EMI Componets
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
  
  SL5/x86_64
  SL6/x86_64
  
  fully supported with EPEL as repository for externals.

- Some components
  
  debian

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3 Main steps

- EMI components installation and configuration requires 3 main steps:
  1. Repository configuration
  2. Package/Metapackage installation
  3. Component configuration
- Other details (synchronization, 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
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/
• Yum-protectbase plugin allows certain repositories to be protected. Packages in the protected repositories can't be overridden by packages in non-protected repositories even if the non-protected 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 \nhttp://repository.egi.eu/sw/production/cas/1/current/repo-files/EGI-trustanchors.repo \n-O /etc/yum.repos.d/EGI-trustanchors.repo

All nodes except UI, WN and BDII require the CA certificates to be installed.
Install EMI 2 repositories on a fresh node, without EMI middleware:

- **SL5/x86_64:**
  
  ```bash
  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:**
  
  ```bash
  rpm -ivh
  ```

- **Debian:**
  
  ```bash
  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 configuration methods. Details 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 NTP protocol.

Details on EMI 2 Generic Installation and Configuration Guide
Details: Cron and logrotate

- Make sure cron and 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-security/hostkey.pem ;
  chown 400 /etc/grid-security/hostkey.pem
Questions?
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