

**ECS Configuration Change Request**

1. Originator Evan Winston	2. Log Date: 2/7/01	3. CCR #: 01-0115	4. Rev: -	5. Tel: 301.925.0348	6. Rm #: 2013	7. Dept. DEV/CO
8. CCR Title: Test Executable 6A.03_PDPS.01 to VATC & PVC. Delivers DPS, PLS, and SCIENCEPROCESSOR Subsystems due to PLS database changes required by NCR fixes. Adds performance based NCR fixes and other 6A.04 baseline merges thru 2/6/01.						
9. Originator Signature/Date <i>Evan Winston 2/7/01</i>			10. Class <i>II</i>	11. Type: CCR	12. Need Date: 02/07/2001	
13. Office Manager Signature/Date <i>Evan Winston 2/7/01</i> <i>For Tim O'Hara</i>			14. Category of Change: Update ECS Baseline Doc.		15. Priority: (If "Emergency" fill in Block 28). Emergency	
16. Documentation/Drawings Impacted: N/A			17. Schedule Impact: N/A	18. CI(s) Affected:DPS, PLS, SCNCPRCS		
19. Release Affected by this Change: 6A		20. Date due to Customer:		21. Estimated Cost: None - Under 100K		
22. Source Reference: <input checked="" type="checkbox"/> NCR (attach) <input type="checkbox"/> Action Item <input type="checkbox"/> Tech Ref. <input type="checkbox"/> GSFC <input type="checkbox"/> Other: NCRs ECSed 29536, 29706,28552,28024(dup),29600. (additional NCRs referenced starting on page 3)						
23. Problem: (use additional Sheets if necessary) 29536 PDPS tx log fills in OPS halting production 29706 Trigs 'Trig**DpPrDiskAllocation' May fail to update DpPrDiskAllocation 28552 Production halts -- may be due to a problem with DPS Locks (may be dup of 28024) 28024 GSFC/SMC Jobs Hanging in Autosys in OPS (dupped to 28552) 29600 GSFC/SMC: Alternate inputs logical ID mislabeled in AM1Eph continued on page 3.						
24. Proposed Solution: (use additional sheets if necessary) Test Executable 6A.03_PDPS.01 will provide fixes to the problems listed above. TE can be loaded on top of installations of 6A.03.  NOTE: The Proper 5B DPREP Version Numbers Are: AM1 = 30006 and PM1 = 00105. 6A Version Numbers are: AM1 = 30101 and PM1 = 00201						
25. Alternate Solution: (use additional sheets if necessary) Take no action now and wait until 6A.04 is available.						
26. Consequences if Change(s) are not approved: (use additional sheets if necessary) PVC must continue to work around the problems and/or modify operating procedures.						
27. Justification for Emergency (If Block 15 is "Emergency"): addresses several items on the ECS Top Priority List.						
28. Site(s) Affected: <input type="checkbox"/> EDF <input checked="" type="checkbox"/> PVC <input checked="" type="checkbox"/> VATC <input type="checkbox"/> EDC <input type="checkbox"/> GSFC <input 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): <i>Dennis J. Bellus 2/7/01</i>		Disposition: <u>Approved</u> App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ECS				
33. M&O CCB Chair (Sign/Date):		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 #: 01-0115 Rev: Originator: Evan Winston

Telephone: 301.925.0348 Office: DEV/CO

**Title of Change:** Test Executable 6A.03\_PDPS.01 to VATC & PVC. Delivers DPS, PLS, and SCIENCEPROCESSOR Subsystems due to PLS database changes required by NCR fixes. Adds performance based NCR fixes and other 6A.04 baseline merges thru 2/6/01.

### CONTENT:

#### CM:

Please generate SGI/IRIX tar from the 6A (6A.04) maintenance branch for the .EcDpScSCNCPRCS.pkg package.

Also generate a SUN TAR file to include:  
Packages from /ecs/formal/PDPS/DPS/PRONG:

.EcDpPrPLNMGMTWS.pkg  
.EcDpPrQUESRVR.pkg

Package from /ecs/formal/PDPS/DPS/SSIT

.EcDpAITWS.pkg

Packages from /ecs/formal/PDPS/PLS

.EcPIODPRM.pkg  
.EcPIPLNMGMTWS.pkg  
.EcPIQUESRVR.pkg

#### CLEARCASE CM PLEASE NOTE:

Immediately make these TAR files available to the PVC from the machine 'blood'. Do NOT wait for the final sign-off of this CCR to provide these TAR files to the PVC.

