ECS Configuration Change Request

1. Originator	2. Log Date:	3. CCR #:	4. Rev:	5. Tel:	6. Rm #:	7. Dept.
Evan Winston	1/10/01	01-0021	—	301.925.0348	2013	DEV/CO

8. CCR Title: Test Executable 5B.06_PDS.02 to EDC. Provides the changes for PDS from the 5B6A baseline to run on top of 5B.06 installation..

9. Originator Signature/Date	10. Class	11. Type:	12. Need Date: 10Jan2001
[signature] 1/10/01	II	CCR	

13. Office Manager Signature/Date	14. Category of Change:	15. Priority: (If "Emergency" fill in Block 28).
[signature] for Jim D'Aiz 1/10/01	Update ECS Baseline Doc.	Emergency

16. Documentation/Drawings Impacted:	17. Schedule Impact:	18. CI(s) Affected:
N/A	N/A	DMS,DSS,DIST,CSS,CLS, STMGT

19. Release Affected by this Change:	20. Date due to Customer:	21. Estimated Cost:
5B		None - Under 100K

22. Source Reference: ☐NCR (attach) ☐Action Item ☐Tech Ref. ☐GSFC ☒Other:
PDS Capability 6A-09, NCRs 29460 and 29466.

23. Problem: (use additional Sheets if necessary)
Provide a Test Executable of PDS so that EDC can run preliminary tests.

24. Proposed Solution: (use additional sheets if necessary)
Test Executable 5B.06_PDS.02 will provide EDC with software to test on top of 5B.06 software already installed.
It must be installed over installations of 5B.06.

25. Alternate Solution: (use additional sheets if necessary)
Take no action now and wait until 5B.07 is available at the DAACs.

26. Consequences if Change(s) are not approved: (use additional sheets if necessary)
Delay in PDS testing.

27. Justification for Emergency (If Block 15 is "Emergency"):
EDC needs for PDS advance testing.

28. Site(s) Affected: ☐EDF ☐PVC ☐VATC ☒EDC ☐GSFC ☐LaRC ☐NSIDC ☒SMC ☐AK ☐JPL ☐EOC ☐IDG Test Cell ☐Other

29. Board Comments:	30. Work Assigned To:	31. CCR Closed Date:

32. EDF/SCDV CCB Chair (Sign/Date): [signature] 1/10/01	Disposition: Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ECS
33. M&O CCB Chair (Sign/Date): [signature] 1/10/01	Disposition: Approved 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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ADDITIONAL SHEET

CCR #: 01-0021 **Rev:** - **Originator:** Evan Winston

Telephone: 301.925.0348 **Office:** DEV/CO

Title of Change: Test Executable 5B.06_PDS.02 to EDC. Provides the changes for PDS from the 5B6A baseline to run on top of 5B.06 installation.

CM: PLEASE, build Sun TAR file(s) for the listed files from current 5B6A baseline and provide to the SMC.

.EcCsSubServerGUI.pkg
.EcClOdAsterOnDemand.pkg
.EcDsDdDISTSRVR.pkg
.EcDmEcsToAsterGw.pkg
.EcDmINTFCSVR.pkg

~~build SGI 6n32 TAR file(s) for the listed files from the current 5B6A baseline and provide to the SMC.~~ delete EBW 1/10/01
~~.EcDsStDatabase.pkg~~
~~.EcDsSCLI.pkg~~

build SGI IRIX TAR file(s) for the listed files from the current 5B6A baseline and provide to the SMC.
.EcDsStDatabase.pkg
.EcDsSCLI.pkg

SMC: Receive the TAR file(s) and make available to the EDC, PVC and VATC.

DAAC Install Instructions:
TE can be loaded on top of mode installations of 5B.06.
This TE replaces 5B.06_PDS.01 (now obsolete).
EDC site map modified so the SCLI package is loaded on the INGEST (icg) box. can be modified if necessary.

