SPIRE HCSS v0.3.6 Acceptance Test Report

Sunil Sidher, Steve Guest and Asier Aramburu
6th November 2006

1. INTRODUCTION

This acceptance test report is based on the tests carried out by SPIRE at RAL on the Herschel Common Science System (HCSS) version 0.3.6 build #1023 on 9th-17th Oct 2006. This acceptance test was part of a wider testing of the SPIRE EGSE in preparation for the fourth-phase testing of the proto-flight model of the instrument (PFM4). The documentation listed in section 2 was used for the execution of the tests. Section 3 describes the RAL system setup and configuration for these tests. In section 4 the results from the execution of each test are described.

1.1 Conventions

Commands entered are in indented courier new font:
```
dbuser -add -P egse@lichfield
```

Output from the system is in the same font but starting without indentation:
```
Exception in thread "main" java.lang.NullPointerException
        at herschel.cus.gui.CusEditor.<init>(CusEditor.java:98)
        at herschel.cus.gui.CusEditor.main(CusEditor.java:1332)
```

2. DOCUMENTATION

2.1 Applicable Documents

AD01	Database MIB Import ICD, Version 5.2, 2nd July 2003, S2K-MCS-ICD-0001-TOS-GIC
AD02	CUS Functionality to Support Command Lists for SPIRE, HCSS SCR-0110 (see http://www.rssd.esa.int/herschel_webapps/servletsuite/ProblemReportServlet?area=hcss&mode=displaypr&id=110), Ken King and Sunil Sidher, 13th Aug 2002.
AD03	Contents of SPIRE VM Table File, Issue 1.0 Draft 2, 5th Feb 2004, SPIRE-RAL-NOT-001907
AD04	SPIRE EGSE-ILT Startup Procedures, Issue 0.7, 24th June 2003, SPIRE-RAL-DOC-001630

2.2 Reference Documents

RD01	HCSS Acceptance Test Plan, Issue 1.1, 6th Jan 2006
RD02	MIB User Guide
RD03	HCSS telemetry ingestion software user manual
RD04	Common Uplink System User's Guide
RD05	HCSS Installation Instructions
RD06	EGSE TestControl User Guide, Draft 5, 16th Dec 2003, PICC-ME-MN-002
RD07	Mission Setup User's Guide

3. TEST SETUP

3.1 System Setup

The SPIRE setup for the acceptance test was as follows.

Lincoln: SCOS 2000 w/s running Linux SuSE 7.3, SCOS2000 v2.3e P5 + TOPE, EGSE part of the TestControl. The sops23e account was used.

Lichfield: Data Server running Linux SuSE 9.3, plus test control support (tcl/tk 4.4.12, tcl thread 2.6.2, tclBlend 1.3.2), Versant 7.0.1.1. The sg55 account was used. SPIRE build #395 was installed.

Salisbury: QLA machine running Linux 9.3, Versant 7.0.1.1. SPIRE build #400 was installed, which has a QLA update to support prime and redundant instrument testing. The qla account was used.

Both Lichfield and Salisbury were installed with:
- Java 1.5.0_09-b01
- HCSS build #1023 (HCSS 0.3.6 release, database schema version 25)

Note that we did install Versant 7.0.1.2, but due to errors with shared libraries, we rolled back to 7.0.1.1.

Post-AT Note: After the Acceptance Test was finished we noticed a crash in TM ingestion while reading an instrument model object from the database. In the hope of remedying this, we re-enhanced the CCM classes corresponding to HCSS build #1023 with Versant 7.0.1.1. This also looks like SPR-2415 even though data frames were not being produced…

3.2 Preliminary Steps

These steps were performed in order to carry out the acceptance test. They were carried out as required, i.e. they were not all performed before the acceptance test steps were started.

3.2.1 Router and Gateway

We started the Router and EGSEGateway from sg55 on Lichfield:

```
➢ router R
➢ router S –scosapids 1280,1282,2036-2038
```

3.2.2 Database setup

We used the DB Admin Manual HSCDT/TN044, Issue Draft 0.19, 29th Sept 2006, linked from the HCSS Documentation Tree. We were unable to find a version of this document specifically applicable to HCSS 0.3.6.

Create database for HCSS 0.3.6 AT:
```
        /home/sg55> db_admin -i hcssv0.3.6_at@lichfield
```

Command was successful and produced the following output:

```
/home/sg55> db_admin -i hcssv0.3.6_at@lichfield
11-Oct-06 14:23:55.365 LogInitialiser: Initialising using local log
configuation
 file /home/sg55/.hcss/userlogging.properties
11-Oct-06 14:23:55.423 Configuration: Build number is 1023
Initializing new database system...
[makedb] New database directory created: hcssv0.3.6_at@lichfield
[profile.be] Updated profile.be for database: hcssv0.3.6_at@lichfield
[createdb] New database created: hcssv0.3.6_at@lichfield
[SchemaTool]
```

```
[indexing] Creating default indices.
11-Oct-06 14:24:02.762 DatabaseTools: Could not check for multi-user-
mode, check is disabled.
[DBI]
[initv]
Initializing database "hcssv0.3.6_at@lichfield"
11-Oct-06 14:24:03.046 ReplicatingTransaction: Initializing normal
Store: hcssv0.3.6_at@lichfield (main), shadowing disabled.
Initializing database using
herschel.ccm.tools.BasicMissionInitializer
11-Oct-06 14:24:03.134 InstrumentModelRegistryImpl: Create new model
registry for instrument HIFI
11-Oct-06 14:24:03.189 InstrumentModelRegistryImpl: Create new model
registry for instrument PACS
11-Oct-06 14:24:03.190 InstrumentModelRegistryImpl: Create new model
registry for instrument SPIRE
Database system initialization finished.
Finished.
```

We then checked the schema of the DB:

```
    sg55/.hcss> schema_tool -v hcssv0.3.6_at

Database schema version = 25
Class schema version = 25
```

Checked the size and amount of free space in DB:

```
    sg55/.hcss> dbtool -space -volume -all hcssv0.3.6_at

/home/sg55> dbtool -space -volume -all hcssv0.3.6_at
VERSANT Utility DBTOOL Version 7.0.1.1
Copyright (c) 1989-2005 VERSANT Corporation

    Percentage of free space in DB : 99%
    Total available free space in DB : 8368640KB
```

We checked to see if the db_admin command had created any indexes:

```
/home/sg55> dbtool -index -info -list hcssv0.3.6_at
```

The command was successful (see Appendix A for the output).
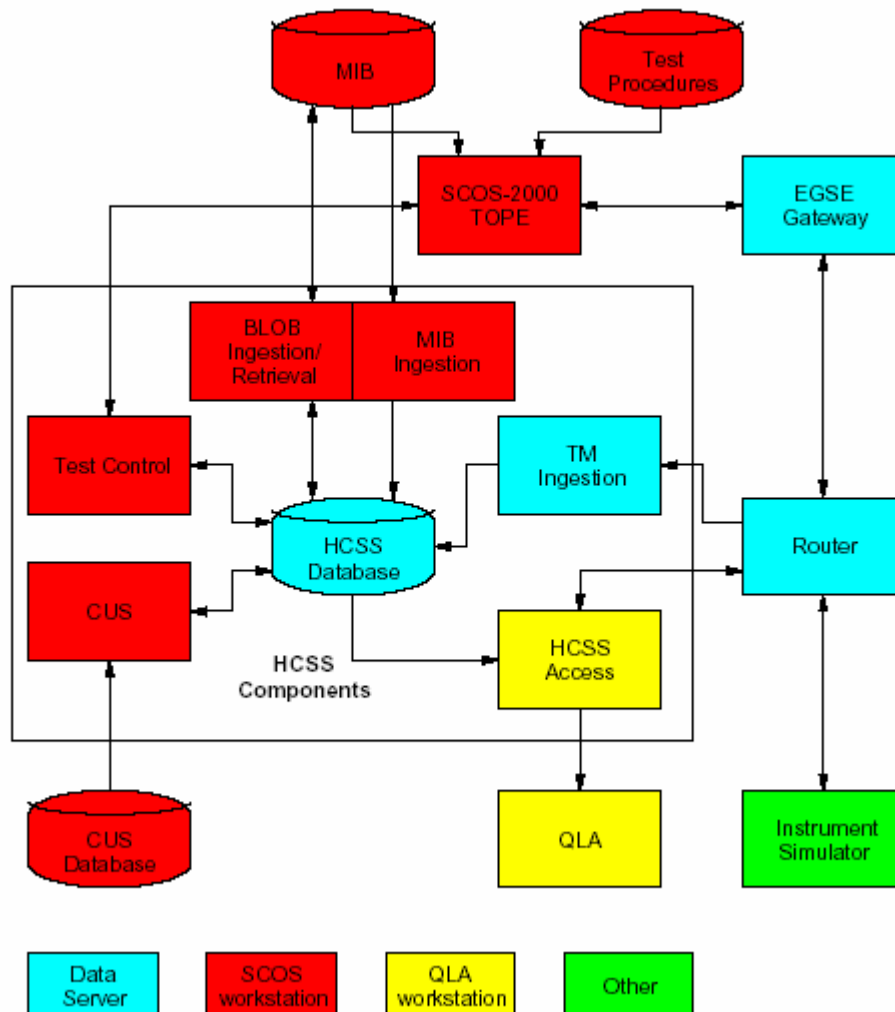
Figure 1: Configuration for the HCSS Acceptance Test

