PATCH TEST PLAN/REPORT
ECS System Integration and Test

Patch IDs:	**Patch Installation Date:** Oct 25,2004	**Lead Engineer:** Hao H Nguyen
PATCH_7.02_DPL_OMS.02B	**Location/Mode(s):** PVC – OPS Mode VATC – TS1 Mode	

NCR Ids/Name (If not shown below): See below.	**Patch Footprint: (Affected subsystems)**

Test Objectives (Functional/Performance/Regression/Fault Recovery)/New Functionality/Ops Concept(s):

The main objective of this test is to verify all 22 NCRs for the PATCH_7.02_DPL_OMS.02B.
ECSed40522 – GSFC/SMC: Unable to partition large requests in OMS GUI.
ECSed40745 – GSFC/SMC - Datapool logging script incorrectly treat rc 200
ECSed40746 – GSFC/SMC - zero byte transfer logged to database
ECSed40896 – Release 7:OMS e-email needs error handling
ECSed40980 – User notifications when failing granules/requests for S4 requests
ECSed41035 -- Emails Sent to Wrong Email for Some FTP Modis Orders
ECSed41069 -- GSFC/SMC: Order Manager is statusing a DVD job as Operator
ECSed41079 -- GSFC/SMC: Suspend New Requests Button in OMS Needs New Location
ECSed41082 -- OPS:Rel7:SA:OrderManager cored and would not stay up
ECSed41086 -- Deadlocks in OmGranuleCounts table
ECSed41136 -- OPS: Granules Intermittently Failing to Stage to DataPool
ECSed41160 -- WebAccess: Theme drill-down search times-out
ECSed41189 -- MISR Browse granules (MISBR) not always being inserted into Data Pool
ECSed41194 -- Rel7.01:TS2:OrderManager cores
ECSed41308 -- OPS:Release_7.01:DataPool cleanup running very slow
ECSed41348 -- Add index on ecsId column in DlOMSGranules table
ECSed41379 -- OMS may cleanup granules referenced by un-expired FTP Pull requests
ECSed41382 -- OMS Gui PVC OPS mode
ECSed41404 -- MISR Browse Linkage Problem
ECSed41407 -- Proc DeleteOrderGranule Scans the EcDlGranuleExpirationPriority Table
ECSed41453 -- Incorrect MISR Browse linkage on the DPL filesystem
ECSed41454 -- Change Filter Button on the OMS GUI sends a software error message.

Test Location/Modes/Tools:	**Test Data:**
PVC – OPS Mode VATC – TS1 Mode And EDF	EOC Data (Tiny Granules): AIR L0, AIRS EXP L0 EXP, AMSU L0, FDD AQUA, DAO, HIRDLS L0, HIRDLS, HIRDLS Higher Level, MLS L0, HSB L0, MLS Higher Level, MODAPS, MODIS L0 AQUA, MODIS L0 TERRA, TERRA AM1ANC, AM1ATTF, GSFC-V0, PMCOGBAD, OMI Level 1 and Level 2 Etc..
Personnel Required **Development POC:** **Tilmes Mark, Bryant Keith, Strub Richard, Davu Srikanth, Pradeep Cheriyath, Valencia William, Yu Zhongfei, Wang Penghai, O'Brien Mike, Colglazier Harold, Farley John, Jew Sally, Duma Calin, Copeland Donna** **NCR Submitter(s) POC:**	**Other Test Requirements (Personnel, etc.)** None.

Required Completion Date: November 10, 2004 **Planned Completion Time/Date:** November 10, 2004				
Test Approach (By NCR, if applicable) NOTE: Specific NCR verification steps/info should be entered in DDTS, not here.				
NCR#	**Inputs/Actions:**	**Outputs/Expected Results:**	**Pass/Fai / Not Tested**	**Comments:**
40522	**GSFC/SMC: Unable to partition large requests in OMS GUI** • Set the number of granules/request limit to 500. • Make sure the partition per request parameter, for the media type requested, is set to a lower value than 500. • Submit a request for 5000 granules. • Partition the request via the OMS GUI.	The request with 5000 granules was partitioned in approximately 40 seconds.	**P**	
40745	**GSFC/SMC - Datapool logging script incorrectly treat rc 200** • Verified concurrently with 40746. Downloaded several granules via WEB access using the u interface (Outside of firewall). • Edited this file to change one of the byte counts to 0 while leaving the rc = 226 (for NCR40746) and changed the rc code to 200 for a second granule while leaving the byte count unchanged. • The custom code script EcDlRollupFwFtpLogs.pl was run.	After 24 hours, the datapoolftp.log.X was produced and placed in p2dps01:/usr/ecs/OPS/COTS/firewall/logs. All the granules that I successfully downloaded had a byte count size > 0 and rc = 226. None of the granules that I downloaded were previously in DlGranuleAccess table. The DlAccessRollup table was updated to indicate that script updated Datapool database. All granules updated in DlGranuleAccess except for the zero byte rc = 226 granule verifying NCRs 40746 and 40745.	**P**	

