**EGI Training for AEGIS Site Administrators**
**Institute of Physics Belgrade**

# Standard Grid site installation Worker Node (WN)

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- Operating system installation (SL 5.5)
- Repository configuration and adjustment
- gLite software installation and configuration
- gLite-WN installation
- gLite-WN configuration

- PXE network boot (requires dhcpd and tftpd network server)

- /tftpboot/pxelinux.cfg/default

  LABEL Scientific Linux 5.5 – gridWNxy.domain

  MENU        Scientific Linux 5.5 – gridWNxy.domain

  KERNEL      ./linux-install/vmlinuz

  APPEND      initrd=./linux-install/initrd.img network ksdevice=eth0 \
  ks=nfs:nfsserver.domain:/install/Kickstart/gridWNxy-kickstart.cfg

- Network installation method (http or nfs)

# Operating system

- ## /install/Kickstart/gridWNxy-kickstart.cfg

langsupport --default=en_US.UTF-8 en_US.UTF-8

keyboard us

xconfig --card "ATI ES1000" --videoram 8192 --hsync 31.5-37.9 --vsync 50-70 --resolution 800x600 \

--depth 16 --startxonboot  --defaultdesktop gnome

network --device eth0 --bootproto static --ip 10.20.30.40 --netmask 255.255.255.0 \

--gateway 10.20.30.254 --nameserver 10.20.30.1 --hostname gridWNxy.domain

nfs --server=nfsserver.domain --dir=/install/sl5.5x86_64

# Partitioning

zerombr yes

clearpart --drives hda --all --initlabel

part / --fstype ext3 --size=100000 --ondrive hda --asprimary

part swap --size=8000 --ondrive hda

part /opt --fstype ext3 --size=100 --grow --ondrive hda

install

******

Adjustments:

- Host file – /etc/hosts contains FQDNs, hostname command returns FQDN

- Ntpd client – configure /etc/ntp.conf, start ntpd service (chkconfig ntpd on, service ntpd start)

- /etc/fstab – mount /home and /var/cache/yum/

- /scratch for simple jobs

- Disable /etc/yum.repos.d/epel.repo

- Enable /etc/yum.repos.d/dag.repo

- /etc/yum.repos.d/egi-trustanchors.repo:

  ```
  [EGI-trustanchors]
  name=EGI-trustanchors
  baseurl=http://repository.egi.eu/sw/production/cas/1/current/
  gpgkey=http://repository.egi.eu/sw/production/cas/1/GPG-KEY-EUGridPMA-RPM-3
  gpgcheck=1
  enabled=1
  ```

- Add /etc/yum.repos.d/scl-glite-WN.repo and /etc/yum.repos.d/scl-glite-TORQUE-client.repo

# gLite-WN installation

- Install CAs:

  yum install lcg-CA

- Install WN metapackage:

  yum groupinstall glite-WN

- Install torque metapackage:

  yum install glite-TORQUE_client

- Prepare yaim configuration files in configuration dir (e.g. /root/conf):

  site-info.def

  users.conf

  groups.conf

  wn-list.conf

  vo.d/

# gLite-WN configuration

- Configure node using yaim:

/opt/glite/yaim/bin/yaim -c -s /root/conf/site-info.def -n WN -n TORQUE_client

- MPI admin guide can be found at:
  - https://http.ipb.ac.rs/documents/glite_mpi_admin_guide/

- gLite 3.2 Installation:

https://twiki.cern.ch/twiki/bin/view/LCG/GenericInstallGuide320

- gLite 3.2 repositories:

http://rpm.scl.rs/yum.conf/gLite/R3.2/