

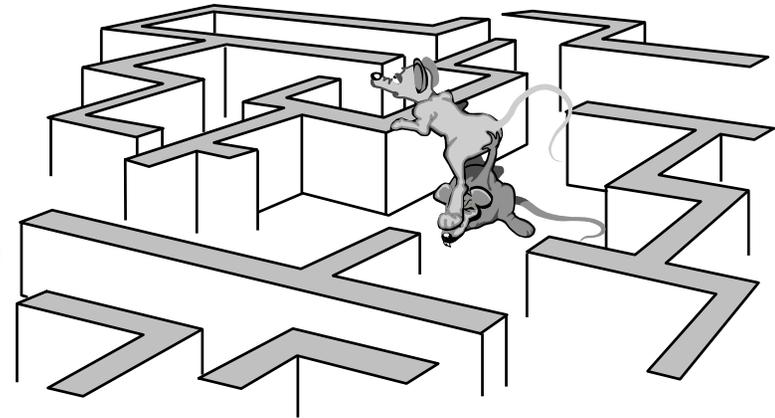
ARCHIVE PROCESSING

ECS Training

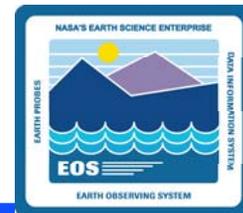
Overview of Lesson



- **Introduction**
- **Archive Processing Topics**
 - **Archive Hardware and Software**
 - **Start and Shut Down AMASS**
 - **Archive Resources and Management**
 - **Insert and Retrieve Data**
 - **Delete Granules**
 - **Load Archive Media**
 - **Backup and Restore Archive Data**
 - **AMASS Graphical User Interface**
 - **Monitor and Troubleshoot Archive**
 - **Data Pool Management and Maintenance**
- **Practical Exercise**

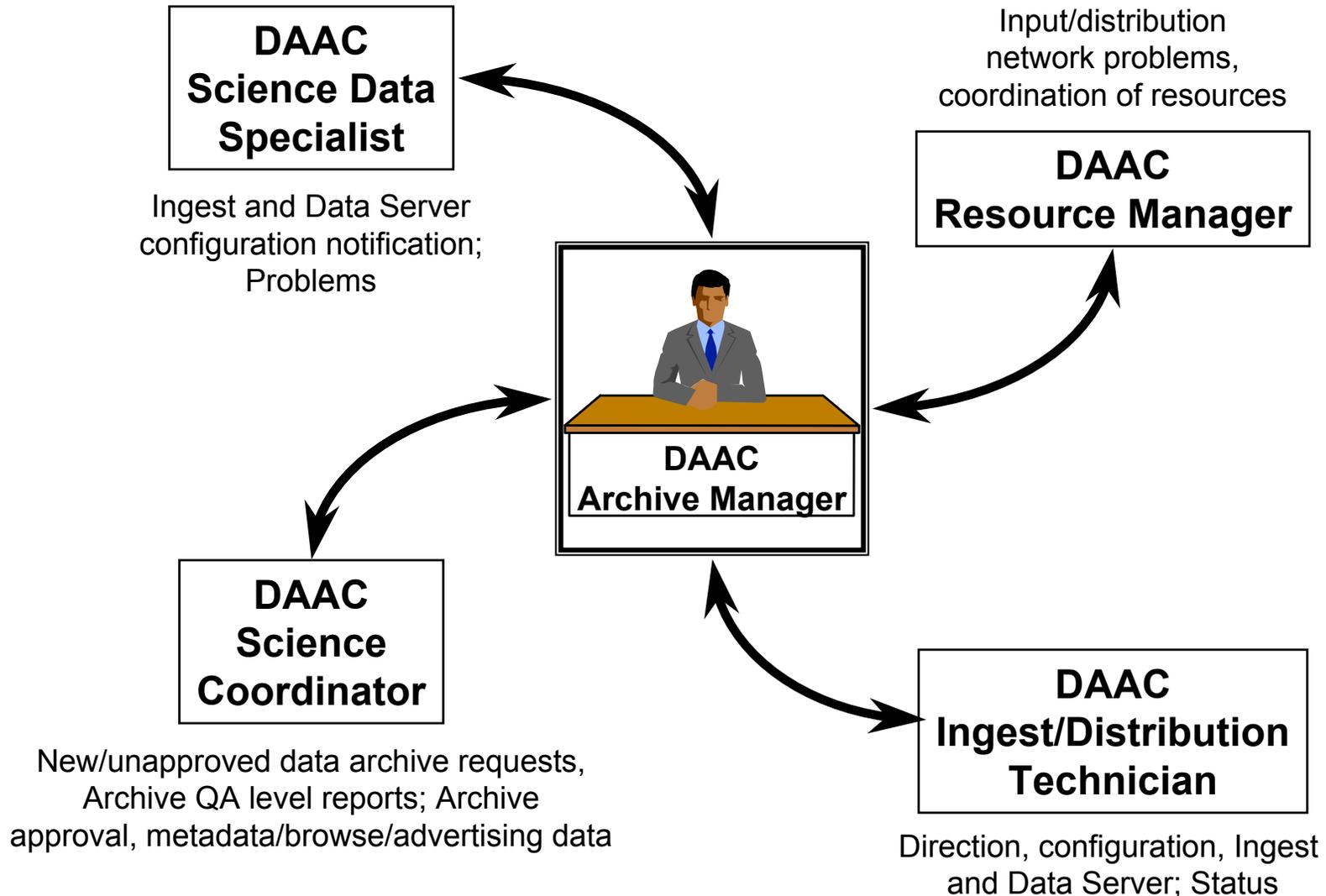


Objectives

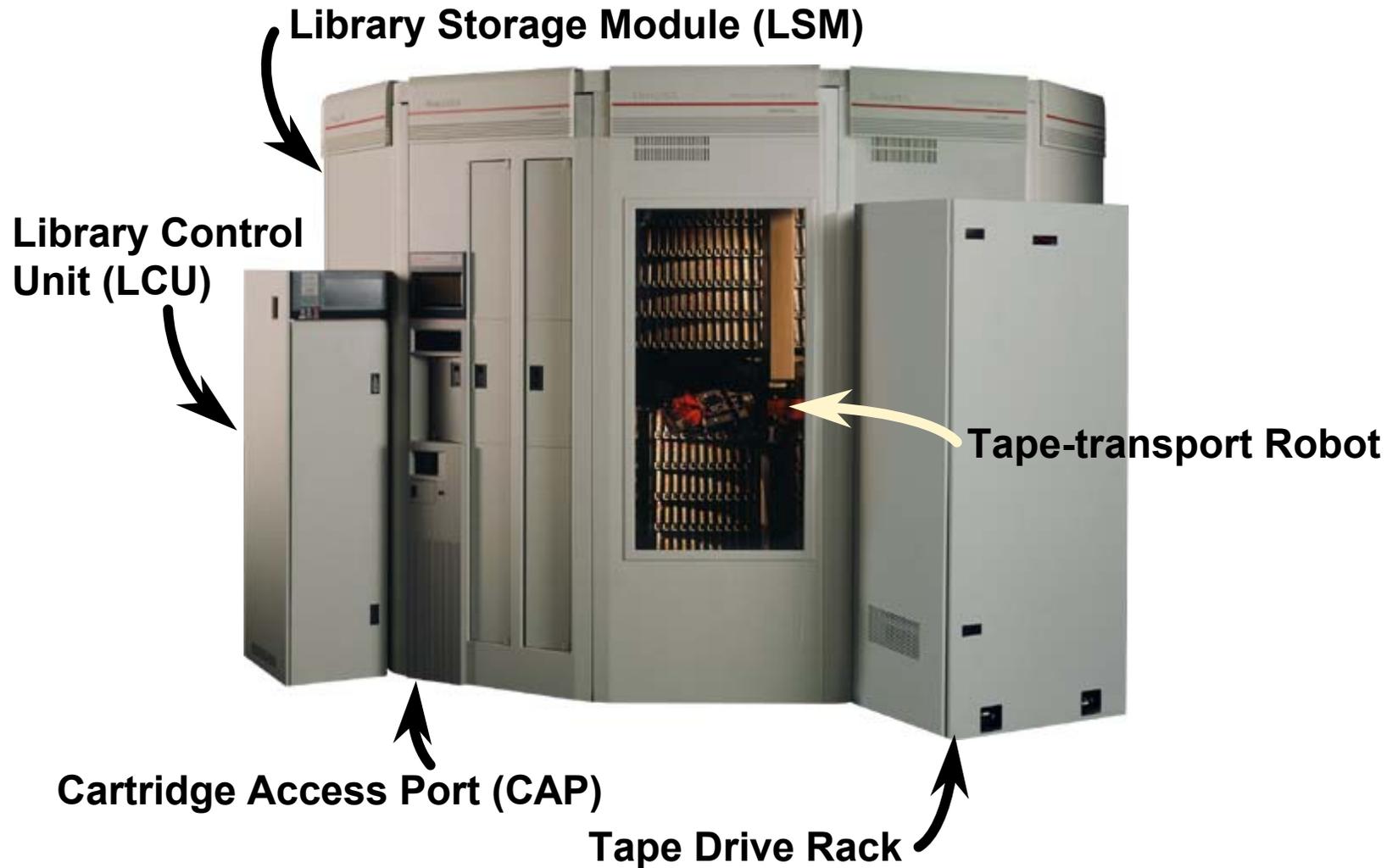
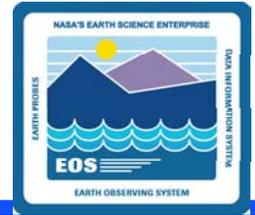


- **Overall: Proficiency in Archive Processing**
 - Describe Archive Manager roles and responsibilities
 - Identify and describe Archive storage resources
 - Start and shut down AMASS
 - Describe archive storage element relationships and archive resource management
 - Use Granule Deletion tool to delete granules
 - Load and unload cartridges
 - Insert/retrieve data
 - Delete files from the archive
 - Backup archive data
 - Restore archive data
 - Use the AMASS Graphical User Interface
 - Monitor archive system and perform troubleshooting
 - Use GUIs, utilities, and scripts for Data Pool maintenance

DAAC Archive Manager Interfaces



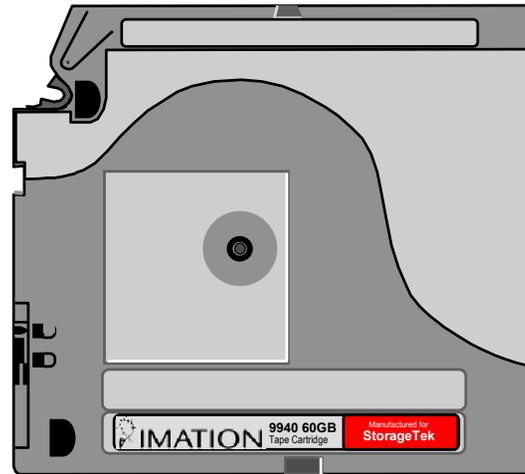
STK Powderhorn Data Storage



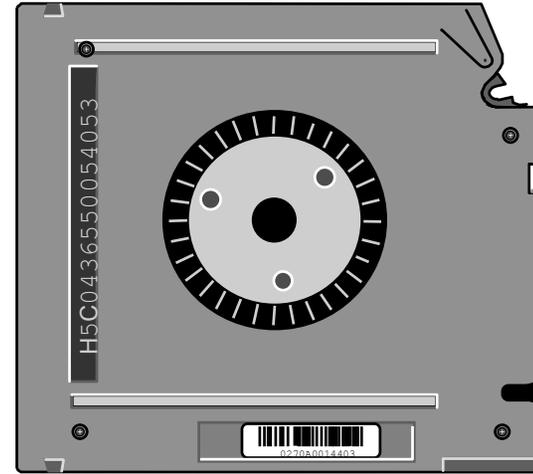
STK 9940 Tape System



9940 Tape Drives



Front



Back

- 10 MB/sec uncompressed sustained data transfer rate
- 60 GB capacity per cartridge (uncompressed)
- 10-sec load time
- 50-sec search/access

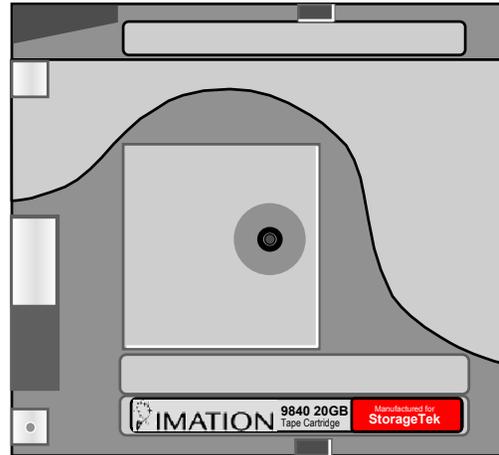


End View with Barcode

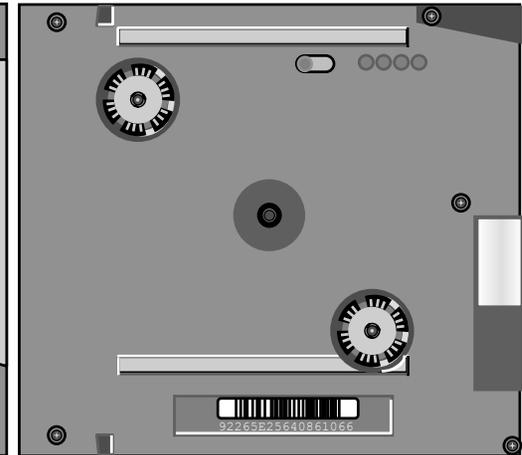
9840 Tape System for Browse Data



9840 Tape Drives



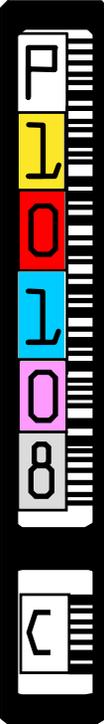
Front



Back

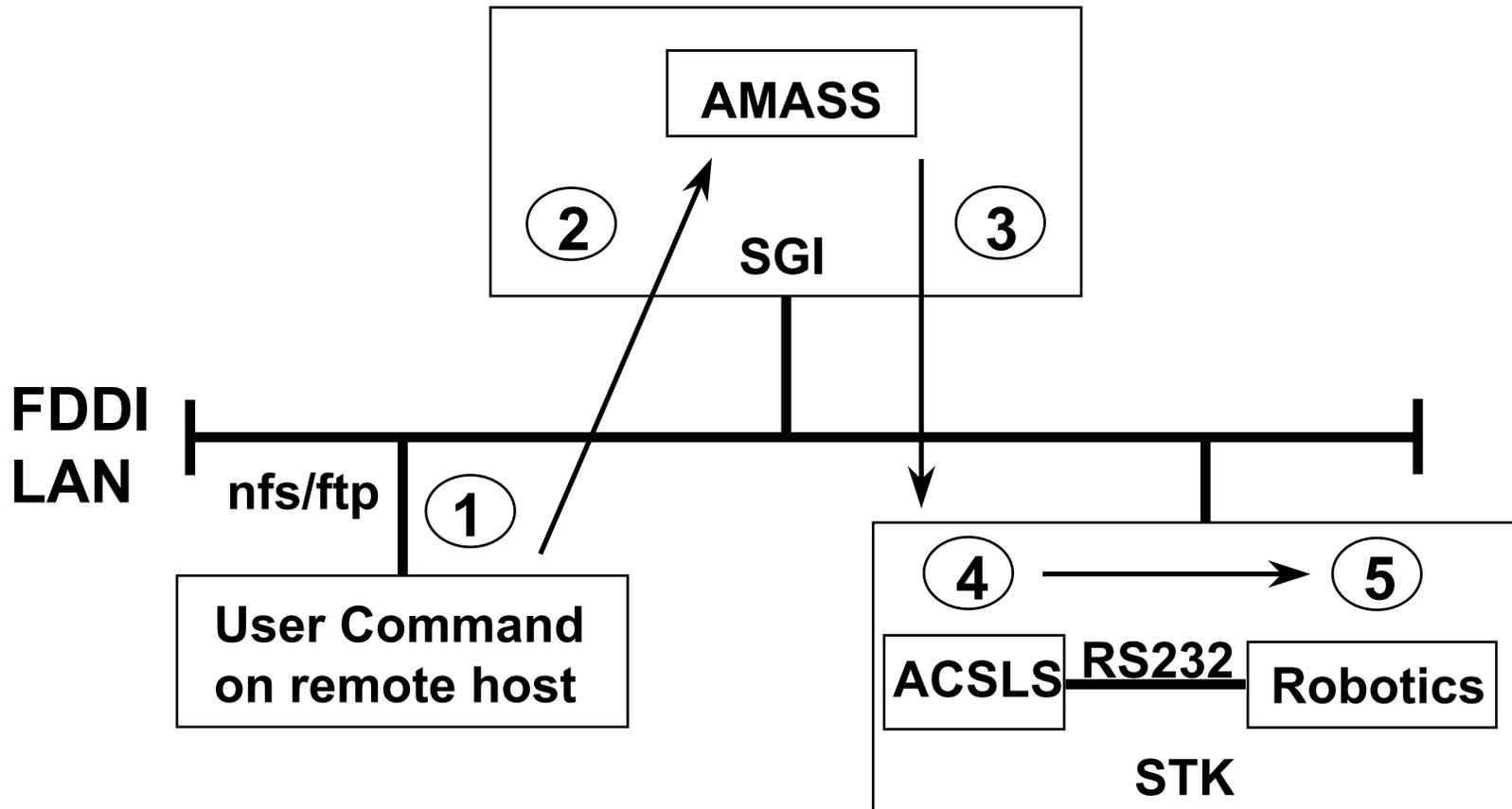
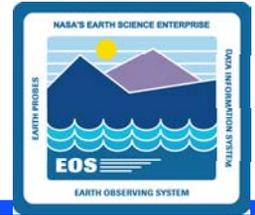
9840 Tape Cartridge

- 10 MB/sec uncompressed sustained data transfer rate
- 20 MB/sec compressed sustained data transfer rate
- 80 GB capacity per cartridge (compressed)
- Mid-point load for rapid search/access



End View with Barcode

AMASS Control Path



Automated Cartridge System Library Software (ACSL)



Table 1. ACSLS Command Reference

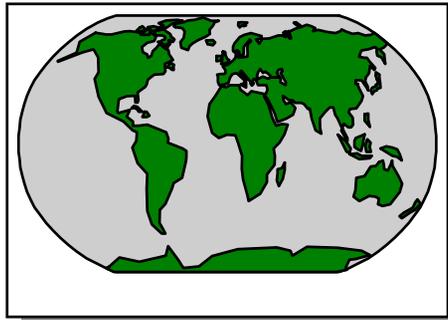
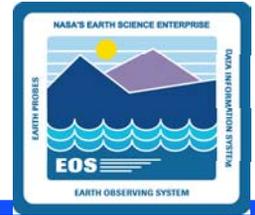
Command	Function
audit	Creates or updates the database inventory of the volumes in a library component.
cancel	Cancels a current or pending request.
clear lock	Removes all active and pending locks on transports or volumes
define pool	Creates or modifies scratch pools.
delete pool	Deletes empty scratch pools.
dismount	Dismounts a volume.
eject	Ejects one or more volumes from the Automated Cartridge System (ACS).
enter	Sets a Cartridge Access Port (CAP) to enter mode.
idle	Stops ACSLS from processing new requests.
lock	Locks (dedicates) a volume or transport to a user.
logoff	Exits the command processor.
mount	Mounts a data or scratch volume.
query	Displays the status of a library component.
set	Sets various attributes of different library components.
show	Displays your lock ID or user ID.
start	Starts ACSLS request processing.
unlock	Removes active locks on volumes or transports.
vary	Changes the state of an ACS, LSM, CAP, transport, or port.
venter	Enters one or more volumes with missing or unreadable labels into the ACS.

Automated Cartridge System Library Software (ACSL) (Cont.)

