EUROPEAN

MIDDLEWARE INITIATIVE

APEL PARSERS SYSTEM ADMINISTRATOR GUIDE

Document Version:	**2.2**
EMI Component Version:	**2.1.0**
Date:	**01.07.2013**

DOCUMENT CHANGE LOG

Version	Date	Comment	Author
2.2	01.07.2013	Update to include file permission information for /etc/apel/parser.cfg	Alison Packer
2.1	25/04/2013	EPEL now required. Add SLURM option.	Will Rogers
2.0	13/02/2013	Rewritten for new APEL implementation in EMI3.	Will Rogers
1.0.2	18/05/2012	Added hardware requirements and funding notice.	Will Rogers
1.0.1	12/09/2011	Updated	Cristina del Cano Novales
1.0.0	07/04/2011	First version	Cristina del Cano Novales

1. INTRODUCTION

If you are upgrading APEL from a previous installation, please read the separate document 'APEL Client Upgrade Plan' first.

The APEL parsers are used for collecting a site's accounting information from batch system log files and CE accounting log files and inserting the data into an APEL client database. The APEL parser works in conjunction with the APEL publisher.

These instructions describe how to install and configure the APEL parsers. APEL supports the Grid Engine, LSF PBS/Torque and SLURM batch systems, and CREAM CE.

2. REQUIREMENTS

2.1. HARDWARE REQUIREMENTS

The following minimum specifications are recommended.

- x86_64 CPU
- 1GB RAM
- 20GB disk space

2.2. SOFTWARE REQUIREMENTS

The APEL parsers are currently supported for 64-bit SL5 and SL6. The EPEL repository must be enabled.

3. INSTALLATION INSTRUCTIONS

An APEL client database must be installed for the parsers to send data to. This will generally be on a separate APEL publisher machine.

Before starting, run

```
yum update
```

3.1. APEL PARSERS PACKAGE

```
yum install apel-parsers
```

4. CONFIGURATION INSTRUCTIONS

The following instructions will give the APEL parser a standard configuration. If you are using SLURM, please see also section 4.3 for additional configuration.

4.1. PARSER CONFIGURATION FILE

The APEL parser configuration file is located at `/etc/apel/parser.cfg`. This file contains database username and password information so ensure it is not world readable, e.g. by running:

```
chmod 600 /etc/apel/parser.cfg
```

The following sections describe the configuration options.

4.1.1 db section

Provide the hostname, port, database name, username and password for the APEL client database.

4.1.2 site_info section

Specify your GOCDB site name. This must also be the name used for the site in the BDII. **It is essential that the same name is used in the APEL Publisher configuration file.**

Specify a sensible hostname for your batch system. This needs only to be unique to your batch system – it is not used for any other purpose. **However, if you wish to publish local jobs, you must specify the same value in the APEL Publisher configuration file.**

4.1.3 blah section

Specify the directory in which blah logs are found.

4.1.4 batch section

Set the type of batch system. Valid options are PBS, SGE, LSF and SLURM. Specify the directory in which the batch system accounting log files are found.

You may filter the files parsed according to the filenames. For example, if the filenames are like 20130415, a sensible prefix is:

```
filename_prefix = 201
```

4.1.5 logging section

You may change logging configuration here if you do not want to use the default location.

The valid logging levels are DEBUG, INFO, WARN, ERROR, CRITICAL. It is recommended to leave the level at INFO.

4.2. CRON JOB

Set up a cron job to run the APEL parsers once per day. Here is an example:

```
# Run APEL parser once daily
mm hh * * * root /usr/bin/apelparser
```

Do not schedule the parser cron jobs and the client cron job at the same time.

4.3. SLURM CONFIGURATION

If you are using the SLURM batch system, please follow these instructions to configure accounting.

```
mkdir /var/log/slurm
chown slurm:slurm /var/log/slurm
```

- Edit `slurm.conf` and add the following lines:

```
...
JobCompType=jobcomp/script
JobCompLoc=/usr/share/apel/slurm_acc.sh
...
```

- make sure the accounting in SLURM is enabled:

```
…
AccountingStorageType=accounting_storage/filetxt
AccountingStorageHost=<hostname>
AccountingStorageLoc=/var/log/slurm/accounting/slurm.acc
#AccountingStoragePass=
AccountingStorageUser=slurm
…
```

5. RUNNING THE PARSER

To run the parser using the default configuration, run:

```
# /usr/bin/apelparser
```