4. HCSS TEST CASES

4.1 TC-ICC-01: MIB Ingestion

The following steps were performed on lichfield:

- Checked that the siteid is set to 3 in the .hcss/user.props file
- Used old MIB in directory tree `/home/sg55/MIB/PFM3_Issue2.1.G1` and recursively copied files into new directory `/home/sg55/MIB/HCSSv0.3.6_AT`

- Ran gencmddurns

```
/home/sg55/MIB/HCSSv0.3.6_AT> gencmddurns ascii-tables auxil/tc-
durns
Using ascii-tables/ccf.dat to create a TEMPLATE command duration
file auxil/tc-durns ..
Done.
```

- Ran the program to check the MIB

  > MIB/PFM3_Issue2.1.E1> mibchecker –properties
  > hcss.mib.datadir=$PWD > mib.log 2>&1 (using bash shell, i.e. typed bash before executing this command)

  The mibchecker ran successfully. (the warnings log is in Appendix B)

- Now we attempted to ingest the MIB into the DB:

  ```
  MIB/PFM3_Issue2.1.E1> ingestmib -properties
  hcss.mib.datadir=$PWD

  The ingestmib reported the following error:

  Exception in thread "main" herschel.mib.api.MibException: The
  label "-properties" exists in the database.
          at
  herschel.mib.utils.MibAndStore.writeToStore(MibAndStore.java:140
  )
          at herschel.mib.tools.IngestMib.exec(IngestMib.java:67)
          at herschel.mib.tools.IngestMib.main(IngestMib.java:100)

  The complete log from ingestmib is in Appendix C.
  ```

We accidentally used the wrong database (viz. asier_temp@chichester) in our attempt to ingest the MIB. Changed the following two properties as follows:

```
var.database.server =lichfield
var.database.devel = hcssv0.3.6_at@${var.database.server}
```

Tried ingesting the MIB again. This time it appeared to ingest successfully, except that there was a strange message regarding the database label:

```
11-Oct-06 15:04:53.233 MibFactory: There was one or more problems in
the imported MIB files. These are not judged to be serious. Check the
file mibchecker.log for details.
11-Oct-06 15:04:53.233 MibFactory: Semantical checks done.
11-Oct-06 15:04:58.575 IngestMib: MibDefinitions now added to
database with label -properties
11-Oct-06 15:04:58.583 IngestMib: Ingestion Completed Successfully.
```

We started the CUS.

  ➢ cusgui&

From the MIB tab selected the "Load a new MIB" option. At this point a window popped up asking for a MIB to be selected. The only MIB available was called –properties. Selected this MIB and the definitions appeared in the "MIB Command Definitions" bottom-right panel. We did not yet commit the new MIB to the registry.

Test partially successful.
NCR-01: MIB ingestion problem when –properties specified.

4.2 TC-ICC-02: CUS: TC Definition File Import

This test is obsolete as its purpose it now covered by TC-ICC-01.

4.3 TC-ICC-03: CUS: Observing Mode Import

We tried to ingest the calibration tables using a shell script using CUS command line functionality. This is located in ~sg55/CUSScripts/HCSSv0.3.6 and named IngestCalTables.csh.

```
Using database hcssv0.3.6_at
VERSANT Utility DBTOOL Version 7.0.1.1
Copyright (c) 1989-2005 VERSANT Corporation

Volume 0:
    Sysname "sysvol"    Size: 8387584K
    Pathname "/spired/versant/db/hcssv0.3.6_at/system"
        Percentage of volume space free in sysvol : 99%
        Free space in vol sysvol : 8361088KB

    Percentage of free space in DB : 99%
    Total available free space in DB : 8361088KB


 Current Calibration Table being read:  PSW_PeakUp.txt


13-Oct-06 09:26:31.384 LogInitialiser: Initialising using local log
configuation file /home/sg55/.hcss/userlogging.properties
13-Oct-06 09:26:31.436 Configuration: Build number is 1023
13-Oct-06 09:26:32.522 ReplicatingTransaction: Initializing normal
Store: hcssv0.3.6_at@lichfield (main), shadowing disabled.
13-Oct-06 09:26:32.611 Cus:
The property "hcss.cus.model" must be set to specify the model name
to use
```

We set the property hcss.cus.model in the user.props file to PFM3 and tried again. This was successful.

```
Using database hcssv0.3.6_at
VERSANT Utility DBTOOL Version 7.0.1.1
Copyright (c) 1989-2005 VERSANT Corporation

Volume 0:
    Sysname "sysvol"    Size: 8387584K
    Pathname "/spired/versant/db/hcssv0.3.6_at/system"
        Percentage of volume space free in sysvol : 99%
        Free space in vol sysvol : 8361088KB

    Percentage of free space in DB : 99%
    Total available free space in DB : 8361088KB


 Current Calibration Table being read:  PSW_PeakUp.txt


13-Oct-06 09:29:25.244 LogInitialiser: Initialising using local log
configuation file /home/sg55/.hcss/userlogging.properties
13-Oct-06 09:29:25.296 Configuration: Build number is 1023
13-Oct-06 09:29:26.196 ReplicatingTransaction: Initializing normal
Store: hcssv0.3.6_at@lichfield (main), shadowing disabled.
```

```
13-Oct-06 09:29:26.407 ReplicatingTransaction: Initializing normal
Store: hcssv0.3.6_at@lichfield (main), shadowing disabled.
13-Oct-06 09:29:26.437 IdRegistryCommitThread: Creating new
IdRegistry entry idreg_productIdRegistry
13-Oct-06 09:29:26.699 Cus: Calibration table "PSW_PeakUp.txt"
successfully uploaded from
"/home/sg55/CUSScripts/HCSSv0.3.6/CUS_CalTables/PSW_PeakUp.txt"
```

We then ran the `IngestCUSDefinitions.csh` script which ingests building blocks first, then observing modes. We saw the error message:

```
Using database hcssv0.3.6_at
VERSANT Utility DBTOOL Version 7.0.1.1
Copyright (c) 1989-2005 VERSANT Corporation

Volume 0:
    Sysname "sysvol"    Size: 8387584K
    Pathname "/spired/versant/db/hcssv0.3.6_at/system"
        Percentage of volume space free in sysvol : 99%
        Free space in vol sysvol : 8359680KB

    Percentage of free space in DB : 99%
    Total available free space in DB : 8359680KB

13-Oct-06 09:32:05.193 LogInitialiser: Initialising using local log
configuation file /home/sg55/.hcss/userlogging.properties
13-Oct-06 09:32:05.245 Configuration: Build number is 1023
13-Oct-06 09:32:06.158 ReplicatingTransaction: Initializing normal
Store: hcssv0.3.6_at@lichfield (main), shadowing disabled.
13-Oct-06 09:32:06.453 Cus: Definition "Spire_SET_OBS_STEP" not
defined
13-Oct-06 09:32:16.669 LogInitialiser: Initialising using local log
configuation file /home/sg55/.hcss/userlogging.properties
13-Oct-06 09:32:16.721 Configuration: Build number is 1023
13-Oct-06 09:32:17.658 ReplicatingTransaction: Initializing normal
Store: hcssv0.3.6_at@lichfield (main), shadowing disabled.
13-Oct-06 09:32:17.881 Cus: Definition "ClearObs" not defined
```