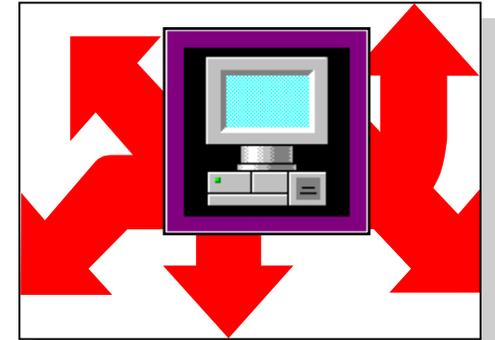
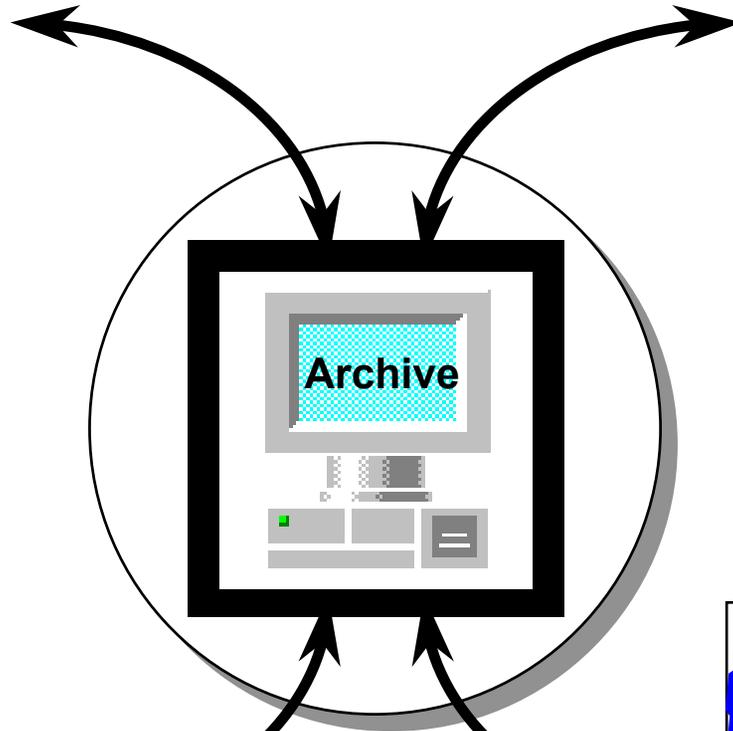


- **General Command Syntax:**
 - `command type_identifier state [options]`
- **Frequently used commands:**
 - `query`, `vary`, `enter`, `eject`
- **Utilities:**
 - `bdb.acsss` -- back up the ACSLS database
 - `kill.acsss` -- terminate ACSLS
 - `rc.acsss` -- start and recover ACSLS
 - `rdb.acsss` -- restore the ACSLS database
 - `volrpt` -- create a volume report
 - `db_command` -- start/stop Oracle database
- **User Ids:**
 - `acssa` -- enter commands
 - `acsss` -- run utilities from UNIX

Sources and Uses of Archive Data

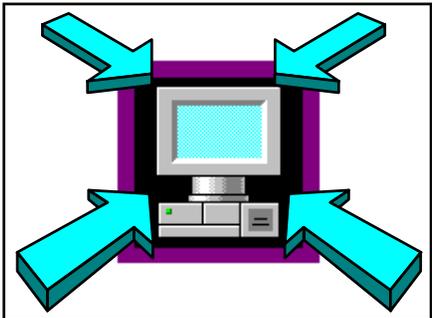


Other DAACs



Processing Subsystem

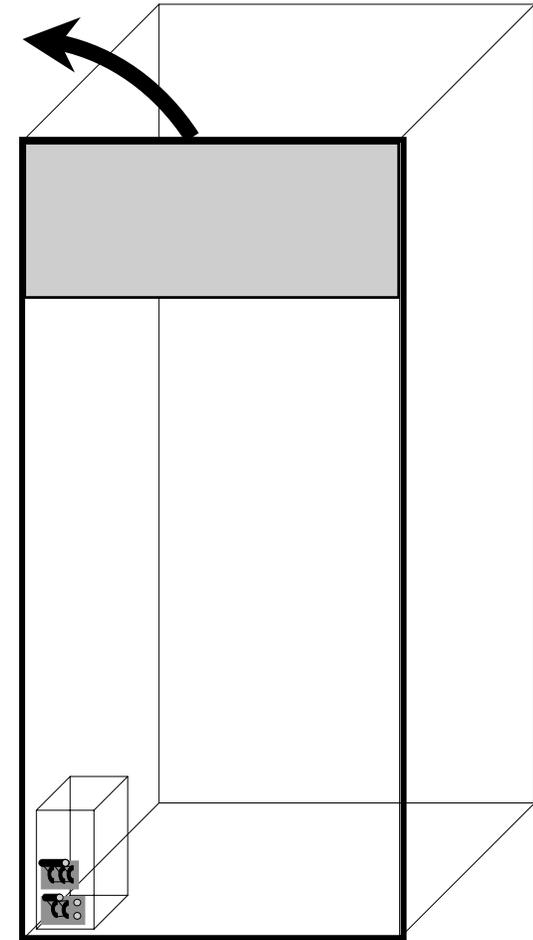
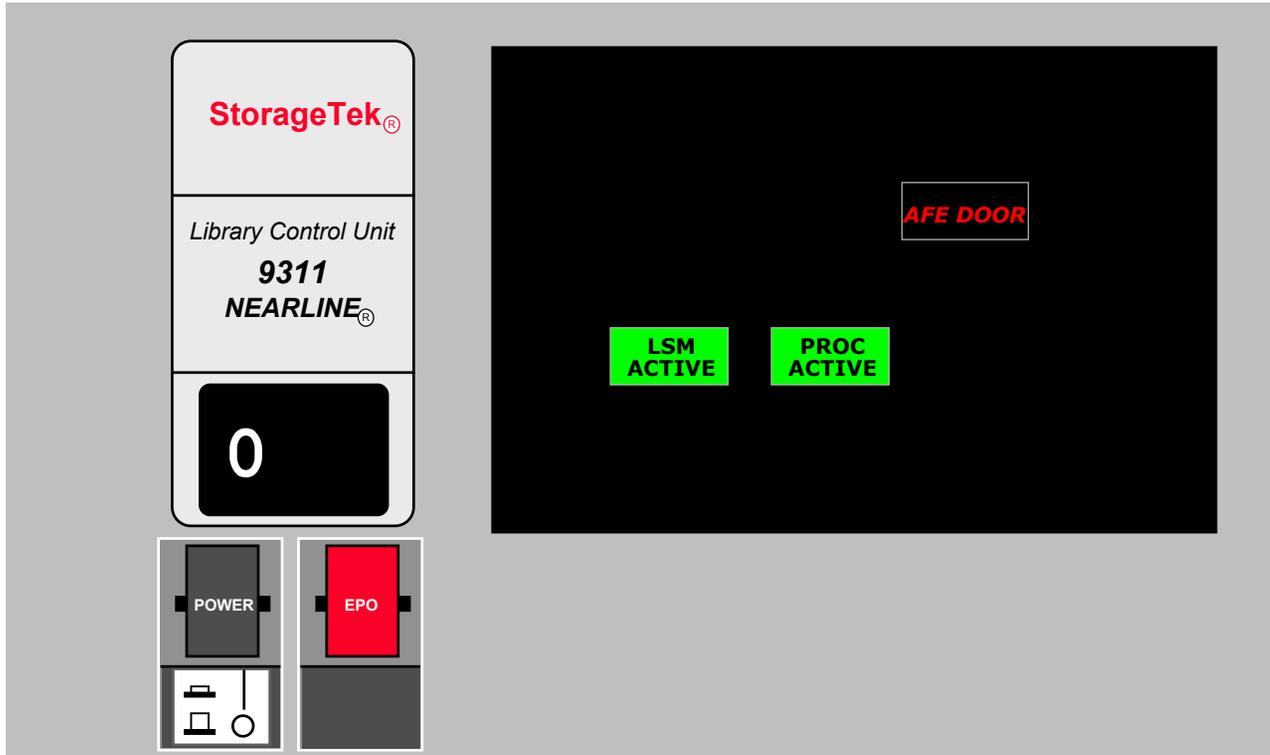
Ingest Subsystem



Authorized Users



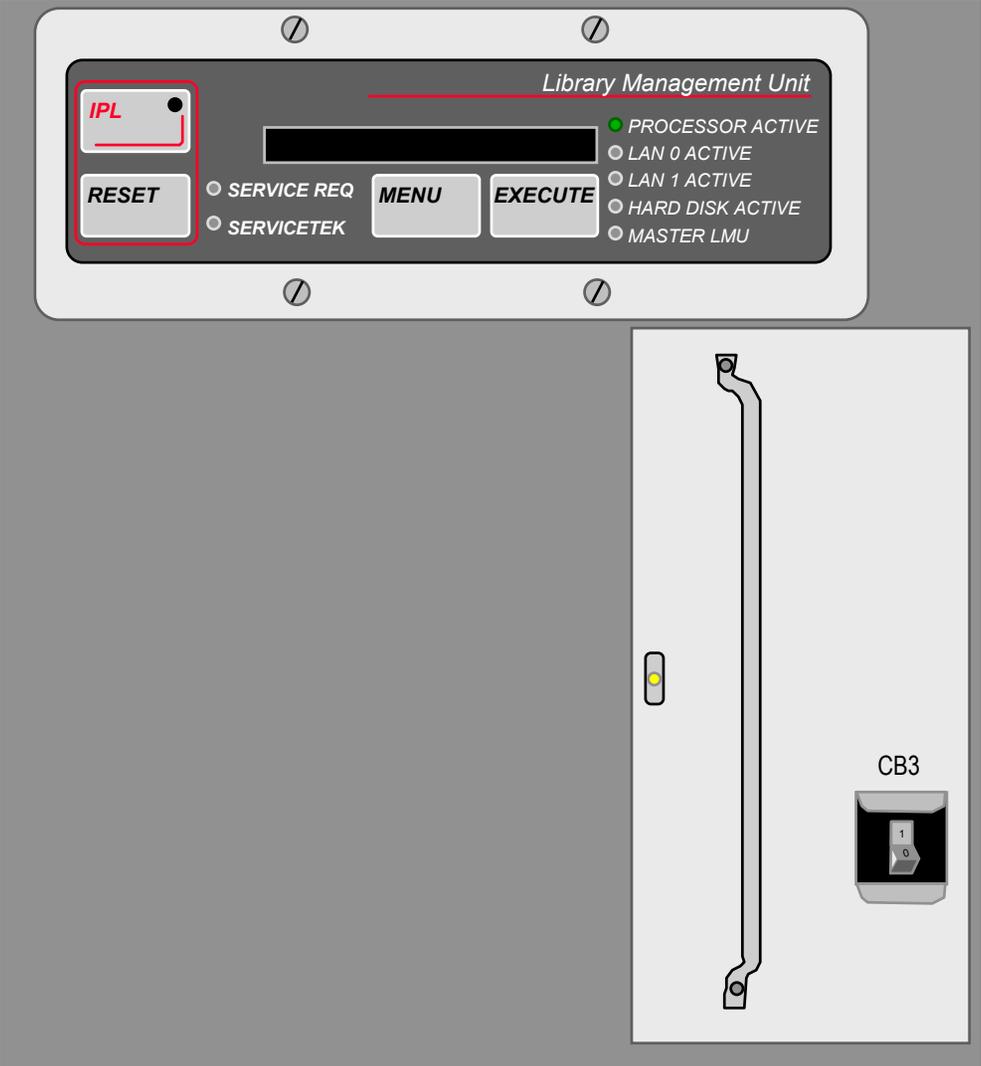
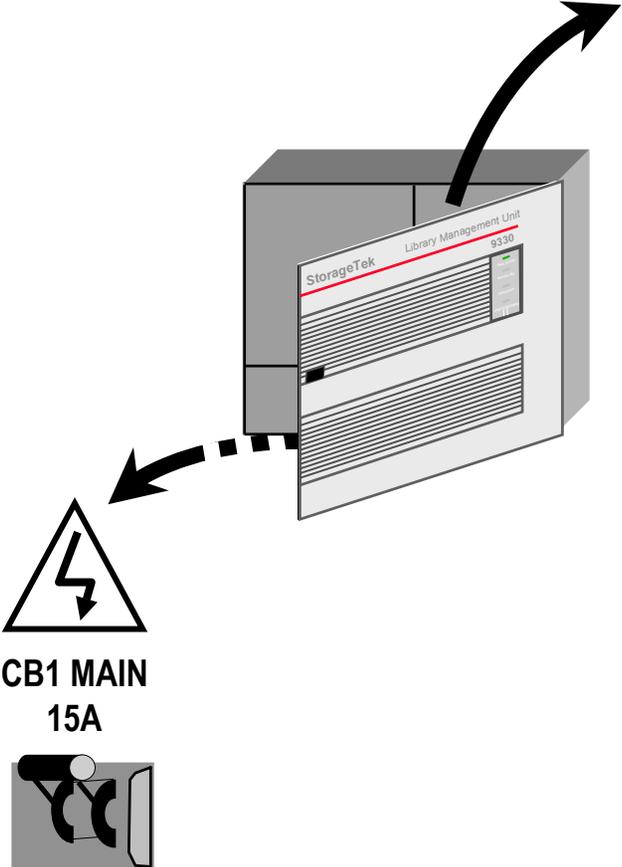
STK Controls/Displays: LCU



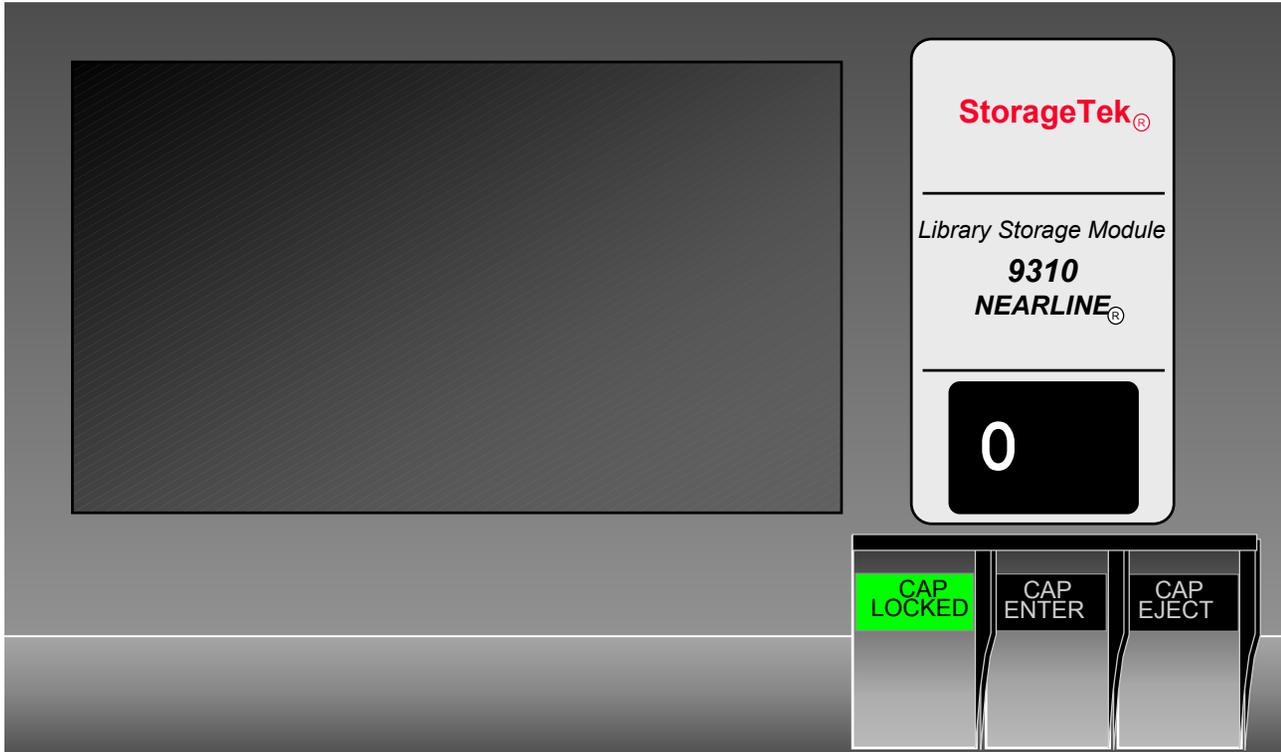
**LCU:
Circuit Breakers
Inside Cabinet**



STK Controls/Displays: LMU



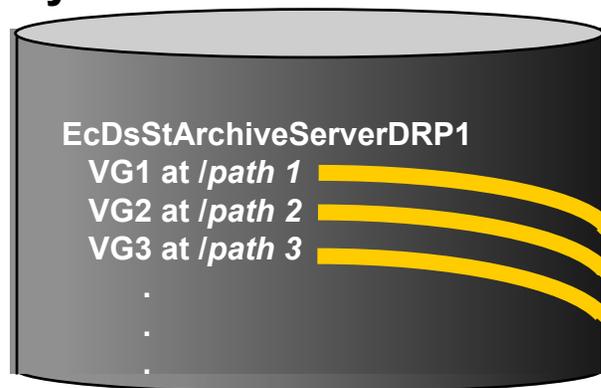
STK Controls/Displays: LSM



Storage Element Relationships

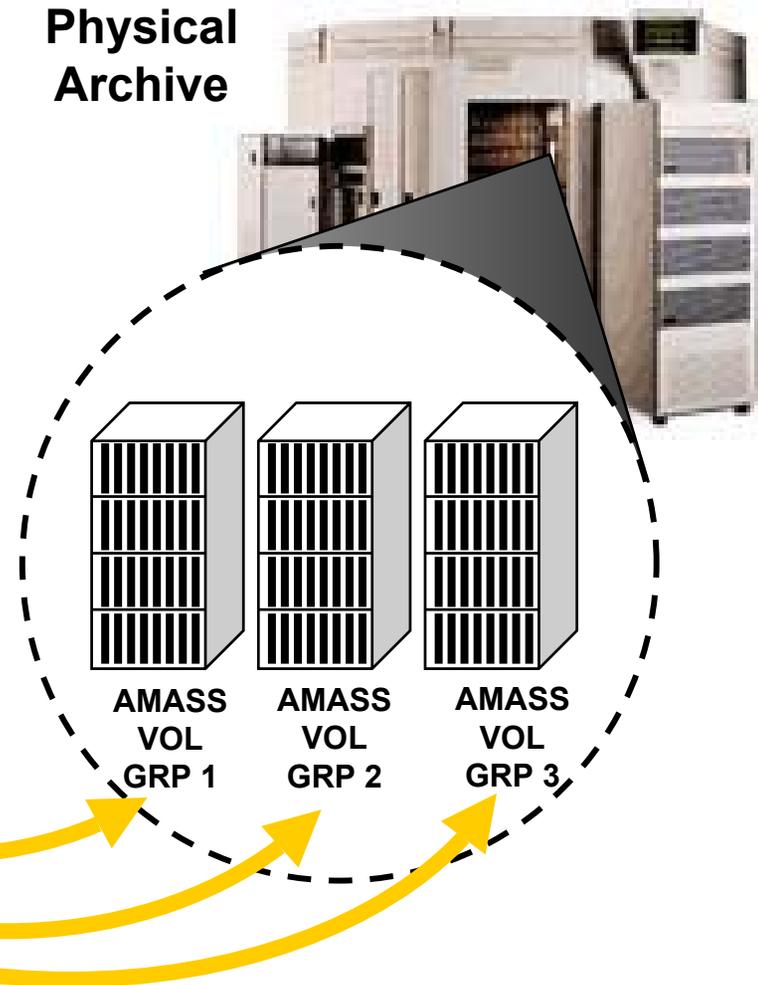


- Each physical archive (Library Storage Module) is mapped to an Archive Server application (e.g., DRP1 is served by the application EcDsStArchiveServerDRP1)
- Library may include multiple Logical Volume Groups (LVGs), each with a specified path, mapped to a volume group in the physical archive

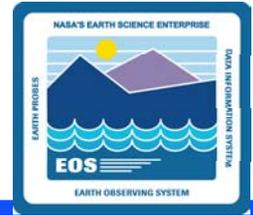


Storage Management Database

Physical Archive



Storage Management: Storage Config. Tab



Storage Management Control

File Options Backup Delete Help

Thursday January 11, 2001 10:57:31 AM Mode: TS3

Storage Config. Vol Grp Config. Resource Mngmt. Cache Stats. Storage Events Request Status

Configuration Parameter Reporting

Server Type	# of Servers	Description	# of Re-routes
SMM	0	SMM Stacker Server	1
ARCHIVE	3	Archive Server	
CACHE MANAGER	4	Cache Management Server	
CDROM	0	CDROM Device Server	1
D3	0	D3 Device Server	1
DLT	0	DLT Stacker Server	1
FTP	4	FTP Server	
REQUEST MANAGER	1	Request Manager Server	

Times to Re-route: Apply to Server Type

Server Name	Status
EcDsStArchiveServerACM4	Up
EcDsStArchiveServerDRP3	Up
EcDsStArchiveServerWKS1	Up

Add Server Modify Server Delete Server

Operator Messages

01/11/01 10:56:58 Error purging old database entries.