Important NOTE !!!!!!!!!!!
For this install you will use the instructions below and then be using parts of the STMGT Install Instructions a copy is attached to this CCR and a copy will be attached to the Delivery Notice e-mail Message for this TE.

1. Get TAR Files from SMC distribution; EBW 1/10/01
Make sure you select the SUN TAR file as well as the ~~proper~~ SGI TAR files--~~either for 6n32 or~~ IRIX65.

2. UNTAR the files and copy to the staging area using the Setup.ksh file. EBW 1/10/01
a) Change to the platform staging directory:

cd /<distribution_directory>/<staging_directory>/SUN and then for the SGI
b) Execute the setup script (change the permissions on the script to 755 if necessary):

./<drop_name>_Setup.ksh
___ c) At the prompt "Press ^C to Cancel, Any Other Key to Continue:", press any key except ^C.
___ d) At the "Continue? (Y/N):" prompt, enter Y
___ e) At the "Extract ECS tar packages? (Y/N):" prompt, enter Y
___ f) Verify that the staging area location is correct on the line "Install ECS Staging area to: <distribution_directory>/<staging_directory>/SUN" and then for the SGI
___ g) If correct, enter Y at the prompt "Enter ^C to Cancel, 'N' to change, 'Y' to continue:"
___ h) Verify that the following messages are received :
Cleaning up ... done.
Delivery setup is complete, you may now install ECS from staging area.

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___ i) At the prompt "Update ECS Assist Common Files? (Root only)(Y/N)", enter Y

Be sure to select "Y" when prompted for "Update ECS Assist Common Files" to get the latest version of ECS ASSIST. THIS MUST BE RUN AS ROOT.

3. Modify the file permissions as specified below

```
cd/<distribution_directory>/<stage_directory>/SUN/CUSTOM/dbms
chmod 744 DSS/EcDsStDbLogin
cd/<distribution_directory>/<stage_directory>/SUN/CUSTOM/dbms
chmod 744 DMS/EcDmSybaseLogins.sql
```

4. On a SUN host, use E.A.S.I. to perform automated installation of the SGI and SUN packages/hosts as follows:

a. Select the Mode to be installed
b. Enter the location of the staged files
c. Select CUSTOM and Click Next
d. Hold down the SHIFT Key and select each of the affected SGI and SUN hosts. Click Next
e. Select Install as the Installation Phase and Click Next
f. Select STAGE as the Source File Location . Click Next
g. Review the packages and hosts as displayed to ensure that they are going to be installed appropriately. Click Next
h. Click COMM and ensure all hosts turn green, signaling they are communicating with ECS E.A.S.I.
i. Click INSTALL and monitor each host. Ensure each SGI and SUN host turns green signaling a successful installation.

5. Now Refer to the attached STMGT Configuration and Initalization sheets (these are attached to this NCR and are attached to the Delivery Notice e-mail message for this TE) for the remaining install instructions.
You will need to run rgy patch or mkconfg for new configuration parameters and STMGT Database patch -- MUST run for patches up to Patch #28!!!!!!

6. If the TE 5B.06_PDS.01 was not installed before you may have to install DMS database patches.
Apply the DMS Database Patch from the SubSystem Manager. Must have DBO privilege to perform this task.

a. Click Database and Select Patch
b. Select .dbparms
c. Ensure Patch File name is: EcDmDdDbPatch5B.sql and enter the DMS Sql DB access variables as prompted
d. After patch has been applied review patch log in the logs directory and disregard the following warning statements:

```
There is already an object named 'TempKeywordAlias' in the database.
There is already an object named 'DmDdKeywordAliasXref' in the database.
There is already an object named 'TempStringDomain' in the database.
There is already an object named 'DmDdStringDomain' in the database.
Attempt to insert duplicate key row in object 'DmDdInfoMgr' with unique index
  'pk_dmddinfomgr'.  Command has been aborted.
```

Ensure no other error messages are present in the db patch log.