We started the CUS GUI, loaded the MIB again and committed the changes, before trying again:

```
Using database hcssv0.3.6_at
VERSANT Utility DBTOOL Version 7.0.1.1
Copyright (c) 1989-2005 VERSANT Corporation

Volume 0:
    Sysname "sysvol"    Size: 8387584K
    Pathname "/spired/versant/db/hcssv0.3.6_at/system"
        Percentage of volume space free in sysvol : 99%
        Free space in vol sysvol : 8359424KB

    Percentage of free space in DB : 99%
    Total available free space in DB : 8359424KB

13-Oct-06 09:43:33.093 LogInitialiser: Initialising using local log
configuation file /home/sg55/.hcss/userlogging.properties
13-Oct-06 09:43:33.145 Configuration: Build number is 1023
```

```
13-Oct-06 09:43:34.075 ReplicatingTransaction: Initializing normal
Store: hcssv0.3.6_at@lichfield (main), shadowing disabled.
13-Oct-06 09:43:35.462 Cus: Definitions successfully imported
13-Oct-06 09:43:45.660 LogInitialiser: Initialising using local log
configuation file /home/sg55/.hcss/userlogging.properties
13-Oct-06 09:43:45.713 Configuration: Build number is 1023
13-Oct-06 09:43:46.591 ReplicatingTransaction: Initializing normal
Store: hcssv0.3.6_at@lichfield (main), shadowing disabled.
13-Oct-06 09:43:47.942 Cus: Definitions successfully imported
```

We didn't commit these changes in order to also test the same operation using the CUS GUI. First the calibration tables were selected, "Upload table" from the menu, selected PSW_PeakUp.txt and "Open". A dialog said "Calibration table exists, do you want to update it?", selected ok. This was confirmed as being successfully uploaded. Then we selected "View table", which prompted "Select a version of the table to display". Selected "version 1", which displayed it as expected.

We then selected "Registry", then "Import", and were prompted "Do you wish to create new versions". We clicked on "Yes", then selected the file containing the building block definitions: CUS_BBlocks_Definitions.txt. Confirmed "Definitions successfully imported".

We again selected "Registry", then "Import", then went to select the file CUS_Modes_Definitions.txt. Confirmed "Definitions successfully imported".

Finally we selected "Registry" and "Commit".

Test successful.

4.4 TC-ICC-04: TOPE: Issuing Telecommands

We imported test procedure TOPE_test.tcl from directory
/home/sops23e/SCOS2.3eP5/tcl/TC/HCSS_AT_Scripts/TestControlScripts
We then ran this test procedure.

```
2006.286.09.00.55.674000:***** Start execution of TOPE_Test.tcl
2006.286.09.00.55.674000:tcsend SC003500 checks DPTV_OFF {SP03N500
0x0000 RAW}
2006.286.09.00.56.964000:tcsend SC003500 checks DPTV_OFF {SP03N500
0x0001 RAW}
2006.286.09.00.58.114000:tcsend SC003500 checks DPTV_OFF {SP03N500
0x0002 RAW}
2006.286.09.00.59.390000:tcsend SC003500 checks DPTV_OFF {SP03N500
0x0003 RAW}
2006.286.09.01.00.545000:tcsend SC003500 checks DPTV_OFF {SP03N500
0x0004 RAW}
2006.286.09.01.01.814000:tcsend SC003500 checks DPTV_OFF {SP03N500
0x0005 RAW}
2006.286.09.01.03.065000:tcsend SC003500 checks DPTV_OFF {SP03N500
0x0006 RAW}
2006.286.09.01.04.324000:tcsend SC003500 checks DPTV_OFF {SP03N500
0x0007 RAW}
2006.286.09.01.05.495000:tcsend SC003500 checks DPTV_OFF {SP03N500
0x0008 RAW}
2006.286.09.01.06.764000:tcsend SC003500 checks DPTV_OFF {SP03N500
0x0009 RAW}
2006.286.09.01.08.065000:***** Finished execution of TOPE_Test.tcl
```

Test successful.

4.5 TC-ICC-05: TestControl: Running Test Observation using the HCSS

First we started `testcontrol-server`

We ran a similar test as in TC-ICC-04 from the HCSS after importing it from lichfield**.** In TOPE HCSSTest.tcl, we had to change the procedure name to Mode_TOPE_HCSS_Test.

```
set serverLibrary =
/spires/hcssbld/hcss/lib/herschel/testcontrol/server
if ( 0 ) then
setenv TCLLIBPATH
/spires/hcssbld/hcss/lib/herschel/testcontrol/server
endif
jwish
/spires/hcssbld/hcss/lib/herschel/testcontrol/server/tch_tcl_server.t
cl
13-Oct-06 10:03:23.598 LogInitialiser: Initialising using local log
configuation file /home/sg55/.hcss/userlogging.prope
rties
13-Oct-06 10:03:23.634 Configuration: Build number is 1023
13-Oct-06 10:03:23.925 TchTclServer: Starting up the TCL server of
the TestControlHandler
13-Oct-06 10:03:24.290 ReplicatingTransaction: Initializing normal
Store: hcssv0.3.6_at@lichfield (main), shadowing disa
bled.
13-Oct-06 10:03:24.360 MissionImpl: Using configuration "democonfig"
13-Oct-06 10:03:24.388 NativeMethodAccessorImpl: Successful startup,
the TestControlHandler TCL server is running!
13-Oct-06 10:08:23.189 TestControlHandlerImpl: Adding testProcedure
TOPE_HCSSTest (SPIRE)
```

