

Installation And Configuration

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Tour in the EMI site



EMI site:

http://www.eu-emi.eu/

Middleware

Products

Releases

EMI 2 Installation and Configuration



 EMI 2 Generic Installation and Configuration Guide:

https://twiki.cern.ch/twiki/bin/view/EMI/GenericInstallationConfigurationEMI2

Supported OSes



All EMI components

fully supported with EPEL as repository for externals.

Some components

debian

3 Main steps



- EMI components installation and configuration requires 3 main steps:
- 1. Repository configuration
- 2. Package/Metapackage installation
- 3. Component configuration
- Other details (syncrinization, SELINUX, cron and logrotate, host certificate).

Repository configuration: No DAG



Disable DAG repository (if present):

```
rm /etc/yum.repos.d/dag.repo
```

Or

```
mv /etc/yum.repos.d/dag.repo \
/etc/yum.repos.d/dag.repo.removed
```

and

yum clean all

Repository configuration: EPEL



Enable EPEL repository:

SL5:

http://download.fedoraproject.org/pub/epel/5/x86_64/

• SL6:

http://www.nic.funet.fi/pub/mirrors/fedora.redhat.com/pub/epel/6/x86 64/

Repo. Conf.: yum-protectbase



- Yum-protectbase plugin allows certain repositories to be protected. Packages in the protected repositories can't be overridden by packages in nonprotected repositories even if the nonprotected repo has a later version.
- Its installation is warmly suggested.
 - yum install yum-protectbase

Repository configuration: CA



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

wget \

http://repository.egi.eu/sw/production/cas/1/current/repofiles/EGI-trustanchors.repo

-O /etc/yum.repos.d/EGI-trustanchors.repo

All nodes except UI, WN and BDII require the CA certificates to be installed.

Repository configuration: Middleware



Install EMI 2 repositories on a fresh node, without EMI middleware:

```
• SL5/x86_64:
```

```
rpm -ivh \
http://emisoft.web.cern.ch/emisoft/dist/EMI/2/sl5/x86_64/base/emi-
release-2.0.0-1.sl5.noarch.rpm
```

• SL6/x86_64:

```
rpm -ivh http://emisoft.web.cern.ch/emisoft/dist/EMI/2/sl6/x86_64/base/emi-release-2.0.0-1.sl6.noarch.rpm
```

Debian:

```
wget http://emisoft.web.cern.ch/emisoft/dist/EMI/2/debian/dists/squeeze/main/binary-amd64/emi-release_2.0.0-1.deb6.1_all.deb dpkg -i emi-release_2.0.0-1.deb6.1_all.deb
```

Installation



- Installation is done with packages or meta-packages (names listed on guide). Examples:
- SL5/SL6:

```
# yum install <meta-package/package name>
```

- # yum update
- Debian6:

```
# apt-get install <meta-package/package name>
```

apt-get update

Configuration



- EMI services have different configration methods. Datails on guide.
- The most part of gLite services is configured using YAIM configuration tool

Note on automatic updates



- STRONGLY RECOMMENDED NOT TO USE AUTOMATIC UPDATE PROCEDURE OF ANY KIND on the EMI middleware repositories.
- Sometimes middleware updates require non-trivial configuration changes or a reconfiguration of the service. This could involve service restarts, new configuration files, etc, which makes it difficult to ensure that automatic updates will not break a service. When an update has been released you should read the update information provided by each service and do the upgrade manually.

Details: Node synchronization



- A general requirement is that the nodes are synchronized.
- Possible solution use MTP protocol.

Details on EMI 2 Generic Installation and Configuration Guide

Details:Cron and logrotate



Make sure

cron

logrotate

are installed

because many middleware components rely on the presence of them

Details: host certificates



- All nodes except UI, WN and BDII require the host certificate/key files to be installed.
- Contact your Certification Authority (CA) to understand how to obtain a host certificate.
- Installation:

```
/etc/grid-security/hostcert.pem;
chown 600 /etc/grid-security/hostcert.pem
/etc/grid-securyty/hostkey.pem;
chown 400 /etc/grid-securyty/hostkey.pem
```

Questions?





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