

ECS Configuration Change Request

1. Originator Randall J. Miller	2. Log Date: 3/27/00	3. CCR #: 00-0326	4. Rev.: -	5. Tel: (301) 925-0400	6. Rm #: 3036	7. Dept. REDV
8. CCR Title: Deliver Hemp.01 Test Executables To GSFC and LaRC						
9. Originator Signature/Date <i>Randall J. Miller</i> 3/27/00			10. Class II	11. Type: CCR	12. Need Date: 03/27/00	
13. Office Manager Signature/Date <i>Randall J. Miller for Roy Armstrong</i> 3/27/00			14. Category of Change: Other		15. Priority: (If "Emergency" fill in Block 28). Emergency	
16. Documentation/Drawings Impacted: None			17. Schedule Impact: None		18. CI(s) Affected: SDSRV, STMGT	
19. Release Affected by this Change: 5A		20. Date due to Customer: 03/020/00		21. Estimated Cost: None - Under 100K		
22. Source Reference: <input type="checkbox"/> NCR (attach) <input type="checkbox"/> Action Item <input type="checkbox"/> Tech Ref. <input type="checkbox"/> GSFC <input type="checkbox"/> Other:						
23. Problem: (use additional Sheets if necessary) Development has developed a script to modify the mapping of data types to archive volume groups to address an operational recovery problem.						
24. Proposed Solution: (use additional sheets if necessary) Software CM shall prepare a tar file as specified on the continuation page. SMC shall distribute this tar file to all sites. Sites shall install as required.						
25. Alternate Solution: (use additional sheets if necessary) Continue with the status quo, in which the loss of an Ancillary data tape may cause significant EDOS recovery processing.						
26. Consequences if Change(s) are not approved: (use additional sheets if necessary) GSFC and LaRC will continue to put all of their Ancillary data on a single tape for months at a time, possibly wearing out the tape.						
27. Justification for Emergency (If Block 15 is "Emergency"): GSFC is experiencing problems with reading tapes that could interact with this Ancillary data issue, resulting in the loss of the Ancillary tape.						
28. Site(s) Affected: <input type="checkbox"/> EDF <input type="checkbox"/> PVC <input checked="" type="checkbox"/> WATC <input type="checkbox"/> EDC <input checked="" type="checkbox"/> GSFC <input checked="" type="checkbox"/> LaRC <input type="checkbox"/> NSIDC <input checked="" type="checkbox"/> SMC <input type="checkbox"/> AK <input type="checkbox"/> JPL <input type="checkbox"/> EOC <input type="checkbox"/> IDG Test Cell <input type="checkbox"/> Other						
29. Board Comments:			30. Work Assigned To:	31. CCR Closed Date:		
32. EDF/SCDV CCB Chair (Sign/Date):		Disposition: Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/EGS				
33. M&O CCB Chair (Sign/Date): <i>Henry W. Bean</i> 3/27/00		Disposition: <u>Approved</u> App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ECS				
34. ECS CCB Chair (Sign/Date):		Disposition: Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ESDIS				

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ECS/EDF/SCDV/M&O

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## ADDITIONAL SHEET

CCR #: 00-0326 Rev: - Originator: Randall J. Miller

Telephone: (301) 925-0400 Office: 3036

**Title of Change:** Deliver Hemp.01 Test Executables To GSFC and LaRC

### CONTENT:

Please create a Sun tar file from the view jcrowfor\_GsfcPatch containing the following file:

/ecs/formal/DSS/stmgt/data/EcDsStESDTMap.Patch.4

### INSTALLATION:

Installation instructions are provided in a separate (attached) file.

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The current volume group allocations at GDAAC and LDAAC have AM-1 ancillary data being written to a separate volume group. Because of the small size of these products, a single D3 tape will hold several months of ancillary data and the loss of any single tape will cause a large gap in ancillary data coverage.

To mitigate this, ECS is changing the volume group allocation for these products. These products will now be assigned to the MODIS Level 0 volume group (modl0) at GDAAC and the MISR Level 0 volume group (misrl0) at LDAAC. This will cause the ancillary data to be spread across a number of tapes since the Level 0 volume group writes about 1.5 tapes per day at GDAAC and about 1 tape per day at LDAAC. Thus the loss of any single tape will now only cause a one day gap in data coverage.

The following ESDTs are affected by the change:

AM1DIAG1  
AM1DIAG2  
AM1HK  
AM1HS  
AM1ST  
AM1ANC

To implement this change, you must temporarily halt ingest of the above data types. Then update the ancillary data type volume group assignments using the STMGT GUI and then update the DsGeESDTConfiguredType table in the SDSRV database to change the archive identifiers for the affected ESDTs.

From the STMGT GUI:

1. From the Storage Config. tab, select the affected Archive Server and click on the View Volume Group Info button.
2. For each of the affected ESDTs, select the ESDT and click on the Modify button.
3. Edit the New Path value, changing "ancnb" to "modl0".
4. Click on the OK button.

Repeat this procedure for each version of each affected ESDT on each affected Archive Server.

At GDAAC only, we recommend backing up the Level 0 volume group until the current tape read problems are resolved. The ESDTs affected by this change are:

AM1DIAG1  
AM1DIAG2  
AM1HK  
AM1HS  
AM1ST  
AM1ANC

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MOD000  
 MOD001\*  
 MOD002\*  
 MOD003\*  
 ...  
 MOD063\*

\*not necessary if these ESDTs have not been installed

In order to simplify creation of these backup volume groups, a patch file, EcDsStESDTMap.Patch.4, has been provided as part of the Hemp.01 test set for the 5A baseline. This patch needs to be applied on g0drg02.

(For a detailed explanation of the creation of logical archive directories and adding volume groups, refer to the **Detailed Notes: Logical Volume Groups** appendix. This information has been distributed with previous release notes, and is provided herein as a convenience to those not familiar with the logical volume group configuration capability.)

1. Move the patch file into place.

```
cd /usr/ecs/<MODE>/CUSTOM/data/DSS
cp EcDsStESDTMap EcDsStESDTMap.master
cp EcDsStESDTMap.Patch.4 EcDsStESDTMap
```

2. Apply the updates to the logical volume group configuration:

```
cd /usr/ecs/<MODE>/CUSTOM/utilities
EcDsStConfigVolGrps
```

Note: Only one physical volume group path will be created, but this will be a new physical volume group path. You may choose either Local Disk or AMASS, but you must follow the directions in the **Detailed Notes: Logical Volume Groups** appendix for whichever approach you choose.

3. Verification: From the STMGT GUI, verify that a logical volume group named MOD004.001B exists for the Archive Server instance on g0drg02, and is tied to a volume group path ending in modl0\_bak.

Log into the SDSRV database and execute the following sql requests:

```
1> begin tran update_backupId
2> go
```

```
1> update DsGeESDTConfiguredType
2> set backupIdentifier = "<DAAC supplied value>"
```

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```
3> where configuredName = "<ESDT ShortName>"  
4> and versionID = <ESDT version ID>  
5> go
```

do this for all the ESDTs in the above list, then run the following

```
1> commit tran update_backupId  
2> go
```

This will allow you to rollback the transaction if there's any error. The DAAC supplied value for backupIdentifier should map to silo 2.

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