

# PATCH TEST REPORT

## ECS System Integration and Test

**Patch ID:** Patch 7.02 BMGT\_DSS.01C

**Patch Installation Date:** 09/20/2004  
**Location/Mode(s):** VATC TS2 Mode

**Lead Engineer:** L. Vaughn

**NCR Ids/Name (If not shown below):**

1. **ECsed30763** GSFC/SMC: Redundant Data is Entered in the InputPointer File
2. **ECsed38445** GSFC/SMC: Backup File Systems Not Restoring Correctly
3. **ECsed39344** Granule BMGT XML Files Fail ECHO Ingest
4. **ECsed39856** BMGT Browse Distribution Issues
5. **ECsed40488** Add the Capability to Accept a List of Browse IDs as Processing Input
6. **ECsed40534** BMGT Handling of DeleteFromArchive (DFA) Flag
7. **ECsed40612** BulkURL Files Not Remaining on Local System
8. **ECsed40650** Error Inserting Event Messages into Database
9. **ECsed40759** SMC/GSFC:Ddistribution requests hung in Pending in OPS
10. **ECsed40770** OMI NOSE Orbit File Needs to be Replaced
11. **ECsed40799** Possible BMGT Problems
12. **ECsed40877** Improve dbinterface Performance and Error Handling
13. **ECsed40881** GSFC/SMC-The SDSRV GUI Does Not Show the Status of Requests
14. **ECsed40887** Queries w/Multiple ShortName/Version ID Constraints Improvements Needed.
15. **ECsed40889** Temporal Size S/B Applied To Improve Performance for Containment Queries
16. **ECsed40964** GSFC/SMC: FtpPullFileNotExist Error Mnemonic
17. **ECsed40984** Can Not Cancel OMS Requests in DDIST
18. **ECsed41143** Patch Number Conflicts in Rel7 STMGT DB
19. **ECsed41062** EcDsStArchiveBatchDelete Script Table Scanning DsStPendingDelete

**Patch Footprint: (Affected subsystems)**

BMGT, DSS, STMGT, DDIST, DBDM

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

The test objective is to confirm that all of the NCRs delivered with this Patch are verified.

**Test Location/Modes/Tools:**

VATC: TS2 Mode

**Test Data:**

MODIS, AIRS, AQUA, MODIS-TERRA, MODIS-AQUA  
ASTER,

**Personnel Required**

**Development POC:**

**NCR Submitter(s) POC:**

H. Liu, P.Wang, T.Zhou, T. Roegner, D. Srikant,  
R. Hartran, W. Jenkins

**Other Test Requirements (Personnel, etc.)**

**Required Completion Date :** 09/29/2004

**Planned Completion Time/Date** 09/29/2004

**Subsystem tailored Regression Testing:**

Scenario/Test List		Pass/Fail/ Not Tested	Comments	
NCR#	Inputs/Actions:	Outputs/Expected Results:	Pass/Fail/ Not Tested	Comments:
30763	<p>Login to the t1acs06</p> <ul style="list-style-type: none"> <li>- Find a granule that contains long list of the granules in its InputPointer in the DsMdInputGranule table.</li> <li>- Use the EcTsDsClientDriver to insert the data into the SDSRV database.</li> </ul> <pre>1&gt; select granuleId, InputPointer from DsMdInputGranule where granuleId = 2384 2&gt; go</pre>	<p>The data is inserted successfully into the SDSRV database.</p> <p>The SDSRV debug log file shows that "\n" was removed from the InputPointer group list of metadata.</p> <ul style="list-style-type: none"> <li>- Query the DsMdInputGranule table and verify that no "\n" character is found in the InputPointer column for each row at the granuleId</li> </ul>	P	
38445	<b>GSFC/SMC: Backup File Systems Not Restoring Correctly</b>		NT	Sent to the DAAC
39344	<ol style="list-style-type: none"> <li>1. Logon Science data server database and select the "lastUpdate" from DsMdCollections table <pre>select * from DsMdCollections where ShortName = "AST_L1B" and VersionID = 3</pre> </li> <li>2. Logon BMGT Host (t1acs06)</li> <li>3. Set BMGT environment (/usr/ecs/MODE/CUSTOM/cfg) <ol style="list-style-type: none"> <li>a. EcBmBMGTSpatialEsds.xml</li> <li>b. EcBmBMGTUserParams.xml</li> </ol>           (Update beginDate and endDate must cover "lastUpdate" range) </li> <li>4. Execute BMGT (cd /usr/ecs/TS2/CUSTOM/utilities) EcBmBMGTStart (No argument is needed)</li> </ol>	<p>Verify the result from t1acs06:/usr/ecs/TS2/CUSTOM/ProductOutput/ directory view</p> <pre>VTCC_Today_AST_L1B200231620023180101.20040917134704.XML</pre> <p>and search for Spatial and Geometry</p>	P	
39856	<p>This NCR has 2 parts one of which is hardware connection issues. That is not cover or fixed by this Verification.</p> <p>The other is Distribution working off it Suspended with errors before the rest of the Q i.e. Pending.</p> <p>By fixing The second issue (Dist. workoff) issue one is greatly mitigated.</p> <p>We built a "GSFC like" load in the PVC and created an issue with a S4p box. (p0spg01 and p0spg07) then allowed the subscriptions, which are going to the S3, mode to become Suspended with errors while there was a Pending queue building up. We then fixed the S4P boxes and resumed the Suspend w/errors</p>	<p>The resumed picked up out the Distribution Queue and shipped before the Pending Queues.</p> <p>All requests will work off to the Shipped state</p>	P	