7. Validate that the database has the SchemaVersion of 78. If the version is already at 78 then skip to step 9. Must have DBO privilege to perform this task.

a. Use isql to access the DMS database
b. Execute the following command:
   Select * from EcDbDatabaseVersions where EcDbCurrentVersionFlag = "Y"
c. Ensure the field EcDbSchemaVersionId = 78.

8. Use ECS Assistant SubSystem Manager to apply the Registry Patch. Must have DBO privilege to perform this task.

a. Select Tools from the top line Menu
b. Select Registry Data Patch
c. Enter the Registry DB access parameters as prompted. Ensure that the <RETURN> key is pressed after entering the value for Registry DB Name. Click the down arrow to select the appropriate Registry Tree to Patch. Click the "Select Patch File" button to enter the path whtere the .rgypatch is located.
   /usr/ecs/<MODE>/CUSTOM/.installed/DMS/.rgypatch

9. Ensure that the Registry and all Servers are re-started.

10. The SCLI package will require some additional configuration changes. These will be supplied under separate cover by COB 1/10/01.

11. The Development Construction office will provide installation assistance as needed.

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STMGT Configuration and Initialization

Before following these procedures, install the STMGT packages via EASI as described in the TE instructions. In addition, in order to ensure that the 8MM tape server will work correctly, verify that the correct drivers are installed:

To ensure that the chs drivers are installed:

1. Obtain the device paths of the stackers (e.g. /dev/chgr0)
2. As cmshared, issue the following command:
   chs -f <device path> inv
3. If the correct drivers are installed, the stacker inventory will be displayed. If the inventory is not displayed, contact the help desk for further information.

These procedures are order-dependent. Each individual step should be completed before the follow-on step is attempted.

Replace all occurrences of the string <MODE> with the mode into which you are performing the installation i.e. TS1, TS2 or OPS. Replace all occurrences of <stage_directory_location> with the path name of the staging directory provided to you by the installation lead. Replace all occurrences of <server_manager> with the UNIX account name that is used to run you servers. Normally this is "cmshared" or "allmode". Replace all occurrences of <mode> with the mode name in lower case letters into which you are performing the installation

CONFIGURATION:

A. Run mkcfg (Media Distribution box only)

___a) Run a mkcfg via ECS Assist **only** on the box which hosts the 8MM server. A new tab for the SyncStackerMkcfg has been added.

a) The SyncStackerMkcfg requires the following parameters for the STMGT database:

- DBUSER	EcDsSt8MMServer
-DBPASSWORD	(get value of password from the contents of the /usr/ecs/<MODE>/CUSTOM/dbms/DSS/EcDsStDbLogin file)
-DBSERVER	(e.g. p0acg04_srvr)
-DBNAME	(e.g. stmgtdb1_TS2)

The SyncStackerMkcfg will create an executable script called SyncStacker in the /usr/ecs/<MODE>/CUSTOM/utilities directory that the EcDsSt8MMServer will execute at start up. More information about the SyncStacker script is provided in the "Notes" section below.

___ b) Remove all .CFG files in the /usr/ecs/<MODE>/CUSTOM/cfg directory on this box.

B. Install Registry Patch

From any STMGT machine, patch the registry database using the .rgypatch file:

___ a) From the ECS Assist Subsystem Manager, select the appropriate Mode, Subsystem, and Component from the main window.

___ b) Select "Registry Data Patch" from the "Tools" menu. An "Apply Registry Data Patch" window will appear.

___ c) In the "Apply Registry Data Patch" window, enter the name of the SQL server in the "Registry Database Server:" box.

___ d) Enter the registry database DBO ID and password, respectively, in the next two boxes.

___ e) In the next ("Registry DB Name:") box, be sure to enter the name of the registry database (**EcCsRegistry[_<mode>]** and press the **<ENTER>** key. This will cause ECS Assist to connect to the registry database and populate the drop-down menu associated with the next field ("Tree to patch:").