Storage Management: Vol. Grp. Config. Tab



Storage Management Control

File Options Backup Delete Help

Thursday January 11, 2001 11:26:21 AM Mode: TS3

Storage Config. Vol Grp Config. Resource Mngmt. Cache Stats. Storage Events Request Status

Volume Group Information

Data Type Name	Current Hardware CI	Current Volume Group Path	UNIX Compression Factor	GZIP Compression Factor
MISLOBF.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLOCA.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLOCAL.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLOCF.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLODA.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLODF.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLODFX.001	DRP3	/dss_stk3/TS3/exp	0	0
MISLOS1X.001	DRP3	/dss_stk3/TS3/exp	0	0
MISLOS2X.001	DRP3	/dss_stk3/TS3/exp	0	0
MISLOS3X.001	DRP3	/dss_stk3/TS3/exp	0	0
MISLOS1Y.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLOS2Y.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLOS3Y.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLOTST.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISQA.001	DRP3	/dss_stk3/TS3/ancb	0	0
MOD000.001	DRP3	/dss_stk3/TS3/mod10	0	0
MOD000X.001	DRP3	/dss_stk3/TS3/exp	0	0
MOD001.001	DRP3	/dss_stk3/TS3/mod10	0	0
MOD002.001	DRP3	/dss_stk3/TS3/mod10	0	0
MOD003.001	DRP3	/dss_stk3/TS3/mod10	0	0
MOD01.001	DRP3	/dss_stk3/TS3/mod10	0	0
MOD02.001	DRP3	/dss_stk3/TS3/mod10	0	0
MOD021KM.001	DRP3	/dss_stk3/TS3/modhi/	0	0
MOD022.001	DRP3	/dss_stk3/TS3/mod10	0	0
MOD02HKM.001	DRP3	/dss_stk3/TS3/modhi	0	0
MOD02LUT.001	DRP3	/dss_stk3/TS3/modhi	0	0
MOD02QKM.001	DRP3	/dss_stk3/TS3/modhi	0	0
MOD03.001	DRP3	/dss_stk3/TS3/modhi	0	0

Find Next

Add... Modify **Display History** Display Statistics Reset

Operator Messages

01/11/01 11:21:20 Error purging old database entries.

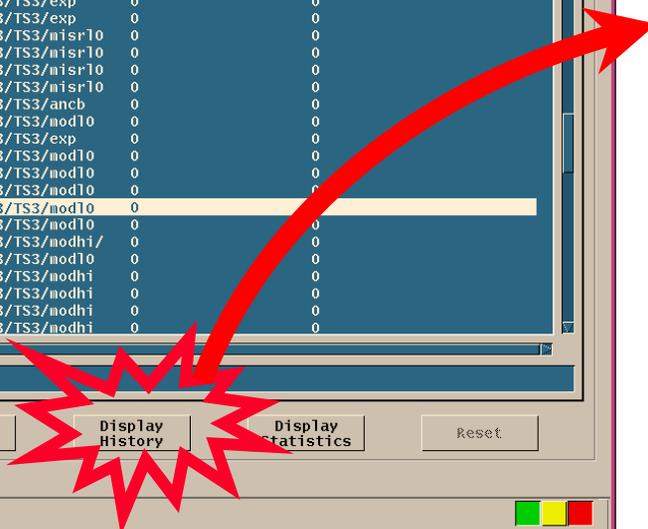
Volume Group History

Volume Group: (ESDT Data Type.Version) MOD01.001

Volume Group History

Hardware CI History	Path History	Start Date	End Date
DRP3	/dss_stk3/TS3/mod10	11/21/00	

Close

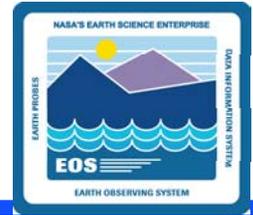


Archive-Related Applications



- **Servers (must be running)**
 - **Science Data Server (SDSRV)**
 - **Storage Management (STMGT) Servers**
 - Request Manager Server
 - Staging Disk Server
 - Cache Manager Server
 - Archive Server
 - FTP Server
 - 9940 Tape Server
 - 8mm Tape Stacker Server
 - **Data Distribution (DDIST) Server**
- **DSS Graphical User Interfaces (GUIs)**
 - **DDIST, STMGT, SDSRV**

DSS Science Data Server GUI: Data Types Tab, with Add/Update Dialogs



The screenshot displays the 'Science Dataserver Operator GUI - [TS1]' window. The main area is titled 'Science Data Server - Data Types' and contains a table of data type information. Below the table are buttons for 'View', 'Add...', 'Update...', and 'Refresh/Reconnect'. Two dialog boxes are overlaid on the main window: 'Add Data Type' and 'Update ESDT'. Both dialogs have a 'Descriptor Filename:' field and a 'File...' button. A red starburst graphic highlights the 'Add...' and 'Update...' buttons, with red arrows pointing from them to the respective dialog boxes.

ID	Name	Version	Description
:CL.000	CL	0	
ACM1_TS1:Browse.001	Browse	1	
DRP1_TS1:ACR3L2OM.001	ACR3L2OM	1	
DRP1_TS1:AIRI2REN.001	AIRI2REN	1	
DRP1_TS1:AIRX2RET.001	AIRX2RET	1	
DRP1_TS1:AIRX2SRD.001	AIRX2SRD	1	
DRP1_TS1:AIRX2SUP.001	AIRX2SUP	1	
DRP1_TS1:AIRX2TOP.001	AIRX2TOP	1	
DRP1_TS1:AIRXADCM.001	AIRXADCM	1	
DRP1_TS1:AIRXARYL.001	AIRXARYL	1	
DRP1_TS1:AIRXATCM.001	AIRXATCM	1	
DRP1_TS1:AIRXATCS.001	AIRXATCS	1	
DRP1_TS1:AIRXATLP.001	AIRXATLP	1	
DRP1_TS1:AIRXBPAP.001	AIRXBPAP	1	

Archive Resource Management



- **For Science Software Integration and Test (SSI&T)**
 - **At the time an Earth Science Data Type (ESDT) is loaded, its characteristics are specified in Science Data Server (SDSRV) through a descriptor file identified on the SDSRV Graphical User Interface**
 - **ESDTs may be uniquely assigned to logical volume groups**
 - **Adherence to convention facilitates support of local archives by centralized resources**
 - **Cooperation through Operations Working Groups can facilitate consistency**
 - ***Note:* The logical volume group is specified as the ESDT short name with the version ID as an extension (e.g., MOD01.001)**

Storage Management: Resource Mngmnt. Tab



Storage Management Control

File Options Backup Delete Help

Thursday January 11, 2001 11:23:32 AM Mode: TS3

Storage Config. Vol Grp Config. Resource Mngmnt. Cache Stats. Storage Events Request Status

Storage Management - Resource and Drive Management

Media Type

Manage Hardware Manage Media Sets

Request ID	Media ID	Location	State
------------	----------	----------	-------

Find Media:

Operator Messages

01/11/01 11:21:20 Error purging old database entries.

Storage Management: Cache Stats. Tab



Storage Management Control

File Options Backup Delete Help

Friday February 09, 2001 08:56:08 AM Mode: TS2

Storage Config. Vol Grp Config. Resource Mngmt. Cache Stats. Storage Events Request Status

Cache: PULL RO Cache Manager-4.000000 Text

Cache Statistics

Current Utilization:	0.000482	Number of Resident Files:	126
Used Space (Blocks):	964242	Maximum File Size (Blocks):	244046
Free Space (Blocks):	1999035758	Minimum File Size (Blocks):	1
Total Space (Blocks):	2000000000	Average File Size (Blocks):	7857

Cache Information

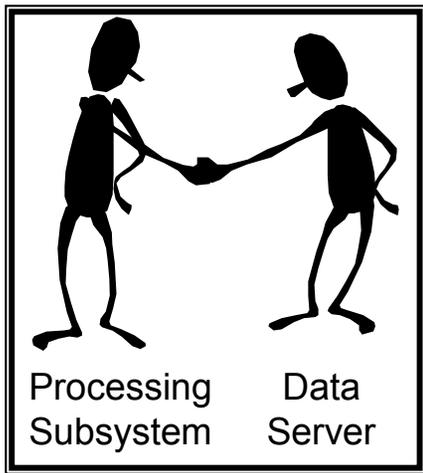
Filename	File Size	Last Accessed	Delete Flag	State
:BR:Browse.001:13800:1.BINARY	18	01/25/01	N	Expired
:LM:PGEEEX.001:1620:1.BINARY	913	02/05/01	N	
:SC:ACR3L2OM.001:13584:1.HDF	1	01/29/01	N	
:SC:ACR3L2OM.001:14170:1.HDF	1	01/26/01	N	
:SC:AM1ATTF.001:17013:1.CCSDS	15	01/29/01	N	
:SC:AMSR_L1A.001:17076:1.HDF	426	01/30/01	N	
:SC:AMSR_L1A.001:17077:1.HDF	426	01/30/01	N	
:SC:AMSR_L1A.001:17104:1.HDF	426	01/30/01	N	
:SC:AST_09T.001:9546:1.HDF-EOS	20	01/25/01	N	
:SC:DFLAXCLD.001:16980:1.HDF-EOS	14413	01/26/01	N	
:SC:L7CPF.002:13835:1.ASCII	76	01/25/01	N	
:SC:L7CPF.002:16769:1.ASCII	76	01/31/01	N	
:SC:MISCALBA.001:17015:1.CCSDS	46158	01/29/01	N	
:SC:MISCALBA.001:17015:2.CCSDS	1	01/29/01	N	

Mark Delete Unmark Delete

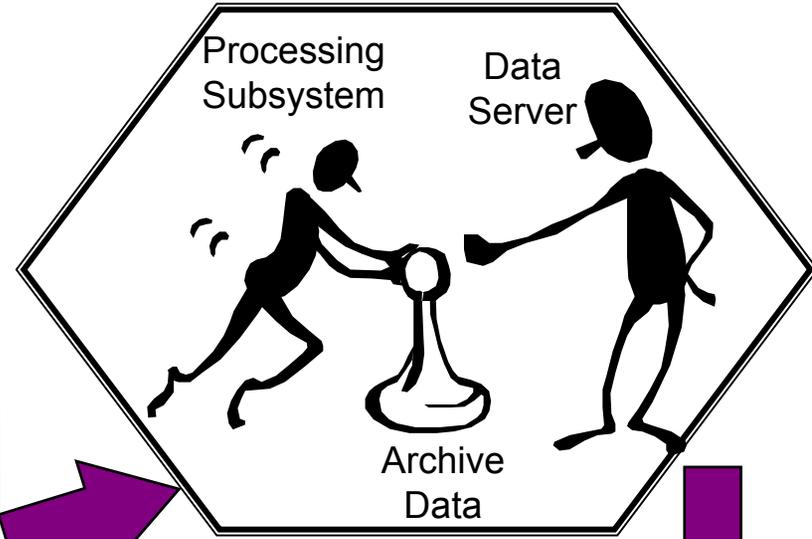
Operator Messages

02/09/01 08:55:41 Error purging old database entries.

Insert Data Into the Archive

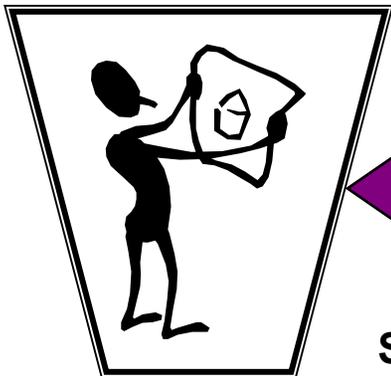


Initiate the session.

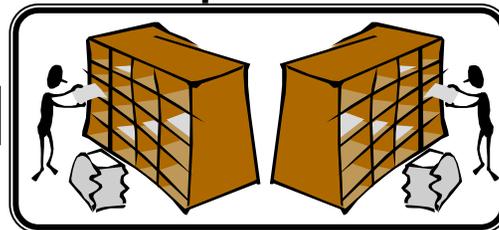


Data are Transferred

Advertise the new data!

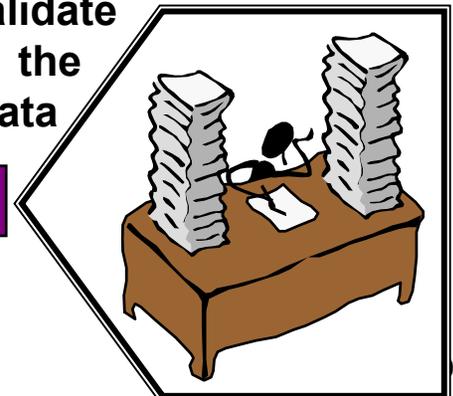


Store data in permanent archive.

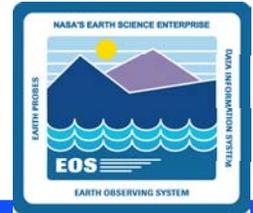


Store metadata in Science Data Server.

Validate the Metadata



Storage Management: Request Status



Storage Management Control

File Options Backup Delete Help

Thursday January 11, 2001 11:03:08 AM Mode: TS3

Storage Config. Vol Grp Config. Resource Mngmt. Cache Stats. Storage Events Request Status

Filtering

Request Status Information

Operation	Request ID	Progress	Status	Priority	When Submitted	Last Update
ArRetrieveFile		RetrieveFailed	DsEstARPathSearchExhausted	NORMAL	11/30/00	11/30/00
CMRemoveLink		Checkpointed	DsEstRemoveManDirEntry	XPRESS	11/30/00	11/30/00
CMRemoveLink		Checkpointed	DsEstRemoveManDirEntry	XPRESS	11/30/00	11/30/00
CMRemoveLink		Checkpointed	DsEstRemoveManDirEntry	XPRESS	11/30/00	11/30/00
CMRemoveLink		Checkpointed	DsEstRemoveManDirEntry	XPRESS	11/22/00	11/22/00
CMRemoveLink		Checkpointed	DsEstRemoveManDirEntry	XPRESS	11/30/00	11/30/00
CMRemoveLink	MODPGE01#s07200200TS3LM:PGEXE.001:3959	Checkpointed	DsEstRemoveManDirEntry	XPRESS	12/06/00	12/06/00
CMRemoveLink	MODPGE02#s20020500TS3496SC:MOD02LUT.001:	Checkpointed	DsEstRemoveManDirEntry	XPRESS	12/06/00	12/06/00
CMRemoveLink	MODPGE02#s20020500TS3SC:MOD02LUT.001:427	Checkpointed	DsEstRemoveManDirEntry	XPRESS	12/12/00	12/12/00
CMRemoveLink	MODPGE01#s07200200TS3LUMSC:MOD03LUT.001:	Checkpointed	DsEstRemoveManDirEntry	XPRESS	12/12/00	12/12/00
CMRemoveLink	MODPGE01#s07200200TS3SC:MOD03LUT.001:456	Checkpointed	DsEstRemoveManDirEntry	XPRESS	12/13/00	12/13/00
CMRemoveLink	MODPGE01#s07200200TS3ADSC:MOD03LUT.001:	Checkpointed	DsEstRemoveManDirEntry	XPRESS	12/13/00	12/13/00

Operator Messages

01/11/01 10:56:58 Error purging old database entries.

Data Server: Distrib'n Requests Window



Data Distribution Operator GUI – TS1

File Selected Edit View Options Help

Distrib'n Requests System Requests Tape IDs Preamble Editor Event Logging

Data Distribution – Track Activity

Data Distribution Requests Items: 12

Mod	Request ID	Requester	Esdt Type	Media	Priority	State	Status Mnemonic	Submission Time
<input type="checkbox"/>	0000000057	ECSGuest	AST_04.001	FtpPull	Normal	Cancelled	DsEstRequestCancelled	02/08/2000 19:
<input type="checkbox"/>	38194030890141	cmshared	AST_04.001	FtpPush	Normal	Cancelled	DsEstRequestCancelled	02/08/2000 19:
<input type="checkbox"/>	40162251599806	cmst1	MOD00.001	FtpPush	Low	Cancelled	DsEstRequestCancelled	02/10/2000 16:
<input type="checkbox"/>	40162251601126	cmst1	MOD00.001	FtpPush	Low	Cancelled	DsEstRequestCancelled	02/10/2000 16:
<input type="checkbox"/>	40162253100522	cmst1	MOD00.001	FtpPush	Low	Cancelled	DsEstRequestCancelled	02/10/2000 16:
<input type="checkbox"/>	40193629774881	cmst1	MOD00.001	FtpPush	Low	Cancelled	DsEstRequestCancelled	02/10/2000 19:
<input type="checkbox"/>	40193630937904	cmst1	MOD00.001	FtpPush	Low	Cancelled	DsEstRequestCancelled	02/10/2000 19:
<input type="checkbox"/>	4019363627040	cmst1	MOD00.001	FtpPush	Low	Cancelled	DsEstRequestCancelled	02/10/2000 19:
<input type="checkbox"/>	40193638911613	cmst1	MOD00.001	FtpPush	Low	Cancelled	DsEstRequestCancelled	02/10/2000 19:
<input type="checkbox"/>	40193641839677	cmst1	MOD00.001	FtpPush	Low	Cancelled	DsEstRequestCancelled	02/10/2000 19:
<input type="checkbox"/>	40193644947334	cmst1	MOD00.001	FtpPush	Low	Cancelled	DsEstRequestCancelled	02/10/2000 19:
<input type="checkbox"/>	44173619562305	cmst1	MOD000.001	FtpPush	Low	Cancelled	DsEstRequestCancelled	02/14/2000 17:

Find: _____

Change Priority: Xpress Apply Refresh

Mark Shipped Cancel Suspend Resume Suspend All Resume All

Operator Messages

Distribution Filter Requests Window



Distribution Filter Requests

Request ID

Requester

All Requests

Media Type:

SMM	All None
CDROM	
D3	
DLT	
FtpPull	
FtpPush	

State:

<input checked="" type="checkbox"/> Pending	<input checked="" type="checkbox"/> Suspended
<input checked="" type="checkbox"/> Active	<input checked="" type="checkbox"/> Suspended with Errors
<input checked="" type="checkbox"/> Staging	<input checked="" type="checkbox"/> Waiting for Shipment
<input checked="" type="checkbox"/> Transferring	<input checked="" type="checkbox"/> Shipped
<input checked="" type="checkbox"/> Cancelled	<input checked="" type="checkbox"/> Failed

All None

OK Apply Cancel Help

Retrieval of Data from the Archive



- **Largely automated process in response to data distribution requests**
 - data orders from scientists or other ECS end users
 - one-time orders
 - standing orders placed as subscriptions for acquiring data
 - data requests from other ECS sites
 - cross-DAAC orders for end users.
 - data needed as input for processing at other sites (subscriptions placed for ingest by those sites)
 - internal requests for data needed for processing
- **DSS Distrib'n Requests window to monitor**

Granule Deletion



- **Granule Deletion Tool allows operators to delete products on demand**
 - Old granules replaced by reprocessing with new PGEs
 - Lower-level interim products not retained, but inventory records kept for production history
 - Defective granules replaced by reprocessing
 - Subsetted products distributed through ECS but periodically deleted with scripts
- **Front-end, command-line utility for deletion**
 - Confirmation required (may be suppressed for background execution of deletion script)
 - Deletions and related errors captured in SDSRV application log, as well as deletion logs

Granule Deletion (Cont.)