<p><b>40488</b></p>	<p>To verify this NCR the following nine tests were conducted:</p> <p>Test #1:</p> <p>Executed the EcBmBMGTStart script with -I option along with a list of three AST_L1A.3 granules (these granules have browse files associated with) as argument, and -S option with Granule as argument</p> <p>Test #2:</p> <p>Executed the EcBmBMGTStart script with -I option along with a list of the same three AST_L1A.3 granules as argument, and -S option with Browse as argument,</p> <p>Test #3:</p> <p>Executed the EcBmBMGTStart script with -I option along with a list of the same three AST_L1A.3 granules as argument, and -S option with Both as argument, both BLIST and GLIST XML files were generated with three other XML files. Both BLIST and GLIST XML files have granule and browse IDs for all three granules.</p> <p>Test #4:</p> <p>Executed the EcBmBMGTStart script with -I option along with a list of the same three AST_L1A.3 granules as argument with no -S option,</p> <p>Test #5:</p> <p>Executed the EcBmBMGTStart script with -I option along with a list of three AST_L1B.3 granules (these granules have no browse file associated with) as argument and -S option with Both as argument,.</p> <p>Test #6:</p> <p>Executed the EcBmBMGTStart script with -I option along with a list of three AST_L1A.3 browse granules as argument and no -S option, the BLIST XML file was generated with three other XML files.</p> <p>Test #7:</p> <p>Executed the EcBmBMGTStart script with -I option along with a file name</p>	<p>The GLIST XML file was generated with three other XML files. The GLIST XML file has both granule and browse IDs for all three granules.</p> <p>The BLIST XML file was generated with three other XML files. The BLIST XML file has both granule and browse IDs for all three granules.</p> <p>Both as argument, both BLIST and GLIST XML files were generated with three other XML files. Both BLIST and GLIST XML files have granule and browse IDs for all three granules.</p> <p>Both BLIST and GLIST XML files were generated with three other XML files.</p> <p>The GLIST XML file was generated with three other XML files. The GLIST file has both granule and browse IDs for all three granules</p> <p>The BLIST XML file has both granule and browse IDs for all three granules.</p>	<p><b>P</b></p>	
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	<p>containing three AST_L1A.3 granules with browses as argument and no -S option.</p> <p>Test #8:</p> <p>Executed the EcBmBMGTStart script with -I option along with a file name containing three AST_L1B.3 granules with no browse associated with as argument or -S option,</p> <p>Test #9:</p> <p>Executed the EcBmBMGTStart script with -I option along with a file name containing three AST_L1A.3 browse granules as argument and with no -S option.</p>	<p>Both BLIST and GLIST XML files were generated with three other XML files</p> <p>The GLIST XML file was generated with three other XML files.</p> <p>The BLIST XML file was generated with three other XML files</p>		
40534	<p>Login to p2acs06.</p> <ul style="list-style-type: none"> <li>- From SDSRV database set DeleteFromArchive flag to H.</li> <li>- Set BMGT configuration for data type to be exported.</li> <li>- Run the BMGT script to export the data granules.</li> <li>- cd /usr/ecs/OPS/CUSTOM/ProductOutput/</li> <li>- ll</li> </ul>	<p>The exported granules did not exist in the ProductOutput directory.</p>	<b>P</b>	

