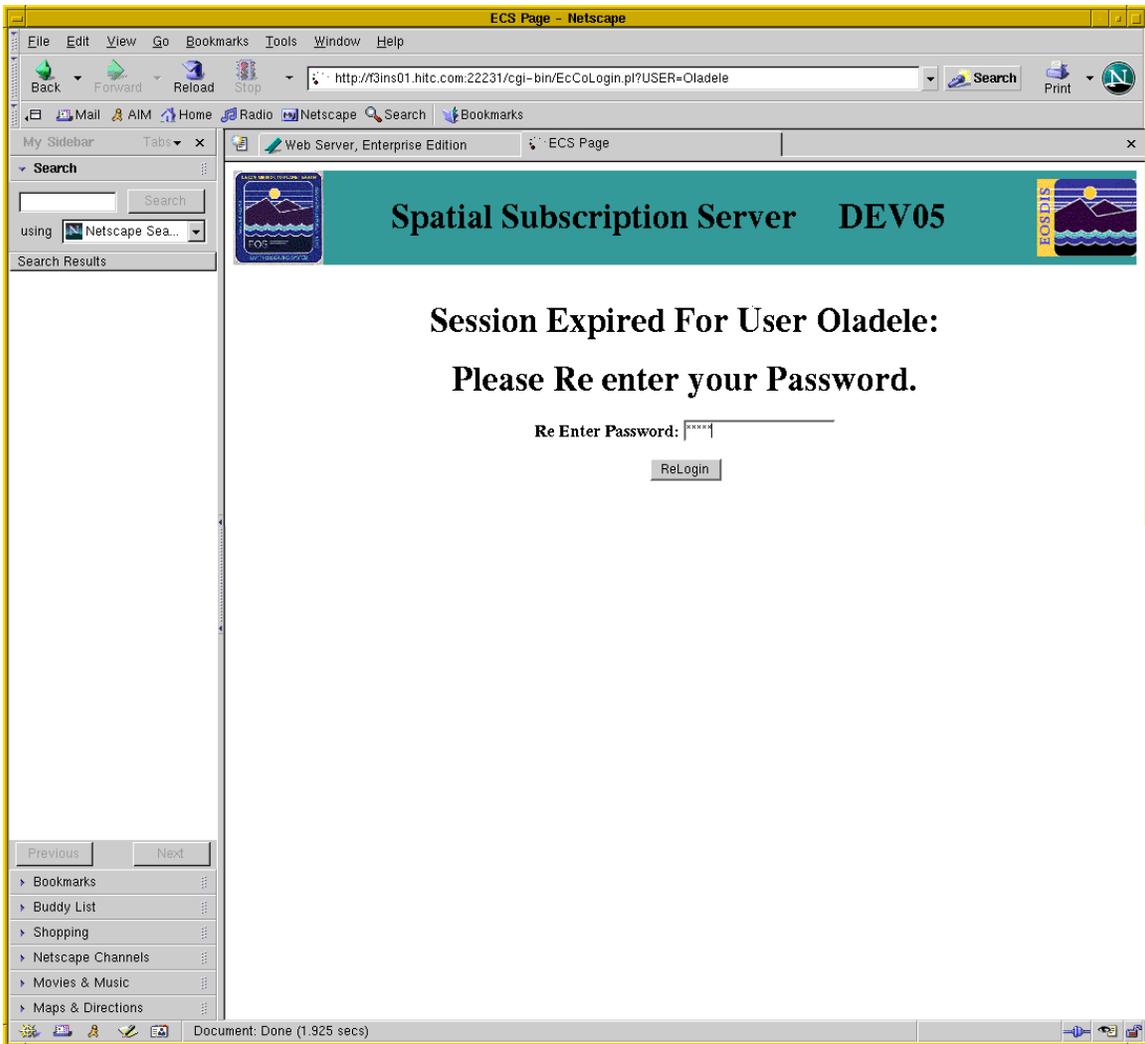
For a user attempting to access SSS GUI using a non certified browser, the page shown in Figure 4.8.7.17-5 is displayed.



