

Client installation

DIRAC Tutorial



Many operations can be performed through the Web interface

Even more to come

However, certain things should be done using the DIRAC client software

Obtaining proxies

Intensive work with jobs, data – scripting tools

E.g, using Ganga

Client software available for MacOS and various Linux flavors

Windows client was demonstrated but not maintained

Installing DIRAC client:

Getting DIRAC installer `dirac-install` script from the web

Run it with France Grilles default

```
dirac-install -V gridfr
```

Detailed instructions at:

[https://github.com/DIRACGrid/DIRAC/wiki/
ClientInstallation](https://github.com/DIRACGrid/DIRAC/wiki/ClientInstallation)

Obtaining user grid certificate is specific for each Certification Authority

Out of scope of this tutorial, you are supposed to have your personal certificate or a temporary training certificate

In p12 form

DIRAC is providing a `dirac-cert-convert.sh` tool to convert the certificate in p12 form into the form suitable for the Grid use

```
dirac-cert-convert.sh <cert_file.p12>
```

User cert and key files in PEM format are in `~/.globus`

Installing user certificates

- ❖ If the user certificate is not yet set up, do that now. Its needed to finish the DIRAC client configuration

<https://github.com/DIRACGrid/DIRAC/wiki/AuthenticationAuthorization>

Users must generate and upload long proxies to the ProxyManager before using DIRAC

Single command, use it for any proxy generation

Analogous to ***voms-proxy-init***

Gets also VOMS extensions if possible

- ▶ Checks the long proxy status and uploads as necessary

Creates short working proxy

dirac-proxy-init

To configure DIRAC client only one command is needed:

dirac-configure defaults-gridfr.cfg

More information at:

[https://github.com/DIRACGrid/DIRAC/wiki/
ClientConfiguration](https://github.com/DIRACGrid/DIRAC/wiki/ClientConfiguration)

- ▶ To configure COMDIRAC extension the command below must be executed

```
$ dconfig -minimal
```

- ▶ Configuration file will be located in `~/.dirac/dcommands.conf` and will look like:

```
[global]
default_profile = dirac_user
[dirac_user]
group_name = dirac_user
home_dir = /
default_se = DIRAC-USER
```

More information in the wiki page:

- ▶ <https://github.com/DIRACGrid/COMDIRAC/wiki/Client-Installation-and-Configuration>

Tutorial page :

Client Installation

<https://github.com/DIRACGrid/DIRAC/wiki/ClientInstallation>

Managing certificates and proxies

<https://github.com/DIRACGrid/DIRAC/wiki/AuthenticationAuthorization>

Client Configuration

<https://github.com/DIRACGrid/DIRAC/wiki/ClientConfiguration>

COMDIRAC Configuration

<https://github.com/DIRACGrid/COMDIRAC/wiki/Client-Installation-and-Configuration>

The goal is to get a fully functional DIRAC user environment ready for subsequent exercises