<p><b>40612</b></p>	<p>1) update DICollections  set bulkExportedFlag = "Y"  where ShortName = "DataType"  and VersionId = 1 (or 2, so on)</p> <p>2) using EcDsBulkDelete.pl script to delete granules  or login SDSRV Database  a) update DsMdGranules  set DeleteFromArchive = "Y"  where dbID = 2339</p> <p>3) to keep local file name  a) modify parameter delFileName is false in the  EcBmBulkURLConfigParams.xml  b) EcDICleanupDataPool.pl DEV02 -  ecsgrandel  or EcBmBulkURLStart MODE Delete  c) cd /datapool/FS1/MODE/usr/URLExport  or cd /datapool/MODE/usr/URLExport  d) ls -lrt )</p> <p>4) to delete local file name  a) modify parameter set delFileName is true in the  EcBmBulkURLConfigParams.xml  b) EcDICleanupDataPool.pl DEV02 -  ecsgrandel  or EcBmBulkURLStart MODE Delete  c) cd /datapool/FS1/MODE/usr/URLExport  or cd /datapool/MODE/usr/URLExport  d) ls -lrt</p> <p><b>Testing for inserting granules</b>  using EcDsSdsrvTest to insert granules</p> <p>1) to keep local file name  a) modify parameter delFileName is false in the  EcBmBulkURLConfigParams.xml  b) EcBmBulkURLStart MODE Insert  c) cd /datapool/FS1/MODE/usr/URLExport  or cd /datapool/MODE/usr/URLExport  d) ls -lrt</p> <p>2) to delete local file name  a) modify parameter set delFileName is true in the  EcBmBulkURLConfigParams.xml  b) EcBmBulkURLStart MODE Insert  c) cd /datapool/FS1/MODE/usr/URLExport  or cd /datapool/MODE/usr/URLExport  d) ls -lrt</p>	<p>(make sure the local file name is existing in this directory)</p> <p>There are no local filenames existing in the directory</p> <p>The local file name is existing in this directory</p> <p>There are no local filenames existing in the directory</p>	<p><b>P</b></p>	
<p><b>40650</b></p>	<p><b>Test 1</b>  <b>Objective:</b> Verify an event message will be inserted into the DsStEventLog table and displayed on STMGT GUI when insert granules to archive failed.  <b>Data:</b> AST_L1BT.001 or other data type.  <b>Precondition:</b> ESDT version should have Backup volume group configured.  <b>Procedure:</b>  1) run dbx for EcDsStArchiveServer on the host where primary volume group</p>	<p>Check STMGT GUI, event message "Remote archived " should be displayed.</p>	<p><b>P</b></p>	