___ f) Use the drop-down menu to select the appropriate registry tree that is being patched (if you don't know which tree to select, bring up the registry GUI and verify which tree is mapped to the mode that you are updating).

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___ g) Finally, click on the "Select Patch File" button to bring up the "File Selection Dialog" window.
___ h) Navigate through this window to find the .rgypatch file (note: if your installation was successful, it should appear in the /usr/ecs/<MODE>/CUSTOM/.installed/DSS/stmgt directory).
___ i) Highlight the .rgypatch file in the window and select **<OK>**.
___ j) Verify that the appropriate information is indicated in the "Patch File:" box in the "Apply Registry Data Patch" window and select **<OK>**.

At this point, the registry patch will be applied. Monitor the output via ECS Assist for any warning or error messages as the patch is run.

DATABASE:

1. Determine the current mode of the STMGT database

> isql -S<server_name> -U<db_user_name> -P<db_user_password>
> use stmgtdb1[_<MODE>]
> go
> select * from EcDbDatabaseVersions where EcDbCurrentVersionFlag="Y"
> go
Note the value of EcDbComments.
> quit

2. Patch the STMGT database:

___ a) **Review any Workarounds for the Database phase.**
___ b) Obtain the required database parameters:

Table A - Database Parameters

PARAMETER	VALUE
DBO ID, db_user_name	stmgt_role
Password, db_user_password	<DBO password>
SQL Server Name, server_name	*xxXXXnn*_srvr
Database Name	stmgtdb1[_<MODE>]

Where **stmgtdb1** is the database name in OPS mode, and **stmgtdb1_<MODE>** is the database name in TS1 and TS2.

___ d) Using EcCoAssist execute the **DbPatch** function to patch the STMGT/DDIST database. For **DbPatch**, you must iteratively update the database from the current patch level (5B25.25 is the baseline for 5B.06) through the installation patch level (5B27.27 for this TE). To update to "**STMGT/Drop 5B27.27**" from "**STMGT/Drop 5B25.25**":

Table B - Database Patch Table

CURRENT DB VERSION	ACTION
STMGT/Drop 5B27.27	Run DbPatch for 5B28.28.

Note that these patch identifiers ("STMGT/Drop 5B25.25", etc.) are the internal subsystem patch identifiers; this subsystem identifier is embedded in the EcDbComments field of the EcDbDatabaseVersions table.

___ e) Select file .dbparms within the select a file box, then select **Ok** in the Database Config box.

___ f) Enter the parameters in the Database Parameters (Table A above).

___ g) Select **Ok** to start the database patch.

___ h) Execute the EcDbDDMUpdateVersionTable.sql script file that is under the directory "/usr/ecs/{MODE}/CUSTOM/dbms/COM/DBAdmin." The parameters to be passed are MODE USERNAME DSQUERY DBNAME. You will be prompted for the PASSWORD.

VERIFICATION:

___ a) Review the file EcInDbPatch.log in /usr/ecs/<MODE>/CUSTOM/logs for any error or warning messages.

___ b) Verify that the current internal subsystem patch identifier is "STMGT/Drop 5B27.27" and the current EcDbDropVersion is "5B.06":

```
> isql -S <server_name> -U <db_user_name> -P <db_user_password>
> use stmgtdb1 [_<MODE>]
> go
> select * from EcDbDatabaseVersions where EcDbCurrentVersionFlag="Y"
> go
```

Check the values of EcDbComments and EcDbDropVersion.

```
> quit
```

Have the DBA verify the database changes through the DbDesc script for this subsystem.

MEDIA SERVERS

__a) The ownership and permissions for the media server executables (EcDsSt8MMServer and EcDsStD3Server) must be set so that they will execute as root. The following must be executed by root. From the directory containing the executable, issue the following commands from the Unix command prompt:

```
chown root EcDsStD3Server
chmod u+s EcDsStD3Server
```

NOTE: The 8MM server file ownership should no longer be changed to root.
Once these commands have been executed, the media servers may be started or killed without root privileges.