Then follow normal procedure and protocol to make the delivery through the SMC.

SMC: distribute to the DAACs.

#### Install Instructions:

1. Get TAR Files from SMC distribution;
2. UNTAR the files and copy to the staging area. UNTAR the files and copy to the staging area using the Setup.ksh file. 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. On a SUN host, use E.A.S.I. to perform automated installation of the .EcDpScSCNCPRCS.pkg and the .EcDpAITWS.pkg and the all the other listed packages as follows:
  - a. Select the Mode to be installed
  - b. Enter the location of the staged files
  - c. Select CUSTOM and Click Next
  - d. Select the "Subsystem" entry in the "Sort By" box.
  - e. Expand the tree down by the DPS icon and then by holding the shift key select the EcDpSc and EcDpAt icons and the PRONG icon as well..  
Also expand down the PLS icon and select the PLS package icons
  - f. You should have Selected all the .pkg packages listed above; Click Next.
  - g. Select Install as the Installation Phase and Click Next

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- h. Select STAGE as the Source File Location . Click Next
- i. Review the packages and hosts as displayed to ensure that they are going to be installed appropriately. Click Next
- j. Click COMM and ensure all DPS SGI and Sun hosts and PLS SUN hosts turn green, signaling they are communicating with ECS E.A.S.I.
- k. Click INSTALL and monitor each host. Ensure each DPS SGI and Sun host and PLS hosts turns green signaling a successful installation.
- l.
- m. Database update. Use the ECS Assistant to run the database patches. You will need to patch up to the most recent level. The CO will provide this information if there are any questions during install.

Detailed Summary of fixes and information for checkout testing:

29981: Restore the value of fileSize so it won't be incremented when there isn't enough disk space available.

29158 Added to the PM-1 DPREP PM1EPHD ESDT ODL file the following information: PERIOD, BOUNDARY, DURATION, DELAY, and SPATIAL\_FLAG. DYNAMIC\_FLAG is set to "EXTERNAL" also.

ECSed28865 The script now resets the onlinestate to zero if the corresponding parameter is supplied, indicating that it needs to reset it. Also it checks for sybase, quitting if sybase is not found. In addition it warns the user that this script is to be run on the queing server.

ECSed28981

Summary of NCR fix:

Restore the value of fileSize so it won't be incremented when there isn't enough disk space available.

Files in Task:

/ecs/formal/PDPS/DPS/PRONG/src/RsrcMgmt/DpPrResourceManager.cxx

ECSed29158

Summary of NCR fix:

Added to the PM-1 DPREP PM1EPHD ESDT ODL file the following information: PERIOD, BOUNDARY, DURATION, DELAY, and SPATIAL\_FLAG. DYNAMIC\_FLAG is set to "EXTERNAL" also.

Files in Task:

/ecs/formal/PDPS/DPS/data/ODL/ESDT\_PM1EPHD#001.odl

28299 A script to remove all the files pertaining to a computer (science processor)

ECSed28865

Summary of NCR fix:

The script now resets the onlinestate to zero if the corresponding parameter is supplied, indicating that it needs to reset it. Also it checks for sybase, quitting if sybase is not found. In addition it warns the user that this script is to be run on the queing server.

Files in Task:

/ecs/formal/PDPS/DPS/PRONG/scripts/EcDpPrCleanMaintMachineFiles.pl

/ecs/formal/PDPS/DPS/PRONG/scripts/EcDpPrCleanMaintMachineFiles.pl

Test Instructions for Checkout Lab:

a) In the mode where the test is to be done, schedule one or two plans with lots of DPRs.

b) When some DPR's have finished and others are halfway through open the registry GUI for the mode; Look for the box corresponding to the

queing server (the server running job management), find Job Management, and click on it. When the parameters appear to the right,

reset the value of DpPrAutosysMaxJobs to zero after noting down it's initial value. Kill job management for that mode and restart it.

c) When all the DPR's go out of the box and the system is quiet, copy the script into a test directory and run it against the mode, choosing a science processor which is supposed to go down. RUN IT ON THE MACHINE ON WHICH JOB MANAGEMENT IS RUN!

d) After the run open the registry and reset the value of DpPrAutosysMaxJobs to it's original value. Kill Job management and restart it.