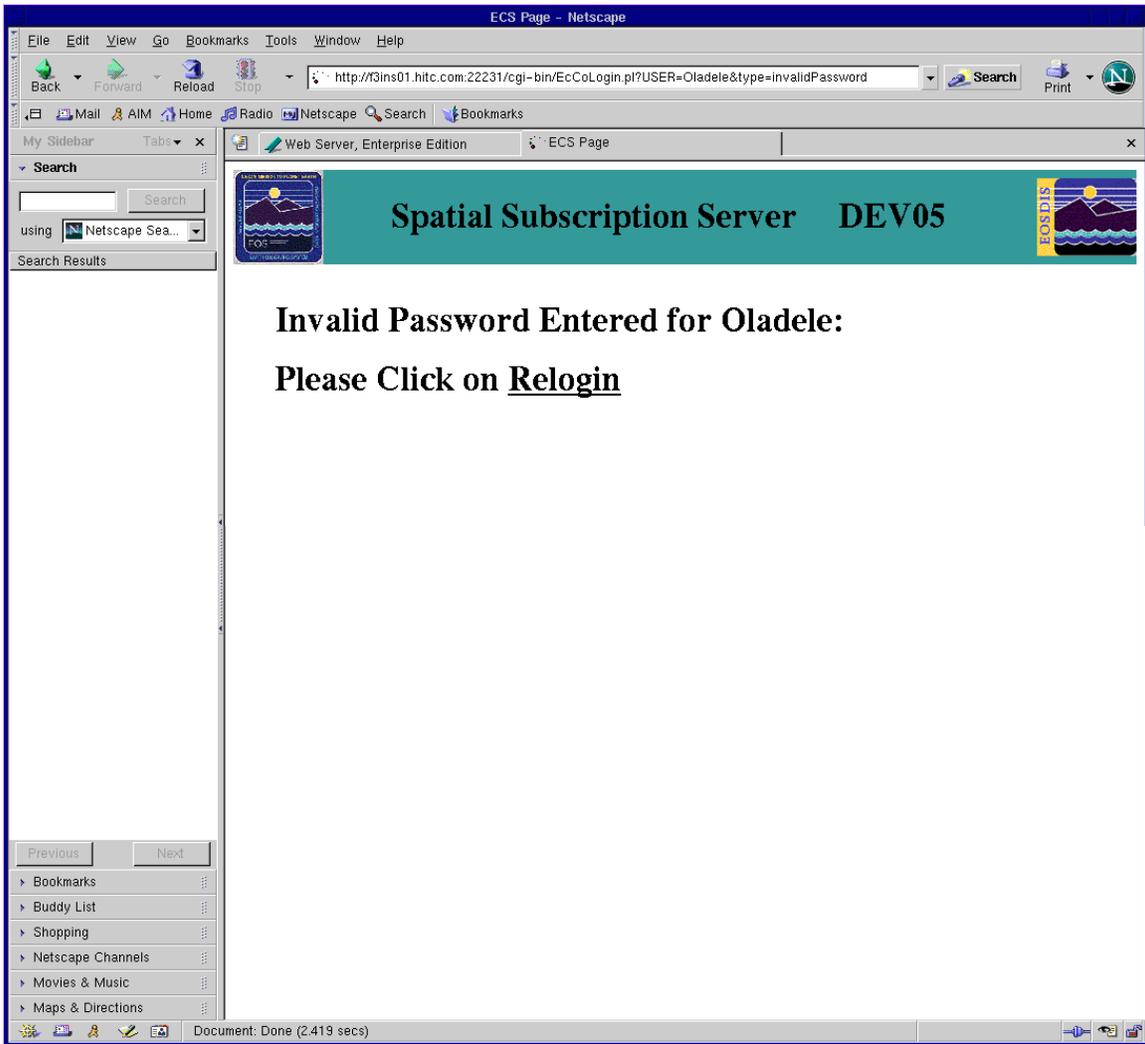
**Figure 4.8.7.17-1. Login Dialog Box**



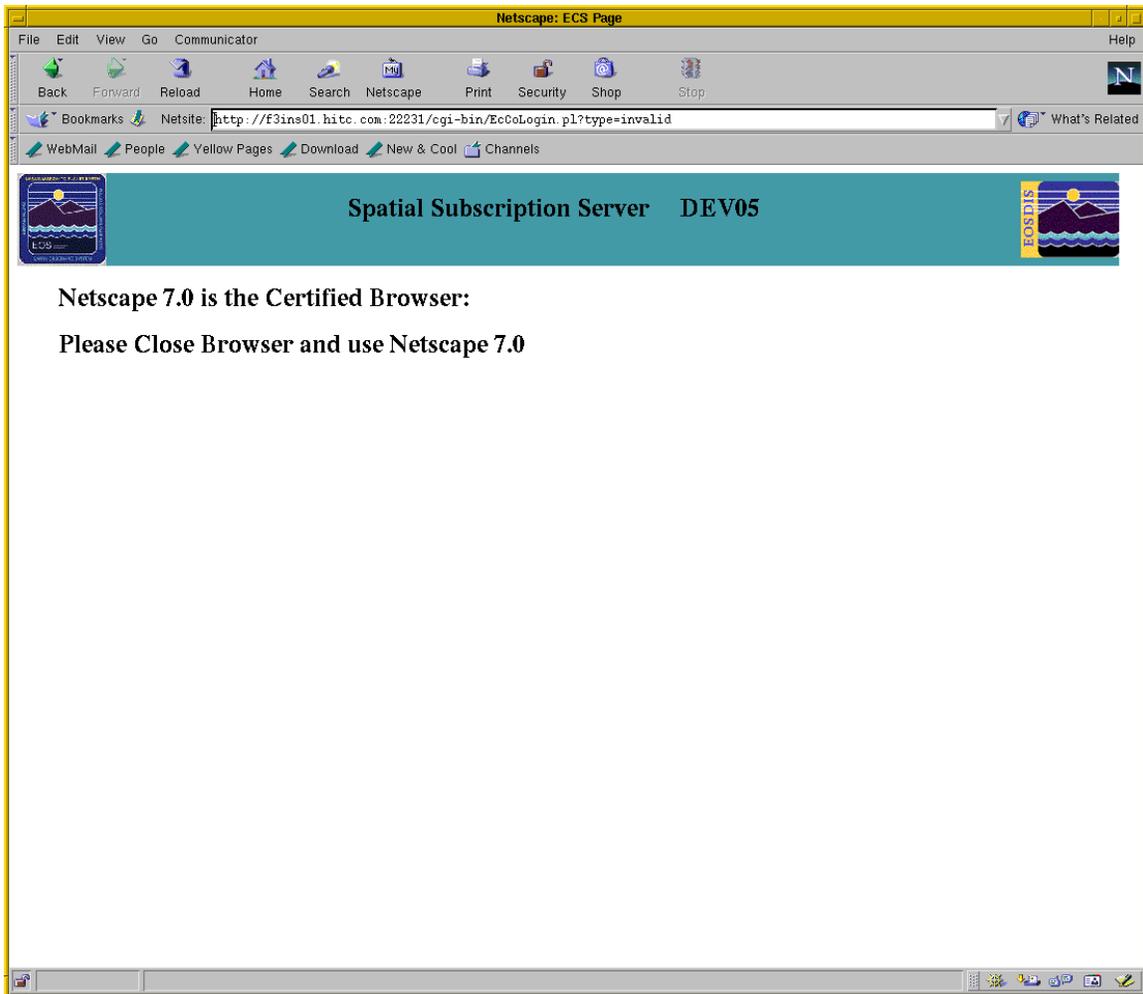
**Figure 4.8.7.17-2. Shut Down Page**



**Figure 4.8.7.17-3. Session Timed-Out Page**



**Figure 4.8.7.17-4. Invalid Password Entered by Operator**



**Figure 4.8.7.17-5. Invalid Client Browser**

#### **4.8.7.18 Required Operating Environment**

This following environment is required for the NBSRV GUI to work properly.

- O/S requirements are Linux 2.x.

#### **4.8.7.19 Interfaces and Data types**

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

#### **4.8.7.20 Databases**

The NBSRV GUI accesses the NBSRV, ScienceDataServer, DDict and MSS Accountability databases.

#### **4.8.7.21 Special Constraints**

There are no special constraints to running the NBSRV GUI.

#### **4.8.7.22 Outputs**

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

#### **4.8.7.23 Events and Messages**

The NBSRV GUI issues client side validation errors when adding or modifying a subscription. If the operator does not correct the validation errors the subscription will be rejected when the operator attempts to add or update the subscription. The NBSRV GUI writes status and error messages to the EcNbGUI.log file in the directory /usr/ecs/<MODE>/CUSTOM/logs.

#### **4.8.7.24 Reports**

The NBSRV GUI does not generate reports.

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## 4.8.8 Spatial Subscription Server Command Line Interface

The Spatial Subscription Server (SSS) Command Line Interface (CLI) allows the user to add a new subscription, delete a subscription, update a subscription, view a subscription or batch update subscriptions without using a GUI. The details of the subscription are contained in a text file.

The CLI is installed in the utilities directory for each mode. You must go to the appropriate mode directory to access the correct database for a particular mode.

### 4.8.8.1 Quick Start Using Spatial Subscription Server Command Line Interface

To execute the CLI, run the script EcNbSubscriptionCLIStart.

For Add, Delete, Update and View, this script takes three parameters: (1) the mode, (2) the function (Add, Delete, Update and View), and (3) a third parameter, which depends on the function in (2).