40746	**GSFC/SMC - zero byte transfer logged to database** • Downloaded several granules via WEB access using the u interface (Outside of firewall). • Edited this file to change one of the byte counts to 0 while leaving the rc = 226 (for NCR40746) and changed the rc code to 200 for a second granule while leaving the byte count unchanged. • The custom code script EcDlRollupFwFtpLogs.pl was run.	After 24 hours, the datapoolftp.log was produced and placed in p2dps01:/usr/ecs/OPS/COTS/firewall/logs. All the granules that I successfully downloaded had a byte count size > 0 and rc = 226. None of the granules that I downloaded were previously in DlGranuleAccess table. The DlAccessRollup table was updated to indicate that script updated Datapool database. All granules updated in DlGranuleAccess except for the zero byte rc = 226 granule verifying NCRs 40746 and 40745.	**P**	
40896	**OMS E-mail Needs Error Handling** • Do a load test for 4-6 hours and make sure some requests don't have granule files. • Analyze the Distribution Notifications for content • Verify that the requests that didn't have associated granule files in OMS or DPL go to operator intervention.	Distribution Notices were analyzed for content of file size and filenames. All of the Notifications contained the correct information. Also, the requests that didn't have granule files in OMS or DPL went to operator intervention during the DN Email creation time.	**P**	
40980	**User notifications when failing granules/requests for S4 requests** • Create a subscription for "MOD05_L2.004 INSERT" and adding FtpPush action with invalid login password. • Configure SSS action driver with MODE="OMS" • Send out the insert granule	The Request goes to the operator intervention. After clicking "Cancel", a window pop out with a check box "Don't send out email. Do not check the box;	**P**	

	request through Science Data test driver. • Bring up OMS Gui. Check " Distribution Request", make sure the request failed and go to operator intervention. • Click "Cancel" • Uncheck the box "Don't send out email" or "Check" the box • Apply Cancel	verify the user does not receive any email notification. Run another test by checking the box, verified the user do receive the email notification.		
41035	**Emails Sent to Wrong Email for Some FTP MODIS Orders** • Make orders from EDG and make sure the granules are not billable or restricted (S4 mode distribution). • Specify a shipping email address different from the contact email address. • Verify that the Notification email is sent to the specified shipping email address when the orders are successfully shipped.	Once the orders were shipped, the DNs were sent to the shipping email address each time.	**P**	
41069	**GSFC/SMC: Order Manager is statusing a DVD job as Operator** • Submit orders from VoGateway EDG. • Stop the Order Manager Server so the orders are suspend. • Open operator intervention detail page and verify the "submit" and "partition" options are not available on the pages. • Start Order Manager Server and resubmit new orders. • Partition the orders and verify the partition request.	The "submit" and "partition" were disappeared. The partition request been unable to resubmit or see the checkbox.	**P**	
41079	**GSFC/SMC – Suspend New Requests Button in OMS Needs New Location** • Submit a few requests using MOD04_L2 granules. • Bring up the OM GUI and	Six MOD04_L2 granules were ordered. I clicked on the "Suspend New	**P**	

