

iRODS installation ON FermiCloud VM

Prerequisite:

- Login as root
- install epel repo:

wget <http://download.fedoraproject.org/pub/epel/5/i386/epel-release-5-4.noarch.rpm>

rpm -ivh epel-release-5-4.noarch.rpm

- install priorities

install yum-priorities

- install and enable osg-repo

rpm -Uvh <http://repo.grid.iu.edu/osg-release-latest.rpm>

enabled osg-development

- install certificates

yum install osg-ca-certs

- install and start fetch CRL

yum install fetch-crl

/sbin/chkconfig fetch-crl-boot on

/sbin/chkconfig fetch-crl-cron on

/sbin/service fetch-crl-boot start

/sbin/service fetch-crl-cron start

- install openssl

yum install openssl

yum install openssl-devel

- install gcc and gcc-c++(for iRODS)

yum install gcc-c++

yum install gcc

Globus Toolkit installation

Download:

<http://www.globus.org/toolkit/downloads/5.0.4/>

Documentation:

Url: <http://www.globus.org/toolkit/docs/5.0/5.0.4/admin/install/#gtadmin-install-build-source>

1. create user globus if needed
2. create installation directory, untar installer file there
3. chown of the directory to globus
4. setup GLOBUS_LOCATION
5. build, e.g.:

```
export GLOBUS_LOCATION=/usr/local/globus-5.0.4  
./configure --prefix=$GLOBUS_LOCATION  
make 2>&1 | tee build.log  
make install
```

iRODS installation

Download iRODS:

<https://www.irods.org/download.html>

1. untar irods.tar in /opt/
2. mkdir /opt/postgres
3. create user irods with home /opt/iRODS
4. create Vault
5. create certificate for iRODS service

```
cd /etc/grid-security  
cp hostcert.pem irods-cert.pem  
cp hostkey.pem irods-key.pem  
chown irods.docs irod*.pem
```

Configure iRODS:

```
./irodssetup
```

with GSI, GLOBUS_LOCATION, etc

additional configuration (otherwise GSI doesn't work) – found at http://technical.bestgrid.org/index.php/IRODS_deployment_plan#NGData_GSI_configuration

Edit scripts/perl/irodsctl.pl and add (around line 247, after section "Overrides", before section "Check usage")

```
$ENV{'X509_USER_CERT'} = '/etc/grid-security/irods-cert.pem';  
$ENV{'X509_USER_KEY'} = '/etc/grid-security/irods-key.pem';
```

Start iRods:

```
./irodsctl start
```