Now we observed a "`Definition "SET_PHOT_PHASE" not defined`" error from the test control server. To try to understand what was happening, we checked out the source code for the CCM corresponding to build #1023, added some diagnostic messages to `TestControlHandlerImpl` and `CommandSetImpl`, then recompiled them. We also set the logging configuration to FINEST.

```
13-Oct-06 15:19:31.652 GeneratedMethodAccessor17: >SPIRE<
13-Oct-06 15:19:31.724 GeneratedMethodAccessor17: >SPIRE<
13-Oct-06 15:19:31.730 GeneratedMethodAccessor17: >SPIRE<
13-Oct-06 15:19:31.736 GeneratedMethodAccessor17: >SPIRE<
13-Oct-06 15:19:31.741 GeneratedMethodAccessor17: >SPIRE<
13-Oct-06 15:19:46.955 GeneratedMethodAccessor17: Adding det_array
(value: PF) to tpParams HashMap
13-Oct-06 15:19:46.957 GeneratedMethodAccessor17: Adding psw_phase
(value: 0) to tpParams HashMap
13-Oct-06 15:19:46.957 GeneratedMethodAccessor17: Adding pmw_phase
(value: 0) to tpParams HashMap
13-Oct-06 15:19:46.957 GeneratedMethodAccessor17: Adding plw_phase
(value: 0) to tpParams HashMap
13-Oct-06 15:19:46.960 TestControlHandlerImpl: Starting test
procedure SET-PHOT-PHASE for instrument model SPIRE PFM3
13-Oct-06 15:19:46.961 TestControlHandlerImpl: 4 test procedure
parameters:
13-Oct-06 15:19:46.961 TestControlHandlerImpl:  plw_phase: 0
```

```
13-Oct-06 15:19:46.961 TestControlHandlerImpl:  det_array: PF
13-Oct-06 15:19:46.961 TestControlHandlerImpl:  pmw_phase: 0
13-Oct-06 15:19:46.962 TestControlHandlerImpl:  psw_phase: 0
13-Oct-06 15:19:47.166 GeneratedMethodAccessor17: Adding pmw_phase
(value: 0) to obsParams HashMap
13-Oct-06 15:19:47.166 GeneratedMethodAccessor17: Adding psw_phase
(value: 0) to obsParams HashMap
13-Oct-06 15:19:47.167 GeneratedMethodAccessor17: Adding plw_phase
(value: 0) to obsParams HashMap
13-Oct-06 15:19:47.167 GeneratedMethodAccessor17: Adding det_array
(value: PF) to obsParams HashMap
13-Oct-06 15:19:47.168 NativeMethodAccessorImpl: Observation mode is
SET_PHOT_PHASE with 4 arguments
13-Oct-06 15:19:47.168 TestControlHandlerImpl:  --------------------
--------------
13-Oct-06 15:19:47.168 TestControlHandlerImpl:  THIS IS THE UPDATED
TEST CONTROL !!
13-Oct-06 15:19:47.168 TestControlHandlerImpl:  --------------------
--------------
13-Oct-06 15:19:47.172 TestControlHandlerImpl: Got CommandSet
13-Oct-06 15:19:47.180 TestControlHandlerImpl: Unexpected
CusException
herschel.ccm.api.CusException: Definition "SET_PHOT_PHASE" not
defined
        at
herschel.versant.ccm.CommandSetImpl.getCusDefinition(CommandSetImpl.j
ava:146)
        at
herschel.testcontrol.TestControlHandlerImpl.getObservationCommands(Te
stControlHandlerImpl.java:363)
        at
herschel.testcontrol.TestControlHandlerImpl.getObservationCommands(Te
stControlHandlerImpl.java:331)
        at sun.reflect.NativeMethodAccessorImpl.invoke0(Native
Method)
        at
sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.
java:39)
        at
sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAcces
sorImpl.java:25)
        at java.lang.reflect.Method.invoke(Method.java:585)
        at
tcl.lang.reflect.PkgInvoker.invokeMethod(PkgInvoker.java:125)
        at tcl.lang.JavaInvoke.call(JavaInvoke.java:263)
        at tcl.lang.JavaInvoke.callMethod(JavaInvoke.java:121)
        at tcl.lang.ReflectObject.cmdProc(ReflectObject.java:914)
        at tcl.lang.Interp.callCommand(Interp.java:1093)
13-Oct-06 15:19:47.268 GeneratedMethodAccessor17: >SPIRE<
13-Oct-06 15:19:47.337 GeneratedMethodAccessor17: >SPIRE<
13-Oct-06 15:19:47.342 GeneratedMethodAccessor17: >SPIRE<
13-Oct-06 15:19:47.348 GeneratedMethodAccessor17: >SPIRE<
```

After consultation with Craig Porrett did the following:

1. From command line execute the command: *missetup –addconfig PFM3*

Result:

```
    missetup -addconfig testconfig
16-Oct-06 13:36:11.439 LogInitialiser: Initialising using local log
configuation file /home/sg55/.hcss/userlogging.properties
16-Oct-06 13:36:11.484 Configuration: Build number is 1023
16-Oct-06 13:36:12.352 ReplicatingTransaction: Initializing normal
Store: hcssv0.3.6_at@lichfield (main), shadowing disabled.
16-Oct-06 13:36:12.432 MissionSetup:
Using database "hcssv0.3.6_at@lichfield"
16-Oct-06 13:36:12.684 MissionSetup: Mission configuration
"testconfig" created in database "hcss.ccm.mission.database"
```

2. Started the cusgui and under Instrument Model tag selected Create Instrument Model in a configuration, on the pop up window selected mission configuration PFM3 then hit select.
3. Then committed changes.
4. On user.props file under Lichfield:/home/sg55/.hcss/ included the following property:

   hcss.ccm.mission.config = PFM3

5. Restarted test control server and re-imported TOPE TCL scripts after configuration change.
6. Executed TOPE_HCSSTest procedure. All commands are generated and sent to SCOS

Test Successful.
SPR-2419 was raised on the problems we encountered – to be closed by Asier.

4.6 TC-ICC-06: End to End: Run a Test Observation, Ingest TM packets, run QLA

Starting this test involved the following actions:

1. TM ingestion failed to start giving the following error messages:
```
   ReplicatingTransaction: Initializing normal
Store:hcssv0.3.6_at@lichfield (main), shadowing disabled.
16-Oct-06 14:15:03.071 MissionImpl: Using configuration "PFM3"
16-Oct-06 14:15:03.077 TmIngestion:
herschel.tmingest.common.TmIngestionException:
Configuration:Instrument not defined in database: Cannot run
requested tm packet processor
```

2. Included properties for the three TM packet processors in user.props
   hcss.tmingest.tmpacketprocessor.hifi, hcss.tmingest.tmpacketprocessor.pacs and
   hcss.tmingest.tmpacketprocessor.spire.
   Originally these properties were all set to Y in the tmingestion.defaults properties file.
Set them to N for HIFI and PACS and Y for SPIRE. TM ingestion still failed with error:
```
   cus -createinsmodel PFM3
16-Oct-06 14:26:39.736 LogInitialiser: Initialising using local log
configuation file /home/sg55/.hcss/userlogging.properties
16-Oct-06 14:26:39.781 Configuration: Build number is 1023
16-Oct-06 14:26:40.779 ReplicatingTransaction: Initializing normal
Store: hcssv0.3.6_at@lichfield (main), shadowing disabled.
16-Oct-06 14:26:40.893 MissionImpl: Using configuration "PFM3"
16-Oct-06 14:26:40.899 Cus: An instrument model for SPIRE exists in
this mission configuration.
Use -f option to force replacement
```

Set hcss.tmingest.tmpacketprocessor.spire to N.

In order to continue with the rest of the AT we decided to create a new AT database in order to replicate the process now in a more ordered manner:

1. Removed the existing AT database and created it once again. Then repeated actions reported on TC-ICC-01.
2. Created a new configuration from command line: *missetup –addconfig iltconfig*
3. Opened CUS and selected Instrument Model → Create new Instrument Model …→ Selected the mission configuration previously defined (iltconfig) and when it prompted (an instrument model for SPIRE exists, … , do you want to replace it) selected OK.
4. On the user.props updated the hcss.ccm.mission.config to point to iltconfig
5. Updated the instrument *hcss.mib.datadir* property on the user.props file for sg55 to point to the directory were MIB files for the AT were located. (/home/sg55/MIB/PFM3_Issue2.1.G1/)
6. Then executed *ingestmib PFM3_Issue2.1.G2* command with the appropriate label for this MIB. Then on the CUS GUI loaded the new MIB by selecting Load a New Mib under the MIB tab. Then committed the changes.

Continued now with the rest of the AT.

Now started tmingestion by typing.

>tmingest HCSSv0.3.6_AT_TC_ICC_06.log

TM Ingestion started OK.

Logs being written to ~sg55/logs/tmingest directory. Script tmingest to start TM ingestion is in ~sg55/bin

3. Started QLA from qla@salisbury: success
4. Added OverNightTest definition in the CUS
5. Started TFTS

We then left it running with nominal housekeeping collection overnight. The following day we checked:

1. Telemetry ingestion log – no errors, warnings or exceptions spotted.
2. Messages on the Router and EGSE gateway konsoles - no errors or warnings.

Test successful.

4.7 TC-ICC-07: End to End: Run RTA/QLA on observation data stored in the HCSS database

We started QLA from qla@salisbury.
- Made the test database publicly accessible (dbuser -add -P hcssv0.3.6_at) from lichfield.

2

Report

SPIRE HCSS v0.3.6 Acceptance Test Report
Sunil Sidher, Steve Guest & Asier Aramburu

Ref:	SPIRE-RAL-REP-002739
Issue:	1.0
Date:	6th Nov 2006
Page:	15 of 38

Playback both by time and by test observation was performed. In both cases QLA displayed a time series plot of the DPUTEMPHK parameter.

Test successful.

4.8 TC-ICC-08: SPIRE Command List functionality in the CUS

Copied from /home/sg55/OBS-Tables/ Functions_2.5_1.2_060302100140.tbl into the directory HCSSv0.3.6.
Within the table corrected small typo (CLname to CLName – this typo was present because we used the table output from an old version of the SPIRE VM compiler).

The table was created using BBID 100 successfully.
We checked that the length of the update table commands within the building block is a maximum of 56 32 bit data words as opposed to 57 23 bit data words.
Definition committed to the database.

We repeated the process for flash table command list with BBID 101. Also successfully created and committed.

