

**Quality Criteria Verification  
Executive Summary  
For QCV, Stage Rollout, DMSU and EGI internal**

|                         |                    |                       |             |
|-------------------------|--------------------|-----------------------|-------------|
| Name of the component   | EMI.APEL           |                       |             |
| Release                 | APEL SSM/ APEL pub | RT Ticket             | #5081 #5099 |
| Software Provider       | EMI                |                       |             |
| Release Contact         | Name:              | E-Mail                |             |
| Validator               | Alvaro Simon       | asimon@cesga.es       |             |
| V. Hours Worked         | 8                  |                       |             |
| Component status        | <b>verified</b>    | Date                  | 24/03/13    |
| Verification start date | 08/04/13           | Verification end date | 24/03/13    |

**Summary:**

**Only a minor issue was found about Apel db misconfiguration.  
Sites must upgrade apel SSM2 and apel plugins at same time. Old APEL db must be migrated to the new schema.**

**GGUS Tickets:**

APEL publisher db misconfiguration:  
[https://ggus.eu/tech/ticket\\_show.php?ticket=92912](https://ggus.eu/tech/ticket_show.php?ticket=92912)

**Summary of Quality Criteria verification:**

|            | Generic Quality Criteria Total (Critical/Non critical) |            |                |       |
|------------|--|------------|----------------|-------|
|            | Passed   | Not passed | Not Applicable | Total |
| <b>TP</b>  |  |            |                |       |
| <b>VLD</b> | 5  | 1          | 0              | 6     |
|            | Specific Quality Criteria                              |            |                |       |
| <b>TP</b>  |  |            |                |       |
| <b>VLD</b> | 13   | 0          | 0              | 13    |

### Quality Criteria verification cheatsheet:

| Criteria                                    | Accepted (Y/N/N) | Tested (TP/VLD) | Comments |
|---|------------------|-----------------|----------|
| <b>DOCUMENTATION QC</b>                     |                  |                 |          |
| GENERIC_DOC_1 (Functional Description)      | Optional         |                 |          |
| GENERIC_DOC_2 (Release Notes)               | Y                | VLD             |          |
| GENERIC_DOC_3 (User Documentation)          | Optional         |                 |          |
| GENERIC_DOC_4 (Online help (man pages))     | Optional         |                 |          |
| GENERIC_DOC_5 (API Documentation)           | Optional         |                 |          |
| GENERIC_DOC_6 (Administrator Documentatio   | Optional         |                 |          |
| GENERIC_DOC_7 (Service Reference Card)      | Optional         |                 |          |
| GENERIC_DOC_8 (Software License)            | Y                | VLD             |          |
| GENERIC_DOC_9 (Release changes testing)     | Optional         |                 |          |
| <b>SOFTWARE DISTRIBUTION QC</b>             |                  |                 |          |
| GENERIC_DIST_1 (Source Code Availability)   | Y                | VLD             |          |
| GENERIC_DIST_3 (Binary Distribution)        | Y                | VLD             |          |
| <b>SOFTWARE FEATURES QC</b>                 |                  |                 |          |
| GENERIC_SOFT_1 (Backwards Compatibility)    | N                | VLD             |          |
| GENERIC_SOFT_2 (New features testing)       | Y                | VLD             |          |
| <b>SERVICE CRITERIA QC</b>                  |                  |                 |          |
| GENERIC_SERVICE_1 (Service control and sta  | Y                | VLD             |          |
| GENERIC_SERVICE_2 (Log Files)               | Y                | VLD             |          |
| GENERIC_SERVICE_3 (Service Reliability)     | Optional         |                 |          |
| GENERIC_SERVICE_4 (Service Robustness)      | Optional         |                 |          |
| GENERIC_SERVICE_5 (Automatic Configuratio   | Optional         |                 |          |
| GENERIC_SERVICE_6 (Default Password Conf    | Y                | VLD             |          |
| GENERIC_SERVICE_7 (Default Configuration )  | Y                | VLD             |          |
| <b>SECURITY QC</b>                          |                  |                 |          |
| GENERIC_SEC_1 (World Writable Files)        | Y                | VLD             |          |
| GENERIC_SEC_3 (Passwords in world readable  | Y                | VLD             |          |
| <b>MISCELLANEOUS QC</b>                     |                  |                 |          |
| GENERIC_MISC_1 (Bug Tracking System)        | Y                | VLD             |          |
| <b>AUTHENTICATION QC</b>                    |                  |                 |          |
| AUTHN_CRED_1 (X.509 Certificate support)    | Y                | VLD             |          |
| AUTHN_CRED_2 (SHA2 Certificate support)     | Optional         |                 |          |
| AUTHN_CRED_3 (RFC Proxy support)            | Optional         |                 |          |
| AUTHN_PROTO_1 (TLS/SSLv3 Support)           | Y                | VLD             |          |
| <b>MONITORING PROBES QC</b>                 |                  |                 |          |
| MON_PROBE_GENERIC_1 (Certificate Lifetime)  | Optional         |                 |          |
| MON_PROBE_GENERIC_2 (Service Probe)         | Optional         |                 |          |
| <b>ACCOUNTING CAPABILITY QC</b>             |                  |                 |          |
| ACC_STORE_1 (Local Accounting Store)        | Y                | VLD             |          |
| ACC_STORE_2 (Accounting Records Transmis    | Y                | VLD             |          |
| ACC_CRON_1 (Periodic Local Registry Store)  | Y                | VLD             |          |
| ACC_CRON_2 (Periodic Central Registry Updat | Y                | VLD             |          |