If the function selected was Delete or View, the third parameter must be the subscription number to be deleted or viewed. If the function selected was Add or Update, the third parameter must be the name of the text file containing the subscription information. This file is assumed to reside in the current directory unless expressed as a qualified pathname.

For BatchUpdate, this script takes four parameters: (1) the mode, (2) the function (BatchUpdate), (3) the match file, which contains "NAME=value" pair(s) that define the search criteria for subscriptions to be updated (this is an "AND" relationship), and (4) the update file, which contains "NAME=value" pair(s) that will replace the existing values associated with matching subscriptions.

#### 4.8.8.1.1 Invoking Spatial Subscription Server From the Command Line Interface

The Spatial Subscription Server Command Line Interface (CLI) allows the user to add a new subscription, delete a subscription, update a subscription, view a subscription, or batch update a set of subscriptions without using a GUI.

To execute the Spatial Subscription Server from the command line interface (Add, Delete, Update, View):

```
EcNbSubscriptionCLIStart <mode> <function> <function dependent parameter>
```

Examples:

```
EcNbSubscriptionCLIStart OPS Add MyNewSubscription.txt
EcNbSubscriptionCLIStart TS1 Delete 5199
EcNbSubscriptionCLIStart TS2 Update/home/daacUser/MyOldSubscription.txt
EcNbSubscriptionCLIStart OPS View 2355
```

To execute the Spatial Subscription Server from the command line interface (BatchUpdate):

EcNbSubscriptionCLIStart <mode> <function> <matchfile> <updatefile>

Example:

EcNbSubscriptionCLIStart OPS BatchUpdate matchFile updateFile

Notes:

- (1) When adding a subscription, a new subscription number is assigned and returned as output to stdout.
- (2) When deleting a subscription, the user is prompted to confirm the delete.
- (3) When updating a subscription, the number of the subscription to be updated must appear within the text file containing the subscription data.
- (4) When viewing a subscription, the output appears in a new file called *sub.nnn.txt*, where *nnn* refers to the subscription number. This file is created in the current directory.
- (5) To save on typing when adding a subscription, it is helpful to start by viewing a subscription similar to the one being added, edit the resulting text file, and then submit that file as input to the Add command.
- (6) Prior to updating a subscription, always view the subscription first and then make your changes in the resulting text file, submitting it as input to the Update command.
- (7) Physical media distributions for subscriptions are now supported through the use of bundling orders. The simplest way to do this is to create a bundling order via the GUI and then “bundle” the subscription by specifying the bundling order ID (see table below). Alternatively, if a bundling order ID is not specified for a physical media distribution, a bundling order is automatically created for the subscription; however, in this case, all of the required information for the bundling order (such as shipping information) must be specified in the input file for the subscription.
- (8) If the user updates a bundled subscription without altering the bundling order ID, the bundling order is updated along with the subscription.
- (9) When batch updating a set of subscriptions, all matching subscription IDs will be displayed on the screen. After viewing all the subscription ids, the user is prompted to confirm whether or not to save the details of the matched subscriptions into a file. The user can choose his own output file name. If the user does not enter anything, then the default file name “matchSub.txt” will be used. Using the saved output file (matchSub.txt) as a reference, the user can always change the values back if any subscriptions are mistakenly updated.
- (10) When batch updating subscriptions, the user is prompted to confirm or abort the batch update after reviewing the set of matched subscriptions retrieved.
- (11) The user can batch update granule collections by batch updating the granule version ID.
- (12) The user can batch delete granules by batch updating the status to “Canceled”. The Spatial Subscription Server deletion driver will remove all the canceled subscriptions from the database after a configured amount of time.

- (13) For batch updating subscriptions, the name and value pairs of the form “NAME=value” (one per line both in matchfile and updatefile) must be chosen from the list in Table 4.8.8-2 TextFile Contents (BatchUpdate List). Otherwise, an error will be raised and the match/update parameter function will not work for the unsupported “NAME”s.
- (14) For batch update, the granule start date and granule end date, if used, must always appear together in the match file or update file. If either is used without the other, the SSS CLI will raise an error and will not process the batch update.

There is a log file called EcNbSubscriptionCLI.log in the logs directory for each mode. If your command did not appear to succeed, be sure to check the log file to see what went wrong.

The text file generated by the View command, or used as input to the Add or Update commands, consists of several lines of name and values pairs of the form “NAME=value”, one per line. If you wish to introduce comments into your text file, you may do so by starting the line for the comment with the “#” character.

Table 4.8.8-1 shows all possibilities for rows in the text file. This table is intended for reference only. If you have never entered a subscription before, it is recommended you start by entering a few subscriptions using the GUI. Then use the View command of the CLI to generate text files for these subscriptions. Modify these text files to serve as input for adding or updating subscriptions.

Table 4.8.8-2 shows all possibilities for rows in the match file or update file when batch updating a set of subscriptions.

**Table 4.8.8-1. Text File Contents (1 of 5)**

<b>Name</b>	<b>Type</b>	<b>Mandatory</b>	<b>Description</b>
SUBSCRIPTION	Integer	Yes for Update or View; ignored by Add	The subscription number.
USERNAME	Variable Character	Yes	The name of the owner of the subscription. A user profile must already exist for the owner.
STATUS	Variable Character	Yes	The subscription status: Active, Inactive or Canceled.
EXPIRATION	Date/Time	No (defaults to one year from the current date if not specified)	The expiration date for the subscription.

**Table 4.8.8-1. Text File Contents (2 of 5)**

Name	Type	Mandatory	Description
ESDT_SHORT_NAME	Variable Character	Yes	The short name for the ESDT being subscribed to.
ESDT_VERSION	Integer	Yes	The version for the ESDT being subscribed to (e.g., 1, if version ID is 001).
EVENT_TYPE	Variable Character	Yes	The type of event being subscribed to: INSERT, DELETE, or UPDATEMETADATA.
NOTE: The next four lines should appear as a block in the text file. Up to five such blocks may be used.			
ATTRIBUTE_NAME	Variable Character	No	The name of a qualifying numeric attribute. Use this only for attributes of type Integer, Float, or Date/Time.
ATTRIBUTE_TYPE	Variable Character	No	The type of a qualifying attribute: Integer, Float, or Date/Time.
ATTRIBUTE_MIN_VALUE	Integer, Float, or Date/Time	No	The smallest acceptable value for this attribute.
ATTRIBUTE_MAX_VALUE	Integer, Float, or Date/Time	No	The largest acceptable value for this attribute.
NOTE: The next three lines should appear as a block in the text file. Up to five such blocks may be used.			
STRING_ATTRIBUTE_NAME	Variable Character	No	The name of a qualifying string attribute.
STRING_ATTRIBUTE_TYPE	Variable Character	No	This is always 'varchar'.
STRING_ATTRIBUTE_VALUE	Variable Character	No	The value that this attribute must have in order to qualify.
NOTE: The next six lines should appear as a block in the text file. Only one such block may be used.			
SPATIAL_ATTRIBUTE_NAME	Variable Character	No	The name of a qualifying spatial attribute: GPolygonContainer, BoundingRectangle, or Nose.
SPATIAL_ATTRIBUTE_TYPE	Variable Character	No	The type of a qualifying spatial attribute: gpolygon, lbox, or PathBlock, respectively.
SPATIAL_VALUE_SOUTH	Float	No	The lower latitude value for the qualifying rectangle.
SPATIAL_VALUE_WEST	Float	No	The lower longitude value for the qualifying rectangle.
SPATIAL_VALUE_NORTH	Float	No	The upper latitude value for the qualifying rectangle.