Test successful.

4.9 TC-ICC-09: Ingest a Calibration Table and check size functionality in the CUS

We tried the calibration table ingestion in two possible ways:

1. Ingest the calibration table(s) using a shell script which makes use of CUS command line functionality. This is located in `~sg55/CUSScripts/HCSSv0.3.6` and named `IngestCalTables.csh`. The calibration table was ingested successfully.
2. Ingest the same calibration table(s) using the CUS GUI functionality.

In both cases the process was verified by selecting View Calibration Table from the CUS GUI.

With the CUS GUI we created a short procedure (CheckTableSize) which would print the table size for PSW_Peakup. We ingested it, ran it, and verified that the size was correct.

Test successful.

4.10 TC-ICC-10: Correct setting of the OBSID values according to Site Id in the CUS

This was verified using the "Check Command" button of the CUS GUI.

Test successful.

4.11 TC-ICC-11: Correct setting of command parameter values in the CUS

This was verified using the "Check Command" button of the CUS GUI.
Command parameters (hexadecimal values) are displayed correctly.

Test successful.

4.12 TC-ICC-12: TC History and OOL data retrieval and ingestion

We tested in ILT client-server mode. We did not test the manual (IST) mode due to difficulties running the GUI program on the same machine as the test control server.

On lincoln we ran:

```
sg55> thfserver
sg55> orfserver
```

We then selected the times on the client (lichfield) by setting the "starttime" properties. On the client machine we ran:

```
17-Oct-06 10:51:09.167 TCHAssociator: Missing TCH record(s): id = 1
last one was 146 at Mon Oct 16 15:55:11 BST 2006
17-Oct-06 10:51:09.713 AbstractFileIngestion: 439 records entered
into the database
17-Oct-06 10:51:09.713 TCHIngestion: Ingestion complete, elapsed time
3542 milliseconds
17-Oct-06 10:51:09.715 FileDetails: Setting start time to Tue Oct 17
09:51:05 UTC 2006
17-Oct-06 10:51:09.716 AbstractFileIngestion: Waiting for 60000 ms
17-Oct-06 10:52:09.717 TCHIngestion: File ingestion begun at Tue Oct
17 10:52:09 BST 2006
17-Oct-06 10:52:10.236 AbstractFileIngestion: Ingesting file
THF_061017_0018.DAT6761.tmp
17-Oct-06 10:52:10.237 AbstractFileIngestion: File received covering
Thu Jan 01 00:00:00 UTC 1970 to Thu Jan 01 00:00:00 UTC 1970
17-Oct-06 10:52:10.238 AbstractFileIngestion: Time of first item in
file (Thu Jan 01 00:00:00 UTC 1970) differs from the requested file
start time (Tue Oct 17 09:51:05 UTC 2006) by more than the allowed
margin (1000)
17-Oct-06 10:52:10.239 AbstractFileIngestion: Time of last item in
file (Thu Jan 01 00:00:00 UTC 1970) differs from the requested file
end time (Tue Oct 17 09:52:05 UTC 2006) by more than the allowed
margin (1000)
17-Oct-06 10:52:10.239 THFProcessor: Processing file
THF_061017_0018.DAT6761.tmp
17-Oct-06 10:52:10.246 THFProcessor: The file contains 0 TCs of which
0 are unknown (manual)
17-Oct-06 10:52:10.248 AbstractFileIngestion: 0 records entered into
the database
17-Oct-06 10:52:10.249 TCHIngestion: Ingestion complete, elapsed time
531 milliseconds
17-Oct-06 10:52:10.249 FileDetails: Setting start time to Tue Oct 17
09:52:05 UTC 2006
17-Oct-06 10:52:10.249 AbstractFileIngestion: Waiting for 60000 ms
```

We used db2tty to check that the same number of records had been entered into the database as expected.

We repeated the ingestion and found that the TCH records were ingested into the database again, even though they were already there (and log messages said so).

```
17-Oct-06 10:57:33.439 THFProcessor: TCH with time stamp Mon Oct 16
17:16:41 BST 2006 cannot be associated with an observation
```

```
17-Oct-06 10:57:33.440 THFProcessor: TC 291 already has a TCHistory
in database
17-Oct-06 10:57:33.441 THFProcessor: TCH with time stamp Mon Oct 16
17:16:42 BST 2006 cannot be associated with an observation
17-Oct-06 10:57:33.443 THFProcessor: TC 292 already has a TCHistory
in database
17-Oct-06 10:57:33.443 THFProcessor: The file contains 439 TCs of
which 1 are unknown (manual)
```

We then repeated the same tests for OOL. In this case the OOL records were not reingested.

NCR-02: TC History ingestion includes same record more than once.

[AAA 1st November 2006]:

After 3 days of the TC history and OOL history processes being started the TCH ingestion process crashed on 20th Oct 2006, hanging at the same time as the OOL ingestion process. Details of the error on the particular TC history record that caused it can be found on **SPR-2456.**
The same error was notified on SPR-1689. On that occasion we could not reproduce the error. Now we have a sample of the file that will produce the error. This is a file filled with certain number of blank spaces which TCH ingest application seems unable to detect as invalid, hence producing an application error.

Test *not* successful.

NCR-03: TC History ingestion crashes

4.13 TC-ICC-13: Overnight test at nominal SPIRE data rate

This test was not performed because no instrument simulator was available at the time. This will be tested during the instrument warm functional tests.

4.14 TC-ICC-14: Database Replication Test

This test was not performed as it is not planned to use this functionality during the test campaign.

4.15 TC-ICC-15: Playback data from database into the EGSE router

This test was not performed as it is:
1. Not needed for the test campaign.
2. Difficult to perform without corrupting the SCOS telemetry history.

5. CONCLUSIONS

The Acceptance Test of HCSS 0.3.6, build #1023 was partially successful, with some important anomalies observed. HCSS v0.3.6 can still be used for our ILT but it does mean that some activities have to be performed manually after the tests.

Table 1 below lists all the Non Conformance Reports (NCRs) resulting from these tests and our response in each case.

Table 1 List of NCRs raised during the acceptance test

NCR Details	Action taken
NCR-01: MIB ingestion problem when - properties specified.	HCSS SPR-2428 raised.
NCR-02: TC History ingestion includes same record more than once.	None. This is the specified behaviour, see HCSS SPR-0503.
NCR-03: TC History ingestion crashes when invalid record is found	HCSS SPR-2456 raised.

Important Post Acceptance Test Remarks:

- **For our instrument level tests with large number of TCs (viz. >1000), there is a delay of up to a minute between the Start of test execution from TOPE and the actual release of TCs to the instrument. This important anomaly, which was not present in HCSS v0.3.3, needs further investigation.**
- **In the HCSS v0.4 acceptance test plan we will need to include test cases for switching between instrument models and configurations.**
- **It would be very helpful if the CUSGUI displayed all the current mission properties as setup by the user, i.e. Instrument Model, Configuration and DB (HCSS SCR-2478).**

6. APPENDIX A – DATABASE INDEXES

To check if the db_admin command had created any indexes, we issue the following command:

```
/home/sg55> dbtool -index -info -list hcssv0.3.6_at
```

The command was successful and produced the following output:

```
VERSANT Utility DBTOOL Version 7.0.1.1
Copyright (c) 1989-2005 VERSANT Corporation

Class: herschel.versant.ccm.HifiDAttribute: _startTime
Domain: o_8b                      Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:01 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.HifiDAttribute: _endTime
Domain: o_8b                      Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.HifiHAttribute: _startTime
Domain: o_8b                      Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:01 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.HifiHAttribute: _endTime
Domain: o_8b                      Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.HifiWAttribute: _startTime
Domain: o_8b                      Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:01 2006
```

```
   Located in volumes:
      /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.HifiWAttribute: _endTime
Domain: o_8b                    Length: 8
  Index:   BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
     /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.PacsDAttribute: _startTime
Domain: o_8b                    Length: 8
  Index:   BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:01 2006
  Located in volumes:
     /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.PacsDAttribute: _endTime
Domain: o_8b                    Length: 8
  Index:   BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
     /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.TmSouAttribute: _time
Domain: o_8b                    Length: 8
  Index:   BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:01 2006
  Located in volumes:
     /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.produAttribute: _productId
Domain: o_8b                    Length: 8
  Index:   BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
     /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                    Length: 8
  Index:   BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:01 2006
  Located in volumes:
     /spired/versant/db/hcssv0.3.6_at/system/sysvol
```

```
Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                         Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                         Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:01 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                         Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                         Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:01 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                         Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                         Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:01 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                         Length: 8
  Index:  BTREE
  Number of pages: 3
```

