

# **EUROPEAN MIDDLEWARE INITIATIVE**

## **APEL SSM SYSTEM ADMINISTRATOR GUIDE**

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Document Version:	<b>1.0</b>
EMI Component Version:	<b>2.0.0</b>
Date:	<b>13.02.2013</b>

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## DOCUMENT CHANGE LOG

Version	Date	Comment	Author
1.0	13/02/2013	Initial Version	Will Rogers

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## 1. INTRODUCTION

The APEL SSM uses messaging to transfer files between computers. It is written in python and uses the STOMP protocol. SSM supports sending and receiving messages. However, only sending is supported within EMI

These instructions describe how to install and configure SSM as a sender.

## 2. REQUIREMENTS

### 2.1. HARDWARE REQUIREMENTS

The following minimum specifications are recommended.

- x86\_64 CPU
- 1GB RAM
- 20GB disk space

### 2.2. SOFTWARE REQUIREMENTS

APEL SSM is currently supported for 64-bit SL5 and SL6.

The EPEL repository must be enabled.

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

The certificate will be used for two purposes:

- To negotiate an SSL connection if configured
- To sign the messages in transit

## 3. INSTALLATION INSTRUCTIONS

### 3.1. APEL SSM PACKAGE

```
yum update
yum install apel-ssm
```

## 4. CONFIGURATION INSTRUCTIONS

The following instructions will give the APEL SSM a standard configuration.

## 4.1. SENDING SSM CONFIGURATION FILE

The SSM configuration file for sending messages is located at `/etc/apel/sender.cfg`.

### 4.1.1 broker section

There are two ways to specify the broker to use.

- Query the BDII to find available brokers. The default configuration will find the production EGI message brokers.
- Specify a host and port manually. If you do this, ensure that you choose the correct port for either 'stomp' or 'stomp+ssl'

Specify whether you want to use an SSL connection. For EGI, this is mandatory.

### 4.1.2 certificates section

Specify:

- the location of the host certificate
- the location of the host key
- the location of the trusted CA certificates directory

If you wish messages to be explicitly encrypted in transit, you may specify the APEL server's certificate using the `server` option. However, if you connect to the broker using SSL, this should not be necessary.

### 4.1.3 messaging section

The correct queue must be specified. The path is the location on the file system in which the sending SSM will look for messages.

### 4.1.4 logging section

You may change logging configuration here. The valid logging levels are DEBUG, INFO, WARNING, ERROR and CRITICAL. We recommend leaving the level as INFO.

## 5. ADDING MESSAGES

To add messages to SSM, see the APEL SSM User Guide section 4.

## 6. RUNNING SSM

To run the SSM using the default configuration, run:

```
# /usr/bin/ssmsend
```