**Table 4.8.8-1. Text File Contents (3 of 5)**

<b>Name</b>	<b>Type</b>	<b>Mandatory</b>	<b>Description</b>
SPATIAL_VALUE_EAST	Float	No	The upper longitude value for the qualifying rectangle.
NOTIFY_EMAIL_ADDRESS	Variable Character	No	The email address of the recipient if email notification is desired.
NOTIFY_USER_STRING	Variable Character	No	An optional user string to be included in the email.
NOTIFY_METADATA	Character	No	Indicates whether the email should include all metadata (Y) or just metadata associated with the subscription qualifiers (N).
ACQUIRE_USERNAME	Variable Character	No	The user profile name requesting an acquire.
ACQUIRE_USERSTRING	Variable Character	No	An optional string to be included in the distribution notice.
ACQUIRE_EMAIL_ADDRESSES	Variable Character	No	The email address for “acquire” notification. This defaults to the email address in the user profile if not specified here.
ACQUIRE_MEDIA_FORMAT	Variable Character	No	At present, this value should always be FILEFORMAT,
ACQUIRE_MEDIA_TYPE	Variable Character	No	The type of acquire: FtpPush or FtpPull.
ACQUIRE_PRIORITY	Variable Character	No	The distribution priority: VHIGH, HIGH, NORMAL, LOW, or XPRESS. This defaults to the distribution priority in the user profile if not specified here.
ACQUIRE_NOTIFY_TYPE	Variable Character	No	At present, this should always be MAIL.
ACQUIRE_FTP_USER	Variable Character	No	The FTP login name for an FTP push operation.
ACQUIRE_FTP_PASSWORD	Variable Character	No	The password for an FTP push operation.
ACQUIRE_FTP_HOST	Variable Character	No	The destination hostname for an FTP push operation.
ACQUIRE_FTP_DIR	Variable Character	No	The destination directory for an FTP push operation.
BUND_USER_NAME	Variable Character	Yes, if adding a new bundling order	If present, it must be the same as USERNAME.

**Table 4.8.8-1. Text File Contents (4 of 5)**

Name	Type	Mandatory	Description
BUND_ORDER_ID	Variable Character	No	The ID of the bundling order to be associated with this subscription. If present, a new subscription is associated with the existing bundling order. If absent, a new order in EcAcOrder is created using the information in BUND_MEDIA_TYPE, BUND_SHIP_PHONE, BUND_SHIP_CTRY, BUND_SHIP_STATE, BUND_SHIP_CITY, BUND_SHIP_FAX, BUND_SHIP_STREET_1, BUND_SHIP_STREET_2, BUND_SHIP_STREET_3, BUND_SHIP_ZIP, BUND_DIST_PRIOR and information obtained from MsAcUsrProfile for USERNAME. A new request in EcAcRequest is created using the above and some or all of BUND_FTP_HOST, BUND_FTP_PASSWORD, BUND_FTP_DIR, and BUND_FTP_USER.
BUND_MAX_BUND_AGE	Float	No	The number of hours which a bundle can have requests incorporated before it is expired.
BUND_MEDIA_TYPE	Variable Character	Yes, if adding a new bundling order	The media type for bundled requests.
BUND_MIN_GRAN_COUNT	Integer	No	The minimum number of granules a bundle can contain before it is distributed.
BUND_MIN_BUND_SIZE	Float	No	The minimum size in MB a bundle must attain before it is distributed.
BUND_EMAIL_NOTIFICATION_ADD R	Variable Character	No	Free text field to record the optional distribution parameter NOTIFY.
BUND_USER_STRING	Variable Character	No	Optional distribution option, which identifies a request.
BUND_DIST_PRIORITY	Variable Character	No	Distribution priority of the bundling order.
BUND_FTP_HOST	Variable Character	No	The destination hostname for an FTP push operation.
BUND_FTP_PASSWORD	Variable Character	No	The FTP password for an FTP push operation.
BUND_FTP_DIR	Variable Character	No	The destination directory for an FTP push operation.
BUND_FTP_USER	Variable Character	No	The FTP login name for an FTP push operation.
BUND_SHIP_PHONE	Variable Character	No	The phone number for the user requesting the order.

**Table 4.8.8-1. Text File Contents (5 of 5)**

<b>Name</b>	<b>Type</b>	<b>Mandatory</b>	<b>Description</b>
BUND_SHIP_CTRY	Variable Character	No	The country the order should be shipped to.
BUND_SHIP_STATE	Variable Character	No	The state the order should be shipped to.
BUND_SHIP_CITY	Variable Character	No	The city the order should be shipped to.
BUND_SHIP_FAX	Variable Character	No	The fax number for the user requesting the order.
BUND_SHIP_STREET_1	Variable Character	No	The street address to which the order should shipped.
BUND_SHIP_STREET_2	Variable Character	No	The street address to which the order should shipped.
BUND_SHIP_STREET_3	Variable Character	No	The street address to which the order should shipped.
BUND_SHIP_ZIP	Variable Character	No	The zip code of address to which the order should be shipped.

**Table 4.8.8-2. Text File Contents (BatchUpdate List) (1 of 2)**

<b>Name</b>	<b>Type</b>	<b>Description</b>
USERNAME	Variable Character	The name of the subscription owner. A user profile must already exist for the owner.
STATUS	Variable Character	The subscription status: Active, Inactive or Canceled.
START_DATE	Date/Time	The start date for the subscription
EXPIRATION	Date/Time	The expiration date for the subscription.
ESDT_SHORT_NAME	Variable Character	The short name for the ESDT being subscribed to. A wildcard can be used in the matchfile by including a subset of the ShortName for the value instead of full ShortName. Any ESDT ShortNames that include this subset as a string are considered a match.
ESDT_VERSION	Integer	The version for the ESDT being subscribed to (e.g., 1, if version ID is 001).
EVENT_TYPE	Variable Character	The type of event being subscribed to: INSERT, DELETE, or UPDATEMETADATA.
ACQUIRE_USERNAME	Variable Character	The user profile name requesting an acquire.
ACQUIRE_EMAIL_ADDRESSES	Variable Character	The email address for “acquire” notification. This defaults to the email address in the user profile if not specified here.
ACQUIRE_MEDIA_TYPE	Variable Character	The type of acquire: FtpPush, FtpPull or scp.