__b) Change the ownership of the EcDsStFTPClientDaemon binary (on all platforms on which it is installed) to the account that will be running the EcDsStFtpDisServer and EcDsStIngestFtpServer processes -- e.g., if the STMGT FTP servers will be run by cmshared, execute the command (some sites may wish to change group permissions as well):

chown cmshared /usr/ecs/<mode>/CUSTOM/bin/DSS/EcDsStFTPClientDaemon

Change the permissions if they are not currently listed as '-rwsr-x---':

chmod 4750 EcDsStFTPClientDaemon

__c) Change the ownership of the EcDsStCopyDaemon binary (on all platforms on which it is installed) to the account that will be running the EcDsStArchiveServer and EcDsStStagingMonitorServer processes. E.g., if the STMGT Archive server will be run by cmshared, execute the command:

chown cmshared /usr/ecs/<mode>/CUSTOM/bin/DSS/EcDsStCopyDaemon

Change the permissions if they are not currently listed as '-rwsr-s---':

chmod 6750 EcDsStCopyDaemon

START SERVERS:

___ a) Verify that SHARED mode subagent configuration files exist before starting any servers.
___ b) Login as <server_manager> (cmshared or allmode at most sites) and change to the /usr/ecs/<MODE>/CUSTOM/utilities directory.
___ c) Start each server using the appropriate start script (generally <server_name>Start).
___ d) Use Whazzup to monitor server status.

START GUIS:

___ a) From the command line, start the GUIs which are a part of your component on the appropriate host(s):

cd /usr/ecs/<MODE>/CUSTOM/utilities
EcDsStmgtGUIStart <MODE>

POST-INSTALLATION:

None

WORKAROUNDS:

None

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NOTES:

SyncStacker script

The SyncStackerMkcfg will create an executable script called SyncStacker in the /usr/ecs/<MODE>/CUSTOM/utilities directory that the EcDsSt8MMServer will execute at startup. SyncStacker moves any tape that is already in a drive at startup back to its original slot and updates the database to reflect the change.

SyncStacker does not actually synchronize the database contents with the actual physical configuration of the stacker. SyncStacker instead relies on the database keeping an accurate picture of the stacker configuration. It is only useful if the database has been originally been accurately configured.

SyncStacker is useful when the EcDsSt8MMServer dies or is killed on purpose while there are requests being serviced by the stackers. Upon startup of the EcDsSt8MMServer, the server will sleep for a number of seconds in order to give any tapes that may be in the drives time to rewind. The script will then be executed to move the tapes back into their slots and updated the database to reflect the new configuration.

To verify that the database accurately depicts the stacker configuration, access the STMGT database and review the DsStStacker, DsStDevice, and DsStSlot tables:

Common DB values to check for:

DsStStacker Table

Status:
0 - Offline
1 - Online

Stackers that are to be used should have a value of 1 - Online

DsStDevice Table

Status:	DriveCurrentSlot:	CurrentStatus
0 - Offline	should be -1 if no tape is in drive	0 - Unallocated/Free
1 - Online	else the slot # of the tape 1 – 10	1 - Allocated/Reserved
2 - Loaded		

Devices that are to be used should have a value of 1 - Online a DriveCurrentSlot value of -1 and a CurrentStatus of 0. Note updates of DriveCurrentSlot must be done on a per drive basis

STMGT Configuration and Initialization (continued)

DsStSlot Table

SlotStatus	SlotUse:	SlotCurrentStatus
0 – Offline	0 - Read Only	0 -Unallocated/Reserved
1 – Empty	1 - Read/Write	1 -Allocated/Reserved
2 - Loaded		
3 - Active		
4 - Complete		

Tapes that are available for distribution should have a value of 2 for SlotStatus, 1 for SlotUse, and 0 for SlotCurrentStatus