

# Installing Globus 4 and Secure Web Service

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# Steps :

1. Installing Globus 4
2. Setting up CA
3. Create Host Certificate
4. Setting Up User Certificates
5. Sample Web Service

# Installing Globus 4

- Download package needed :
  - [gt4.0.8-all-source-installer.tar.bz2](#)
  - [gpt-3.2-src.tar.gz](#)
  - [Globus-repo-config.centos-5-1.noarch.rpm](#)
  - [epel-release-5-4.noarch.rpm](#)
  - [apache-ant-1.7.0-bin.tar.gz](#)
  - [jdk-1\\_5\\_0\\_12-nb-5\\_5\\_1-linux-ml.bin](#)

# Installing Globus 4

- Set below path :
  - `export GLOBUS_LOCATION=/usr/local/globus4`
  - `export GPT_LOCATION=/usr/local/gpt-3.2`
  - `export JAVA_HOME=/usr/local/jdk`
  - `export ANT_HOME=/usr/local/apache-ant-1.7.0`
  - Export `PATH=$GLOBUS_LOCATION/bin:$GPT_LOCATION/bin:$JAVA_HOME/bin:$ANT_HOME/bin:$PATH`

# Setting up CA

- `yum install globus-simple-ca`
- `yum install myproxy`

# Create Host Certificate

- Set new hostname
  - `gedit /etc/hosts`
- Create CA
  - `grid-ca-create`
- Go to CA path
  - `cd /etc/grid-security/`
  - `cp certificates/grid-security.conf.316312ed grid-security.conf`
  - `cp certificates/globus-user-ssl.conf.316312ed globus-user-ssl.conf`
  - `cp certificates/globus-host-ssl.conf.316312ed globus-host-ssl.conf`
  - `grid-cert-request -host 'centos.com'`

# Create Host Certificate

- `grid-ca-sign -in hostcert_request.pem -out hostcert_signed.pem`
- `mv /var/lib/globus/simple_ca/newcerts/01.pem hostcert.pem`

# Setting Up User Certificates

- Create user :
  - `useradd gtuser`
- Request Certificate:
  - `grid-cert-request`
- Go to root fo respond CA:
  - `cd /home/gtuser/.globus/`
  - `grid-ca-sign -in usercert_request.pem -out usercert_signed.pem`
  - `cp /var/lib/globus/simple_ca/newcerts/02.pem usercert.pem`
- Go to user :
  - `grid-proxy-init -verify`



# Sample Web Service

- Go to root :
  - `source /usr/local/globus4/etc/globus-devel-env.sh`
  - `chmod 777 globus-build-service.sh`
  - `./globus-build-service.sh first`
  - `globus-deploy-gar org_globus_examples_services_core_first.gar`
- Compile client file :
  - `javac -classpath ./build/stubs/classes/:$CLASSPATH org/globus/examples/clients/MathService_instance/Client.java`
- Run webservice :
  - `globus-start-container -nosec`

# Sample Web Service

- Go to user :
  - `source /usr/local/globus4/etc/globus-devel-env.sh`
- Run client file :
  - `java -classpath ./build/stubs/classes/:$CLASSPATH  
org.globus.examples.clients.MathService_instance.Client  
http://127.0.0.1:8080/wsrp/services/examples/core/first/MathService`