**Table 4.8.8-2. Text File Contents (BatchUpdate List) (2 of 2)**

Name	Type	Description
ACQUIRE_PRIORITY	Variable Character	The distribution priority: VHIGH, HIGH, NORMAL, LOW, or XPRESS. This defaults to the distribution priority in the user profile if not specified here.
ACQUIRE_FTP_USER	Variable Character	The FTP login name for an FTP push operation.
ACQUIRE_FTP_HOST	Variable Character	The destination hostname for an FTP push operation.
ACQUIRE_FTP_DIR	Variable Character	The destination directory for an FTP push operation.
NOTIFY_EMAIL_ADDRESS	Variable Character	The email address of the recipient if email notification is desired.
GRANULE_START_DATE	Date/Time	The start date of the granule.
GRANULE_END_DATE	Date/Time	The end date of the granule.

#### **4.8.8.2 Spatial Subscription Server Command Line Interface Main Screen**

The Spatial Subscription Server (NBSRV) Command Line Interface does not have a main screen. It is a command line interface only.

#### **4.8.8.3 Required Operating Environment**

O/S requirements are Linux 2.x platforms.

#### **4.8.8.4 Databases**

The Spatial Subscription Server CLI accesses the Spatial Subscription Server, Science Data Server, Data Dictionary and System Management Subsystem’s Accountability databases.

#### **4.8.8.5 Special Constraints**

There are no special constraints to running the Spatial Subscription CLI.

#### **4.8.8.6 Outputs**

In addition to status and error messages, there will be an output file called sub.*nnn*.txt (where *nnn* refers to the subscription number) when viewing a subscription.

There also will be an output file for matched subscriptions when using “BatchUpdate” function if the user chooses to save the information.

#### **4.8.8.7 Event and Error Messages**

The Spatial Subscription Server CLI issues validation errors when adding or updating a subscription. If the operator does not correct the validation errors, the subscription is rejected when the operator attempts to add or update the subscription. The SSS CLI writes status and error messages to the EcNbSubscriptionCLI.log file in the directory /usr/ecs/<MODE>/CUSTOM/logs.

#### **4.8.8.8 Reports**

The SSS CLI does not generate reports.

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### 4.8.9 Bulk Metadata Generation Tool

In order to support the development of value-added providers (e.g., IIMS, ESIPs, RESACs, and InfoMarts), ECS sites will make an external representation of their metadata holdings available and provide a capability for bulk distribution of browse data through normal ECS distribution methods.

Several new ECS data collections will be created and maintained at each site to store this data. Bulk Metadata Generator and Bulk Browse Generator Tools will be run daily at each site to populate these data collections. One metadata product will be created per ESDT group per day. Each product will contain an external representation of the metadata for each new, updated, or deleted granule that is a member of the ESDT group. The format used for the external representation of the metadata is XML. One bulk browse product will be produced per day that contains references to all new, updated, or deleted browse granules. Value-added providers may use any of the standard ECS search, order, and subscription capabilities to find and order these bulk metadata and browse products.

This document defines the operations concept for the ECS Bulk Metadata and Browse Export Capability and specifies the XML Document Type Definitions (DTDs) for the external representation of the metadata.

#### 4.8.9.1 Invoking the Bulk Metadata Generation Tool Utility

The Bulk Metadata Generation Tool (BMGT) can be executed via a start script (EcBmBMGTStart, located in the /usr/ecs/<mode>/CUSTOM/utilities directory), BMGT can be run with the following command line arguments for different options.

**EcBmBMGTStart OR**

**EcBmBMGTStart -P <PRODUCT> OR**

**EcBmBMGTStart -P <PRODUCT> -I <INPUTSOURCE> -S<InputSOURCEPRODUCT>  
OR**

**EcBmBMGTStart -P <PRODUCT> -I <INPUTSOURCE> -L <LIST\_ONLY> -  
S<InputSOURCEPRODUCT> OR**

**EcBmBMGTStart -P <PRODUCT> -I <INPUTSOURCE> -L <LIST\_ONLY> -  
S<InputSOURCEPRODUCT> -A <ARCHIVE> OR**

**EcBmBMGTStart -P <PRODUCT> -I <INPUTSOURCE> -F <FILE\_NAME> -  
S<InputSOURCEPRODUCT> OR**

**EcBmBMGTStart -P <PRODUCT> -I <INPUTSOURCE> -L <LIST\_ONLY> -S<InputSOURCEPRODUCT> -A <ARCHIVE> -F <FILE\_NAME> OR**

**EcBmBMGTStart -I <INPUTSOURCE> -S<InputSOURCEPRODUCT> OR**

**EcBmBMGTStart -I <INPUTSOURCE> -L <LIST\_ONLY> -S<InputSOURCEPRODUCT> OR**

**EcBmBMGTStart -I <INPUTSOURCE> -L <LIST\_ONLY> -A <ARCHIVE> -S<InputSOURCEPRODUCT> OR**

**EcBmBMGTStart -I <INPUTSOURCE> -L <LIST\_ONLY> -A <ARCHIVE> -F <FILE\_NAME> -S<InputSOURCEPRODUCT> OR**

**EcBmBMGTStart -I <INPUTSOURCE> -L <LIST\_ONLY> -F <FILE\_NAME> -S<InputSOURCEPRODUCT> OR**

**EcBmBMGTStart -I <INPUTSOURCE> -F <FILE\_NAME> -S<InputSOURCEPRODUCT>**

<PRODUCT> can be any one of [Validis | Collection | Granule | Browse] these options.

- With this option BMGT generates the corresponding PRODUCT (XML, MET and PDR files) requested.

<INPUTSOURCE>[FILE | GRANULES] this is for processing list of granules.

- Input source can be a file (absolute path) with GranuleID's/GeoId's or both.
- Input source can also be granuleId/GeoID as string as the command line option.
- Multiple GranId's/GeoId's be placed inside " " as one string with spaces separating each dbID.

<InputSOURCEPRODUCT>[Granule| Browse| Both]

- This is the product that is generated for the list provided by INPUTSOURCE.
- Option Both will generate Granule and Browse products for the list of DbID's specified by <INPUTSOURCE>.

<InputSOURCEPRODUCT> is ignored if <INPUTSOURCE> is not provided.

<InputSOURCEPRODUCT> is defaulted to "Both" if <INPUTSOURCE> is provided and <InputSOURCEPRODUCT> is not provided as argument.

