

DIRAC Demo

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EGI Conference, 21 October 2021*



- ▶ Documentation sources
- ▶ Recipes with live illustrations
 - ▶ Running DIRAC clients
 - ▶ Developing with the DIRAC API

The main DIRAC documentation:

<https://dirac.readthedocs.io/en/latest>

Tutorials:

<https://github.com/DIRACGrid/DIRAC/wiki/DIRAC-Tutorials>

<https://github.com/DIRACGrid/COMDIRAC/wiki>

- ▶ **dirac-install installer**

- ▶ <https://dirac.readthedocs.io/en/latest/UserGuide/GettingStarted/InstallingClient/index.html>
- ▶ Python2
- ▶ No prerequisites needed
 - ▶ Batteries included
- ▶ Somewhat complicated, needs manual updates
- ▶ Pay attention to the client configuration parameters
 - ▶ Only at the first installation
- ▶ Any Linux should be OK
 - ▶ No luck for MacOS

- ▶ Docker client

- ▶ Needs Docker daemon running and accessible
- ▶ Client preconfigured for the EGI DIRAC service
- ▶ Python 2 (Python 3 is coming)

```
docker run -it -v $HOME:$HOME -e HOME=$HOME diracgrid/client:egi
```

- ▶ Generic client

```
docker run -it -v $HOME:$HOME -e HOME=$HOME  
-e DIRACSYSCONFIG=$HOME/work/DEMO/dutchgrid.cfg diracgrid/client
```

- ▶ Configurable by a local configuration file

- ▶ Client from CVMFS - Python2
 - ▶ `source /cvmfs/dirac.egi.eu/dirac/bashrc_egi`
 - ▶ Simplest solution, updated by the service administrators
 - ▶ Ask your system admins if CVMFS is (can be made) available for you
 - ▶ Any Linux should be OK
- ▶ Client from CVMFS – Python3
 - ▶ `source /cvmfs/dirac.egi.eu/dirac/bashrc_egi_3`
 - ▶ CentOS7 or later
 - ▶ Conda based

- ▶ DIRAC client installation with standard Python tools
 - ▶ Conda based, Python 3
 - ▶ `pip install DIRAC`
 - ▶ Any Linux or MacOS
 - ▶ No COMDIRAC commands (coming)
 - ▶ **DIRACOS-Linux-x86_64.sh** Conda environment builder
 - ▶ Use DIRACOS-Darwin-x86_64.sh for MacOS
 - ▶ <https://dirac.readthedocs.io/en/latest/UserGuide/GettingStarted/InstallingClient>
 - ▶ Pay attention to the configuration step
 - ▶ For EGI:
 - Setup:
Dirac-Production
 - Configuration Service
`dips://dirac-conf.in2p3.fr:9135/Configuration/Server`

- ▶ DIRAC client for EGI and MacOS example
 - ▶ Ready to use with cut and paste

```
curl -LO https://github.com/DIRACGrid/DIRACOS2/releases/latest/download/DIRACOS-Darwin-$(uname -m).sh
```

```
bash DIRACOS-Darwin-$(uname -m).sh
```

```
rm DIRACOS-Darwin-$(uname -m).sh
```

```
source diracos/diracosrc
```

```
pip install DIRAC==7.3.5
```

```
dirac-configure -S Dirac-Production -C dips://dirac-conf.in2p3.fr:9135/Configuration/Server --SkipCAChecks
```

- ▶ Next time just activate the client with
`source diracos/diracosrc`

- ▶ Documentation

- ▶ Developer docs

- ▶ <https://dirac.readthedocs.io/en/latest/DeveloperGuide>

- ▶ DIRAC API

- ▶ Subset of the DIRAC functionality

- ▶ https://dirac.readthedocs.io/en/latest/CodeDocumentation/Interfaces/API/API_Module.html

- ▶ Hint: get used to using DIRAC commands as example applications using the DIRAC API
 - ▶ All the files in “scripts” directories
 - ▶ ~200 examples !