Report

SPIRE HCSS v0.3.6 Acceptance Test Report
Sunil Sidher, Steve Guest & Asier Aramburu

Ref: SPIRE-RAL-REP-002739
Issue: 1.0
Date: 6th Nov 2006
Page: 22 of 38

```
   Creation time: Wed Oct 11 14:24:02 2006
   Located in volumes:
     /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                    Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:01 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                    Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                    Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:01 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                    Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                    Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:01 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                    Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol
```

Report

SPIRE HCSS v0.3.6 Acceptance Test Report
Sunil Sidher, Steve Guest & Asier Aramburu

Ref: SPIRE-RAL-REP-002739
Issue: 1.0
Date: 6th Nov 2006
Page: 23 of 38

```
Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                     Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:01 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                     Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                     Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:01 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                     Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                     Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:01 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                     Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                     Length: 8
  Index:  BTREE
```

Report

SPIRE HCSS v0.3.6 Acceptance Test Report
Sunil Sidher, Steve Guest & Asier Aramburu

Ref:	SPIRE-RAL-REP-002739
Issue:	1.0
Date:	6th Nov 2006
Page:	24 of 38

```
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                   Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                   Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                   Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                   Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                   Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                   Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol
```

```
Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                         Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                         Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                         Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                         Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                         Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                         Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
    /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                         Length: 8
```

Report

SPIRE HCSS v0.3.6 Acceptance Test Report
Sunil Sidher, Steve Guest & Asier Aramburu

Ref: SPIRE-RAL-REP-002739
Issue: 1.0
Date: 6th Nov 2006
Page: 26 of 38

```
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
     /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                        Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
     /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                        Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
     /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                        Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:01 2006
  Located in volumes:
     /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                        Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
     /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _startTime
Domain: o_8b                        Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
     /spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: herschel.versant.ccm.spireAttribute: _endTime
Domain: o_8b                        Length: 8
  Index:  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:02 2006
  Located in volumes:
```

```
/spired/versant/db/hcssv0.3.6_at/system/sysvol


Class: VAssociate                   Attribute: VAssociate::name
Domain: char                        Length: variable

  Index: UNIQUE  BTREE
  Number of pages: 3
  Creation time: Wed Oct 11 14:24:01 2006
  Located in volumes:
     /spired/versant/db/hcssv0.3.6_at/system/sysvol
```

7. APPENDIX B – LOG OF MIBCHECKER WARNINGS

Only the warnings from mibchecker are listed below. These are considered to be minor and do not affect the conclusions of the acceptance test.

```
=== Table ccf START
A problem was found. Events prior to problem:
Table ccf record 1: Field 1: got [SCM00500]
Table ccf record 1: Field 2: got [LOAD_MEMORY]
Table ccf record 1: Field 3: got [LOAD MEMORY USING ABSOLUTE ADDRESSES]
Table ccf record 1: Field 4: got []
Warning: UseofDefaultWarning Table ccf record 1: In field 4 the field value
is null. Using default value of [null]
A problem was found. Events prior to problem:
Table ccf record 1: Field 5: got [N]
Table ccf record 1: Field 6: got [GX000000]
Table ccf record 1: Field 7: got [6]
Table ccf record 1: Field 8: got [2]
Table ccf record 1: Field 9: got [1280]
Table ccf record 1: Field 10: got [5]
Table ccf record 1: Field 11: got [A]
Table ccf record 1: Field 12: got [Y]
Table ccf record 1: Field 13: got [N]
Table ccf record 1: Field 14: got [C]
Table ccf record 1: Field 15: got [19]
Table ccf record 1: Field 16: got [N]
Table ccf record 1: Field 17: got []
Info: NumericNullValueAssumed Table ccf record 1: In field 17:  Cannot
convert [null] to an Numeric type. Setting value to null

+++++++++Summary of Validation Problems++++++++++
NumericNullValueAssumed 179
UseofDefaultWarning 272
=== Table ccf END.



=== Table ccs START
+++++++++Summary of Validation Problems++++++++++
=== Table ccs END.



=== Table cdf START
A problem was found. Events prior to problem:
Table cdf record 1: Field 1: got [SCM00500]
Table cdf record 1: Field 2: got [E]
Table cdf record 1: Field 3: got [MEMORYID_LOADMEM]
Table cdf record 1: Field 4: got [8]
Table cdf record 1: Field 5: got [0]
Table cdf record 1: Field 6: got [0]
Table cdf record 1: Field 7: got [SPM0N500]
Table cdf record 1: Field 8: got [D]
Table cdf record 1: Field 9: got []
Warning: UseofDefaultWarning Table cdf record 1: In field 9 the field value
is null. Using default value of []
+++++++++Summary of Validation Problems++++++++++
UseofDefaultWarning 659
=== Table cdf END.



=== Table cpc START
A problem was found. Events prior to problem:
```

```
Table cpc record 1: Field 1: got [SPM0N500]
Table cpc record 1: Field 2: got [MEMORYID_LOADMEM]
Table cpc record 1: Field 3: got [3]
Table cpc record 1: Field 4: got [4]
Table cpc record 1: Field 5: got [A]
Table cpc record 1: Field 6: got [H]
Table cpc record 1: Field 7: got []
Warning: UseofDefaultWarning Table cpc record 1: In field 7 the field value
is null. Using default value of [null]
A problem was found. Events prior to problem:
Table cpc record 1: Field 8: got [T]
Table cpc record 1: Field 9: got []
Info: NumericNullValueAssumed Table cpc record 1: In field 9:  Cannot
convert [null] to an Numeric type. Setting value to null

+++++++++Summary of Validation Problems++++++++++
NumericNullValueAssumed 435
UseofDefaultWarning 865
=== Table cpc END.



=== Table cvs START
A problem was found. Events prior to problem:
Table cvs record 1: Field 1: got [1000]
Table cvs record 1: Field 2: got [A]
Table cvs record 1: Field 3: got [R]
Table cvs record 1: Field 4: got [0]
Table cvs record 1: Field 5: got [50]
Table cvs record 1: Field 6: got []
Warning: UseofDefaultWarning Table cvs record 1: In field 6 the field value
is null. Using default value of [null]
A problem was found. Events prior to problem:
Info: NumericNullValueAssumed Table cvs record 1: In field 6:  Cannot
convert [null] to an Numeric type. Setting value to null

+++++++++Summary of Validation Problems++++++++++
NumericNullValueAssumed 8
UseofDefaultWarning 8
=== Table cvs END.



=== Table gpf START
A problem was found. Events prior to problem:
Table gpf record 2: Field 1: got [QGF0S490]
Table gpf record 2: Field 2: got [H]
Table gpf record 2: Field 3: got [Stage velocity vs. time]
Table gpf record 2: Field 4: got [Y]
Table gpf record 2: Field 5: got [N]
Table gpf record 2: Field 6: got [0]
Table gpf record 2: Field 7: got [1]
Table gpf record 2: Field 8: got [5]
Table gpf record 2: Field 9: got [7]
Table gpf record 2: Field 10: got [10]
Table gpf record 2: Field 11: got [10]
Table gpf record 2: Field 12: got [10]
Table gpf record 2: Field 13: got [10]
Warning: PossibleIncorrectFieldNumber Table gpf record 2: Number of fields
in input data [13] equals the number of mandatory fields expected, but is
lower than the total number of fields for this table [14].

+++++++++Summary of Validation Problems++++++++++
PossibleIncorrectFieldNumber 2
```

```
=== Table gpf END.



=== Table ocp START
A problem was found. Events prior to problem:
Table ocp record 1: Field 1: got [SMD0V505]
Table ocp record 1: Field 2: got [1]
Table ocp record 1: Field 3: got [S]
Table ocp record 1: Field 4: got [4.75]
Table ocp record 1: Field 5: got [5.25]
Table ocp record 1: Field 6: got []
Warning: UseofDefaultWarning Table ocp record 1: In field 6 the field value
is null. Using default value of [null]
+++++++++Summary of Validation Problems++++++++++
UseofDefaultWarning 371
=== Table ocp END.

=== Table pcf START
A problem was found. Events prior to problem:
Table pcf record 1: Field 1: got [SM_LN525]
Table pcf record 1: Field 2: got [TCPKTSTYPE]
Table pcf record 1: Field 3: got []
Warning: UseofDefaultWarning Table pcf record 1: In field 3 the field value
is null. Using default value of []
A problem was found. Events prior to problem:
Info: NumericNullValueAssumed Table pcf record 1: In field 3:  Cannot
convert [] to an Numeric type. Setting value to null


+++++++++Summary of Validation Problems++++++++++
NumericNullValueAssumed 5089
UseofDefaultWarning 13973
=== Table pcf END.

=== Table pic START
A problem was found. Events prior to problem:
Table pic record 12: Field 1: got [1]
Table pic record 12: Field 2: got [1]
Table pic record 12: Field 3: got [-1]
Table pic record 12: Field 4: got [0]
Table pic record 12: Field 5: got []
Warning: UseofDefaultWarning Table pic record 12: In field 5 the field value
is null. Using default value of [null]
A problem was found. Events prior to problem:
Info: NumericNullValueAssumed Table pic record 12: In field 5:  Cannot
convert [null] to an Numeric type. Setting value to null

=== Table pid START
A problem was found. Events prior to problem:
Table pid record 1: Field 1: got [1]
Table pid record 1: Field 2: got [8]
Table pid record 1: Field 3: got [1280]
Table pid record 1: Field 4: got [1537]
Table pid record 1: Field 5: got [0]
Table pid record 1: Field 6: got [190000525]
Table pid record 1: Field 7: got [ILL_MEMID]
Table pid record 1: Field 8: got []
Warning: UseofDefaultWarning Table pid record 1: In field 8 the field value
is null. Using default value of [null]
A problem was found. Events prior to problem:
Table pid record 1: Field 9: got [-1]
Table pid record 1: Field 10: got [0]
Table pid record 1: Field 11: got [Y]
```