If both <PRODUCT> and <INPUTSOURCE> are provided as arguments

- BMGT will generate the Product specified by <PRODUCT> along with the product specified by <InputSOURCEPRODUCT> for all ESDT's and list of dbID's in the INPUTSOURCE.

<LIST\_ONLY> This can be either [Y/N]

- If LIST\_ONLY is Y, BMGT will generate XML, MET and PDR for only the list of granules in input source based on <InputSOURCEPRODUCT>.
- \*\*If LIST\_ONLY is Y and PRODUCT is Valids it generates XML, MET, PDR for Valids and the LIST in the input source.
- If LIST\_ONLY is N, BMGT will generate all the products based on other parameters including the list of granules from the Input source.

<FILE\_NAME>

- This is used to rename the Granule and Browse XML files (only) generated for the list of dbIDs from the input source.
- The file should have .XML/.xml extension.
- If absolute path is not provided the renamed file is placed in the the Output directory for BMGT.
- If the renamed file cannot be placed in the directory specified (OS constraints) by the absolute path the renamed file will be placed in the Output directory instead.

<ARCHIVE> this can be either [Y/N]

- If ARCHIVE is Y .MET and .PDR will be generated along with XML for the List of granules in Input source.
- If Archive is N (this can only be when LIST\_ONLY is set to Y not otherwise) .MET and PDR will not be generated for granules in Input source.

If <INPUTSOURCE> is not provided BMGT ignores <InputSOURCEPRODUCT>, <LIST\_ONLY>, <FILE\_NAME>, and <ARCHIVE> flags.

If <LIST\_ONLY> is N, <ARCHIVE> Flag is ignored.

### **Setup Process for Bulk Metadata Generation**

The following steps must be performed prior to initiating bulk metadata generation:

1. DAAC personnel install new Earth Science Data Types (ESDTs), named ECSMETC, ECSMETG, ECSBBR, and ECSMETV, that will store the external representation of the Science Data Server's (SDSRV) inventory database.

2. DAAC personnel install the ECS Bulk Metadata Generator Tool (BMGT) in OPS mode and configure the target ESDT versions to be exported by editing the BMGT's group configuration file.
3. DAAC personnel configure BMGT to run daily as a cron job. BMGT input arguments are set to generate bulk metadata products for each target ESDT version that had granules inserted, updated, or deleted during the previous day.

### **Normal Operation of the Bulk Metadata Generator Tool**

The following events occur on a daily basis during normal operation of the BGMT:

1. The BMGT is invoked at the specified time each day via a cron job.
2. The BGMT determines the date of the previous day and then executes a series of Sybase stored procedures against the SDSRV inventory database to extract metadata for all collections, granules, browse and valids that were inserted, updated, or deleted during the target day.
3. For each target ESDT version that had collection level metadata inserted, updated, and/or deleted, perform the following steps:
  - 1.0. If this collection is the first collection in a group, then create a new file and append an XML representation of the packaging options to the file.
  - 2.0. Append an XML representation of the collection level metadata to the file.
4. Insert each file, as a product, into the ECSMETC data collection setting the value for the GroupId PSA along with the starting date and ending date of the insert, update, and/or delete activity covered by this file. In this case, the starting and ending dates are the same since the period covered is a single day.
5. For each target ESDT version that had granule level metadata inserted, update, and/or deleted, perform the following steps:
  - 1.0. If this granule is the first granule in a group, then create a new file.
  - 2.0. Append an XML representation of the metadata for each active granule to the file.
6. Insert each file, as a product, into the ECSMETG data collection setting the value for the GroupId PSA along with the starting date and ending date of the insert, update, and/or delete activity covered by this file. In this case, the starting and ending dates are the same since the period covered is a single day.
7. For all browse images that were inserted or deleted within a specified time period, extract the browse identifiers and associated browse file names for each browse product and insert an XML file, called the Browse Reference File (BRF) file, as a product into the ECSBBR data collection. Set the value for start and end date of the insert, update, and/or delete activity covered by this file, allowing it to be an ECS product that can be ordered and distributed via normal ECS search and order mechanisms. The BRF DTD is specified in Appendix A.5.
8. If any collections were inserted, updated, and/or deleted during the period then create a new file, append an XML representation of the valids information, and insert the file, as a product, into the ECSMETV data collection setting the starting date and ending date of the

insert, update, and/or delete activity covered by this file. In this case, the starting and ending dates are the same since the period covered is a single day.

### Bulk Metadata Generation for Existing Data

After the BMGT has been setup for normal operation, DAAC personnel must go back and generate ECSMET products for all of the existing granules in the SDSRV inventory database. The following steps are performed:

1. DAAC personnel invoke the BMGT and set a date range to be processed. Note that because some DAACs will have over a year's worth of operational data, all existing granules should not be processed at once. Instead, it is suggested that DAAC personnel invoke BMGT to process one week of granules at a time.
2. For each day in the date range, the BGMT performs steps 3 through 8 as defined in normal operations section.
3. DAAC personnel repeat step 1 until all existing granules in the SDSRV inventory database have been converted.

### 4.8.9.2 BMGT Configuration Files

BMGT uses xml configuration files, EcBmBMGTConfigParams.xml, EcBmBMGTUserparams.xml, EcBmBMGTSpecialCases.xml, EcBmBMGTGroup.xml, EcBmBMGTSpatialEsdts.xml, and EcBmBMGTControlEsdts located in the /usr/ecs/<mode>/CUSTOM/cfg directory on the x0acsxx host. The configuration parameters are stored in xml format (<parameter name>parameter value</parameter name>), with each parameter/value pair as a separate line entry in the file. Table 4.8.9-1, 4.8.9-2, and 4.8.9-3 describes the configuration parameters, which can be set by the DAAC operations staff.

**Table 4.8.9-1. Configuration Parameters for EcBmBMGTConfigParams.xml/ EcBmBMGTCronConfigParams.xml (1 of 2)**

Parameter Name	Value Description
Logging, debug, level	Debug level for debug log
Logging, log, level	Logging level of the application log
jdbc, url	"jdbc:[] ybase:Tds:<[] ybase Database host name>:<[] ybase server port>/<DB Name>", e.g., jdbc:[] ybase:Tds:p0acg05:3005/EcDsScienceDataServer1
Jdbc, sqsurl	"jdbc:[] ybase:Tds:<SQS Database host name>:<SQS server port>/<DB Name >", e.g., jdbc:[] ybase:Tds:p0acg05:3005/EcDsScienceDataServer1
dtdLocation	<b>HTTPHost: HTTPPort</b> These are the DAAC configured Host and Port for the instance of a web server to enable BMGT generated XML to refer to the DTD's in their Document element.
Process_MISR_BROWSE	"true/false" setting it to true will enable the MISR Browse products to be processed, and not otherwise.
DaacId	3 Letter DAAC ID used as prefix to output file names indicating to ECHO the source of the output file; e.g. "PVC", "EDC", etc.