**Validator comments:**

EMI3 APEL  
=====

== Upgrade from UMD2 to UMD3 ==

```
* Backup db:
# mysqldump -u root -p accounting > oldapedb.sql
```

Upgrade APEL packages to UMD3

```
# cat EMI.apel.s16.x86_64.repo
# EGI Software Repository - REPO META (releaseId,repositoryId,repofileId) - (5081,885,810)
```

```
[EMI.apel.s16.x86_64]
name=EMI.apel.s16.x86_64
baseurl=http://admin-repo.egi.eu/sw/unverified/umd-3.emi.apel.s16.x86_64/4/0/0/
enabled=1
protect=1
priority=1
gpgcheck=1
gpgkey=http://emisoft.web.cern.ch/emisoft/dist/EMI/3/RPM-GPG-KEY-emi
```

```
# yum install apel-ssm apel-lib apel-client
```

```
=====
Package Arch Size Version
Repository Size
=====
Installing:
apel-client noarch 1.0.0-0.e16
EMI.apel.s16.x86_64 12 k
apel-lib noarch 1.0.0-0.e16
EMI.apel.s16.x86_64 77 k
apel-ssm noarch 2.0.0-0.e16
EMI.apel.s16.x86_64 26 k
Installing for dependencies:
MySQL-python x86_64 1.2.3-0.3.c1.1.e16
sl 85 k
python-daemon noarch 1.5.2-1.e16
epel 27 k
python-dirc noarch 1.2.2-1.e16
epel 47 k
python-ldap x86_64 2.3.10-1.e16
sl 124 k
python-lockfile noarch 0.8-3.e16
epel 17 k
stomppy noarch 3.0.3-1.e16
epel 37 k
=====
```

Transaction Summary

```
=====
Install 9 Package(s)
```

Total download size: 453 k

Create a new database

```
# mysql -u root -p -e "create database apelclient"
```

Create new database schema

```
# mysql -u root -p apelclient < /usr/share/apel/client.sql
```

```
mysql> show tables;
```

```
+-----+
| Tables_in_apelclient |
+-----+
| BlandRecords          |
| DNs                   |
| EventRecords          |
| JobRecords            |
| LastUpdated          |
| MachineNames         |
| ProcessedFiles       |
| Queues                |
| Sites                 |
| SpecRecords          |
| SubmitHosts          |
| SuperSummaries       |
| VJobRecords          |
| VOGroups             |
| VORoles              |
| VOs                  |
| VProcessedFiles      |
| VSpecRecords         |
| VSuperSummaries      |
| VSyncRecords         |
+-----+
```

20 rows in set (0.00 sec)

Client Configuration

```
# vi /etc/apel/client.cfg
{{{
# Information about the apel client database
[db]
hostname = localhost
port = 3306
name = apelclient
username = root
password = *****
```

```
[spec_updater]
```

```

enabled = true
# The GOCDB site name
site_name = CESGA
ldap_host = lcg-bdii.cern.ch
ldap_port = 2170
...
...
}}

SSM configuration

# vi /etc/apel/sender.cfg

[broker]

# The SSM will query a BDII to find brokers available. These details are for the
# EGI production broker network
bdii: ldap://lcg-bdii.cern.ch:2170
network: TEST-NWOB
...
...
destination: /queue/global.accounting.cputest.CENTRAL

Configure cron script

* Use migrate_apel.py to migrate old db to the new db

mysql> grant all on apelclient.* to 'root'@'test06.egi.cesga.es' identified by '*****';

== Upgrade APEL parsers ==

At test06.egi.cesga.es (CREAM)

# cat EMI.apel.s16.x86_64.repo

# EGI Software Repository - REPO META (releaseId,repositoryId,repofileId) - (5099,903,828)

[EMI.apel.s16.x86_64]
name=EMI.apel.s16.x86_64
baseurl=http://admin-repo.egi.eu/sw/unverified/umd-3.emi.apel.s16.x86_64/2/0/0/
enabled=1
protect=1
priority=1
gpgcheck=1
gpgkey=http://emisoft.web.cern.ch/emisoft/dist/EMI/3/RPM-GPG-KEY-emisoft

# rpm -e --nodeps glite-apel-core glite-apel-pbs