Report

SPIRE HCSS v0.3.6 Acceptance Test Report
Sunil Sidher, Steve Guest & Asier Aramburu

Ref:	SPIRE-RAL-REP-002739
Issue:	1.0
Date:	6th Nov 2006
Page:	31 of 38

```
Table pid record 1: Field 12: got []
Info: NumericNullValueAssumed Table pid record 1: In field 12:  Cannot
convert [] to an Numeric type. Setting value to null

+++++++++Summary of Validation Problems++++++++++
NumericNullValueAssumed 172
UseofDefaultWarning 318
=== Table pid END.

=== Table prf START
A problem was found. Events prior to problem:
Table prf record 1: Field 1: got [533]
Table prf record 1: Field 2: got [T_POSITION_DEFOCUS]
Table prf record 1: Field 3: got [R]
Table prf record 1: Field 4: got [R]
Table prf record 1: Field 5: got []
Warning: UseofDefaultWarning Table prf record 1: In field 5 the field value
is null. Using default value of [D]
+++++++++Summary of Validation Problems++++++++++
UseofDefaultWarning 6
=== Table prf END.


=== Table tpcf START
A problem was found. Events prior to problem:
Table tpcf record 138: Field 1: got [190100510]
Table tpcf record 138: Field 2: got [PHOTF]
Table tpcf record 138: Field 3: got []
Warning: UseofDefaultWarning Table tpcf record 138: In field 3 the field
value is null. Using default value of [null]
A problem was found. Events prior to problem:
Info: NumericNullValueAssumed Table tpcf record 138: In field 3:  Cannot
convert [null] to an Numeric type. Setting value to null

+++++++++Summary of Validation Problems++++++++++
NumericNullValueAssumed 26
UseofDefaultWarning 26
=== Table tpcf END.


=== Packet definition apid=1288, type=21, subtype=1, sid=1040 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=1288 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=1288, type=21, subtype=1, sid=1040 END


=== Packet definition apid=1288, type=21, subtype=1, sid=1554 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=1288 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=1288, type=21, subtype=1, sid=1554 END


=== Packet definition apid=1288, type=21, subtype=1, sid=2592 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=1288 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
```

	Report	**Ref:**	SPIRE-RAL-REP-002739
SPIRE	SPIRE HCSS v0.3.6 Acceptance Test Report Sunil Sidher, Steve Guest & Asier Aramburu	**Issue:** **Date:** **Page:**	1.0 6th Nov 2006 32 of 38

```
PacketPrefixNotFound 1
=== Packet definition apid=1288, type=21, subtype=1, sid=2592 END



=== Packet definition apid=1288, type=21, subtype=1, sid=5136 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=1288 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=1288, type=21, subtype=1, sid=5136 END



=== Packet definition apid=1288, type=21, subtype=3, sid=2068 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=1288 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=1288, type=21, subtype=3, sid=2068 END



=== Packet definition apid=1288, type=21, subtype=3, sid=2325 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=1288 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=1288, type=21, subtype=3, sid=2325 END



=== Packet definition apid=1288, type=21, subtype=3, sid=4385 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=1288 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=1288, type=21, subtype=3, sid=4385 END



=== Packet definition apid=1288, type=21, subtype=3, sid=65280 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=1288 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=1288, type=21, subtype=3, sid=65280 END



=== Packet definition apid=1288, type=21, subtype=4, sid=521 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=1288 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=1288, type=21, subtype=4, sid=521 END



=== Packet definition apid=1288, type=21, subtype=4, sid=522 START
A problem was found. Events prior to problem:
```

Report

SPIRE HCSS v0.3.6 Acceptance Test Report
Sunil Sidher, Steve Guest & Asier Aramburu

