

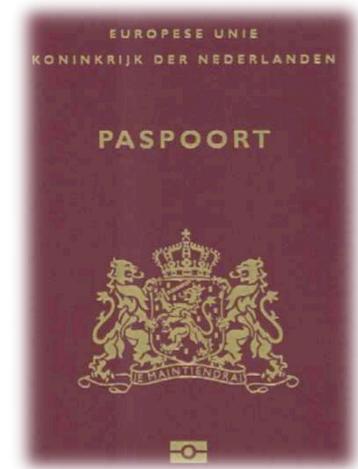
Start a Grid Session



Outline

- ❑ **Proxies step by step**
 1. Generate a proxy
 2. Store the proxy to Myproxy server
 3. Delegate credential to the wms

- ❑ **All steps in one script: StartGridSession.sh**



1. Generate a proxy



- ❑ **voms-proxy-init --voms <VO>**
 - eg. `voms-proxy-init --voms tutor`
 - Creates a 12h proxy in your local `/tmp/` directory
 - ✓ `ls -l /tmp/`
`-rw----- 1 mooc mooc 5871 Oct 10 16:50 x509up_u520`
 - If you get the following error... check the certificate permissions!
“Couldn't find valid credentials to generate a proxy.
Use `--debug` for further information. “

- ❑ **voms-proxy-info**
 - Gives proxy information
 - eg. see how much time there is left on your Grid session:

- ❑ **voms-proxy-destroy**
 - Destroys this session proxy

2. Store proxy to Myproxy server

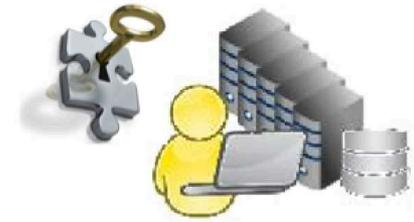


- ❑ **myproxy-init -d -n**
 - It stores a week long proxy certificate in the Myproxy server

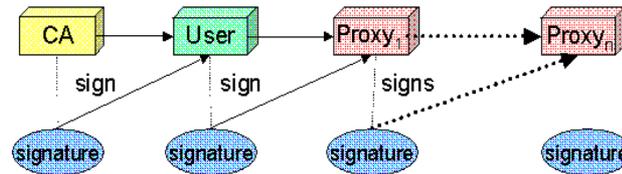
- ❑ **myproxy-info -d**
 - Gives proxy information on Myproxy

- ❑ **myproxy-destroy -d**
 - Destroys the proxy on Myproxy
 - Note: You need to have a valid local proxy to execute this
 - It doesn't cancel the job. It runs until proxy expires.

3. Delegate proxy to WMS



- ❑ `glite-wms-job-delegate-proxy -d <delegation ID>`
 - e.g. `glite-wms-job-delegate-proxy -d $USER`
 - `<delegation id >`
 - ✓ Identifies your session
 - ✓ `glite-wms-job-delegate-proxy -a`
 - ✓ `-a` option is time consuming



- ❑ And now you are ready to submit jobs to the Grid!
Or copy data from and to the grid...

Start Grid Session

```
moo@ui:~/globus  
laptop $
```

StartGridsession script

- ❑ Renew your Grid session: StartGridSession.sh <VO>
 - cat /usr/local/bin/StartGridSession.sh

```
#!/bin/bash
if [ $# = 1 ]
then
  printf "ERROR: not enough params, use 'startGridSession <vname>', or try -h for a help text\n"
  exit 192
fi

declare -r OPTSTRING=:h
declare SWITCH
declare -r VOMS_PROXY_INIT="voms-proxy-init -voms $1 --valid 168:00 -pwatdin"
declare -x DELEGATION_ID
declare password
declare -r GLOBUSDIR="$HOME/.globus"
declare -r CERT="$HOME/.globus/usercert.pem"
declare -r KEY="$HOME/.globus/userkey.pem"
declare -r MY_PROXY_INIT="myproxy-init -S -s px.grid.sara.nl -d -n"

while getopts "$OPTSTRING" SWITCH ; do
  case $SWITCH in
    h)
      printf "The command startGridSession <vo_name> starts your Grid session for a particular VO. \n"
      printf "It enables you to create jobs that have a default\n"
      printf "life span of one week. Your username ($USER) will be used as the delegation identifier\n"
      printf "and will also be stored in $HOME/.globus/DID.txt. You\n"
      printf "need this identifier when submitting jobs.\n"
      exit 0
      ;;
    *)
      printf "Invalid use: use -h for help"
      exit 192
      ;;
  esac
done

if [ ! -e $CERT ]
then
  printf "%s\n" "Your gridcertificate does not exist";
  printf "%s\n" "The file usercert.pem should be in $HOME/.globus"
  exit 192
fi

if [ ! -r $CERT ]
then
  printf "%s\n" "Your gridcertificate can not be read";
  exit 192
fi

chmod 400 $KEY
if [ $? -ne 0 ]
then
  printf "%s\n" "Your userkey permissions and/or owner is incorrect: unable to change that!"
fi

if [ -z $HOME ] ;
then
  printf "HOME is not set!\n"
  exit 192
fi

printf "%s\n" "Now starting..."
```

```
function checkstatus(){
  if [ $? -gt 0 ]
  then
    printf "command failed\n"
    exit $?
  fi
}

stty -echo
read -p "Please enter your GRID password:" password
stty echo
echo

echo $VOMS_PROXY_INIT
$VOMS_PROXY_INIT <<END
$password
END

checkstatus

$MY_PROXY_INIT <<END
$password
END

checkstatus

DELEGATION_ID="/opt/glite/bin/glite-wms-job-delegate-proxy -d $USER"
DID="${DELEGATION_ID#*identifier: *}"

declare i
for i in $DID
do
  printf "%s\n" "Your delegation ID is: $i"
  DID=$i
  break
done

function saveDelegationID(){
  if [ -d $GLOBUSDIR -a -w $GLOBUSDIR ]
  then
    echo $DID > "$HOME/.globus/DID.txt"
  else
    printf "%s\n" "Unable to store your Delegation ID: The directory .globus does not exist or is not writable"
    exit 192
  fi
}

saveDelegationID
```

Summary

- ❑ Proxy generation
- ❑ Proxy acts on your behalf
- ❑ Ready to submit jobs