```

```

=====
Package
Repository                Arch          Size          Version
=====
Removing:
glite-apel-core           noarch       1.2 M         2.0.14-5.s16
@EMI.cream-torque.s16.x86_64/6.2
glite-apel-pbs           noarch       84 k         2.0.6-8.s16
@EMI.cream-torque.s16.x86_64/6.2
Removing for dependencies:
emi-cream-ce             x86_64       0.0          1.1.0-4.s16
@UMD-2-updates
emi-torque-utils         x86_64       0.0          2.0.0-1.s16
@UMD-2-updates

```

```

Transaction Summary
=====
Remove      4 Package(s)

Installed size: 1.2 M

```

```

# yum install apel-parsers

=====
Package
Repository                Arch          Size          Version
=====
Installing:
apel-parsers              noarch       7.6 k         1.0.0-0.e16
EMI.apel.s16.x86_64
Installing for dependencies:
MySQL-python             x86_64       85 k         1.2.3-0.3.c1.1.e16
s1
apel-lib                 noarch       77 k         1.0.0-0.e16
EMI.apel.s16.x86_64
python-ldap              x86_64      124 k         2.3.10-1.e16
s1

```

```

Transaction Summary
=====
Install     4 Package(s)

# vi /opt/glite/yaim/functions/local/config_apel_pbs

