



Technical Report

HCSS 0.1.4 Acceptance Test Report
Steve Guest & Sunil Sidher

Ref: SPIRE-RAL-REP-001886
Issue: 1.0
Date: 2nd December 2003
Page: 1 of 13

HCSS 0.1.4 Acceptance Test Report for SPIRE

Steve Guest and Sunil Sidher

2nd December 2003



Technical Report

HCSS 0.1.4 Acceptance Test Report
Steve Guest & Sunil Sidher

Ref: SPIRE-RAL-REP-001886
Issue: 1.0
Date: 2nd December 2003
Page: 2 of 13

1.	INTRODUCTION.....	3
1.1	Conventions.....	3
2.	DOCUMENTATION.....	3
2.1	Applicable Documents	3
2.2	Reference Documents.....	3
3.	TEST SETUP.....	3
3.1	System Setup	3
3.2	Preliminary Setup	4
4.	HCSS TEST CASES.....	5
4.1	Test Case TC-ICC-01: Generation of TC Definition File and MIB Ingestion thereof.....	5
4.2	Test Case TC-ICC-02: CUS: TC Definition File Import.....	11
4.3	Test Case TC-ICC-03: CUS: Observing Mode Import	11
4.4	Test Case TC-ICC-04: TOPE: Issuing Telecommands	11
4.5	Test Case TC-ICC-05: Test Control: Running Test Observation on TestClient	12
4.6	Test Case TC-ICC-06: End to End: Run a Test Observation, Ingest TM packets, run QLA	12
4.7	Test Case TC-ICC-07: End to End: Run RTA/QLA on observation data stored in the HCSS database	13
5.	CONCLUSIONS.....	13



Technical Report

HCSS 0.1.4 Acceptance Test Report
Steve Guest & Sunil Sidher

Ref: SPIRE-RAL-REP-001886
Issue: 1.0
Date: 2nd December 2003
Page: 3 of 13

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 0.1.4 release candidate #1 (Build #263) on 2nd December 2003. All the tests listed in AD01 were attempted. The documentation listed in section 2 was used for the preparation and 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 sg55@truro
```

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	HCSS Acceptance Test Plan, issue 1.1, 5 th November 2002
------	---

2.2 Reference Documents

RD01	MIB User Guide, Issue 0.3, 21 st October 2003
RD02	HCSS telemetry ingestion software user manual, Issue 1.0, 20 th October 2003, HERSCHEL-HSC-DOC-0231
RD03	Common Uplink System User's Guide, Issue 0.14, 29 th October 2003
RD04	Database MIB Import ICD, Version 5.1, 26th October 2001, S2K-MCS-ICD-0001-TOS-GCI
RD04	HCSS Installation Instructions, Issue 0.32, 27 th Oct 2003, ftp://astro.esa.int/pub/HERSCHEL/csdt/releases/doc/Install.html

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 P3 + TOPE and HCSS Build #263

Truro: Data Server running Linux SuSE 7.3, HCSS Build #263 with patches as described in section 3.2.

Both Lincoln and Truro had Java 1.4 1-01 and Versant 6.0.5.1 installed.

We ran QLA (2.0 Release Candidate 2) on Truro.



Technical Report

HCSS 0.1.4 Acceptance Test Report
Steve Guest & Sunil Sidher

Ref: SPIRE-RAL-REP-001886
Issue: 1.0
Date: 2nd December 2003
Page: 4 of 13

The tests were run from user account sg55 with setting as "tester".

3.2 Preliminary Setup

Installed HCSS #253 on Truro and initialised database schema:

```
truro/home/sg55> schema_tool -v drcu_test
Database has no schema version
Class schema version = 1
truro/home/sg55> schema_tool -i drcu_test
Creating database schema
Setting schema version = 1
Creation successful
```

Installed HCSS #263 on Truro and evolved database schema:

```
truro/home/sg55> schema_tool -v drcu_test
Database schema version = 1
Class schema version = 2

truro/home/sg55> schema_tool -e drcu_test
Evolving schema to version 2
Exception in thread "main" { VException(2903:SM_LOCK_TIMEDOUT:
Lock wait Timed out on 99.0.5140 ("sm/tr/trlk.c", line 16
42)) }
    at com.versant.fund.Capi.appendAttr(Native Method)
    at
com.versant.fund.SynchronizedCapi.appendAttr(SynchronizedCapi.java:290)
    at
com.versant.fund.MSession._appendAttr(MSession.java:450)
    at
com.versant.fund.MClassHandle.appendAttr(MClassHandle.java:153)
    at
herschel.versant.tools.schema.evolve.Schema.appendAttribute(Schema.java:109)
    at
herschel.versant.tools.schema.evolve.Schema.addIntAttribute(Schema.java:258)
    at
herschel.versant.ccm.schema.SchemaTool$TmSourceTool.run(SchemaTool.java:102)
    at
herschel.versant.tools.schema.evolve.Schema.apply(Schema.java:637)
    at
herschel.versant.ccm.schema.SchemaTool.evolveSchema(SchemaTool.java:31)
    at
herschel.versant.tools.schema.evolve.AbstractSchemaTool.evolve(AbstractSchemaTool.java:61)
    at
herschel.versant.tools.schema.evolve.AbstractSchemaTool.run(AbstractSchemaTool.java:286)
```



Technical Report

HCSS 0.1.4 Acceptance Test Report
Steve Guest & Sunil Sidher

Ref: SPIRE-RAL-REP-001886
Issue: 1.0
Date: 2nd December 2003
Page: 5 of 13

at
`herschel.versant.ccm.schema.SchemaTool.main (SchemaTool.java:227)`

Used dbtool -t to see existing transactions. Had to get them all shut down. Ran the evolution again with the following edited response:

```
...  
1262273  
Updating CommandSet associations  
99.0.2105  
99.0.2106  
99.0.2107  
Evolution successful  
Schema evolution took 972841 ms
```

Hence the schema evolution took ~16 minutes for ~1.26 million packets, or ~1298 packets/second. It was then checked that the schema had changed to the new version:

```
truro/home/sg55> schema_tool -v drcu_test  
Database schema version = 2  
Class schema version = 2
```

Applied build #263 patches to Windows installation:

- access
- ia.ui
- ia.jconsole
- ia.dataset
- share.log.api

non-Versant dependent version of CCM updated to match CCM in build

Installed build #263 as-is on lincoln.

Patched build #263 on truro with:

- access (latest)
- ia.ui (latest)
- ia.jconsole (latest)
- ia.dataset (Product implements herschel.ccm.api.Product)
- Logging.java gets input stream by
 InputStream is = herschel.spire.qla.QLA.getQlaFileAsStream (propertiesFile);

4. HCSS TEST CASES

4.1 Test Case TC-ICC-01: Generation of TC Definition File and MIB Ingestion thereof

For this test AD01 only gives an outline test procedure to be followed and refers the user to the MIB User Guide (RD01). We therefore set out below the actual procedure followed:

The acceptance test MIB was the one with CVS tag MIBDATA_SPIRE_0_6 (04-11-2003) checked out from CVS. This was the latest documented tag we could find on CVS.



Technical Report

HCSS 0.1.4 Acceptance Test Report
Steve Guest & Sunil Sidher

Ref: SPIRE-RAL-REP-001886
Issue: 1.0
Date: 2nd December 2003
Page: 6 of 13

```
lincoln/home/sg55> cvs co -r MIBDATA_SPIRE_0_6 develop/data/mibdata/spire
```

Issued the preparemib command:

```
lincoln/home/sg55> preparemib
develop/data/mibdata/spire/data/mibdata/spire/ascii-tables/
outmib
Processing table caf..
Processing table cap..
Processing table cca..
Processing table ccf..
Processing table ccs..
Processing table cdf..
Processing table cpc..
Processing table cps..
Processing table csf..
Processing table csp..
Processing table css..
Processing table cve..
Processing table cvp..
Processing table cvs..
Processing table dpc..
Processing table dpf..
Processing table gpc..
Processing table gpf..
Processing table mcf..
Processing table ocf..
Processing table ocp..
Processing table paf..
Processing table pas..
Processing table pcdf..
Processing table pcf..
Processing table pcpc..
Processing table pic..
Processing table pid..
Processing table plf..
Processing table prf..
Processing table prv..
Processing table psm..
Processing table pst..
Processing table psv..
Processing table ptv..
Processing table pvs..
Processing table sdf..
Processing table spc..
Processing table spf..
Processing table tcp..
Processing table tpcf..
Processing table txf..
Processing table txp..
Processing table vdf..
Using develop/data/mibdata/spire/data/mibdata/spire/ascii-
tables//ccf.dat to create a TEMPLATE command duration file
outmib/auxil/tc-durns ..
Done.
```



Technical Report

HCSS 0.1.4 Acceptance Test Report
Steve Guest & Sunil Sidher

Ref: SPIRE-RAL-REP-001886
Issue: 1.0
Date: 2nd December 2003
Page: 7 of 13

ingestmib failed with error:

```
lincoln/home/sg55> ingestmib
[Configuration]: Build number is 263
[Configuration]: Loading properties: IngestMib.defaults
[Configuration]: Loading properties:
/home/hcssbld/hcss_builds/latest_userRelease/config/devel.props
[Configuration]: Loading properties: /home/hcssbld/hcss.props
[Configuration]: Loading properties: /home/sg55/hcss.props
Exception in thread "main" herschel.mib.api.MibException:
InvalidInstrument: The value for the property
hcss.mib.instrument [NONE] is invalid. Accepted values are PACS
SPIRE HIFI
    at herschel.mib.tools.IngestMib.main(IngestMib.java:104)
```

An attempt was made to use the Property Generator tool without success. According to RD04 this tool should inform us of properties that are not defined in our property files. It did not.

Added property `hcss.mib.instrument=${var.instrument}` to the `hcss.props` file in the `hcssbld` account.

Tried `ingestmib` again but got the following error messages:

```
lincoln/home/sg55> ingestmib
[Configuration]: Build number is 263
[Configuration]: Loading properties: IngestMib.defaults
[Configuration]: Loading properties:
/home/hcssbld/hcss_builds/latest_userRelease/config/devel.props
[Configuration]: Loading properties: /home/hcssbld/hcss.props
[Configuration]: Loading properties: /home/sg55/hcss.props
[Logging-init]: Using java default settings.
02-Dec-03 11:50:17.521: [HCSS-INFO]:ValidationLog: Creating file
mibchecker.log logging problems encountered during validation.
02-Dec-03 11:50:17.528: [HCSS-INFO]:MibContainer: Performing
syntactical checks ..
02-Dec-03 11:50:18.144: [HCSS-WARNING]:MibCheckWarnings:
Possible data problem: 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.
02-Dec-03 11:50:18.145: [HCSS-INFO]:MibContainer: Syntactical
checks done.
02-Dec-03 11:50:18.145: [HCSS-INFO]:MibContainer: Performing
longname validation ..
02-Dec-03 11:50:18.258: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2038 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 11:50:18.259: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2038 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 11:50:18.259: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2038 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 11:50:18.260: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2038 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 11:50:18.260: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2038 cannot be
found. Assuming a prefix of 'Unknown'
```



Technical Report

HCSS 0.1.4 Acceptance Test Report
Steve Guest & Sunil Sidher

Ref: SPIRE-RAL-REP-001886
Issue: 1.0
Date: 2nd December 2003
Page: 8 of 13

```
02-Dec-03 11:50:18.260: [HCSS-ERROR]:MibCheckErrors: There was
one or more serious problems in the imported MIB files. Check
the file mibchecker.log for details.
Exception in thread "main" herschel.mib.api.MibException:
ValidationProblemsFound: One or more serious validation problems
encountered.
    at
herschel.mib.api.MibFactory.createDefinitions(MibFactory.java:17
6)
    at
herschel.mib.api.MibFactory.createDefinitions(MibFactory.java:89
)
    at herschel.mib.tools.IngestMib.exec(IngestMib.java:70)
    at herschel.mib.tools.IngestMib.main(IngestMib.java:108)
```

After discussions with Hassan Siddiqui tried ingestmib again with the property hcss.mib.datadir, giving the path of the MIB data files, explicitly specified on the command line:

```
lincoln/home/sg55> ingestmib -properties
hcss.mib.datadir='develop/data/mibdata/spire/data/mibdata/spire/'
```

```
[Configuration]: Build number is 263
[Configuration]: Loading properties: IngestMib.defaults
[Configuration]: Loading properties:
/home/hcssbld/hcss_builds/latest_userRelease/config/devel.props
[Configuration]: Loading properties: /home/hcssbld/hcss.props
[Configuration]: Loading properties: /home/sg55/hcss.props
[Configuration]: Loading property from command line
hcss.mib.datadir=develop/data/mibdata/spire/data/mibdata/spire/
[Logging-init]: Using java default settings.
02-Dec-03 12:24:36.699: [HCSS-INFO]:ValidationLog: Creating file
mibchecker.log logging problems encountered during validation.
02-Dec-03 12:24:36.706: [HCSS-INFO]:MibContainer: Performing
syntactical checks ..
02-Dec-03 12:24:37.327: [HCSS-WARNING]:MibCheckWarnings:
Possible data problem: 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.
02-Dec-03 12:24:37.328: [HCSS-INFO]:MibContainer: Syntactical
checks done.
02-Dec-03 12:24:37.328: [HCSS-INFO]:MibContainer: Performing
longname validation ..
02-Dec-03 12:24:37.423: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2038 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 12:24:37.426: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2038 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 12:24:37.426: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2038 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 12:24:37.427: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2038 cannot be
found. Assuming a prefix of 'Unknown'
```




Technical Report

HCSS 0.1.4 Acceptance Test Report
Steve Guest & Sunil Sidher

Ref: SPIRE-RAL-REP-001886
Issue: 1.0
Date: 2nd December 2003
Page: 9 of 13

02-Dec-03 12:24:37.427: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2038 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 12:24:37.427: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2036 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 12:24:37.427: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2037 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 12:24:37.427: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2037 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 12:24:37.428: [HCSS-WARNING]:MibCheckWarnings:
Possible data problem: 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.
02-Dec-03 12:24:37.428: [HCSS-INFO]:MibContainer: Longname
validation checks done.
02-Dec-03 12:24:37.434: [HCSS-INFO]:MibContainer: Performing
detailed semantical checks ..
[Logging-init]: Using java default settings.
02-Dec-03 12:24:38.133: [HCSS-WARNING]:EngParamWithRawValue:
Software limitation: Parameter of mnemonic SP04N500 has a
CDF_INTER value of 'R' which is not currently supported for
Engineerin
g parameters. Assume a default value of null.
02-Dec-03 12:24:38.185: [HCSS-WARNING]:CmdParamNotFound:
Software limitation: Parameter raw type of 9 is not currently
supported. Assuming a type <string>
02-Dec-03 12:24:38.188: [HCSS-WARNING]:CmdParamNotFound:
Software limitation: Parameter raw type of 9 is not currently
supported. Assuming a type <string>
02-Dec-03 12:24:38.199: [HCSS-WARNING]:EngParamWithRawValue:
Software limitation: Parameter of mnemonic QPC0N485 has a
CDF_INTER value of 'R' which is not currently supported for
Engineerin
g parameters. Assume a default value of null.
02-Dec-03 12:24:38.212: [HCSS-WARNING]:EngParamWithRawValue:
Software limitation: Parameter of mnemonic QPB0N485 has a
CDF_INTER value of 'R' which is not currently supported for
Engineerin
g parameters. Assume a default value of null.
02-Dec-03 12:24:38.218: [HCSS-WARNING]:EngParamWithRawValue:
Software limitation: Parameter of mnemonic QPT0N485 has a
CDF_INTER value of 'R' which is not currently supported for
Engineerin
g parameters. Assume a default value of null.
02-Dec-03 12:24:38.235: [HCSS-WARNING]:EngParamWithRawValue:
Software limitation: Parameter of mnemonic QPF0F490 has a
CDF_INTER value of 'R' which is not currently supported for
Engineerin
g parameters. Assume a default value of null.
02-Dec-03 12:24:38.242: [HCSS-WARNING]:EngParamWithRawValue:
Software limitation: Parameter of mnemonic QPF1F490 has a
CDF_INTER value of 'R' which is not currently supported for
Engineerin
g parameters. Assume a default value of null.



Technical Report

HCSS 0.1.4 Acceptance Test Report
Steve Guest & Sunil Sidher

Ref: SPIRE-RAL-REP-001886
Issue: 1.0
Date: 2nd December 2003
Page: 10 of 13