**Table 4.8.9-1. Configuration Parameters for EcBmBMGTConfigParams.xml/  
EcBmBMGTCronConfigParams.xml (2 of 2)**

Parameter Name	Value Description
nodename	PdrTargetHost Host, which picks up BMGT Data.
JAVA_HOME	Location of the jre used by EcBmBMGTStart script.
JDOM_HOME	Location of jdom classes used by EcBmBMGTStart script.
JDBC_HOME	Location for the Jconnect classes used by EcBmBMGTStart script.
IsOwsDeploymentSite	“true” if the site is enabled for OWS; “false” otherwise
OWSBaseURL	Base URL to construct WMS and WCS urls (with host and port information)
outputDirectory	Directory where output files from BMGT will be placed ; of the form /usr/ecsl/<mode>/CUSTOM/ProductOutput

**Table 4.8.9-2. Configuration Parameters for EcBmBMGTCronUserParams.xml**

Parameter Name	Value Description
previousRange, doPreviousFlag	“true” if the time period for which the BMGT reports ECS metadata to ECHO is the time period ending when the run begins, and of duration indicated by the <duration> and <count> parameters; “false” if the time period of the run is specified using the <startDate> and <endDate> parameters
previousRange, duration	“day” if the time period of the run is measured in days; “hour” if the time period of the run is measured in hours; only valid if doPreviousFlag = true.
PreviousRange, count	Integer indicating how many days or hours (depending on value of <duration> parameter) will be in the time period of the run; only valid if doPreviousFlag = true

**Table 4.8.9-3. Configuration Parameters for EcBmBMGTUserParams.xml**

Parameter Name	Value Description
insert, startDate	The start date of the time period of the run;
insert, endDate	The end date of the time period of the run;

The following are descriptions of control files:

#### **EcBmBMGTSpecialCases.xml**

This control file is used for processing ESDT’s which have a cost associated for ordering their granules. This file is used to set up the price of a particular ESDT as part of its metadata that is being exported. This file is used in conjunction with EcBmBMGTGroups.xml file. All the ESDT’s listed in the groups file while being processed will pick up their Estimated Cost (if exists) from this file. Daac operators can add/delete <case> node for each ESDT that the DAAC’s have configured a price.

```
<? xml version='1.0'?>
<specialCases>
```

```

    <case>
      <ShortName>L70RWRS</ShortName>
      <EstimatedCost>475</EstimatedCost>
    </case>
</specialCases>

```

### **EcBmBMGTSpatialEsdts.xml**

This control file is used for Spatial Processing. This file helps ESDT's to be represented as geodetic or Cartesian for ECHO ingest. This file is used in conjunction with EcBmBMGTGroups.xml file. All the ESDT's listed in the groups file while being processed will pick up their spatial representation (if exists) from this file. Daac operators can add/delete SP\_ESDT nodes for all the ESDT's that are being processed.

```

<spatialesdtControlFile>
  <spatialesdts>
    <SP_ESDT>
      <ShortName>MOD02HKM</ShortName>
      <SpatialRep>Geodetic</SpatialRep>
    </SP_ESDT>
  </spatialesdts>
</spatialesdtControlFile>

```

### **EcBmBMGTGroup.xml**

The ESDTs that are to be exported from DAAC's to ECHO are specified here. BMGT generates Collection, Granule and Browse XML files for each of the groups in this file.

```

<?xml version='1.0'?>
<groupConfigFile>
  <groupConfig>
    <group>
      <name>ASTT</name>
      <ESDT>
        <ShortName>AST_L1BT</ShortName>
        <VersionID>1</VersionID>
      </ESDT>
    </group>
    <group>
      <name>MOAA</name>
      <ESDT>
        <ShortName>MOD020BC</ShortName>
        <VersionID>1</VersionID>
      </ESDT>
      <ESDT>
        <ShortName>MOD02QKM</ShortName>
        <VersionID>1</VersionID>
      </ESDT>
    </group>
  </groupConfig>
</groupConfigFile>

```

### **EcBmBMGTControlEsdts.xml**

At this time, this control file is used for MISR Browse Processing.

This file is used in conjunction with EcBmBMGTGroups.xml file. All the MISR ESDT's listed in the groups file while being processed will export MISR Browse.

```
<?xml version='1.0'?>
<esdtControlFile>
  <esdts>
    <ESDT>
      <ShortName>MB2LME</ShortName>
      <VersionID>>null</VersionID>
      <ProcessingLevelID>1</ProcessingLevelID>
    </ESDT>
  </esdts>
</esdtControlFile>
```

### **EcBmBMGT\_OwsEsdts.xml**

This file specifies a list of ESDTs for which the collection product is to be exported regardless of whether the temporal range in EcBmBMGTUserParams.xml overlaps the collection insert times. The file has the following structure:

```
<?xml version='1.0'?>
<OwsESDTConfigFile>

  <!-- For the ESDTs mentioned below, complete collection metadata
  will be exported to ECHO independent of whether they are
  updated in SDSRV. This config file will trigger updates ONLY
  on the day mentioned below and 24 hours later, i.e. if
  this day is 01/12/2005, then whenever BMGT is run between
  01/12/2005 12:00 AM to 01/13/2005 11:59:59 PM (a span of 48
hours),
  the specified ESDTs will be exported to ECHO with the specified
  Additional Attributes.
  This date is in the format MM/dd/yyyy
-->
<LastUpdate>05/25/2005</LastUpdate>

<!-- Specify any number of ESDTs to export OWS attributes to ECHO
IF the collection is updated in SDSRV and this
triggers export to ECHO, then the ESDTs specified below will
be processed. For this reason, once an ESDT is enabled for
WCS/WMS/Both, it should not be removed from this file unless it
has been disabled for OWS and this disabling has been exported
successfully to ECHO via BMGT.
Otherwise, OWS will have operational problems
The tags used are described below:
  ShortName: ESDT ShortName
  VersionID: ESDT VersionID
  Three digit number or less
```

list)  
ThemeName: The name of the theme in the DPL Database  
Fields: HDF Fields for Coverage URL (comma separated

ServiceType: WCS,WMS,Both or None.  
This is not case sensitive  
WCS: Export WCS enabling  
WMS: Export WMS enabling  
Both: Export WCS & WMS enabling  
None: Export OWS disabling -->

<OwsESDTs>

```
<OwsESDT>
  <ShortName>MOD11A1</ShortName>
  <VersionID>4</VersionID>
  <ThemeName>MOD11A1.004</ThemeName>
  <Fields>None</Fields>
  <ServiceType>WMS</ServiceType>
</OwsESDT>
<OwsESDT>
  <ShortName>MOD13A2</ShortName>
  <VersionID>4</VersionID>
  <ThemeName>MOD13A2.004</ThemeName>
  <Fields></Fields>
  <ServiceType>WCS</ServiceType>
</OwsESDT>
<OwsESDT>
  <ShortName>MYD11A1</ShortName>
  <VersionID>4</VersionID>
  <ThemeName>WMSDatasetTheme8</ThemeName>
  <Fields>fields3, field 4</Fields>
  <ServiceType>Both</ServiceType>
</OwsESDT>
<OwsESDT>
  <ShortName>MYD13A2</ShortName>
  <VersionID>4</VersionID>
  <ThemeName>MYD13A2.004</ThemeName>
  <Fields>None</Fields>
  <ServiceType>None</ServiceType>
</OwsESDT>
```

</OwsESDTs>

</OwsESDTConfigFile>

### 4.8.9.3 Required Operating Environment

The Bulk Metadata Generation Tool runs on a Linux 2.x platform.