The rest of the dprs should run on the other science processor without failing.

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ECSed28299

Summary of NCR fix:

A script to remove all the files pertaining to a computer (science processor) from the database and also from the computer that was requested. This is the script EcDpPrCleanMaintMachineFiles.pl

Reason for Merge: newfunc Capability ID: Script

Files in Task:

/ecs/formal/PDPS/DPS/PRONG/.EcDpPrQUESRVR.lu

/ecs/formal/PDPS/DPS/PRONG/scripts/EcDpPrCleanMaintMachineFiles.pl

/ecs/formal/PDPS/DPS/PRONG/scripts

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ECSed28920

B. Summary of all NCR fixes:

Add EcPIMkcfg to all PLS .lu files

ECSed29119

B. Summary of all NCR fixes:

Error messages (detailed errors) coming from DPS through DpPrCommon.h are incorporated in PIDetailedError.h. By doing this, production request editor will be able to display all error messages coming from Job-management without core dumping PREDitor.

ECSed27548

B. Summary of all NCR fixes:

Performance enhancement by suppressing the subscription of dynamic internal granules in PLS and letting DPS insert notification to PINotification table after SDSRV insert completes. This will bypass the notification passing and hopefully achieve a performance gain.

ECSed28945

B. Summary of all NCR fixes:

Add exception handler for DpPrSchedulerProxy in PIProductionRequest.C and PIDpr.C.

ECSed27083

B. Summary of all NCR fixes:

Fix provides notification to the operator of the problem where DPRs do not get created for orbit-related (MISR) ProductionRequests (PR). This because the PR orbit start & stop times span time that crosses over the start of Daylight Savings Time.

ECSed28670

B. Summary of all NCR fixes:

Add EcPIPlanningAppMkcfg into EcPIMkcfg since EcPIPlanningAppMkcfg is responsible for creating EcPIPlanning.ACFG, so it can automatically create the EcPIPlanning.ACFG file.

ECSed29370

B. Summary of all NCR fixes:

Output the detailed message to PWB debug log instead of trying to dump everything on the message box. This fix also included a fix for a similar problem when reactivate a plan which is observed in PVC but not mentioned in the NCR description.

ECSed27946

B. Summary of all NCR fixes:

Contact information is not passing to MSS when creating an OrderId

ECSed29499

B. Summary of all NCR fixes:

Fix to negative fileSize problem in PDPS for static inputs

ECSed29383ECSed29354

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B. Summary of all NCR fixes:

NCR 29354: Corrected DPREP ESDT ODLs: (1) NOMINAL\_SIZE of the PM1 ephemeris data sets, (2) cleaned-up DATA\_TYPE\_DESCRIPTION.

NCR 29383: DPREP now tries to "wrap" Euler angles into their valid range.

ECSed29385

B. Summary of all NCR fixes:

Removed the pdps\_odl section from the .EcDpPrAM1DPREP.iu and .EcDpPrPM1DPREP.iu. This section was erroneously added in the effort to automate the delivery of DPREP of ESDT and PGE ODLs.

ECSed28887

B. Summary of all NCR fixes:

When delete stray granules which happens in DEPREP scenario, the version ID got messed up. It causes trying to insert duplicate entries in PIDataGranuleShort table. The fix changed the error in PIDataGranule::CreateBaseGranuleId method.

ECSed28981

B. Summary of all NCR fixes:

Restore the value of fileSize so it won't be incremented when there isn't enough disk space available.

ECSed29231ECSed29120

B. Summary of all NCR fixes:

NCR 29120: Automate the delivery of DPREP PGE and ESDT ODLs.

NCR 29231: Calculate the best estimate of the platform orbital period and descending node propagation from ephemeris data, thereby eliminating the nominal specifications in the PCF. These quantities are used in orbit metadata projection whenever these quantities cannot be deduced from two consecutive node crossings in the ephemeris data on DPREP Profile 2 boot-up processing.

ECSed27576

B. Summary of all NCR fixes:

Performance enhancement.

ECSed29261

EcDpAtRegisterPGE has extraneous debug outputs.

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