- **Deletion sequence: Three elements**
 - **Command-line utility for “logical” deletion: Flags granules in inventory (SDSRV) as deleted**
 - **Delete from Archive (DFA) only**
 - **Physical Deletion from SDSRV inventory and from Archive**
 - **Note: Undelete options available for recovery of granules marked for deletion**
 - **Physical deletion script (SDSRV): Removes inventory entries and creates list of granule files now eligible for deletion from the archive; writes list to STMGT database**
 - **STMGT GUI screen for removal of rows from STMGT database**
- **Operators may use AMASS commands (*volcomp*, *volclean*, *volformat*, *volstat*) to reclaim archive tape space and recycle tapes**

Granule Deletion (Cont.)



Storage Management Control

File Options Backup Delete

Thursday January 11, 2001 10:56:58 AM

Storage Config. Vol Grp Config. Resource Mngmt. Cache Stats.

Configuration Parameter Report

Server Type	# of Servers	Description
SMM	0	SMM Stacker Server
ARCHIVE	3	Archive Server
CACHE MANAGER	4	Cache Management Server
CDROM	0	CDROM Device Server
D3	0	D3 Device Server
DLT	0	DLT Stacker Server
FTP	4	FTP Server
REQUEST MANAGER	1	Request Manager Server

Times to Re-route: []

Server Name Status

EcDsStArchiveServerACM4	Up
EcDsStArchiveServerDRP3	Up
EcDsStArchiveServerWKS1	Up

Add Server Modify Server

Operator Messages

```
01/11/01 10:56:58 Error purging old database entries
```

Batch Delete

Granule Deletion Information

Versioned Data Type	Number of Files
L7IGS.001	2
MOD01.001	25
MOD021KM.001	141
MOD03.001	24
MOD29.001	135
PH.001	205

Select All Reset Delete

Failed Deletion List

Filename	Versioned Data Type	Server Name	Path	Error Code
----------	---------------------	-------------	------	------------

Close

Loading/Removing Archive Media



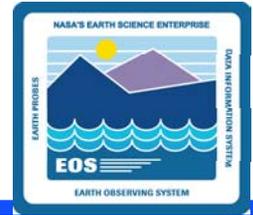
- **STK Powderhorn: Cartridge Access Port (CAP)**
 - 21 Tapes
- **Automatic loading (recommended for most loading)**
- **Manual loading (available for initial loading or other bulk loading)**

Archive Backups



- **Programmatic backups are part of design requirements**
 - **Active archive copy (use *Archive ID* -- ShortName and VersionID)**
 - e.g., AST_L1B.001
 - **Local backup storage copy (use *Backup ID*)**
 - Append “B” -- e.g., AST_L1B.001B
 - **Off-site backup storage copy (use *Offsite ID*)**
 - Append “O” -- e.g., AST_L1B.001O
- **Archive manager needs to create volume group for offsite backups, using STMGT GUI**
- **Selection of data for backup dependent on factors such as feasibility of recovery by other means (e.g., re-ingest, reprocess)**
- **Each site is responsible for arranging its own secure offsite storage**

Storage Management: Vol. Grp. Config. Tab Add Dialog



Storage Management Control

File Options Backup Delete Help

Thursday January 11, 2001 11:26:21 AM Mode: TS3

Storage Config. Vol Grp Config. Resource Mngmt. Cache Stats. Storage Events Request Status

Volume Group Information

Data Type Name	Current Hardware	Current Volume Group Path	UNIX Compression Factor	GZIP Compression Factor
MISLOBF.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLOCA.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLOCAL.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLOCF.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLODA.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLODF.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLODFX.001	DRP3	/dss_stk3/TS3/exp	0	0
MISLOSIX.001	DRP3	/dss_stk3/TS3/exp	0	0
MISLOS2X.001	DRP3	/dss_stk3/TS3/exp	0	0
MISLOS3X.001	DRP3	/dss_stk3/TS3/exp	0	0
MISLOS1Y.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLOS2Y.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLOS3Y.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISLOTST.001	DRP3	/dss_stk3/TS3/misr10	0	0
MISQA.001	DRP3	/dss_stk3/TS3/ancb	0	0
MOD000.001	DRP3	/dss_stk3/TS3/mod10	0	0
MOD000X.001	DRP3	/dss_stk3/TS3/exp	0	0
MOD001.001	DRP3	/dss_stk3/TS3/mod10	0	0
MOD002.001	DRP3	/dss_stk3/TS3/mod10	0	0
MOD003.001	DRP3	/dss_stk3/TS3/mod10	0	0
MOD01.001	DRP3	/dss_stk3/TS3/mod10	0	0
MOD02.001	DRP3	/dss_stk3/TS3/mod10	0	0
MOD021KM.001	DRP3	/dss_stk3/TS3/modhi	0	0
MOD022.001	DRP3	/dss_stk3/TS3/mod10	0	0
MOD02HKM.001	DRP3	/dss_stk3/TS3/modhi	0	0
MOD02LUT.001	DRP3	/dss_stk3/TS3/modhi	0	0
MOD02QKM.001	DRP3	/dss_stk3/TS3/modhi	0	0
MOD03.001	DRP3	/dss_stk3/TS3/modhi	0	0

Add... Modify Display History Display Statistics Reset

Operator Messages

01/11/01 11:21:20 Error purging old database entries.

Add Volume Group

Data Type.Version: []

HWC1: []

Volume Group Path: []

UNIX Compression Factor (%): [0]

GZIP Compression Factor (%): [0]

Volume Group Type:

PRIMARY BACKUP OFFSITE

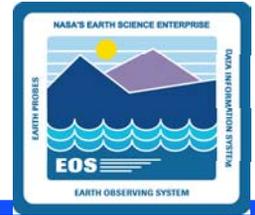
OK Cancel

Some AMASS Commands



- ***vollist***
 - Lists all volumes and current status
- ***dirfilelist***
 - lists files under a specified directory
- ***volfilelist***
 - lists all files on a specified volume
- **Others: See *AMASS System Administrator's Guide***

Creating a Backup for AMASS



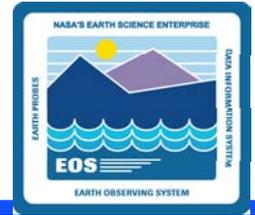
- **AMASS** tape format is proprietary, designed for speed of access
- ***vgexport -q*** command creates an ASCII file that can be used with the tapes and ***vgimport*** command to recover the stored data

Replace Backup Volume (Volume 1)



- **AMASS database backup is stored in the archive on Volume 1**
- **AMASS issues warning when Backup Volume is nearly full (95%)**
- **When warning message is received, install new Backup Volume and perform a full backup**
- **If Backup Volume gets full during attempted backup, backup will fail, necessitating replacement and full backup**

Manual Backup of Archive Data



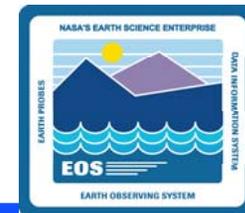
- **Necessary when a backup data tape is used and must be replaced**
- **Data restoration using a backup data tape is achieved by inserting the tape into the archive**
- **To replace the tape requires manual creation of a copy**

Restoring Archive Data



- **Copy from backup to primary (using UNIX)**
- **Reprocess lower-level data to obtain lost higher-level product**
 - Recovered granule has a new UR and a new production date and time
- **Request replacement from data provider**
 - Some data providers do not offer replacement (e.g., Landsat-7)
 - EDOS provides L0 backup for ECS; replacement data on DTF-2 tape
- **Restoring AMASS/ACSLs database**
 - For AMASS: amassrestore
 - For ACSLS: rdb.acsss

End-to-End Data Tracking System for Access to EOS Data Reorder Tool



End-to-End Data Tracking System - Netscape

File Edit View Go Communicator Help

Back Forward Reload Home Search Netscape Print Security Shop Stop

Bookmarks Location: <http://edts1.gsfc.nasa.gov:8080/index.html> What's Related



End-to-End Data Tracking System

EDTS Mission Specific Reports			
Terra	Daily	10 Day	
Aqua	Daily	10 Day	
ICESat	Daily	10 Day	
Aura	Daily	10 Day	

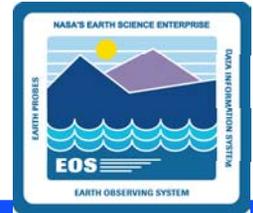
EDTS Data User Reports	
	EMOS FDS Daily
	GES DAAC Daily Page
	ASDC DAAC Daily Page
	NASDA/NSIDC DAAC Daily Page
	LaTIS Daily Page
	Aqua RBD Daily Page
	EDTS Data Download

Related Links			
Data Reorder	Terra	Aqua	Aura ICESat
Top 5 Reorders	Terra	Aqua	Aura (Password Req'd)
SSR Loss	Terra	Aqua	Aura ICESat
Carryout Status	Terra	Aqua	Aura
Whiteboard	Terra	Aqua	Aura
	EOS System Status		
	EDOS System Webpages (Password Req'd)		

Documents	
	EDTS Bug Reporting
	EDTS Requirements
	EDTS Interface

System Administration	
	EDTS Usage Statistics (Password Req'd)
	EDTS Process Status
	EDTS Process Logs

EOS Data Reorder Tool



Access the Data Reorder Database - Netscape

EOS Terra Data Reorder Request

- [Search Terra Data Reorder Database](#)
- [Add New Request](#)
- [Data Reorder Summary Report](#)
- [Distribution Matrix \(Open Requests\) - limited access \(EDOS Only, FOT Only \)](#)
- [EDOS Tape Status](#)

[Data Production: Go to Data Production page](#)
[Top 5](#) [Go to Top 5 page](#)

Contact mss@eos.nasa.gov for changes
 Last Modified: May 3, 2002
[NASA Security Warning](#)
[NASA Privacy Statement](#)

Data Reorder New Record - Netscape

EOS Terra Data Reorder Request

Add New Request

[Data Reorder](#) [Tapes](#)

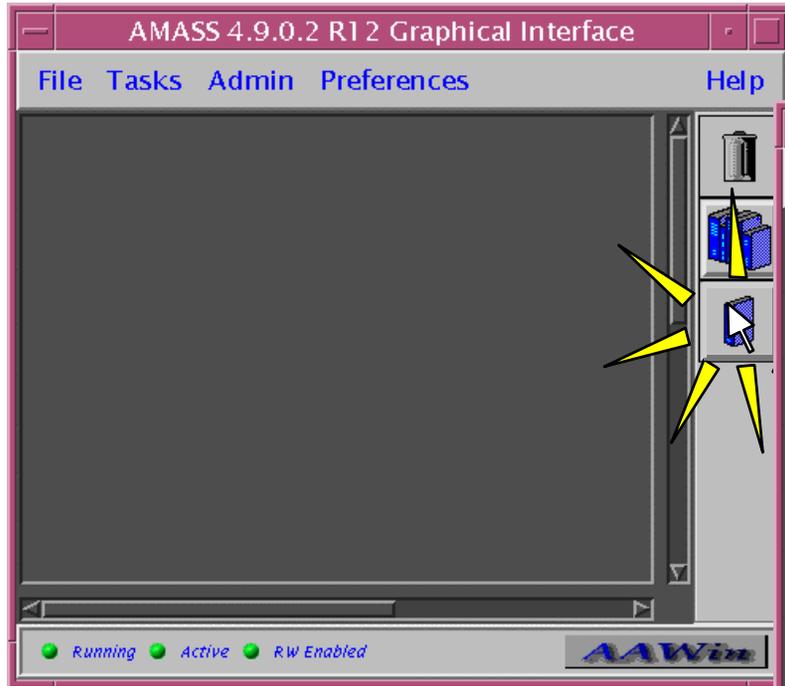
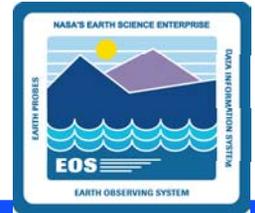
Requestor's Name*	<input type="text"/>				Requestor's Organization*	- No Selection -					
Requested data (UTC)*	Year 2003	DOY 1	Start time 0000	Stop time 0200	Request Reason*	Dataset: <input type="radio"/> Missing <input type="radio"/> Partial	Priority* (See below) 3				
Data type(s)* (Select all that apply)	FDS	<input type="checkbox"/>	Carry-out & APID1		<input type="checkbox"/>	Altitude		<input type="checkbox"/> Replacement Ephemeris			
	Low Rate	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6				
	MODIS	<input type="checkbox"/> 64									
	ASTER	<input type="checkbox"/> EDS	<input type="checkbox"/> 257/259	<input type="checkbox"/> 261/263	<input type="checkbox"/> 265/267	<input type="checkbox"/> 273/275	<input type="checkbox"/> 277/279	<input type="checkbox"/> 281/283			
		<input type="checkbox"/> 289/291	<input type="checkbox"/> 293/295	<input type="checkbox"/> 297/299	<input type="checkbox"/> 305-307	<input type="checkbox"/> 309-311	<input type="checkbox"/> 313-315				
	CERES	<input type="checkbox"/> 131	<input type="checkbox"/> 132	<input type="checkbox"/> 133	<input type="checkbox"/> 167	<input type="checkbox"/> 168	<input type="checkbox"/> 169				
	MOPITT	<input type="checkbox"/> 192	<input type="checkbox"/> 193	<input type="checkbox"/> 194	<input type="checkbox"/> 195	<input type="checkbox"/> 196					
		<input type="checkbox"/> 320	<input type="checkbox"/> 323	<input type="checkbox"/> 325	<input type="checkbox"/> 326	<input type="checkbox"/> 329	<input type="checkbox"/> 330	<input type="checkbox"/> 332	<input type="checkbox"/> 335	<input type="checkbox"/> 337	
	MISR	<input type="checkbox"/> 338	<input type="checkbox"/> 340	<input type="checkbox"/> 343	<input type="checkbox"/> 344	<input type="checkbox"/> 347	<input type="checkbox"/> 349	<input type="checkbox"/> 350	<input type="checkbox"/> 353	<input type="checkbox"/> 354	
		<input type="checkbox"/> 356	<input type="checkbox"/> 359	<input type="checkbox"/> 360	<input type="checkbox"/> 365	<input type="checkbox"/> 373	<input type="checkbox"/> 374	<input type="checkbox"/> 378	<input type="checkbox"/> 380		
Comments	<input type="text"/>										
Actionce Org*	<input type="radio"/> EDOS <input type="radio"/> FOT										

* Required field

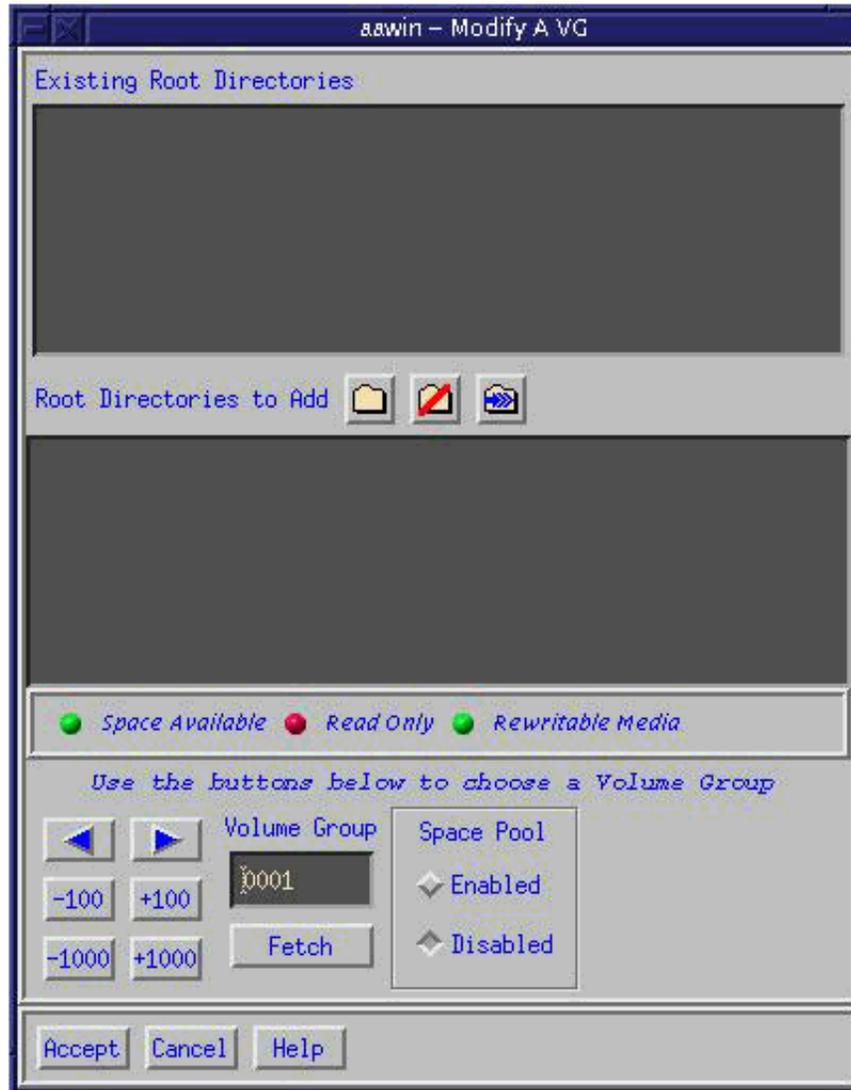
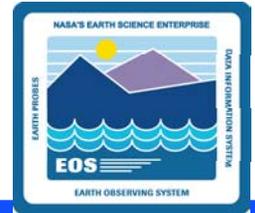
Data Reorder Priorities	
Priority 1:	Critical Data needed within 24-48 hours. This includes expedited data, calibration data, and any other data identified by the instrument team as critical path data.
Priority 2:	Important Data observation or activity (e.g., targets of opportunity)
Priority 3:	All other data needs

[Return to Home Page](#)

AMASS GUI



AMASS GUI: Modify A VG Screen



AMASS GUI: Modify A Volume Screen



aawin - Modify A Volume

Volume	65
Volume Group	75
Online	<input checked="" type="checkbox"/>
Active	<input checked="" type="checkbox"/>
Format Request	No
Block Size	16384
Volume Label	DF0059

Slot	: NET
Library	: 1
Format Type	: Yes
Error count	: 0
R/W status	: R/W
Volume in use	: True
Media type	: TAPE
Last PBN	: 0x00000001
Block size	: 16384
Total blocks	: 1220672
Blocks Used	: 1
Dead space	: 0%

Accept Cancel Help

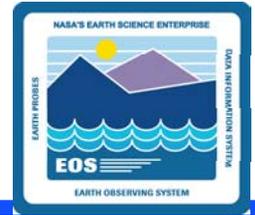
Monitoring and Troubleshooting



Some Common Archive Problem Resolutions

Symptom/Problem	Response
Unable to log in to the FSMS host (e.g., x0drg01)	Check with the Operations Controller/System Administrator to ensure that the host is "up."
AMASS is not running	Have the System Administrator restart AMASS.
A volume is inactivated by AMASS	Check for AMASS errors and, unless there are many errors, use the command <code>/usr/amass/bin/volstat -a <vol_number></code> to re-activate the volume. [For detailed instructions, refer to the procedure Use the <i>amass_log</i> script to Display AMASS Errors (subsequent section of this lesson).]
A storage system robot gets out of synchrony with AMASS concerning the location of media.	Re-establish synchrony. [For detailed instructions, follow the procedure Use <i>mediamove</i> to Establish Synchrony Between <i>quedisplay</i> and <i>medialist</i> (subsequent section of this lesson).]
An Ingest or Data Processing action cannot complete because of failure to store data (reflected as failure on Ingest or Processing GUIs).	Check to ensure AMASS is on line; check for file copy errors, network problems, mount point problems. [For detailed instructions, refer to the procedure for Recovery from Failure to Store Data (subsequent section of this lesson).]