### 4.8.9.4 Interfaces and Data Types

Table 4.8.9-4 lists the supporting products that this tool depends upon in order to function properly.

**Table 4.8.9-4. Interface Protocols**

Product Dependency	Protocols Used	Comments
Science Data Server database	SQL	Via SQL server machines

**4.8.9.5 Special Constraints**

BMGT runs only if the Science Data Server database server is running and if the Science Data Server database is available. It also assumes the stored procedures are present.

**4.8.9.6 Outputs**

The ECSMETC, ECSMETG, ECSBBR and ECSMETV products consist of XML files. The XML is generated conforming to the DTDs for each product.

The file name for the ECSMETC, ECSMETG, and ECSMETV products consist of 30 characters including the file extension. It has the following form:

ssstggggaaaabbbccccdddnmm.XML

The components of the file name for the ECSMETC, ECSMETG, and ECSMETV products are specified in Table 4.8.9-5.

**Table 4.8.9-5. ECSMET File Name Components**

Component	Description
sss	Three character site identifier. For ECS sites, the identifiers are EDC, GFC, LRC, and NDC.
t	File type indicator. Valid values are "C" if this file stores collection-level metadata, "G" if this file stores granule-level metadata, and "V" if this file stores valids metadata.
gggg	For ECSMETC and ECSMETG products, this is a four character GroupId (see Table 2-1). For ECSMETV products, this value is set to "VALD".
aaaa	Four-digit year of the beginning range of the data in the product. Valid values are 1999 to 9999.
bbb	Three-digit day of year of the beginning range of the data in the product. Valid values are 001 to 366.
cccc	Four-digit year of the ending range of the data in the product. Valid values are 1999 to 9999.
ddd	Three-digit day of year of the beginning range of the data in the product. Valid values are 001 to 366.
nn	Two-digit segment number. Valid values are 01 to 99. If the size of an individual product is larger than the maximum file size (2 GB), the BGMT will break the file into segments. The segment number is incremented by one for each additional file segment.
mm	Two-digit maximum segment number. Valid values are 01 to 99. If the size of an individual product is larger than the maximum file size (2 GB), the BGMT will break the file into segments. The maximum segment number indicates the last segment for this product.

For example, EDCGMOLT200009920000990101.XML would be the file name for the granule-level metadata related to MODIS Land products stored at the EDC DAAC. The metadata

contained in the file was inserted, updated, and/or deleted on the 99th day of the year 2000. This is file segment one of one.

For example, EDCCMOLT200009920000990101.XML would be the file name for the Collection-level metadata related to MODIS Land products stored at the EDC DAAC. The metadata contained in the file was inserted, updated, and/or deleted on the 99th day of the year 2000. This is file segment one of one.

Each ECSBBR product consists of XML files, called Browse Reference Files (BRF). The XML files contain a set of browse granule pointers, file name pairs that map a given browse granule pointer to the name of the file containing the corresponding browse product.

The file name of each BRF is 30 characters including the file extension. It has the following form:

ssstggggaaaabbbccccdddnmm.XML

The components of the file name are specified in Table 4.8.9-6.

**Table 4.8.9-6. BRF File Name Components**

Component	Description
sss	Three character site identifier. For ECS sites, the identifiers are EDC, GFC, LRC, and NDC.
t	File type indicator. Valid value is "B" for browse.
gggg	This is a four character GroupId(see Table 2-1).
aaaa	Four digit year of the beginning range of the data in the product. Valid values are 1999 to 9999.
bbb	Three digit day of year of the beginning range of the data in the product. Valid values are 001 to 366.
cccc	Four digit year of the ending range of the data in the product. Valid values are 1999 to 9999.
ddd	Three digit day of year of the beginning range of the data in the product. Valid values are 001 to 366.
nn	Two digit segment number. Valid values are 01 to 99. If the number of image referred by a browse product is larger than the maximum browse number (200), the BGMT will break the file into segments. The segment number is incremented by one for each additional file segment.
mm	Two digit maximum segment number. Valid values are 01 to 99. If the number of image referred by a browse product is larger than the maximum browse number, the BGMT will break the file into segments. The maximum segment number indicates the last segment for this product.

For example, EDCBMOLT200009920000990101.XML would be the file name for the bulk browse products related to MODIS Land products stored at the EDC DAAC. The metadata contained in the file was inserted, updated, and/or deleted on the 99<sup>th</sup> day of the year 2000.

#### **4.8.9.7 Event and Error Messages**

Usage errors will be displayed to the screen. Processing error messages are written to the log files.

#### **4.8.9.8 Reports**

None

#### **4.8.9.9 Logs**

The utility produces two log files in the /usr/ecs/<mode>/CUSTOM/logs directory:

- 1) An application log file called EcBmBMGT.ALOG.
- 2) A debug log called EcBmBMGTDebug.log.

If these log files already exist, the files are time stamped and saved in the logs directory, and new logs are created. If there is no existing logs files by these names, new log files with these names will automatically be created when the BMGT is invoked.

Debug level for ALOG is set to level 7, and for the Debug log its set to 4 in the EcBmBMGTConfigParams.xml file for information level. Debug log can be set to level 7 for a detailed log file.

#### **4.8.9.10 Recovery**

Occasionally, the cron job that automatically executes the BGMT will fail to operate on a daily basis. This may happen due to a variety of reasons including software failure, hardware failure, or changes in DAAC operational priorities. When this happens, it is necessary for DAAC operations to manually invoke the tool to generate ECSMET products for all days that were missed. This is accomplished by following the steps specified in Section 4.8.9.1 under *Normal Operation of the Bulk Metadata Generator Tool*.

#### **4.8.9.11 Sybase Error Handling**

If a Sybase error occurs, the actual Sybase error/exception will be logged in the EcBmBMGT.ALOG file. Possible Sybase errors are that the database server is unavailable, that the connection to the database was dropped, or that there was an error executing the stored procedure. In the event of a Sybase-sourced error, the utility will immediately stop running.