EGI Hands-On Training for AEGIS Site Administrators
School of Electrical Engineering of the University of Belgrade

Worker Node (WN) installation

Nikola Grkic

SCL, Institute of Physics Belgrade

Serbia

ngrkic@ipb.ac.rs

e-infrastructure

23/11/2012

- UMD-2 based installation

- Disable DAG repository if available on the system

- Remove all UMD and EPEL related configuration files that may exist from */etc/yum.repos.d/*

- Install the appropriate EPEL repository:
  # wget http://download.fedoraproject.org/pub/epel/6/ x86_64/epel-release-6-7.noarch.rpm
  #yum install epel-release-6-7.noarch.rpm

- Install yum-priorities and protect-base
  # yum install yum-priorities yum-protectbase

- Install SL5 umd-release RPM or SL6 umd-release RPM

  - This adds all missing repositories that are needed for the installation of UMD products and configures yum priorities
    # wget http://repository.egi.eu/sw/production/umd/2/sl6/x86_64/base/umd-release-2.0.0-1.el6.noarch.rpm

    # yum install umd-release-2.0.0-1.el6.noarch.rpm

- Installation of the CA certificates

 # yum install ca-policy-egi-core

- Install the Worker Node metapackage:

  # yum install emi-wn

- Install Torque metapackages

  # yum install emi-torque-client

- Prepare YAIM configuration files:

- YAIM variables relevant for WN:

  - https://twiki.cern.ch/twiki/bin/view/LCG/Site-info_configuration_variables#WN.

- YAIM configuration files:

  - site-info.def

  - groups.conf

  - users.conf

  - wn-list.conf

  - vo.d/*

- ## site-info.def
  - Main configuration file. It contains the list of variables common to multiple node types in form of key-value pairs.

- ## users.conf
  - Defines UNIX pool users for each Virtual Organization.

- ## groups.conf
  - Defines the VOMS group mapping.

- ## wn-list.conf
  - defines the list of WN hostnames (FQDN) in the site.

- ## vo.d/
  - contains a file per VO which contain the definitions for that VO.

- Perform YAIM configuration:
  - # /opt/glite/yaim/bin/yaim -c -s ./site-info.def -n WN –n TORQUE_client

- To reconfigure the BATCH_SERVER variable on the WN via yaim, remove the file /var/lib/torque/mom_priv/config as reported by yaim itself

- Copy the key /etc/munge/munge.key from the Torque server to every host of the cluster

- Permissions should be adjusted and service started:

  # chown munge:munge /etc/munge/munge.key

  # chkconfig munge on

  # /etc/init.d/munge restart

- Generic Installation & Configuration for EMI 2:
  - https://twiki.cern.ch/twiki/bin/view/EMI/GenericInstallationConfigurationEMI2
- UMD-2 software:
  - http://repository.egi.eu/category/umd_releases/distribution/umd-2/
- EMI-WN 2.0.1
  - http://repository.egi.eu/2012/11/20/emi-wn-2-0-1/
- YAIM Guide:
  - old guide - https://twiki.cern.ch/twiki/bin/view/LCG/YaimGuide400
  - new guide - WorkInProgress https://twiki.cern.ch/twiki/bin/view/EMI/EMIYaim

- MPI User guide:
  - https://wiki.egi.eu/wiki/MPI_User_Guide
- https://wiki.italiangrid.it/twiki/bin/view/SiteAdminCorner/NotesAboutWN%28torque,Mpi,Glexec%29-EMI-2SL6