```

```

config_apel_pbs () {
    yaimglog INFO "DISABLED APEL parser-config through YAIM"
    return 0
}

Reconfigure with yaim

# /opt/glite/yaimg/bin/yaimg -c -s /opt/glite/yaimg/etc/site-info.def -n MPI_CE -n creamCE -n TORQUE_server -n
TORQUE_utils

The APEL parser configuration file is located at /etc/apel/parser.cfg

# Information about the apel client database
[db]
hostname = test07.egi.cesga.es
port = 3306
name = apelclient
username = root
password = *****

[blah]
enabled = true
dir = /var/log/cream/accounting
# typical logfile name is blahp.log-yyyymmdd
filename_prefix = blahp.log
subdirs = false

[batch]
enabled = true

# Uncomment the appropriate section for your batch system.

type = PBS
parallel = false
dir = /var/lib/torque/server_priv/accounting
## typical logfile name is yyyymmdd e.g. 20120101
filename_prefix = 201
subdirs = false

..
..

[site_info]
# Specify the site name from GOCDB
site_name = CESGA
# Batch system hostname. This does not need to be a definitive hostname,
# but it should uniquely identify the batch system.
# Example: pbs.gridpp.rl.ac.uk
lrms_server = test06.egi.cesga.es

[logging]
logfile = /var/log/apelparser.log
level = INFO
console = true

[root@test06 ~]# /usr/bin/apelparser
2013-03-27 16:01:08.555 - parser - INFO - =====
2013-03-27 16:01:08.555 - parser - INFO - Starting apel parser version 1.0.0
2013-03-27 16:01:08.569 - apeldb - DEBUG - Cannot import oracle backend
2013-03-27 16:01:08.581 - apel.db.backends.mysql - INFO - Connected to test07.egi.cesga.es:3306
2013-03-27 16:01:08.581 - apel.db.backends.mysql - INFO - Database: apelclient; username: root
2013-03-27 16:01:08.581 - parser - INFO - Connection to DB established
2013-03-27 16:01:08.581 - parser - INFO - Setting up parser for blah files
2013-03-27 16:01:08.581 - apel.db.backends.mysql - DEBUG - SELECT * FROM VProcessedFiles
2013-03-27 16:01:08.583 - apel.parsers.parser - INFO - Site: CESGA; batch system: test06.egi.cesga.es
2013-03-27 16:01:08.583 - parser - INFO - Directory: /var/log/cream/accounting
2013-03-27 16:01:08.594 - parser - INFO - Parsing file: /var/log/cream/accounting/blahp.log-20130111
/usr/lib/python2.6/site-packages/apel/db/backends/mysql.py:127: Warning: No data - zero rows fetched, selected, or
processed
c.execute(proc, values)
2013-03-27 16:01:08.629 - parser - INFO - Parsed 7 lines
2013-03-27 16:01:08.629 - parser - INFO - Ignored 0 lines (incomplete jobs)
2013-03-27 16:01:08.629 - parser - INFO - Failed to parse 0 lines
2013-03-27 16:01:08.634 - parser - INFO - Parsing file: /var/log/cream/accounting/blahp.log-20130325
2013-03-27 16:01:08.637 - parser - INFO - Parsed 1 lines
2013-03-27 16:01:08.638 - parser - INFO - Ignored 0 lines (incomplete jobs)
2013-03-27 16:01:08.638 - parser - INFO - Failed to parse 0 lines
2013-03-27 16:01:08.638 - parser - INFO - Parsing file: /var/log/cream/accounting/blahp.log-20130326
2013-03-27 16:01:08.650 - parser - INFO - Parsed 7 lines
2013-03-27 16:01:08.650 - parser - INFO - Ignored 0 lines (incomplete jobs)
2013-03-27 16:01:08.650 - parser - INFO - Failed to parse 0 lines
2013-03-27 16:01:08.656 - parser - INFO - Parsing file: /var/log/cream/accounting/blahp.log-20130114
2013-03-27 16:01:08.667 - parser - INFO - Parsed 7 lines
2013-03-27 16:01:08.667 - parser - INFO - Ignored 0 lines (incomplete jobs)
2013-03-27 16:01:08.667 - parser - INFO - Failed to parse 0 lines
2013-03-27 16:01:08.668 - parser - INFO - Parsing file: /var/log/cream/accounting/blahp.log-20130327
2013-03-27 16:01:08.671 - parser - INFO - Parsed 2 lines
2013-03-27 16:01:08.672 - parser - INFO - Ignored 0 lines (incomplete jobs)
2013-03-27 16:01:08.672 - parser - INFO - Failed to parse 0 lines
2013-03-27 16:01:08.677 - parser - INFO - Parsing file: /var/log/cream/accounting/blahp.log-20130322
2013-03-27 16:01:08.683 - parser - INFO - Parsed 3 lines
2013-03-27 16:01:08.683 - parser - INFO - Ignored 0 lines (incomplete jobs)
2013-03-27 16:01:08.683 - parser - INFO - Failed to parse 0 lines
2013-03-27 16:01:08.694 - parser - INFO - Parsing file: /var/log/cream/accounting/blahp.log-20130305
2013-03-27 16:01:08.699 - parser - INFO - Parsed 2 lines
2013-03-27 16:01:08.699 - parser - INFO - Ignored 0 lines (incomplete jobs)
2013-03-27 16:01:08.699 - parser - INFO - Failed to parse 0 lines
2013-03-27 16:01:08.711 - parser - INFO - Parsing file: /var/log/cream/accounting/blahp.log-20130321
2013-03-27 16:01:08.716 - parser - INFO - Parsed 3 lines
2013-03-27 16:01:08.716 - parser - INFO - Ignored 0 lines (incomplete jobs)

