EUROPEAN

MIDDLEWARE INITIATIVE

APEL PUBLISHER SYSTEM ADMINISTRATOR GUIDE

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DOCUMENT CHANGE LOG

Version	Date	Comment	Author
2.1	15/04/2013	Correct database permissions.	Will Rogers
2.0	13/02/2013	Rewritten for new APEL implementation in EMI3.	Will Rogers
1.0.2	16/05/2012	Added hardware requirements and funding notice.	Will Rogers
1.0.1	12/05/2011	Updated Added EMI 1 repository URL Updated YAIM configuration instructions	Cristina del Cano Novales
1.0.0	07/04/2011	First version	Cristina del Cano Novales

Contents

1. INTRODUCTION

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

The APEL Publisher includes the APEL client package, which is used for collecting a site's accounting information before the APEL SSM sends it to the central APEL server. It works in conjunction with the APEL parsers.

These instructions describe how to install and configure the APEL Publisher packages.

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 Publisher is currently supported for 64-bit SL5 and SL6. The EPEL repository must be enabled.

The following packages must be installed before the APEL packages:

- mysql-server

- ca-policy-egi-core

A host certificate and key in PEM format should be installed in the following locations:

- /etc/grid-security/hostkey.pem

- /etc/grid-security/hostcert.pem

3. INSTALLATION INSTRUCTIONS

Before starting, run

```
yum update
```

3.1. MYSQL-SERVER

```
yum install mysql-server
service mysqld start
chkconfig --level 345 mysqld on
mysqladmin –u root password '<new-password>'
```

3.2. CA-POLICY-EGI-CORE

Follow the instructions on this page to install the EGI-approved certificates:

https://wiki.egi.eu/wiki/EGI_IGTF_Release

3.3. APEL PUBLISHER PACKAGES

```
yum install apel-ssm

yum install apel-lib

yum install apel-client
```

3.4. INSTALL THE APEL CLIENT DATABASE

The APEL client database schema is located at `/usr/share/apel/client.sql`.

```
mysql -p -e "create database apelclient"

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

3.4.1 Grant Permissions to the Database

```
mysql> GRANT ALL PRIVILEGES ON apelclient.* TO 'apel'@'localhost'
IDENTIFIED BY '<apel-password>';
```

For each machine on which APEL Parsers are installed:

```
mysql> GRANT ALL PRIVILEGES ON apelclient.* TO 'apel'@'<FQDN>' IDENTIFIED
BY '<apel-password>';
```

4. CONFIGURATION INSTRUCTIONS

The following instructions are for a standard configuration.

4.1. CLIENT CONFIGURATION FILE

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

4.1.1 db section

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

4.1.2 spec_updater section

Ensure that you put the same site name as is found in GOCDB. This must be the same as the site name in the BDII. **It is essential that all APEL parsers are configured with the same site name.** You may specify any top-bdii configuration.

4.1.3 joiner section

Leave enabled as true. If you want to send information about local jobs, set local_jobs to true.

4.1.4 unloader section

The default configuration sends individual job records. Sending summaries of the data only will reduce network load, and will not lose any information. To do this:

```
send_summaries = true
```

Leave send_ur as false.

If you want to send only certain VOs, list them after include_vos.

If you want to exclude certain VOs, list them after exclude_vos.

4.1.5 ssm section

Leave this section as enabled. To configure SSM, see section 4.2.

4.1.6 logging section

You may change the logging configuration here.

4.2. SSM CONFIGURATION FILE

The APEL publisher uses SSM to send the data to the central APEL server. The SSM configuration file is located at `/etc/apel/sender.cfg`.

To send data to the test server:

```
...
[broker]
...
network: TEST-NWOB
...
[messaging]
...
destination: /queue/global.accounting.cputest.CENTRAL
...
```

To send data to the production server:

```
...
[broker]
...
network: PROD
...
use_ssl: true
...
[messaging]
...
destination: /queue/global.accounting.cpu.central
...
```

The file should otherwise stay as it is.

4.3. CRON JOB

The APEL publisher should run once per day, from a cron. Here is an example:

```
# Run APEL client once daily
mm hh * * * root /usr/bin/apelclient
```

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

5. RUNNING THE PUBLISHER

To run the publisher using the default configuration, run:

```
# /usr/bin/apelclient
```