	click on the OM Status Page. • Click on the "Suspend New Requests" button and check for status red (0). • Click on the Distribution Request Page and check for status on the requests. • Go back to the OM Status Page and click on the "Resume New Requests" button. Check for status green (A). • Check the Distribution Request Page for the processed requests.	Requests" button on the OM Queue Status Page. The status changed to a red (O) from a green (A) and the requests on the Distribution Request page stayed queued. I clicked on the "Resume New Requests" button on the OM Queue Status Page. The status returned to a green (A) and the requests were processed (status showed shipped).		
41082	**OPS:Rel7:SA:OrderManager cored and would not stay up** During 5 days of load testing in the PVC OPS MODE we had many FtpPull Requests. These requests were resubmitted via the OMS Gui. In Fact one of these "resubmitals" contained a 100-granule order.	Neither during the resubmit nor the Cleanup did the Order Manager Core. All resubmitted orders were completed successfully	**P**	
41086	**Deadlocks in OmGranuleCounts table** • The OPS mode was run with an EOC load for several hours • Use isql command to count number records in Order Manager and MSS database and found that 57592 records were inserted. • Run the cleanup script p2acs06:/usr/ecs/OPS/CUSTOM/dbms/OMS/scripts/EcOmCleanupOldData.ksh • Verify the clean up information by viewing /usr/ecs/OPS/CUSTOM/logs/EcOmCleanupOldData.ksh.log	The utility never stopped because of Deadlocks, which is what happened before the fix. Cleanup ended: Nov 3 2004 5:13:48:183PM Total Requests removed from OMS = 57592 Total Requests removed from MSS = 57592 Total Orders removed from MSS = 57592	**P**	
41136	**OPS: Granules Intermittently Failing to Stage to DataPool**		**P**	

	• Amass was loaded up so that copies from amass to SAN would take in excess of 15 minutes to complete. • Initiated batch insert into Datapool of granule with dbID = 2014401748. • DPAD then killed. Waited 15 minutes • DPAD restarted.	DlInsertactionQueue and the DlActiveInsertProcesses queries unchanged for granule. Granule showed up first in DlInsertactionQueue and then DlActiveInsertProcesses with message that EcUtCopyExec initated. DlActiveInsertProcesses entry for granule removed. DlInsertactionQueue entry for granule changed to FAILED.		
41160	**WebAccess: Theme drill-down search times-out** • Start the Datapool Web Access GUI using the "Netscape" Homepage • Select "Theme" by using "Down Arrow" at the "Start Search" Option • Click on the "Start Search" Button • Select the "Theme", which has 3641 granules • Repeat to select “Themes” which have 10385, 21544, 18515, and 28775 granules	The "Current Search Criteria" has displayed in few seconds and “No Timeout” The "Current Search Criteria" also has “No Timeout”	**P**	
41189	**MISR Browse granules (MISBR) not always being inserted into Data Pool** • Verified concurrently with ncr41404 during 4 hour run. During 4 hour run, 5100+ granules were batch inserted into datapool. The test consisted of inserting MISBR.5, MI1B2E.2, MI1B2T.2, MIL2ASAE.2 and MIL2TCST.2 granules. Sometimes the MISBR were inserted before the corresponding science granules.	After careful examination, it was determined that 1) All Granules were successfully inserted into the DataPool. 2) All L1 and L2 granules that had corresponding MISBR.5 granules were Linked to the correct Browse granule. 3) No "fathom" Browse linkages were found.	**P**	

	• At other times the L1 and L2 granules were inserted before the corresponding MISBR granules. Most of the inserted granules overlapped, i.e. linkages expected. Some of the granules did not overlap so that linkages were not expected.	4) Subdirectories created under collections were correctly setup as Acquisition date, not insertion date.		
41194	**Rel7.01:TS2:OrderManager cores** During 5 days of load run in the PVC we suspended several Distribution Requests through the runs in order to attempt to reproduce the Multiple Threads attempting to suspend the request at the same time.	Order Manager did not core during the Suspend, or the resuming, or the Cleaning up of requests.	**P**	
41308	**OPS:Release_7.01:DataPool cleanup running very slow** • Retrieve the dbID from ScienceDataServer database for testing. • Create file that contains those dbID. • Run /usr/ecs/OPS/CUSTOM/utilities/EcDlBatchInsert.pl to insert those granules into DataPool. • Bring up the DataPool Maintenance GUI to location the collection group with those granules. • Create a new collection group. • Run /usr/ecs/OPS/CUSTOM/utilities/EcDlRemap.pl to re-map from original collection group to new one. • Disable the collection data type of original collection group under "invalid for Data Pool Insert" • Select the insert granules ID from DataPool database and store in a file	Granules were inserted in the Datapool The collection group was displayed on the Datapool Maintenance GUI. A new collection group was created. The linked was created.	**P**	