```

```
2013-03-27 16:01:08,717 - parser - INFO - Failed to parse 0 lines
2013-03-27 16:01:08,744 - parser - INFO - Parsing file: /var/log/cream/accounting/blahp.log-20130306
2013-03-27 16:01:08,900 - parser - INFO - Parsed 119 lines
2013-03-27 16:01:08,901 - parser - INFO - Ignored 0 lines (incomplete jobs)
2013-03-27 16:01:08,901 - parser - INFO - Failed to parse 0 lines
2013-03-27 16:01:08,905 - parser - INFO - Parsing file: /var/log/cream/accounting/blahp.log-20130116
2013-03-27 16:01:08,909 - parser - INFO - Parsed 2 lines
2013-03-27 16:01:08,909 - parser - INFO - Ignored 0 lines (incomplete jobs)
2013-03-27 16:01:08,910 - parser - INFO - Failed to parse 0 lines
2013-03-27 16:01:08,910 - parser - INFO - Parsing file: /var/log/cream/accounting/blahp.log-20130320
2013-03-27 16:01:08,918 - parser - INFO - Parsed 5 lines
2013-03-27 16:01:08,918 - parser - INFO - Ignored 0 lines (incomplete jobs)
2013-03-27 16:01:08,918 - parser - INFO - Failed to parse 0 lines
2013-03-27 16:01:08,925 - parser - INFO - Finished parsing blah log files.
2013-03-27 16:01:08,925 - parser - INFO - Setting up parser for PBS files
2013-03-27 16:01:08,926 - apel.db.backends.mysql - DEBUG - SELECT * FROM VProcessedFiles
2013-03-27 16:01:08,927 - apel.parsers.parser - INFO - Site: CESGA; batch system: test06.egi.cesga.es
2013-03-27 16:01:08,928 - parser - INFO - Directory: /var/lib/torque/server_priv/accounting
2013-03-27 16:01:08,932 - parser - INFO - Parsing file: /var/lib/torque/server_priv/accounting/20120812
2013-03-27 16:01:08,934 - parser - WARNING - Failed to parse file. Is it <apel.parsers.pbs.PBSParser object at
0x27d3e90> correct?
2013-03-27 16:01:08,954 - parser - INFO - Parsing file: /var/lib/torque/server_priv/accounting/20120924
2013-03-27 16:01:08,983 - parser - INFO - Parsed 30 lines
2013-03-27 16:01:08,983 - parser - INFO - Ignored 60 lines (incomplete jobs)
2013-03-27 16:01:08,984 - parser - INFO - Failed to parse 0 lines
2013-03-27 16:01:08,996 - parser - INFO - Parsing file: /var/lib/torque/server_priv/accounting/20121003
2013-03-27 16:01:09,013 - parser - INFO - Parsed 18 lines
2013-03-27 16:01:09,014 - parser - INFO - Ignored 36 lines (incomplete jobs)
2013-03-27 16:01:09,014 - parser - INFO - Failed to parse 0 lines
2013-03-27 16:01:09,015 - parser - INFO - Parsing file: /var/lib/torque/server_priv/accounting/20130326
2013-03-27 16:01:09,024 - parser - INFO - Parsed 9 lines
2013-03-27 16:01:09,024 - parser - INFO - Ignored 18 lines (incomplete jobs)
2013-03-27 16:01:09,024 - parser - INFO - Failed to parse 0 lines
2013-03-27 16:01:09,058 - parser - INFO - Parsing file: /var/lib/torque/server_priv/accounting/20120906
2013-03-27 16:01:09,130 - parser - INFO - Parsed 79 lines
2013-03-27 16:01:09,130 - parser - INFO - Ignored 156 lines (incomplete jobs)
2013-03-27 16:01:09,130 - parser - INFO - Failed to parse 0 lines
2013-03-27 16:01:09,131 - parser - INFO - Parsing file: /var/lib/torque/server_priv/accounting/20130307
2013-03-27 16:01:09,132 - parser - WARNING - Failed to parse file. Is it <apel.parsers.pbs.PBSParser object at
0x27d3e90> correct?
2013-03-27 16:01:09,132 - apel.common.exceptions - CRITICAL - Unhandled exception raised!
2013-03-27 16:01:09,132 - apel.common.exceptions - CRITICAL - Please send a bug report with following information:
2013-03-27 16:01:09,133 - apel.common.exceptions - CRITICAL - UnboundLocalError: local variable 'i' referenced before
assignment
2013-03-27 16:01:09,133 - apel.common.exceptions - CRITICAL - parse_file [/usr/bin/apelparser 132]
2013-03-27 16:01:09,133 - apel.common.exceptions - CRITICAL - scan_dir in /usr/bin/apelparser [164]
2013-03-27 16:01:09,133 - apel.common.exceptions - CRITICAL - handle_parsing in /usr/bin/apelparser [256]
2013-03-27 16:01:09,133 - apel.common.exceptions - CRITICAL - main in /usr/bin/apelparser [338]
2013-03-27 16:01:09,134 - apel.common.exceptions - CRITICAL - <module> in /usr/bin/apelparser [350]
```

```
# cat /etc/cron.d/apelparser
PATH=/sbin:/bin:/usr/sbin:/usr/bin
35 01 * * * root env APEL_HOME=/usr/bin/apelparser
```

**Not applicable Quality Criteria**



**Specific Functional Tests to be repeated in SR:**

| Test number | Description | Motivation |
|-------------|-------------|------------|
|             |             |            |
|             |             |            |
|             |             |            |

**Specific Non-functional tests (Scalability, etc...) to be repeated in SR:**

| Test number | Description | Motivation |
|-------------|-------------|------------|
|             |             |            |
|             |             |            |
|             |             |            |

**Comments for UMD QC definition (TSA2.2):**

- Review criteria xxxx
- Add criteria xxxx

**Comments for SR (TSA1.3):**

**Sites must upgrade apel SSM2 and apel plugins. Old APEL db must be migrated to the new schema.**

**Comments for DMSU (TSA2.5):**

**Comments for TP:**