	<p>configured on;</p> <p>2) file /ecs/formal/DSS/stmgt/src/cmn/fileio/DsStCopyService.C;</p> <p>3) stop at 79, then cont;</p> <p>4) insert a granule (such as AST_L1BT.001) via SDSRV test driver;</p> <p>5) when dbx stopped at 79, print *destinationFile.</p> <p>6) stop at 326, then cont. When dbx stopped at 326, remove the file from volume path. The file name was printed by step 5);</p> <p>7) quit dbx.</p> <p><b>Test 2</b> <b>Objective:</b> Verify an event message will be inserted into the DsStEventLog table and displayed on STMGT GUI when ArDeleteFile request failed to cleanup file from archive. <b>Data:</b> Data type with browse data. <b>Precondition:</b> ESDT version should have Backup volume group configured. <b>Procedure:</b> 1) run dbx for EcDsStArchiveServer on the host where Backup volume group configured on; 2) file /ecs/formal/DSS/stmgt/src/archive/DsStArchiveServiceThread.C; 3) stop at 3147, then cont; 4) insert a granule (such as AST_L1A.003) via SDSRV test driver, then insert subtype data such as browse data files, browse data file should be a wrong file (e.g., wrong file name); 5) quit dbx.</p> <p><b>Test 3</b> <b>Objective:</b> Verify no more stored procedure execution failed information appeared in the EcDsStArchiveServerDebug.log. <b>Data:</b> same as Test 1. <b>Precondition:</b> same as Test 1. <b>Procedure:</b> A. Insert several granules to archive by using SDSRV test driver, insertion should be successful without errors; B. Repeat Test 1: Check EcDsStArchiveServerDebug.log,</p>	<p>Expected Results: Check STMGT GUI, event message "File does not exist" should be displayed.</p> <p>There should be no failed log information related to "exec DsStGRUpdateCkPtState" found in the log file.</p>		
40759	Run several Load Test.	The thread pool hangs are no longer being observed.	<b>P</b>	
40770	<b>OMI NOSE Orbit File needs to be Replaced</b>		<b>NT</b>	<b>Sent to DAAC</b>
40799	Run a load test with BMGT running. View the .XML files via the Internet Explored 5.5 along with the Source Code	The .dtd file name is displayed WITHOUT the full path	<b>P</b>	

	from the corresponding .XML files.			
40877	Do regression test for inserts and acquires successfully for inserting and acquiring	There will be no error messages that come out from the STMGT and DDIST server.	P	
40881	Using the Test Driver perform an insert and acquire a granule	Gui will display the proper values..	P	
40887	Use MTMGateway to initiate search for two granules of different data types. Separate queries noted in Science data Server debug	You will not see multiple queries for the granules it is searching for	P	
40889	Use EcDsSdsrvTest driver as EcDsSdsrvTestStart OPS  3. Go back to main menu 4. Exit Please make selection => 1 Enter data type => MI1B2T Enter VersionID => 1 Enter starting date(mm/dd/yyyy) => 07/22/2001 Enter end date(mm/dd/yyyy) => 07/23/2001 Do you want to send chunk size y or n => n Searching...  Index = 0 SC: MI1B2T.001: 2015181393 MI1B2T.001, and UR = UR: 10:DsShESDTUR: UR: 15:DsShSciServerUR:10: [:DSSDSRV]:24:SC:MI1B2T.001:2015181393  There is (are) 1 in the collection	09/23/04 10:36:20: Thread ID : 280789 : DsMdCatalog::SEARCH: Query SELECT dbID = CONVERT(varchar(30), a0.dbID), ShortName = CONVERT(varchar(30), a0.ShortName), VersionID = CONVERT(int, a0.VersionID) FROM DsMdGranules a0 WHERE (a0.BeginningDateTime BETWEEN "07/22/2001 00:00:00" AND "07/23/2001 00:00:00" AND a0.EndingDateTime BETWEEN "07/22/2001 00:00:00" AND "07/23/2001 00:00:00" AND a0.ShortName = "MI1B2T" AND a0.VersionID = 1) AND a0.deleteEffectiveDate Is null AND a0.DeleteFromArchive IN ("N", "G")	P	
40964	Submit several SCLI FtpPush and FtpPull requests, View the FtpServer logs	No message stating "The file to be ftp pulled does not exist at the source location".	P	
40984	1. Bring down FtpServer 2. Send 2 requests from OM in SYN3 mode for AST_L1B.003 3. Execute the EcDsStCancelRequestClientStart script	The requests were cancelled in DDIST gui with a status of "Failed and an mnemonic of DsStCanceled. Both requests are canceled successfully.	P	
41143	Delete the latest patch record from the patch versions table (7510) Set the previous patch entry to be the current patch level (7416). Use ECS Assist to install patches up to 7510.	The versions table shows all the renumbered patches (7500, 7502, 7504, 7506, and 7508) were listed and patch record 7510 was present.	P	
41062	<b>EcDsStArchiveBatchDelete Script Table Scanning DsStPendingDelete</b>		NT	<b>Sent to the DAAC</b>
<b>List of Artifacts/Attachments (Procedures/data/etc.):</b> N/A				

**Signature of Lead Engineer:**

/s/ Linda Vaughn

**Completion Date:**

**09/29/2004**