Storage Management: Storage Events Tab



Storage Management Control

File Options Backup Help

Thursday January 11, 2001 11:06:30 AM Mode: TS2

Storage Config. Vol Grp Config. Resource Mngmt. Cache Stats. Storage Events Request Status

Event Log Search Parameters

Date Interval: Begin 01 / 11 / 2001 End 01 / 11 / 2001

Event Type: Any Event Level: Any

Message:

Search Clear Parameters

Search Records Found: 2

Number	Date	Level	Type	Message
30105	01/11/01	SEVERE	SOFTWARE	Error in restore from Backup sources in Archive
30105	01/11/01	SEVERE	SOFTWARE	Error in Archive Retrieve using primary path, s

Purge Selected

Operator Messages

01/11/01 11:03:53 Old database entries were successfully purged.

Event Type: Any

- Device
- Cache
- Software
- COTS
- Sybase
- Pulldisk
- Unknown

Search records Found:

Event Level: Any

- Information
- Warning
- Error
- Severe
- Fatal
- Unknown

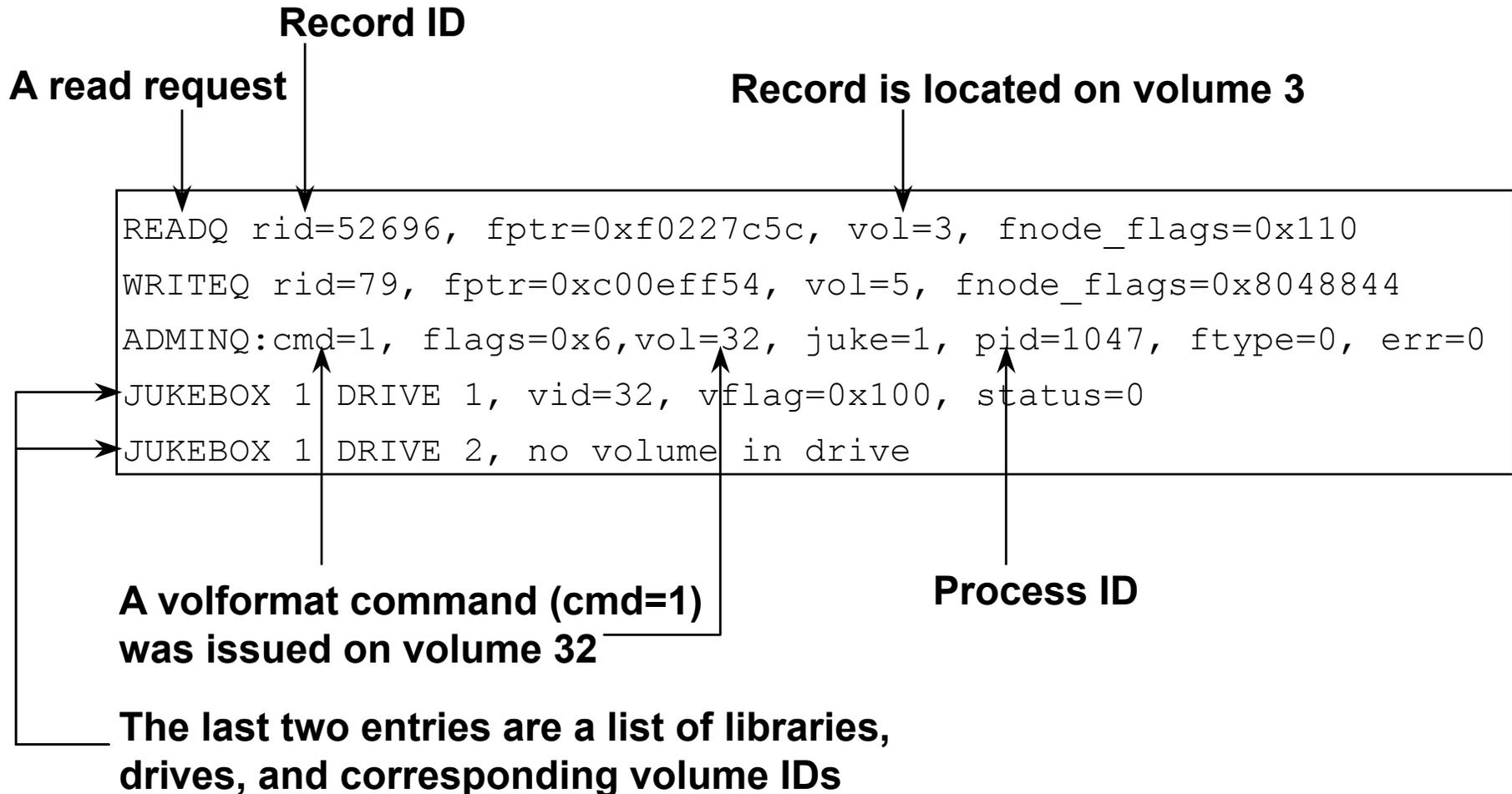
Clear Parameters

AMASS Monitoring Commands, Utilities, and Scripts



- ***healthcheck*** is a command providing status on basic AMASS functions and capabilities
- ***sysperf*** is a command to display AMASS I/O activity
- ***amass_log*** is a script permitting display of AMASS messages from the system log
- ***quedisplay*** is a library utility used to view the AMASS queue and diagnose problems
- ***medialist*** shows robot's view of media and their slot locations
- ***mediamove*** can establish synchrony between ***quedisplay*** and ***medialist***
- There are other utilities and scripts described in ***AMASS System Administrator's Guide***

Sample Output from *quedisplay*

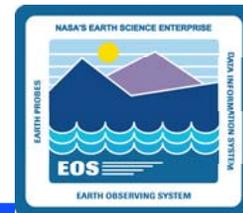


Recovery from Failure to Store or Retrieve Data



- **Successful storage depends on many functions**
 - Archiving of granules (can be compromised by network problems, mount point problems, AMASS being off line)
 - Entry of metadata in SDSRV inventory database
 - Successful staging disk creation and cache management
- **Troubleshooting**
 - Check server logs (including Request Manager server debug log)
 - Check *tac* log for interaction of AMASS and ACSLS
 - Use *amass_log* script to display errors
 - » Corrective action from *AMASS System Administrator's Guide*
 - » Resume action

Checking Server Log Files



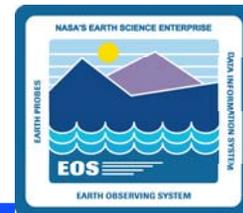
- ***.ALOG**
- ***Debug.log**
 - **Get parameters from Registry**
 - **Load resource catalogs**
 - **Pre-cache database connectivity errors**
 - **Get server configuration parameters**
 - **Spawn receptionist thread and register server in database**
 - **Spawn service threads**
 - **Process Restart Notification for server restart**
 - **Check queue for requests (“Waiting for an event”)**
 - **Communication between calling and called server**

Checking Request Manager Server Debug Log



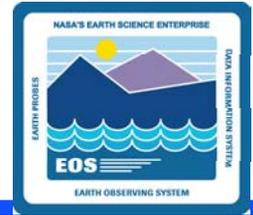
- **Request Manager handles requests from outside of Storage Management**
 - Requests for STMGT processing are checkpointed (registered in the database)
 - “Trivial” requests (serviceable through SQL) are not checkpointed
- **Manages concurrent activities through threads**
 - Manager thread (assigns requests to service threads)
 - Service thread (services requests, logs progress)
 - Receptionist thread (registers server as “up,” monitors socket for connections from other servers)
 - Others (Inbound RPC thread, Housekeeper thread)
- **Transactions among threads recorded in Debug Log**

Checking *tac* Log



- **tac log records interactions between AMASS and ACSLS**
- **New log each day**
 - **Current log: `tac_00`**
 - **Prior logs: `tac_00:date:time`**
- **Log identifies AMASS commands to ACSLS concerning tape operations; can provide useful information concerning failures related to problems in these transactions**
- **Communication failure may signal a need to check for synchrony between AMASS and ACSLS (*quedisplay* vs. *medialist*)**

Handling Data Insertion Failure



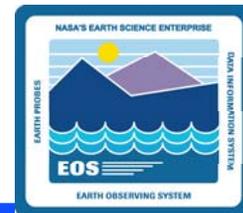
- **Check Logs (and run EcCslidPingServers)**
 - **EcDsScienceDataServerDebug.log**
 - **EcDsStArchiveServerDebug.log**
 - **EcDsStStagingDiskServerDebug.log**
 - **EcDsStCacheManagerServerDebug.log**
 - **EcDsStRequestManagerServerDebug.log**
 - **EcIoAdServerServerDebug.log**
 - **EcSbSubServerDebug.log**
- **Check Archive Script**
- **Look in directory *dss_stk<#>/<MODE>/datatype* for file**
- **Check Mount Points**
- **Check Staging Disk**
- **Check Archive Volume Group Set-up**

Handling Data Acquire Failure



- **Check for Request on Science Data Server GUI**
- **Check Logs (and run EcCsdPingServers)**
 - EcDsScienceDataServer.ALOG
 - EcDsScienceDataServerDebug.log
 - EcDsStArchiveServerDebug.log
 - EcDsStRequestManagerServerDebug.log
- **Check arrival in DDIST cache on Distribution Server**
 - /usr/ecs/<MODE>/CUSTOM/drp/<archivehost>/data/staging/cache
- **Check More Logs**
 - EcDsStStagingDiskServerDebug.log
 - EcDsStCacheManagerServerDebug.log
- **Check Space in Staging Area on Distribution Server with command *df -k* .**
 - /usr/ecs/<MODE>/CUSTOM/drp/<archivehost>/data

Checksum De-activation (Default)



- **System design incorporates calculation of checksum on granule insertion**
 - Supports detection of data corruption
 - Comparison of original checksum with checksum calculated on data retrieval from the archive
 - Default configuration deactivates calculation to improve system throughput; set by highlighting **Archive Server on Storage Config. tab of Storage Management GUI** and clicking “**Modify Server**” button
 - Compromises detection of data corruption
 - Partial alleviation by comparison of checksums calculated on sequential data retrievals

Archive Server Configuration

Server Name: EcDsStArchiveServer RPC Tag:

File I/O Block Size (bytes):

Retries: ▲ ▼

Sleeptime (seconds): ▲ ▼

Service Threads:	<input type="text" value="10"/>	<input type="button" value="Allocate by Priority"/>
Read Threads:	<input type="text" value="10"/>	<input type="button" value="Allocate by Priority"/>
Write Threads:	<input type="text" value="10"/>	<input type="button" value="Allocate by Priority"/>

Enable Checksumming On Store:

Enable Checksumming On Retrieve:

Data Pool Management



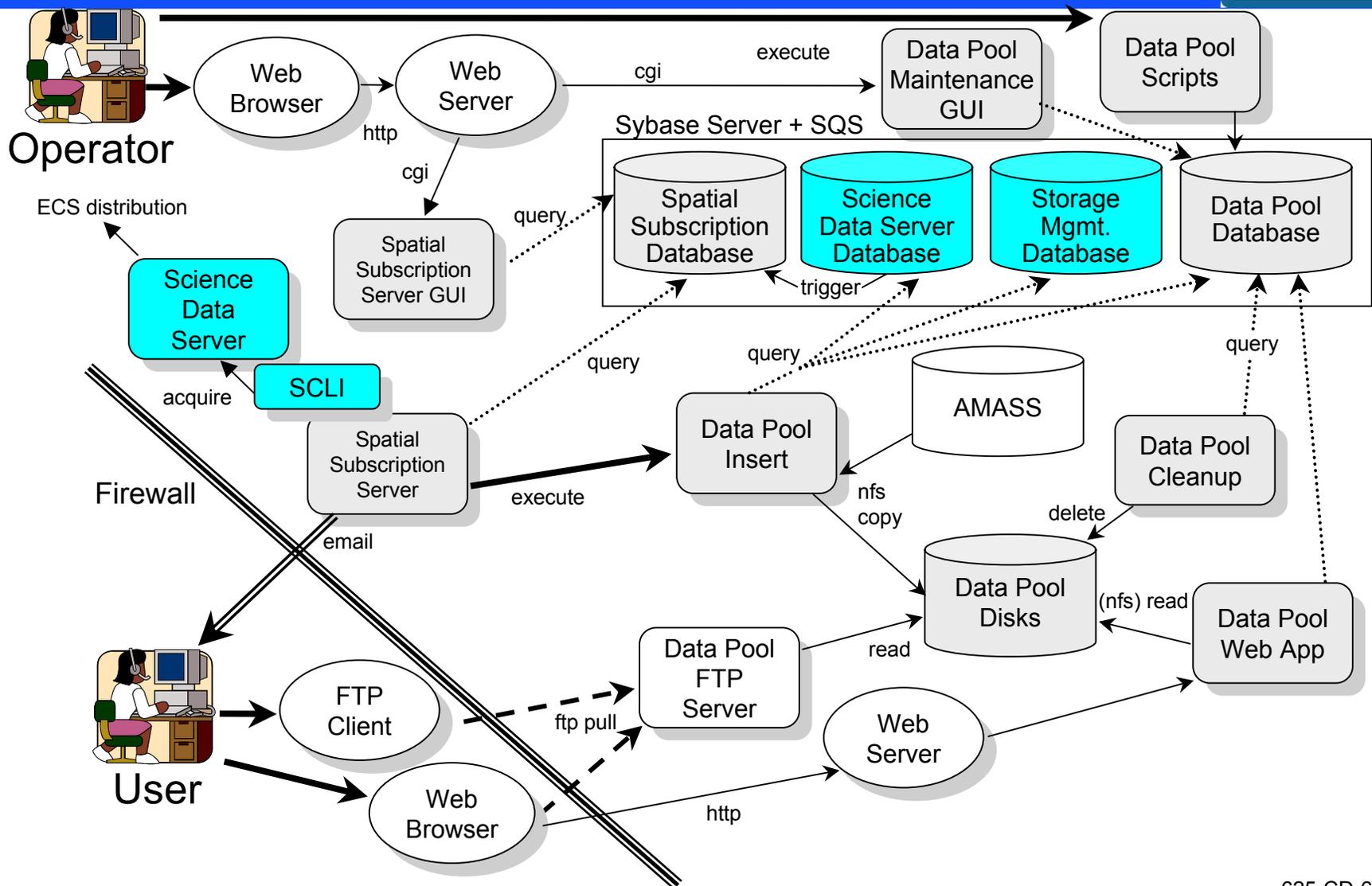
- **Search and Order Limitations**
 - slow distribution times due to tape access
 - search and order tool with a complex user interface
 - limited subsetting options
 - difficult to qualify subscriptions spatially
- **Data Pool Solutions**
 - online cache of ECS data
 - easy-to-use drill-down web user interface
 - interface from ECS to external subsetters
 - **Spatial Subscription Server (NSBRV)**

- **Data Pool Capacity:***

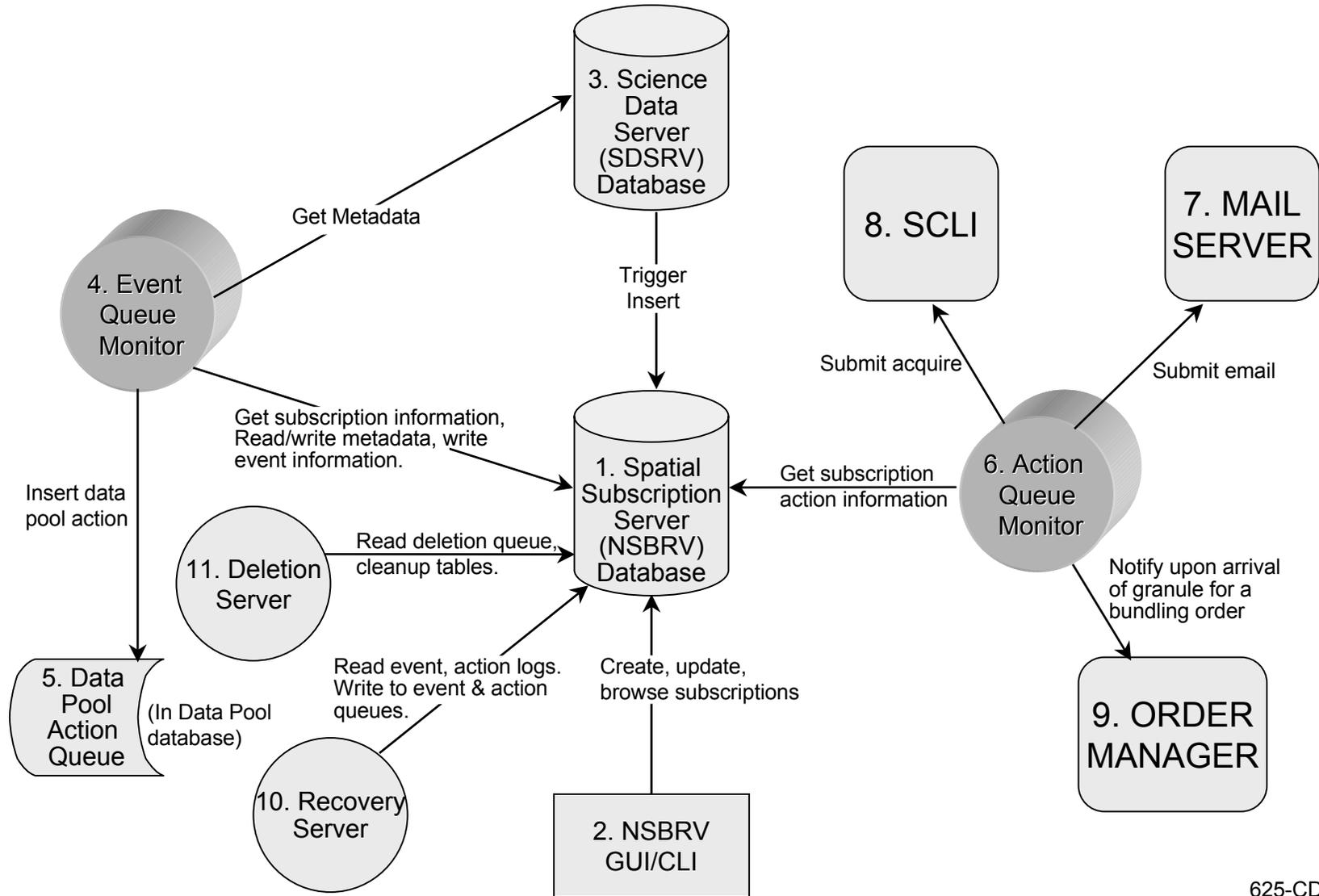
<i>Initial</i>	<i>Current</i>	<i>Synergy IV</i>
– 14 TeraBytes at GSFC	→ 67 TeraBytes	→ 132 TeraBytes
– 14 Terabytes at EDC	→ 49 TeraBytes	→ 93 TeraBytes
– 7 Terabytes at LaRC	→ 25 TeraBytes	→ 47 Terabytes
– 0.5 Terabytes at NSIDC	→ 2 TeraBytes	→ 4.8 TeraBytes

*Disk Size; Usable space is approximately 80% of actual disk size

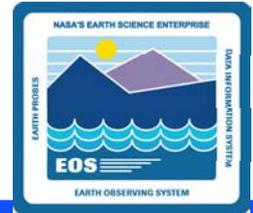
Data Pool Component Architecture



NSBRV Component Architecture



DPM GUI: Home Page



Netscape: Data Pool Maintenance

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Bookmarks Netsite: http://p2dps01.pvc.ecs.nasa.gov:22111/cgi-bin/EcDLPmHomePage.pl

Members WebMail Connections BizJournal SmartUpdate Mktplace

Data Pool Maintenance

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[Refresh Home Page](#)

Screen Refresh Rate (in Secs) Last Screen Refresh on Thu Oct 17 08:43:54 EDT 2002