	store in a file. • run /usr/ecs/OPS/CUSTOM/utilities/EcDlCleanupDataPool.pl to clean up two or three granules in the files. • Verify those two or three granules were deleted • Run /usr/ecs/OPS/CUSTOM/utilities/EcDlCleanupDataPool.pl to clean up the rest of granules and verify the results	The rest of granules were deleted including directory because the directory is empty.		
41348	**Add index on ecsId column in DlOMSGranules table** • Login Datapool database • From sql command line, sp_help DlOMSGranules • The index information of the ecsId column will display	DlOMSGranEcsIdIdx Nonclustered located on default ecsId	**P**	
41379	**OMS may cleanup granules referenced by un-expired FTP Pull requests** • The CLI was used to order a granule through the Order Manager. • Then a second order was submitted that requested two granules, with one being the same granule ordered in the first request. • The orders were submitted approximately six hours apart.	The expirationDate of the first granule was updated to reflect the expirationDate of the second order.	**P**	
41382	**OMS Gui PVC OPS mode** • During a load test on the PVC OPS mode several Distribution Requests were displayed on the OMS Gui Distribution Requests Page. • Clicking on the "Select All Bulk" button did select all Requests displayed on the page. • Then clicking "Bulk Cancel" the selected Requests were canceled. • Returning to the Distribution	Then "Bulk Cancel" was pushed and only the requests highlighted were removed leaving the one that was "de-selected"	**P**	

	Requests page and selecting "Select All Bulk" button again selected all and 1 was removed via clicking the individual check box.			
41404	**MISR Browse Linkage Problem** • During 4 hour run, 5100+ granules were batch inserted into datapool. The test consisted of inserting MISBR.5, MI1B2E.2, MI1B2T.2, MIL2ASAE.2 and MIL2TCST.2 granules. Sometimes the MISBR were inserted before the corresponding science granules. • At other times the L1 and L2 granules were inserted before the corresponding MISBR granules. Most of the inserted granules overlapped, i.e. linkages expected. Some of the granules did not overlap so that linkages were not expected.	After careful examination, it was determined that all 1) All Granules were successfully inserted into the DataPool. 2) All L1 and L2 granules that had corresponding MISBR.5 granules were linked to the correct Browse granule. 3) No "fathom" Browse linkages were found. 4) Subdirectories created under collections were correctly setup as Acquisition date, not insertion date.	**P**	
41407	**Proc DeleteOrderGranule Scans the EcDlGranuleExpirationPriority Table** • Create a FtpPull subscription using Subscription GUI and make sure the retention time (2 days) • Ingest data for the subscription • The requests for Ftppull were displayed on the OMS GUI and the Status is “Shipped” • Using isql command to retrieve information in the DataPool database select G.granuleId, G.ShortName, E.expirationDate, E.retentionPriority	Nine granules were found: 2014510890 2014510893 2014510892 2014510895 2014510894 2014510897 2014510899 2014510896	**P**	

	from DlGranules G, DlGranuleExpirationPriority E where G.granuleId = E.granuleId and G.ecsId > 2016288769 • view EcOmOrderManager.ALOG to see the granule for that request does not clean from the expiration date • Using the same isql command above to verify information from Datapool database to make sure that all granules were not removed.	2014510898 IncrementDHWP Adding 0.102956MB for Cleanup of RequestId=0400711422. New DHWP=69.2671 File=OmSrFtpPullPool.C at line 103 Priority: 2 Time : 11/04/04 09:29:19 There are nine granules still existing 2014510890 2014510893 2014510892 2014510895 2014510894 2014510897 2014510899 2014510896 2014510898		
41453	**Incorrect MISR Browse linkage on the DPL filesystem** • Insert MISR Browse science granule into /datapool/OPS/user/SAN/MSRT/MI/datapool/OPS/user/MI1B2T/2003.08.15. • Verified a link to /datapool/OPS/user/SAN/BRWS/Browse.001/2003.08.15	/MISR_AM1_GRP_ELLIPSOID_BR_GM_P233_0019459_BF_F02_0019.jpg-->../../../BRWS/Browse.001/2003.08.15/MISR_AM1_GRP_ELLIPSOID_BR_GM_P233_0019459_BF_F02_0019.jpg	**P**	
41454	**Change Filter Button on the OMS GUI sends a software error message.** • During the verification of NCR41079, I clicked on the "Change Filter" buttons on the Distribution Request Page, FtpPush Request Page, and the Staging Requests Page. • I successfully changed the date and time to be able to view the status of the requests I submitted.	The verification was successfully completed on p2dps01 in the OPS mode.	**P**	
List of Artifacts/Attachments (Procedures/data/etc.):				

Signature of Lead Tester: Hao Huu Nguyen	Completion Date: November 10, 2004