```
02-Dec-03 12:24:38.244: [HCSS-WARNING]:CmdParamNotFound:
Software limitation: Parameter engineering type of U is not
currently supported. Assuming a type <string>
02-Dec-03 12:24:38.250: [HCSS-WARNING]:EngParamWithRawValue:
Software limitation: Parameter of mnemonic QPF2F490 has a
CDF_INTER value of 'R' which is not currently supported for
Engineerin
g parameters. Assume a default value of null.
02-Dec-03 12:24:38.308: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2038 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 12:24:38.309: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2038 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 12:24:38.309: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2038 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 12:24:38.309: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2038 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 12:24:38.309: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2038 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 12:24:38.311: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2036 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 12:24:38.312: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2037 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 12:24:38.312: [HCSS-WARNING]:PacketPrefixNotFound:
Software limitation: A packet prefix for APID=2037 cannot be
found. Assuming a prefix of 'Unknown'
02-Dec-03 12:24:39.897: [HCSS-WARNING]:MibCheckWarnings:
Possible data problem: 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.
02-Dec-03 12:24:39.897: [HCSS-INFO]:MibContainer: Semantical
checks done.
Using configuration "democonfig"
Exception in thread "main" { VException(9608:EVJ_NO_SUCH_ATTR:
Attribute does not exist) }
    at com.versant.fund.Capi.getLoid(Native Method)
    at com.versant.trans.Pickler.get_loid(Pickler.java:366)
    at
herschel.versant.ccm.InstrumentModelImpl._vj_unpickle_herschel_v
ersant_ccm_InstrumentModelImpl(InstrumentModelImpl.java)
    at
herschel.versant.ccm.InstrumentModelImpl._vj_unpickle(Instrument
ModelImpl.java)
    at com.versant.trans.Pickler.unpickle(Pickler.java:34)
    at com.versant.trans.Jod._vj_update(Jod.java:156)
    at
herschel.versant.ccm.InstrumentModelImpl._vj_getfield_herschel_v
ersant_ccm_InstrumentModelImpl__mib(InstrumentModelImpl.java)
    at
herschel.versant.ccm.InstrumentModelImpl.getMibDefinitions(Instr
umentModelImpl.java:35)
```



Technical Report

HCSS 0.1.4 Acceptance Test Report
Steve Guest & Sunil Sidher

Ref: SPIRE-RAL-REP-001886
Issue: 1.0
Date: 2nd December 2003
Page: 11 of 13

```
at  
herschel.mib.utils.MibAndStore.writeToStore(MibAndStore.java:62)  
at herschel.mib.tools.IngestMib.exec(IngestMib.java:72)  
at herschel.mib.tools.IngestMib.main(IngestMib.java:108)
```

The problem was due to the relevant configuration property pointing to the wrong database. The Versant database exception was overcome by adding the line `var.database.level = drcu_test${var.database.server}` in the user's `hcss.props` file. On running `ingestmib` yet again the Versant exception disappeared and the ingestion was successful:

```
02-Dec-03 13:01:35.075: [HCSS-INFO]:MibContainer: Semantical  
checks done.  
Using configuration "democonfig"  
02-Dec-03 13:01:37.763: [HCSS-INFO]:MibAdded: MibDefinitions now  
added database for instrument SPIRE  
02-Dec-03 13:01:37.775: [HCSS-INFO]:IngestionComplete: Ingestion  
Completed Successfully.
```

Modified the user `hcss.props` file to set the property `var.mib.data` to `/home/sg55/develop/data/mibdata/spire/data/mibdata/spire/`

Ran `gencusscript` as follows:

```
lincoln/home/sg55> gencusscript
```

This was successful and produced the following final message:

```
02-Dec-03 14:06:40.573: [HCSS-INFO]:GenCusScriptComplete: GenCusScript completed successfully
```

Test Result: *Success*

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

The CUS GUI was started:

```
cusgui
```

We imported `cus.script` from registry and committed, then verified that the result appeared in the database with `vdbsinspector`.

Test Result: *Success*

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

We imported `Block_Init_1`, `Block_Chop_1`, `Block_PCal_1`, `Mode_POF1_1` from files; committed, then verified that the result appeared in the database with `vdbsinspector`.

Test Result: *Success*

4.4 Test Case TC-ICC-04: TOPE: Issuing Telecommands

We started SCOS 2000. From the task launcher selected EGSEsv tasks and started them. Logged in as `Matt/Matt`, role `SOFT001`.



Technical Report

HCSS 0.1.4 Acceptance Test Report
Steve Guest & Sunil Sidher

Ref: SPIRE-RAL-REP-001886
Issue: 1.0
Date: 2nd December 2003
Page: 12 of 13

Selected MON2, TCHIST2 and EXIF, started those.

From the EXIF task launcher, selected EXIF_TMM, EXIF_CHM, EXIF_TM1, EXIF_CH1, TOPE1, started them.

The procedure TestClient_DPUAT was run from TOPE. OBSID, BBID and MODE were observed to change in a correct way by QLA.

Test Result: *Success*

4.5 Test Case TC-ICC-05: Test Control: Running Test Observation on TestClient

From the sops23e console on lincoln logged in as sg55 using ssh¹

```
setenv DISPLAY 130.246.32.24:0.0
```

Added the xauth key from the sops23e console (for lincoln.bnsc.rl.ac.uk:0):

```
xauth add lincoln.bnsc.rl.ac.uk:0 MIT-MAGIC-COOKIE-1f26cc4296fe01149c14dc05ba38f7f1a
```

The test control server was successfully started by typing:

```
testcontrol-server
```

We then executed the script IntegrationTest3.tcl from TOPE with parameters a=2, b=4, c=6 (these were the default values for the script).

Test Result: *Success*

Caveats:

- We had the CUS Editor running already but then we started a second session. Upon trying to execute IntegrationTest3.tcl again the TOPE command window froze in the Stop/Abort mode. This was despite the TOPE command window indicating that the IntegrationTest3.tcl had finished OK. We then stopped the second CUS Editor but the TOPE window did not recover and we got the following TOPE error message in a popup window:

```
Error in Tcl Script: java.lang.ArrayOutOfBoundsException:  
Array index out of range: 0
```

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

We now started the telemetry ingestor and QLA on truro:

```
tmingestion  
qla
```

No problems were observed.

Test Result: *Success*

¹ We also tried the same thing using su instead of ssh, with identical results.



Technical Report

HCSS 0.1.4 Acceptance Test Report
Steve Guest & Sunil Sidher

Ref: SPIRE-RAL-REP-001886
Issue: 1.0
Date: 2nd December 2003
Page: 13 of 13

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

The ingested data was successfully played back using QLA. RTA playback mode was also tested.

Test Result: *Success*

5. CONCLUSIONS

- The Acceptance Test of HCSS 0.1.4 release candidate #1 (build #263) was successful.
- The configuration properties continue to cause problems and confusion. Either all of the properties should be guaranteed to be defined in the HCSS “out of the box” (preferred option), or any necessary changes should be highlighted in a release note.

Table 1 below lists the two 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: Property hcss.mib.instrument was missing in the hcss.props file	Added property and set it to var.instrument.
NCR-02: TOPE reported an Error in Tcl Script: java.lang.ArrayOutOfBoundsException: Array index out of range: 0	SPR-0535 raised on the HCSS as we are not sure exactly where the problem lies, probably one of Test Control or CUS.