No Free Space Flag ON OFF No Free Space Flag was turned Off Oct 3 2002 2:41PM

Suspension SUSPEND RESUME Data Pool Insert actions were resumed on Oct 3 2002 2:41PM

Maximum allowed processes 30
Maximum allowed processes from AMASS cache 20
Maximum allowed processes from AMASS tape 3

Total number of active insert processes running 20
Number of active insert processes using AMASS cache 0
Number of active insert processes using AMASS tape 20

List of Active Insert Processes

Unix ProcessId	ecsID	Collection	Version	Start Time	Status Time	Status	AMASS Cache	Retries
16153	2018651709	MOD28L2	077	Oct 17 2002 6:32AM	Oct 17 2002 6:32AM	COPYING SDSRV INVENTORY	N	0
16180	2018651718	MOD28L2	077	Oct 17 2002 6:32AM	Oct 17 2002 6:33AM	COPYING SDSRV INVENTORY	N	0
16181	2018651722	MOD28L2	077	Oct 17 2002 6:32AM	Oct 17 2002 6:33AM	COPYING SDSRV INVENTORY	N	0
16236	2018651712	MOD28L2	077	Oct 17 2002 6:33AM	Oct 17 2002 6:33AM	COPYING SDSRV INVENTORY	N	0
16309	2018651725	MOD28L2	077	Oct 17 2002 6:33AM	Oct 17 2002 6:33AM	COPYING SDSRV INVENTORY	N	0
16331	2018651759	MOD28L2	077	Oct 17 2002 6:33AM	Oct 17 2002 6:33AM	COPYING SDSRV INVENTORY	N	0

100%

DPM GUI: Batch Summary Page



Netscape: Data Pool Maintenance

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Bookmarks Netsite: <http://p2dps01.pvc.ecs.nasa.gov:22111/cgi-bin/EcDlDpmBatchSummary.pl> What's Related

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Batch Summary

Screen Refresh Rate (in Minutes) Last Screen Refresh on: Thu Oct 17 08:52:29 EDT 2002

Batch Label	New	Completed	Failed	Retry	Canceled
file1	0	1	0	0	0
version_one	0	0	11	0	0
batchtest32a	0	44	2	4	0
batchtest32b	0	46	0	4	0
batchtest32c	0	70	0	5	0
EDGAccessToDpl	0	0	0	0	0

100%

DPM GUI: List Insert Queue



Netscape: Data Pool Maintenance GUI in mode TS1

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Bookmarks Netsite: <http://p2dps01.pvc.ecs.nasa.gov:22111/cgi-bin/ECDDpmInsertQueue.pl> What's Related

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Data Pool Maintenance

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Batch Label: Status:

48504

Detailed list of Data Pool Inserts

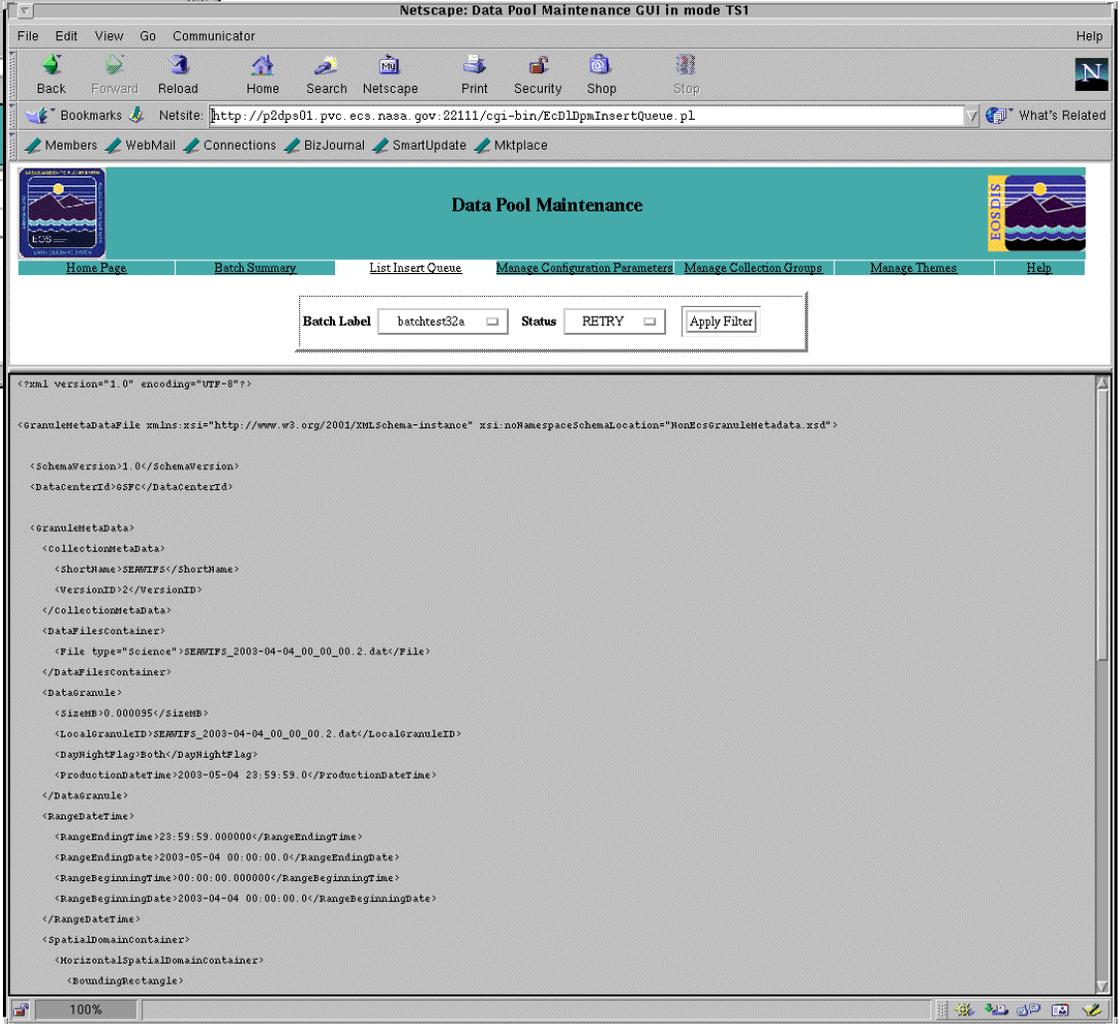
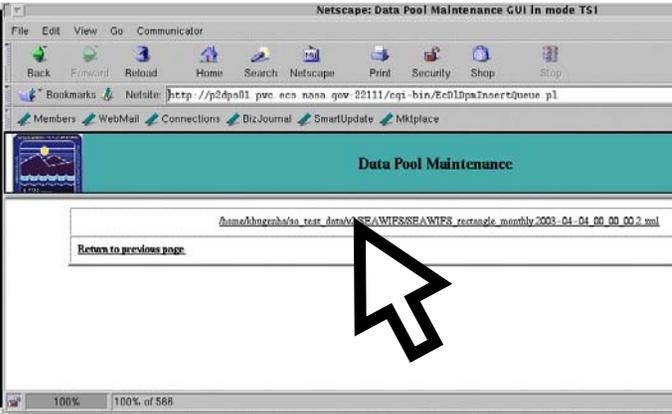
Click on the NONECS link in the Data Source column to view the XML file associated with this insert

DataSource	BatchLabel	Dispatch Priority	InsertQueueID	SubID	ECSID	Collection	Version	Science Granules and/or Metadata	Enqueue Time	Retries	Status	Click on Box to Cancel
ECS	--	--	20000000039179	529	2018653209	MOD28QC	077	science and metadata	Oct 16 2002 10:36PM	1	RETRY	<input type="checkbox"/>
ECS	--	--	20000000039112	595	2018653154	MYD01	077	science and metadata	Oct 16 2002 10:33PM	1	RETRY	<input type="checkbox"/>
ECS	--	--	20000000039091	597	2018653043	MYD021KM	077	science and metadata	Oct 16 2002 10:30PM	1	RETRY	<input type="checkbox"/>
NONECS	batchtest32b	200	20000000027685	-1	--	AVHRR	002	science and metadata	Oct 16 2002 2:07PM	4	RETRY	<input type="checkbox"/>
NONECS	batchtest32b	200	20000000027690	-1	--	AVHRR	002	science and metadata	Oct 16 2002 2:07PM	4	RETRY	<input type="checkbox"/>
NONECS	batchtest32b	200	20000000027705	-1	--	CZCS	002	science and metadata	Oct 16 2002 2:07PM	4	RETRY	<input type="checkbox"/>
NONECS	batchtest32b	200	20000000027718	-1	--	CZCS	002	science and metadata	Oct 16 2002 2:07PM	4	RETRY	<input type="checkbox"/>

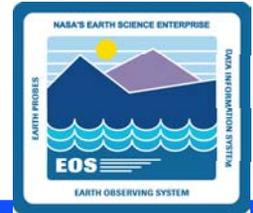
[Continue](#)

100%

DPM GUI: .XML File Path and Content



DPM GUI: Manage Configuration Parameters



Netcape: Data Pool Maintenance

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Bookmarks NetSite: http://p2dp01.pvc.eos.nasa.gov:22111/cgi-bin/ECDLpaConf.cgi#area.pl

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Data Pool Maintenance

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List of Configuration Parameters

Parameter Name	Parameter Value	Click on Box to Modify Param
ActionQueueCleanupFrequency	300 Frequency in seconds when the action queue is checked for completed actions and those older than the configured retention are removed.	<input type="checkbox"/>
BatchSummaryAutoRefresh	3 Auto Refresh Rate for Batch Summary Screen.	<input type="checkbox"/>
DefaultRetentionPeriod	3 The number of days is configured for the default retention period with all Data Pool Insert actions.	<input type="checkbox"/>
DefaultRetentionPriority	200 The default retention priority is configured for the Data Pool Insert action. The value should be between 1 and 255.	<input type="checkbox"/>
DeleteCompletedActionsAfter	3000 The time in minutes that operations let completed actions stay in the insert action queue before making them eligible for removal.	<input type="checkbox"/>
HEOCleanupAge	30 HEO Cleanup Age in days	<input type="checkbox"/>
IdleSleep	3 The number of seconds to sleep when there is nothing to do.	<input type="checkbox"/>
InCacheTimeout	30 Max time in minutes operators are willing to wait for a DPU process to complete whose files are in cache.	<input type="checkbox"/>
InsertRetryWait	30 The number of seconds to wait before a insert that failed reticably should be resubmitted.	<input type="checkbox"/>
MaxInsertRetries	3 The maximum number of times an insert should be tried again (-1 means forever).	<input type="checkbox"/>
NewActionCheckFrequency	30 Frequency in seconds for checking new actions.	<input type="checkbox"/>
NumOfAllowedCacheProcesses	20 Max number of insert processes that require AMASS access to cache.	<input type="checkbox"/>
NumOfAllowedInsertProcesses	30 Max number of insert processes.	<input type="checkbox"/>
NumOfAllowedInCacheProcesses	3 Max number of insert processes that require AMASS access to tape.	<input type="checkbox"/>
OnTypeTimeout	30 Max time in hours that operators are willing to wait for DPU process to complete whose files are not in cache.	<input type="checkbox"/>
RefreshRate	30 Refresh rate in seconds when the list of active insert process Data Maintenance Page is refresh.	<input type="checkbox"/>
RunAwayCheckFrequency	30 Frequency in seconds for checking run away processes.	<input type="checkbox"/>
RunawayDuration	3000 Max period of time to wait for an insert to complete.	<input type="checkbox"/>
SizeOfInsertQueueList	300 Insert Queue List dbms size.	<input type="checkbox"/>
StartupWait	30 The number of seconds to delay start-up while trying to clean out left over DPU processes.	<input type="checkbox"/>

Apply Changes

DPM GUI: Manage Collection Groups



Netscape: Data Pool Maintenance

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Bookmarks Netsite: <http://p2dps01.pvc.ecs.nasa.gov:22111/cgi-bin/EcdDpmManageCollGroups.pl> What's Related

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Data Pool Maintenance

Home Page Batch Summary List Insert Queue **Manage Configuration Parameters** Manage Collection Groups Manage Themes Help

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

Data Source	Group ID (Click for managing collections)	Description
ECS	ACRM	All collections/granules from the ACRIM mission
ECS	AIRA	AIRS/AMSU/MHS collections/granules from the Aqua mission
ECS	AMSA	AMSR-E collections/granules from the Aqua mission
ECS	ASTT	ASTER collections/granules from the Terra mission
ECS	BRWS	Browse collections/granules
ECS	DASP	Data Assimilation System Products
NON-ECS	DPAD	DPAD/DPIU/BATCH tests (version 2 ESDTs are in this group)
ECS	HIRD	HIRD Group
ECS	LSR7	All collections/granules from the Landsat 7 mission
ECS	MLS	MLS Group
ECS	MOAA	MODIS Atmosphere collections/granules from Aqua mission
ECS	MOAT	MODIS Atmosphere collections/granules from the Terra mission
ECS	MOGA	MODIS Radiometric and Geolocation collections/granules for Aqua
ECS	MOGT	MODIS Radiometric and Geolocation collections/granules for Terra
ECS	MOLA	MODIS Land collections/granules from the Aqua mission
ECS	MOLT	MODIS Land collections/granules from the Terra mission
ECS	MOQA	MODIS Oceans collections/granules from Aqua mission
ECS	MOQT	MODIS Oceans collections/granules from the Terra mission

100%

DPM GUI: View Collection Group



The screenshot shows the Data Pool Maintenance GUI in a Netscape browser. The main window displays a table of collections for the 'NONECS Group ID: DPAD'.

Collection (Click for description)	Version	Science Granules and/or Metadata
AERI	002	science and metadata
AVHRR	002	science and metadata
CZCS	002	science and metadata
DEM	002	science and metadata
SEAWIFS	002	science and metadata
TOPEX	002	science and metadata
UARS	002	science and metadata
SUSIM	002	science and metadata

Below the table are links for 'Add Collection' and 'Modify Collection', and a note: 'You can view the description of a collection by clicking on the collection link'.

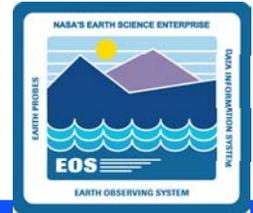
An inset window shows the 'Description for Collection: MYD07_L2 Version: 001'. The text reads: 'This is the description for MYD07_L2 collection. Level 2 Daily global Total Ozone Burden, Atmospheric Stability, Temperature and Moisture Profiles at 20 vertical levels for temperature and 15 levels for moisture, and Atmospheric Water Vapor at 5x5 1-km resolution when at least 9 FOVs are cloud free. Return to previous page'.

Another inset window shows the 'Data Source: ECS Group ID: MOAA Description: MODIS Atmosphere collections/granules from Aqua mission'. It contains a 'List of Collections' table:

Collection (Click for description)	Version	Science Granules and/or Metadata	Data Pool Insertion	HEG Processing	Spatial Search Type
MODPML0	001	science and metadata	valid for Data Pool	Enabled	Not supported
MODPML0	077	science and metadata	valid for Data Pool	Enabled	Not supported
MODPML0X	001	science and metadata	valid for Data Pool	Enabled	Not supported
MYD04_L2	003	science and metadata	valid for Data Pool	Enabled	Rectangle
MYD05_L2	003	science and metadata	valid for Data Pool	Enabled	Rectangle
MYD06_L2	003	science and metadata	valid for Data Pool	Enabled	Rectangle
MYD07_L2	003	science and metadata	valid for Data Pool	Enabled	Rectangle
MYD08_L2	003	science and metadata	valid for Data Pool	Enabled	Not supported
MYD09_L2	003	science and metadata	valid for Data Pool	Enabled	Not supported
MYD13_L2	077	science and metadata	valid for Data Pool	Enabled	Not supported

At the bottom of this inset window are links for 'Add Collection' and 'Modify Collection'. A large white arrow points to the 'MYD07_L2' row in the table.

DPM GUI: Modify Collection Group



Netscape: Data Pool Maintenance

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Bookmarks Netsite: <http://p2dps01.pvc.ecs.nasa.gov:22111/cgi-bin/EcDlDpmManageCollGroups.pl?collAction=2> What's Related

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Data Pool Maintenance

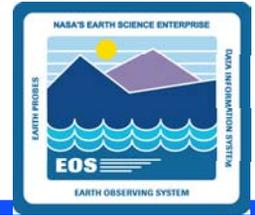
Home Page Batch Summary List Insert Queue Manage Configuration Parameters Manage Collection Groups Manage Themes Help

Modify Collection Group Description

Data Source	Group ID (Click for managing collections)	Description	Click on Box to Modify Desc
ECS	ACRM	All collections/granules from the ACRM mission	<input type="checkbox"/>
ECS	AIRA	TRIS/RMSU/MHS collections/granules from the Aqua mission	<input type="checkbox"/>
ECS	AMSA	RMSR-E collections/granules from the Aqua mission	<input type="checkbox"/>
ECS	ASTI	ASTER collections/granules from the Terra mission	<input type="checkbox"/>
ECS	BRWS	Browse collections/granules	<input type="checkbox"/>
ECS	DASP	Data Assimilation System Products	<input type="checkbox"/>
NON-ECS	DPAD	DPAD/DPIU/BATCH tests (version 2 ESDTs are in this group)	<input type="checkbox"/>
ECS	HIRD	HIRD group	<input type="checkbox"/>
ECS	LSR7	All collections/granules from the Landsat 7 mission	<input type="checkbox"/>
ECS	MLS	MLS group	<input type="checkbox"/>
ECS	MOAA	MODIS Atmosphere collections/granules from Aqua mission	<input type="checkbox"/>

100%

DPM GUI: Add Collection Group



The screenshot shows a Netscape browser window titled "Netscape: Data Pool Maintenance". The address bar contains the URL: `http://p2dps01.pvc.ecs.nasa.gov:22111/cgi-bin/EcDlDpmManageCollGroups.pl?collAction=1`. The browser interface includes a menu bar (File, Edit, View, Go, Communicator), a toolbar with icons for Back, Forward, Reload, Home, Search, Netscape, Print, Security, Shop, and Stop, and a bookmarks bar with links for Members, WebMail, Connections, BizJournal, SmartUpdate, and Mktplace.

The main content area displays the "Data Pool Maintenance" page with a teal header. Below the header is a navigation menu with links: Home Page, Batch Summary, List Insert Queue, Manage Configuration Parameters, Manage CollectionGroups, Manage Themes, and Help. The "Manage CollectionGroups" link is highlighted.

The "Add Collection Group" form is displayed within a dotted border. It contains the following fields and controls:

Data Source	Group ID	Description
<input type="text" value="ECS"/>	<input type="text" value="I"/>	<input type="text"/>

At the bottom left of the form is a link: [Return to previous page](#). At the bottom right is an button.

The browser status bar at the bottom shows "100%" zoom and "100% of 3K" data size.