Ref: SPIRE-RAL-REP-002739
Issue: 1.0
Date: 6th Nov 2006
Page: 33 of 38

```
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=1288 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=1288, type=21, subtype=4, sid=522 END


=== Packet definition apid=2038, type=3, subtype=25, sid=769 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=2038 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=2038, type=3, subtype=25, sid=769 END


=== Packet definition apid=2038, type=5, subtype=2, sid=1 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=2038 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=2038, type=5, subtype=2, sid=1 END


=== Packet definition apid=2038, type=5, subtype=2, sid=2 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=2038 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=2038, type=5, subtype=2, sid=2 END


=== Packet definition apid=2038, type=9, subtype=8, sid=0 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=2038 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=2038, type=9, subtype=8, sid=0 END


=== Packet definition apid=2038, type=17, subtype=2, sid=0 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=2038 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=2038, type=17, subtype=2, sid=0 END


=== Packet definition apid=2036, type=3, subtype=25, sid=256 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=2036 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=2036, type=3, subtype=25, sid=256 END


=== Packet definition apid=2036, type=17, subtype=2, sid=0 START
A problem was found. Events prior to problem:
```

```
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=2036 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=2036, type=17, subtype=2, sid=0 END


=== Packet definition apid=2036, type=9, subtype=9, sid=0 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=2036 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=2036, type=9, subtype=9, sid=0 END


=== Packet definition apid=2037, type=3, subtype=25, sid=769 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=2037 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=2037, type=3, subtype=25, sid=769 END


=== Packet definition apid=2037, type=17, subtype=2, sid=0 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=2037 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=2037, type=17, subtype=2, sid=0 END


=== Packet definition apid=2037, type=5, subtype=2, sid=2 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=2037 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=2037, type=5, subtype=2, sid=2 END


=== Packet definition apid=2037, type=5, subtype=2, sid=4 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=2037 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=2037, type=5, subtype=2, sid=4 END


=== Packet definition apid=2037, type=5, subtype=2, sid=8 START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=2037 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=2037, type=5, subtype=2, sid=8 END


=== Packet definition apid=2037, type=5, subtype=2, sid=769 START
A problem was found. Events prior to problem:
```

```
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=2037 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 1
=== Packet definition apid=2037, type=5, subtype=2, sid=769 END


=== Command SCM00500 START
A problem was found. Events prior to problem:
Warning: EngParamWithRawValue Software limitation: Parameter of mnemonic
SPM0N500 has a CPC_INTER value of 'R' which is not currently supported for
Engineering parameters. Assume a default value of null.
+++++++++Summary of Validation Problems++++++++++
EngParamWithRawValue 1
=== Command SCM00500 END.


=== Command SCM01500 START
A problem was found. Events prior to problem:
Warning: EngParamWithRawValue Software limitation: Parameter of mnemonic
SPM6N500 has a CPC_INTER value of 'R' which is not currently supported for
Engineering parameters. Assume a default value of null.
+++++++++Summary of Validation Problems++++++++++
EngParamWithRawValue 1
=== Command SCM01500 END.


=== Command SCM02500 START
A problem was found. Events prior to problem:
Warning: EngParamWithRawValue Software limitation: Parameter of mnemonic
SPM9N500 has a CPC_INTER value of 'R' which is not currently supported for
Engineering parameters. Assume a default value of null.
+++++++++Summary of Validation Problems++++++++++
EngParamWithRawValue 1
=== Command SCM02500 END.



=== Command SC004500 START
A problem was found. Events prior to problem:
Warning: EngParamWithRawValue Software limitation: Parameter of mnemonic
SP04N500 has a CPC_INTER value of 'R' which is not currently supported for
Engineering parameters. Assume a default value of null.
+++++++++Summary of Validation Problems++++++++++
EngParamWithRawValue 1
=== Command SC004500 END.



=== Command QCC02480 START
A problem was found. Events prior to problem:
Warning: CmdParamNotFound Software limitation: Parameter raw type of 9 is
not currently supported. Assuming a type <string>
+++++++++Summary of Validation Problems++++++++++
CmdParamNotFound 1
=== Command QCC02480 END.


=== Command QCC03480 START
A problem was found. Events prior to problem:
Warning: RawParamWithEngValue Possible data problem: Parameter of mnemonic
QPC4N480 does not have a calibration curve [CPC_CATEG=T], so is assumed to
```

```
be of RAW nature, but the value is be interpreted as of ENG nature
(CPC_INTER=E). Setting the default value to null
A problem was found. Events prior to problem:
Warning: CmdParamNotFound Software limitation: Parameter raw type of 9 is
not currently supported. Assuming a type <string>
+++++++++Summary of Validation Problems++++++++++
RawParamWithEngValue 1
CmdParamNotFound 1
=== Command QCC03480 END.



=== Command QCC00485 START
A problem was found. Events prior to problem:
Warning: EngParamWithRawValue Software limitation: Parameter of mnemonic
QPC0N485 has a CDF_INTER value of 'R' which is not currently supported for
Engineering parameters. Assume a default value of null.
+++++++++Summary of Validation Problems++++++++++
EngParamWithRawValue 1
=== Command QCC00485 END.

=== Command QCB00485 START
A problem was found. Events prior to problem:
Warning: EngParamWithRawValue Software limitation: Parameter of mnemonic
QPB0N485 has a CDF_INTER value of 'R' which is not currently supported for
Engineering parameters. Assume a default value of null.
+++++++++Summary of Validation Problems++++++++++
EngParamWithRawValue 1
=== Command QCB00485 END.

=== Command QCT00485 START
A problem was found. Events prior to problem:
Warning: EngParamWithRawValue Software limitation: Parameter of mnemonic
QPT0N485 has a CDF_INTER value of 'R' which is not currently supported for
Engineering parameters. Assume a default value of null.
+++++++++Summary of Validation Problems++++++++++
EngParamWithRawValue 1
=== Command QCT00485 END.



=== Command QCF00490 START
A problem was found. Events prior to problem:
Warning: EngParamWithRawValue Software limitation: Parameter of mnemonic
QPF0F490 has a CDF_INTER value of 'R' which is not currently supported for
Engineering parameters. Assume a default value of null.
+++++++++Summary of Validation Problems++++++++++
EngParamWithRawValue 1
=== Command QCF00490 END.

=== Command QCF03490 START
A problem was found. Events prior to problem:
Warning: RawParamWithEngValue Possible data problem: Parameter of mnemonic
QPF0P490 does not have a calibration curve [CPC_CATEG=C], so is assumed to
be of RAW nature, but the value is be interpreted as of ENG nature
(CDF_INTER=E). Setting the default value to null
A problem was found. Events prior to problem:
Warning: EngParamWithRawValue Software limitation: Parameter of mnemonic
QPF1F490 has a CDF_INTER value of 'R' which is not currently supported for
Engineering parameters. Assume a default value of null.
A problem was found. Events prior to problem:
Warning: CmdParamNotFound Software limitation: Parameter engineering type of
U is not currently supported. Assuming a type <string>
```

```
+++++++++Summary of Validation Problems++++++++++
EngParamWithRawValue 1
RawParamWithEngValue 3
CmdParamNotFound 1
=== Command QCF03490 END.




=== Command QCF05490 START
A problem was found. Events prior to problem:
Warning: EngParamWithRawValue Software limitation: Parameter of mnemonic
QPF2F490 has a CDF_INTER value of 'R' which is not currently supported for
Engineering parameters. Assume a default value of null.
+++++++++Summary of Validation Problems++++++++++
EngParamWithRawValue 1
=== Command QCF05490 END.




=== Command QCF06490 START
A problem was found. Events prior to problem:
Warning: RawParamWithEngValue Possible data problem: Parameter of mnemonic
QPF1P490 does not have a calibration curve [CPC_CATEG=C], so is assumed to
be of RAW nature, but the value is be interpreted as of ENG nature
(CDF_INTER=E). Setting the default value to null
+++++++++Summary of Validation Problems++++++++++
RawParamWithEngValue 4
=== Command QCF06490 END.




=== MonParam (init) START
A problem was found. Events prior to problem:
Warning: PacketPrefixNotFound Software limitation: A packet prefix for
APID=1288 cannot be found. Assuming a prefix of 'Unknown'
+++++++++Summary of Validation Problems++++++++++
PacketPrefixNotFound 24
=== MonParam (init) END.

=== MonParam SDP0H510 START
A problem was found. Events prior to problem:
Warning: ParamNatureNotSupported Software limitation: Parameter of mnemonic
`SDP0H510` is of D nature. Can only process raw (R) parameters. Ignoring
this parameter.
+++++++++Summary of Validation Problems++++++++++
ParamNatureNotSupported 1
=== MonParam SDP0H510 END.

=== MonParam SDB0H510 START
A problem was found. Events prior to problem:
Warning: ParamNatureNotSupported Software limitation: Parameter of mnemonic
`SDB0H510` is of D nature. Can only process raw (R) parameters. Ignoring
this parameter.
+++++++++Summary of Validation Problems++++++++++
ParamNatureNotSupported 1
=== MonParam SDB0H510 END.

=== MonParam SDF0H510 START
A problem was found. Events prior to problem:
Warning: ParamNatureNotSupported Software limitation: Parameter of mnemonic
`SDF0H510` is of D nature. Can only process raw (R) parameters. Ignoring
this parameter.
+++++++++Summary of Validation Problems++++++++++
ParamNatureNotSupported 1
=== MonParam SDF0H510 END.
```

Report

SPIRE HCSS v0.3.6 Acceptance Test Report
Sunil Sidher, Steve Guest & Asier Aramburu

Ref:	SPIRE-RAL-REP-002739
Issue:	1.0
Date:	6th Nov 2006
Page:	38 of 38

```
=== MonParam SDB1H510 START
A problem was found. Events prior to problem:
Warning: ParamNatureNotSupported Software limitation: Parameter of mnemonic
`SDB1H510` is of D nature. Can only process raw (R) parameters. Ignoring
this parameter.
+++++++++Summary of Validation Problems++++++++++
ParamNatureNotSupported 1
=== MonParam SDB1H510 END.


=== MonParam SDS0P515 START
A problem was found. Events prior to problem:
Warning: ParamNatureNotSupported Software limitation: Parameter of mnemonic
`SDS0P515` is of D nature. Can only process raw (R) parameters. Ignoring
this parameter.
+++++++++Summary of Validation Problems++++++++++
ParamNatureNotSupported 1
=== MonParam SDS0P515 END.
```