DPM GUI: Modify ECS Collection



Netscape: Data Pool Maintenance

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Data Pool Maintenance

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Data Source : ECS **Group ID:** MOAT **Description:** MODIS Atmosphere collections/granules from the Terra mission

Modify Collections

You can modify the science or metadata exclusion flag and/or data pool insertion flag by choosing your selection from the drop down lists. After selecting check the corresponding check box for action

Collection	Version	Science Granules and/or Metadata	Data Pool Insertion	Click on Box to Modify Collection
MOD000	001	science and metadata <input type="checkbox"/>	valid for data pool <input type="checkbox"/>	<input type="checkbox"/>
MOD000	077	science and metadata <input type="checkbox"/>	valid for data pool <input type="checkbox"/>	<input type="checkbox"/>
MOD000X	001	science and metadata <input type="checkbox"/>	valid for data pool <input type="checkbox"/>	<input type="checkbox"/>
MOD000X	077	science and metadata <input type="checkbox"/>	valid for data pool <input type="checkbox"/>	<input type="checkbox"/>
MOD001	001	science and metadata <input type="checkbox"/>	valid for data pool <input type="checkbox"/>	<input type="checkbox"/>
MOD041_0	001	science and metadata <input type="checkbox"/>	valid for data pool <input type="checkbox"/>	<input type="checkbox"/>
MOD041_2	001	science and metadata <input type="checkbox"/>	valid for data pool <input type="checkbox"/>	<input type="checkbox"/>
MOD041_2	003	science and metadata <input type="checkbox"/>	valid for data pool <input type="checkbox"/>	<input type="checkbox"/>
MOD041_2	077	science and metadata <input type="checkbox"/>	valid for data pool <input type="checkbox"/>	<input type="checkbox"/>

100%

DPM GUI: Modify NONECS Collection



Netscape: Data Pool Maintenance

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Bookmarks Netsite: <http://p2dps01.pvc.ecs.nasa.gov:22111/cgi-bin/EcDLPmManageNon-ECSCollections.pl?collAction=2&GroupID=DPAD> What's Related

Members WebMail Connections BizJournal SmartUpdate Mktplace

Data Pool Maintenance

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Data Source : NONECS **Group ID:** DPAD **Description:** DPAD/DPIUBATCH tests (version 2 ESDTs are in this group)

Modify Collections

You can modify the Science Granule exclusion flag and (or) Data Pool Insertion flag and (or) Spatial Search Type flag by choosing your selection from the drop down lists. After selecting check the corresponding check box for action

Collection (Click for description)	Version	Science Granules and/or Metadata	Data Pool Insertion	Spatial Search Type	Click on Box to Modify Collection
AERI	002	science and metadata <input type="checkbox"/>	valid for data pool <input type="checkbox"/>	Rectangle <input type="checkbox"/>	<input type="checkbox"/>
AVHRR	002	science and metadata <input type="checkbox"/>	valid for data pool <input type="checkbox"/>	Gpolygon <input type="checkbox"/>	<input type="checkbox"/>
CZCS	002	science and metadata <input type="checkbox"/>	valid for data pool <input type="checkbox"/>	Gpolygon <input type="checkbox"/>	<input type="checkbox"/>
DEM	002	science and metadata <input type="checkbox"/>	valid for data pool <input type="checkbox"/>	Rectangle <input type="checkbox"/>	<input type="checkbox"/>
SEAWIFS	002	science and metadata <input type="checkbox"/>	valid for data pool <input type="checkbox"/>	Rectangle <input type="checkbox"/>	<input type="checkbox"/>
TOPEX	002	science and metadata <input type="checkbox"/>	valid for data pool <input type="checkbox"/>	Gpolygon <input type="checkbox"/>	<input type="checkbox"/>
UARS	002	science and metadata <input type="checkbox"/>	valid for data pool <input type="checkbox"/>	Not supported <input type="checkbox"/>	<input type="checkbox"/>
SUSIM	002	science and metadata <input type="checkbox"/>	valid for data pool <input type="checkbox"/>	Not supported <input type="checkbox"/>	<input type="checkbox"/>

[Return to previous page](#)

100%

DPM GUI: Add ECS Collection



Netscape: Data Pool Maintenance

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Bookmarks Netsite: <http://p2dps01.pvc.ecs.nasa.gov:22111/cgi-bin/EcDlDpmManageCollections.pl?collection=1&groupId=MOAT> What's Related

Members WebMail Connections BizJournal SmartUpdate Mktplace

Data Pool Maintenance

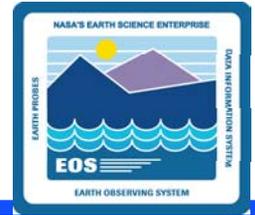
[Home Page](#)
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Data Source : ECS Group ID : MOAT **Description:** MODIS Atmosphere collections/granules from the Terra mission

Add Collections

Collection	Version	Science Granules and/or Metadata	Data Pool Insertion	Click on Box to Add Collection
TAST_04	001	science and metadata <input type="checkbox"/>	invalid for data pool <input type="checkbox"/>	<input type="checkbox"/>
TAST_08	001	science and metadata <input type="checkbox"/>	invalid for data pool <input type="checkbox"/>	<input type="checkbox"/>
TAST_L1B	001	science and metadata <input type="checkbox"/>	invalid for data pool <input type="checkbox"/>	<input type="checkbox"/>
TAST_05	001	science and metadata <input type="checkbox"/>	invalid for data pool <input type="checkbox"/>	<input type="checkbox"/>
MOD02QC	001	science and metadata <input type="checkbox"/>	invalid for data pool <input type="checkbox"/>	<input type="checkbox"/>
MOD03CP	001	science and metadata <input type="checkbox"/>	invalid for data pool <input type="checkbox"/>	<input type="checkbox"/>
MOD03QC	001	science and metadata <input type="checkbox"/>	invalid for data pool <input type="checkbox"/>	<input type="checkbox"/>
TESTD4	001	science and metadata <input type="checkbox"/>	invalid for data pool <input type="checkbox"/>	<input type="checkbox"/>
AIRBOSCI	001	science and metadata <input type="checkbox"/>	invalid for data pool <input type="checkbox"/>	<input type="checkbox"/>
AIRBOSCI	001	science and metadata <input type="checkbox"/>	invalid for data pool <input type="checkbox"/>	<input type="checkbox"/>

DPM GUI: Add NONECS Collection



The screenshot shows a Netscape browser window titled "Netscape: Data Pool Maintenance". The address bar contains the URL: `http://p2dps01.pvc.ecs.nasa.gov:22111/cgi-bin/ECdDpmManageNon-ECSCollections.pl?collAction=1&GroupId=DPAD`. The browser interface includes a menu bar (File, Edit, View, Go, Communicator), a toolbar with icons for Back, Forward, Reload, Home, Search, Netscape, Print, Security, Shop, and Stop, and a bookmarks bar with links for Members, WebMail, Connections, BizJournal, SmartUpdate, and Mktplace.

The main content area has a teal header with the title "Data Pool Maintenance" and two EOS logos. Below the header is a navigation bar with the following links: Home Page, Batch Summary, List Insert Queue, Manage Configuration Parameters, Manage CollectionGroups, Manage Themes, and Help.

The main content area displays the following information:

Data Source: NONECS **Group ID:** DPAD **Description:** DPAD/DPIU/BATCH tests (version 2 ESDTs are in this group)

Add Collections

Collection	Version	Science Granules and/or Metadata	Data Pool Insertion	Spatial Search Type
<input type="text" value="I"/>	<input type="text" value="I"/>	Science and Metadata <input type="checkbox"/>	Valid for data pool <input type="checkbox"/>	Not supported <input type="checkbox"/>

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The status bar at the bottom shows "100%" zoom and "Document: Done."

DPM GUI: Manage Themes Tab



Netscape: Data Pool Maintenance GUI in mode TS1

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Bookmarks Netsite: <http://p2dps01.pvc.ecs.nasa.gov:22111/cgi-bin/EcDlDpmThemesFrame.pl> What's Related

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Web Visible ALL
 Insert Enabled ALL
 Beginning Letters

Detailed list of Data Pool Themes

Theme Name Description	Insert Enabled	Web Visible	Click on Box to Delete
dpad test testing DPAD + Batch utility	Yes	Yes	<input type="checkbox"/>
webaccess test tests for the WebAccess group	Yes	Yes	<input type="checkbox"/>
Add NewTheme Modify Theme			<input type="button" value="Apply Change"/>

100%

DPM GUI: Add New Theme



Netscape: Data Pool Maintenance GUI in mode TS1

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Web Visible ALL
 Insert Enabled ALL
 Beginning Letters

Add New Theme

Theme Name	Description	Web Visible	Insert Enabled
Theme <input style="width: 90%;" type="text"/>	Description <input style="width: 90%;" type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

[Return to theme list](#)

100%

DPM GUI: Modify Theme



Netscape: Data Pool Maintenance GUI in mode TS1

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Bookmarks Netsite: http://p2dps01.pvc.ecs.nasa.gov:22111/cgi-bin/EcDlDpmThemesFrame.pl

Members WebMail Connections BizJournal SmartUpdate Mktpace

Data Pool Maintenance

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Web Visible ALL Insert Enabled ALL Beginning Letters Apply Filter

Modify Theme

Theme Name	Description	Web Visible	Insert Enabled	Click on Box to Modify
dpad test	<input type="text" value="Testing DPAD + Batch utility"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
webaccess test	<input type="text" value="tests for the WebAccess group"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

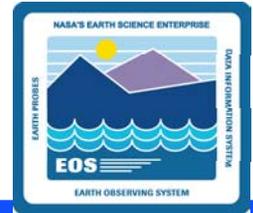
[Return to previous page](#) [Return to Main Theme Page](#)

Number of Drivers to Run



- **Recommended initial configuration**
 - 3 event drivers
 - 3 action drivers
 - 1 recovery driver
 - 1 deletion driver
- **EcNbDriverStart <MODE> d_e d_a d_r d_d**
- **Increase throughput by doubling number of event and action drivers (i.e., 6 each)**
- **isql query to identify a condition in which action processing lags behind event processing**
 - **select max(actionDateTime from EcNbActionQueueLog where actionStatus = 'Acquire' or actionStatus = 'ActionNotification**
 - **if delay is an hour, try increasing number of action drivers to one and one-half times the number of event drivers (e.g., 6 event drivers and 9 action drivers)**

DPM GUI User Messages



Message Text	Impact	Cause and Corrective Action
DB Error: You entered a duplicate collection group name that exists in the database. Please try again	Unable to add a new group id	Duplicate group name is entered. Check the list of group ids and enter a group name consisting of four letters, which is not on the list.
INPUT Error: You entered an invalid group name. Please see help page for more information. Please see section Add Collection Group	Unable to add a new group	Lower case letter is entered. Group id should be all Upper case letters.
INPUT Error: You entered an invalid name. Please see log for more details. Consult help tab and see section for NON-ECS add Collection Screen	Unable to add a new non-ECS collection	Special characters/small letters are entered. Non-ECS collection name should be in capital letters and without any special characters.
INPUT Error: You entered an invalid theme name. Please see help page for more information. Please see section: Add New Theme	Unable to add a new theme	Special characters/small letters are entered. Theme names should be in capital letters and without any special characters.
DB Error: Theme can not be null or empty	Unable to add a theme	A null or empty string is entered. Theme name should contain capital, small letters. Space is also allowed but no special characters.

DPM GUI User Messages (Cont.)



Message Text	Impact	Cause and Corrective Action
DB Error: You entered either an existing theme name or a collection or a group name or an ESDT name. Check the log at /usr/ecs/<mode>/CUSTOM /log/EcDIDpmDataPoolGui. log for more details	Unable to add a theme	A name is entered, which is a duplicate name for a group, collection or an ESDT name.
DB Error: This collection is allowed for insertion therefore Spatial Search Type cannot be modified for this collection	Unable to modify Spatial Search type for a collection	Collection is not allowed for insertion. First make the collection allowed for insertion and then try to modify search type
DB Error: Error adding this collection. Collection entry <collection name> <version> already exist	Unable to add a collection.	Duplicate collection name entered. Verify the list of collection and then enter a name, which is unique.
DB Error: Internal error occurred	A db transaction interrupted.	Database connection is lost for network error. No suggestion.
DB Error: delete failed because there are granules associated with this theme	Unable to delete a theme.	There are granules associated with this theme. Disassociate granules from this theme and then delete it.

Using NSBRV GUI



- **Modify period of retention in a Data Pool
insert subscription**
- **View acquire and notification actions
currently being processed by NSBRV**
- **View statistics on the processing of events
and actions by NSBRV**

NSBRV GUI Home Page



Netscape: Spatial Subscription Server

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Bookmarks Netsite: <http://p2ins02.pvc.ecs.nasa.gov:22211/NBSRV.html> What's Related

 **Spatial Subscription Server** 

[Home Page](#) [List Events](#) [Manage Subscriptions](#) [Manage Bundling Orders](#) [Monitor Queues](#) [Help](#)

Welcome to the Spatial Subscription Server GUI, a web-based interactive utility for:

- Listing subscribable events
- Managing subscriptions (list, view, cancel, update, add, suspend, resume)
- Managing bundling orders
- Monitoring runtime queues and production statistics

100%

NSBRV GUI

Manage Subscriptions Page



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Spatial Subscription Server

[Home Page](#)
[List Events](#)
[Manage Subscriptions](#)
[Add Subscriptions](#)
[List Themes](#)
[Monitor Queues](#)
[Help](#)

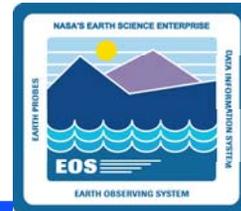
User
 Collection
 Status

Subscription Id	User	Collection	Version	Event Type	Status	Expiration Date	Choose Subscription Action
3	cmops	AIRH0ScE	001	INSERT	Inactive	Nov 6 2002 12:00 AM	<input type="button" value="View"/> <input type="button" value="Update"/> <input type="button" value="Delete"/> <input type="button" value="Apply"/>
5	LarInMgr	MOD03	001	INSERT	Active	Nov 7 2002 12:00 AM	<input type="button" value="View"/> <input type="button" value="Update"/> <input type="button" value="Delete"/> <input type="button" value="Apply"/>
7	LarInMgr	MOD04_L2	001	INSERT	Active	Nov 7 2002 12:00 AM	<input type="button" value="View"/> <input type="button" value="Update"/> <input type="button" value="Delete"/> <input type="button" value="Apply"/>
10	NOAA/SOAP	AM1EPHN0	001	INSERT	Active	Nov 7 2002 12:00 AM	<input type="button" value="View"/> <input type="button" value="Update"/> <input type="button" value="Delete"/> <input type="button" value="Apply"/>
11	NOAA/SOAP	GDAS_0ZF	001	INSERT	Active	Nov 7 2002 12:00 AM	<input type="button" value="View"/> <input type="button" value="Update"/> <input type="button" value="Delete"/> <input type="button" value="Apply"/>
12	NOAA/SOAP	OZONEEP	001	INSERT	Active	Nov 8 2002 12:00 AM	<input type="button" value="View"/> <input type="button" value="Update"/> <input type="button" value="Delete"/> <input type="button" value="Apply"/>
14	NOAA/SOAP	SEA_ICE	001	INSERT	Active	Nov 8 2002 12:00 AM	<input type="button" value="View"/> <input type="button" value="Update"/> <input type="button" value="Delete"/> <input type="button" value="Apply"/>
15	cgili	DFLAXMIS	001	INSERT	Active	Nov 8 2002 12:00 AM	<input type="button" value="View"/> <input type="button" value="Update"/> <input type="button" value="Delete"/> <input type="button" value="Apply"/>

100%

NSBRV GUI

View Subscriptions Page



Netscape: Spatial Subscription Server

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Bookmarks Netsite: <http://f2ins01.hitc.com:10478/cgi-bin/EcNbSubscriptionChoose.pl> What's Related

 Spatial Subscription Server 

[Home Page](#) [List Events](#) [Manage Subscriptions](#) [List Themes](#) [Monitor Queues](#) [Help](#)

User=kcarr
Status=Active
Expiration Date=Nov 5 2002 12:00AM
Short Name=MOD01
Version= 003
Event Type=INSERT

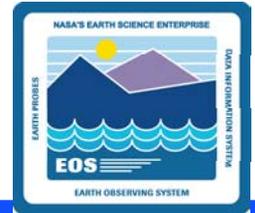
-- **Qualifiers associated with Subscription** --
Attribute Name=GPolygonContainer
Attribute Type=gpolygon
South Latitude=0
West Longitude=- 40
North Latitude=30
East Longitude=- 10

-- **Email Notification Data associated with Subscription** --
Email Address=kcarr@eos.hitc.com
Email User String=test of gpolygon spatial
Metadata=Qualifying Metadata Only

[View another subscription](#) [Return to Home Page](#)

100%

NSBRV GUI List Themes Page



Netscape: Spatial Subscription Server

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Bookmarks Netsite: <http://p2ins02.pvc.ecs.nasa.gov:22211/cgi-bin/EcNbListThemes2.pl> What's Related



Spatial Subscription Server



[Home Page](#) [List Events](#) [Manage Subscriptions](#) [Manage Bundling Orders](#) [Monitor Queues](#) [Help](#)

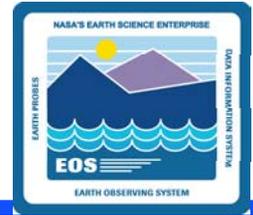
Theme Name	Choose Theme Action
dpad test	<input type="checkbox"/> List Subscriptions <input type="button" value="Apply"/>
webaccess test	<input type="checkbox"/> List Subscriptions <input type="button" value="Apply"/>
Wallace theme	<input type="checkbox"/> List Subscriptions <input type="button" value="Apply"/>

[Continue](#)

100%

NSBRV GUI

Manage Bundling Orders Page



Netscape: Spatial Subscription Server

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Bookmarks Netsite: http://p2ins02.pvc.ecs.nasa.gov:22211/cgi-bin/EcNbrManBundOrder.pl

Spatial Subscription Server

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

Bundling Order List | [Add Bundling Order](#) | [Configure Defaults](#)

User MediaType Status Filter

Bundling Order	User	Creation Date	Expiration Date	Media Type	Status	Choose Bundling Order Action
2600025838	cmshared	Nov 1 2002 12:00PM	Nov 1 2003 12:00AM	FtpPull	ACTIVE	View Update Cancel List Subs Apply
2600025848	cmshared	Nov 1 2002 12:06PM	Nov 1 2003 12:00AM	FtpPush	ACTIVE	View Update Cancel List Subs Apply

[Continue](#)

Netscape: Spatial Subscription Server

File Edit View Go Communicator

PVC Metrics GNU Emacs Reference (for version 19) esds-proto.gsfc.nasa.gov Hughes/EDF ATM30 Members WebMail Connections BizJournal

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Spatial Subscription Server

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

Bundling Order 2600025848

User Name=cmshared
 Creation Date=Nov 1 2002 12:06PM
 Expiration Date=Nov 1 2003 12:00AM
 Media Type=FtpPush
 Current Status=ACTIVE
 User String=
 Email Address=cmshared@p0ins01u.ecs.nasa.gov
 Distribution Priority=XPRESS

FTP Distribution Information:

FTP User=cmshared
 FTP Host=p0tes02
 FTP Directory=/raid2/ftp_push/bundled

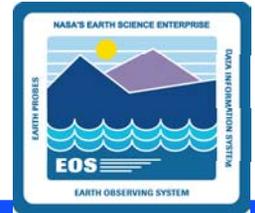
Completion Criteria:

Minimum Bundle Size=15
 Minimum Granule Count=10
 Maximum Bundle Age=1

[Return to bundling order list](#)

NSBRV GUI

Add Bundling Order Page



A screenshot of a Netscape browser window displaying the 'Spatial Subscription Server' web application. The browser title is 'Netscape: Spatial Subscription Server'. The address bar shows the URL 'http://p2ins02.pvc.ecs.nasa.gov:22211/cgi-bin/EcNbAddBundle.pl'. The page has a teal header with the title 'Spatial Subscription Server' and a navigation menu with links: 'Home Page', 'List Events', 'Manage Subscriptions', 'Manage Bundling Orders', 'Monitor Queues', and 'Help'. Below the header, there are links for 'Bundling Order List', 'Add Bundling Order', and 'Configure Defaults'. The main content area features a form titled 'Add Bundling Order' with the following fields: 'UserID' (empty), 'Expiration Date' (11/07/2003) with a '(mm/dd/yyyy)' label, and 'Media Type' (CDROM) with a dropdown arrow. At the bottom of the form are 'continue' and 'clear' buttons. The browser's status bar at the bottom shows '100%' zoom and various system icons.

NSBRV GUI

Add Bundling Order: Data Pages



Hard Media

Add Bundling Order

User ID: cmshared
Expiration Date: 11/13/2003
Media Type: CDROM
Email Address: [cmshared@po13a.gsfc.nasa.gov]
User String: []
Distribution Priority: Xpress

Shipping Information

Street1: 8800 McConck Dr.
Street2: []
Street3: []
City: Landover
State: Maryland
Country: United States
Zip Code: 20774
Phone number: 301-111-1111
FAX number: []

Completion Criteria

Minimum Bundle Size(Gb): 0.50
Minimum Granule Count: 10
Maximum Bundle Age(days): 3

FTP Push

Add Bundling Order

User ID: cmshared
Expiration Date: 11/13/2003
Media Type: FtpPush
Email Address: [cmshared@po13a.gsfc.nasa.gov]
User String: []
Distribution Priority: Xpress

FtpPush Parameters

FTP Username: []
FTP Host: []
FTP Password: []
Rtype Password: []
FTP Directory: []

Completion Criteria

Minimum Bundle Size(Gb): 33.5
Minimum Granule Count: 10
Maximum Bundle Age(days): 3

FTP Pull

Add Bundling Order

User ID: cmshared
Expiration Date: 11/13/2003
Media Type: FtpPull
Email Address: [cmshared@po13a.gsfc.nasa.gov]
User String: []
Distribution Priority: Xpress

Completion Criteria

Minimum Bundle Size(Gb): 10
Minimum Granule Count: 10
Maximum Bundle Age(days): 3

NSBRV GUI -- Monitor Queues: List Action Queue Page



Netscape: Spatial Subscription Server

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Bookmarks Netsite: <http://p2ino02.pvc.ecs.nasa.gov:22211/cgi-bin/EoNActionFrame.pl> What's Related

Spatial Subscription Server

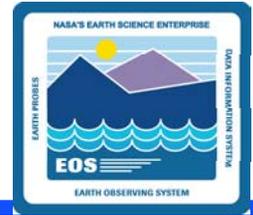
Home Page List Events Manage Subscriptions List Action Queue List Statistics Help

Action Type Subscription Status

Action Type	Subscription Id	User	Collection	Version	Enqueue Time	Dequeue Time	Status
Notify	13	kcarr	MOD04_L2	003	Dec 31 2001 11:42AM	Dec 31 2001 11:42AM	FinishedActionProcessing
Notify	13	kcarr	MOD04_L2	003	Dec 31 2001 11:42AM	Dec 31 2001 11:42AM	FinishedActionProcessing
Notify	20	kcarr	MOD05_L2	003	Dec 31 2001 11:42AM	Dec 31 2001 11:42AM	FinishedActionProcessing
Notify	20	kcarr	MOD05_L2	003	Dec 31 2001 11:42AM	Dec 31 2001 11:42AM	FinishedActionProcessing
Notify	20	kcarr	MOD05_L2	003	Dec 31 2001 11:42AM	Dec 31 2001 11:42AM	FinishedActionProcessing
Notify	20	kcarr	MOD05_L2	003	Dec 31 2001 11:42AM	Dec 31 2001 11:42AM	FinishedActionProcessing
Notify	20	kcarr	MOD05_L2	003	Dec 31 2001 11:42AM	Dec 31 2001 11:42AM	FinishedActionProcessing
Notify	20	kcarr	MOD05_L2	003	Dec 31 2001 11:42AM	Dec 31 2001 11:42AM	FinishedActionProcessing
Notify	20	kcarr	MOD05_L2	003	Dec 31 2001 11:42AM	Dec 31 2001 11:42AM	FinishedActionProcessing
Notify	29	mstevens	AST_L1BT	001	Dec 31 2001 11:42AM	Dec 31 2001 11:42AM	FinishedActionProcessing
Acquire	29	mstevens	AST_L1BT	001	Dec 31 2001 11:42AM	Dec 31 2001 11:42AM	FinishedActionProcessing
Notify	35	kcarr	MOD021KM	001	Jan 2 2002 3:12PM	Jan 2 2002 3:12PM	FinishedActionProcessing
Notify	35	kcarr	MOD021KM	001	Jan 2 2002 1:57PM	Jan 2 2002 1:57PM	FinishedActionProcessing
Notify	35	kcarr	MOD021KM	001	Jan 2 2002 1:49PM	Jan 2 2002 1:49PM	FinishedActionProcessing

100%

NSBRV GUI -- Monitor Queues: List Statistics Page



Netscape: Spatial Subscription Server

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Bookmarks Netsite: <http://f2ins01.hitc.com:10478/cgi-bin/EcNbListStatistics.pl> What's Related

Spatial Subscription Server

Home Page List Events Manage Subscriptions List Action Queue List Statistics Help

Subscription Events Left to Dequeue

0

Actions Left to Dequeue

0

Summary of the Processing Time for Subscriptions Evaluated against Events in the Event Queue

ESDT Count	ESDT ShortName	ESDT VersionID	ESDT Event Type	MaxMetadataTime (ms)	AverageMetadataTime (ms)	MaxSubEvalTime (ms)	AverageSubEvalTime (ms)
1	AST_L1A	2	INSERT	1013	1013	1153	1153
2	AST_L1B	2	INSERT	1523	1449	1383	1219
1	AST_L1BT	1	INSERT	1573	1573	963	963
24	MOD01	1	INSERT	2196	1399	1590	1155
7	MOD021KM	1	INSERT	4740	1614	2233	1486
2	MOD04_L2	3	INSERT	1656	1151	1873	1776
8	MOD05_L2	3	INSERT	1986	1057	2293	1734

Summary of the Processing Time for E-Mail Notification Actions in Action Queue

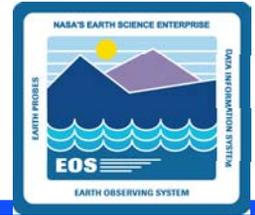
Notification Count	MaxNotifyTime (ms)	AverageNotifyTime (ms)
19	5903	2381

Summary of the Processing Time for Distribution Actions in Action Queue

Acquire Count	MaxAcquireTime (ms)	AverageAcquireTime (ms)
1	28123	28123

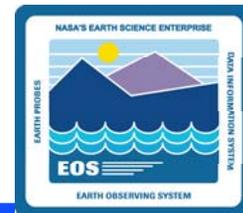
100%

Application of NSBRV GUI



- **View subscriptions and themes**
- **Extend retention period in an existing Data Pool insert subscription**
 - May need to reflect changes in user interest in a location covered by data in Data Pool (e.g., unusual weather or natural events)
- **Manage/add bundling orders, and specify that a subscription is to be associated with a bundling order**
- **Monitoring of Spatial Subscription Server**
 - View Acquire and Notification actions in process (List Action Queue)
 - Review summary information on processing of events and subscriptions (List Statistics)

Data Pool Scripts



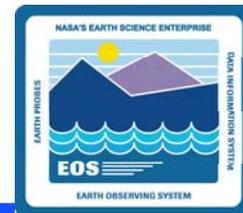
- **Update Granule Utility**
 - Updates granule retention period
 - Updates retention priority (optional)
- **Data Pool Cleanup Utility**
 - Removes expired granules from the Data Pool disks and inventory
- **Data Pool Access Statistics Accumulation Utility**
 - Derives statistics from event logs produced by the Data Pool FTP server and the Data Pool Web Access application
 - Statistics are written to a data base that can be used to produce tabular reports for loading/manipulation by a spreadsheet application program
- **Batch Insert Utility**
 - Allows insert of ECS or non-ECS granules into Data Pool

Update Granule Utility

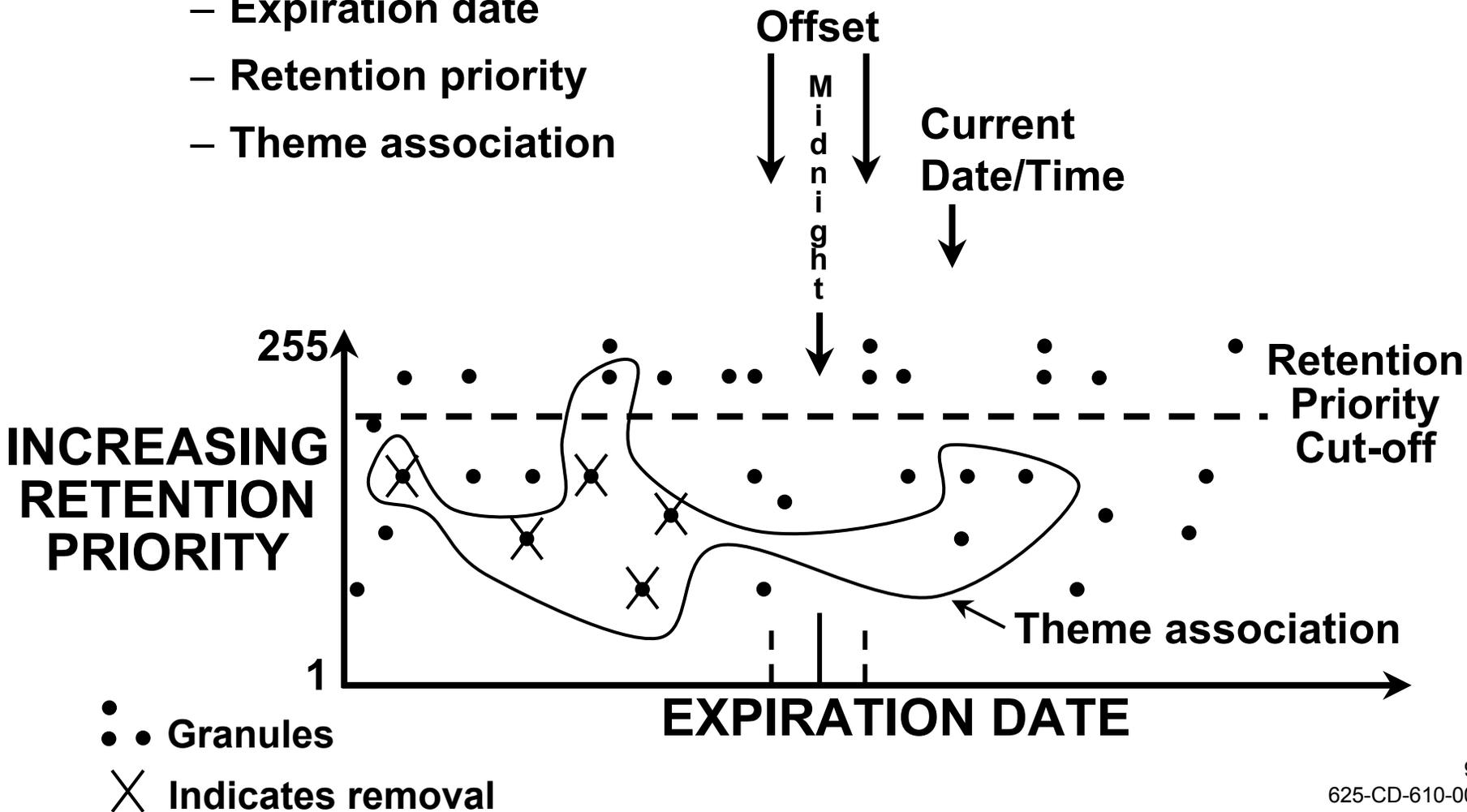


- **Extend retention of data already in Data Pool**
- **Options**
 - **-noprompt:** Suppress prompts and detailed information
 - **-theme:** Specifies a valid theme name (i.e., a character string that matches an existing theme name in the Data Pool inventory)
- **Run for a single granule with command-line input**
 - **-grnid** input parameter specifies granule information
- **Run for multiple granules listed in input file**
 - **-file** input parameter specifies the file use to provide granule data to the utility
- **Run as background process, suppressing all warnings, error messages, prompts**
- **Connects to data base and uses Sybase stored procedures**

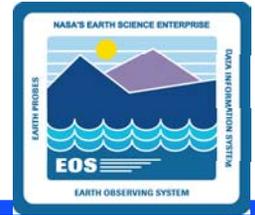
Data Pool Cleanup Utility



- Removal of granules that qualify for deletion
 - Expiration date
 - Retention priority
 - Theme association



Data Pool Cleanup Utility (Cont.)



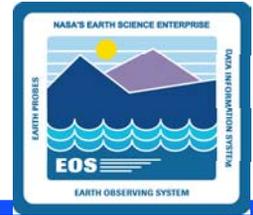
- **Cleanup utility acts on non-ECS data in the same way as on ECS data**
- **Cleanup utility can remove granule cross references associated with a given theme, and also the granules if specified**
 - **-themexref specifies a theme for which all cross references are to be removed from the Data Pool**
 - **-theme specifies a theme for which associated granules are to be removed (a granule is not removed if it is associated with other themes)**
- **Cleanup utility permits “validation”**
 - **Cleans up “phantoms” (inventory entries without Data Pool data) and “orphans” (Data Pool data without inventory entries)**
 - **Operator may specify logging discrepancies only, without removals**

Data Pool Access Statistics Utility



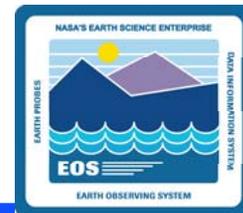
- **Processes logs of web access and FTP access and stores results in tables in the Data Pool database**
- **Two versions, each with configuration file**
 - **EcDIRollupWebLogs.pl (EcDIRollupWebLogs.CFG)**
processes web access logs
 - **EcDIRollupFtpLogs.pl (EcDIRollupFtpLogs.CFG)**
processes SYSLOG for FTP entries
- **Captured data are written to a flat file and exported to Sybase**
- **Associated shell scripts**
 - **DIDbArchiveAccessStat**
 - **DIDbDeleteAccessStat**
 - **DIDbRestoreAccessStat**

Data Pool Batch Insert Utility



- **Command-line utility allows insert of granules from the ECS archive or from outside ECS**
 - Queues granules for Data Pool Action Dispatcher (DPAD) and insert by Data Pool Insert Utility (DPIU)
 - Batch label specified by **-label** option
 - Theme association specified by **-theme** option
 - » **Note:** If **-theme** option is used to link granules resident in Data Pool to a theme, and the granules were originally inserted using the Batch Insert Utility, must use a different batch label from that used for original insert into Data Pool
 - **EcDIBatchInsert.pl** *<MODE>* **-ecs** | **nonecs** [**-file** *pathname*]
[**-theme** "*theme-name*"] [**-label** *label*]
[**-rpriority** *priority*] [**-rperiod** *period*]
[**-dpriority** *priority*] [**-mdonly**]
[**-verbose**]

Data Pool Order Status & Control



- **For orders place using the Data Pool Web Access tool or the single granule converter dialog for the HDF EOS - GeoTiff (HEG) Converter**
- **Allows operators to view the status of orders and order items**
- **Allows operators to control certain aspects of the order process**
- **Four functional areas:**
 - **Queue Control: Start and stop the HEG Converter Front End server**
 - **Orders: Reports the status of orders**
 - **Order Items: Reports the status of order items**
 - **Help: Provides information on the functions**

DataPool Order Status & Control: Orders Page and Order Details



DataPool: Order Status - Netscape

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Location: <http://n0dps01u.ecs.nasa.gov:22000/OPS/order>

DataPool Order Status & Control

[Queue Control](#) | [Orders](#) | [Order Items](#) | [Help](#)

Orders

There are totally **23** orders , **1** order is currently being processed. There are also **9 failed orders** which need operator attention. The filtering status in this page is: No filtering

Filter: On Off By Status: Do Filtering

Order ID	Status	E-Mail	User Name	Creation Date	Last Update
32	DONE	hconover@itsc.uah.edu	-	05/15/03	05/15/03
9	DONE	sjsk@nsidc.org	s khalsa	04/15/03	05/15/03
17	DONE	sjsk@nsidc.org	s khalsa	04/18/03	05/15/03
10	DONE	sjsk@nsidc.org	s khalsa	04/15/03	05/15/03
19	DONE	sjsk@nsidc.org	s khalsa	04/21/03	05/15/03
31	FAILOPERN	btmclean@nsidc.org	-	05/14/03	05/15/03
30	DONE	btmclean@nsidc.org	-	05/14/03	05/14/03
29	DONE	marilynk@nsidc.org	-	05/12/03	05/12/03
27	FAILOPERN	btmclean@nsidc.org	-	05/02/03	05/06/03
28	FAILOPERN	btmclean@nsidc.org	-	05/02/03	05/02/03

Filter: On Off By Status: Do Filtering

DataPool: Order Details Viewer - Netscape

Order Details Viewer

Current Order/Row is 2 of 23: [First](#) | [Previous](#) | [Next](#) | [Last](#)

Details for Order 10 (#2 of 23)

Order ID: 10
 Status: DONE
 Creation Date: 04/15/03
 Last Update: 05/15/03
 Email: sjsk@nsidc.org
 Real Name: s khalsa

Upper Left Latitude: -
 Upper Left Longitude: -
 Lower Right Latitude: -
 Lower Right Longitude: -

Output Projection:
 (If specified at the Order level. Overrides orderItem projection selection.) **geo**

Output Format:
 (If specified at the Order level. Overrides orderItem format selection.) **geotiff**

Current Order/Row is 2 of 23: [First](#) | [Previous](#) | [Next](#) | [Last](#)

DataPool Order Status & Control: Order Items Page and Item Details



DataPool: Item Status - Netscape

File Edit View Go Communicator Help

Location: tu.ecs.nasa.gov:22000/OPS/order.jsessionid=vj1lvotv31?page=item&doFilter=on&submitFilter=yes&orderid=28&sort=itemid

DataPool Order Status & Control

[Queue Control](#) | [Orders](#) | [Order Items](#) | [Help](#)

Items

There are totally [196](#) order items , [1](#) order item is currently being processed. There are also [72 failed order items](#) which need operator attention. The filtering status in this page is: Filter on order 28

Filter: On Off By Order ID: Do Filtering By Status: Do Filtering

Rows in Page: Showing of 4 Order Items: < >

Item ID	Status	Error Code	Granule ID	Input File	Ord
143	DONE	0	2594549	MOST/MOD10A1.004/2003.04.25//MOD10A1.A2003115.h14v09.004.2003122183052.hdf	28
144	DONE	0	2594556	MOST/MOD10A1.004/2003.04.25//MOD10A1.A2003115.h13v09.004.2003122185038.hdf	28
145	FAILED	610 HEG: Opening Input Parameter File	2594544	MOST/MOD10A1.004/2003.04.25//MOD10A1.A2003115.h14v10.004.2003122183034.hdf	28
146	FAILED	610 HEG: Opening Input Parameter File	2594560	MOST/MOD10A1.004/2003.04.25//MOD10A1.A2003115.h13v10.004.2003122185704.hdf	28

Rows in Page: Showing of 4 Order Items: < >

Filter: On Off By Order ID: Do Filtering By Status: Do Filtering

Document Done

DataPool: Request Details Viewer - Netscape

Order Item Details Viewer

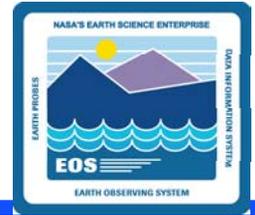
Current Item/Row is 2 of 2: [First](#) | [Previous](#) | Next | [Last](#)

Details for Order Item 38 (#2 of 2)

Item ID: 38
 Order ID: 8
 Status: DONE
 Error Code: 0
 Granule ID: 2013176744
 Input File: MOST/MODPT1KN.001/2000.08.25//labtest_2013308902
 Output
 Projection: nochange
 Output
 Format: hdfs

Current Item/Row is 2 of 2: [First](#) | [Previous](#) | Next | [Last](#)

DataPool Order Status & Control: Queue Control Page



DataPool: Request Status - Netscape
File Edit View Go Communicator Help
Back Forward Reload Home Search Netscape Print Security Shop Stop
Location: http://n0dps01u.ecs.nasa.gov:22000/OPS/order;jsessionid=vj1hvotv31?page=config What's Related



DataPool Order Status & Control

[Queue Control](#) | [Orders](#) | [Order Items](#) | [Help](#)

Processing and Queue Status

HEG Front End Server:	UP	Exit Gracefully	Exit Immediately (No Cleanup)
HEG Front End Processing State:	Process orders in the order queue		
Maximum number of HEG Converter Processes:	10		
Maximum Order Queue Size:	100		

Apply Changes Reset

U.S. GOVERNMENT COMPUTER

YOU SHOULD HAVE NO EXPECTATION OF PRIVACY
By continuing, you consent in your keystrokes and data content being monitored

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Document Done