

Table of Contents

What is esgf-getCredentials?	2
Getting started	2
Pre-requisites	2
Download	2
Run it	2
Command line UI Guide	2
Graphic UI Guide	3
Setting user	3
Setting output files	3
Retrieve credentials	3
Advanced options	4
Specific use cases	5
Aria2	5
WGET (OPENSSL)	5
WGET (GNU TLS)	5
ToolsUI	6
ESGF WGET Script (Linux)	6
ESGF WGET Script (cygwin)	6
NETCDF DAP	6
Developers Guide	6
Github	6
Architecture	6
See Also	6

What is esgf-getCredentials?

A tool to retrieve user credentials from ESGF. It have one graphic interface and another command line interface.

Getting started

Pre-requisites

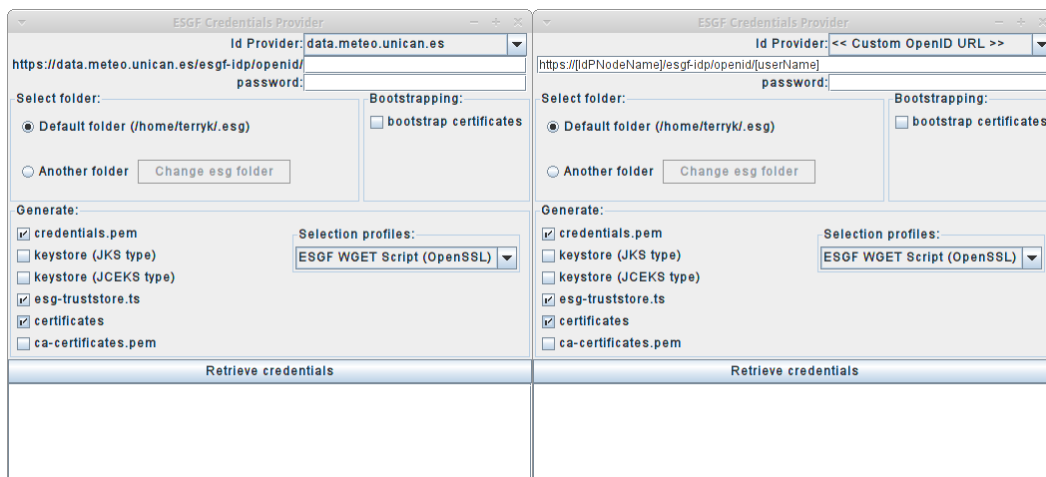
JDK or OpenJDK 6 and upper versions

Download

Download the jar -> [getESGFCredentials-0.1.jar](#) 476.4 KB new

[Other versions..](#)

Run it



Go to download folder:

- In Windows:
 - Open ESGFToolsUI-v0.8.jar
- Command-line interpreter:

```
java -jar ESGFToolsUI-v0.8.jar
```

Command line UI Guide

Command line help

```
$ java -jar getESGFCredentials-0.1.jar --help
```

Basic usage

```
esgf-getcredentials --openid <openid> [other options]
```

Summary of **options**

Option	Description
--help	Display this help message
--openid <openid>	OpenID URL
--folder <folder>	Folder where to store the generated files
--bootstrap-certificates	Generate bootstrap certificates
--generate-credentials	Generate credentials
--generate-keystore	Generate keystore
--generate-truststore	Generate truststore
--generate-certificates	Generate certificates
--generate-ca-certificates	Generate CA certificates

}}}

To view specific use cases -->

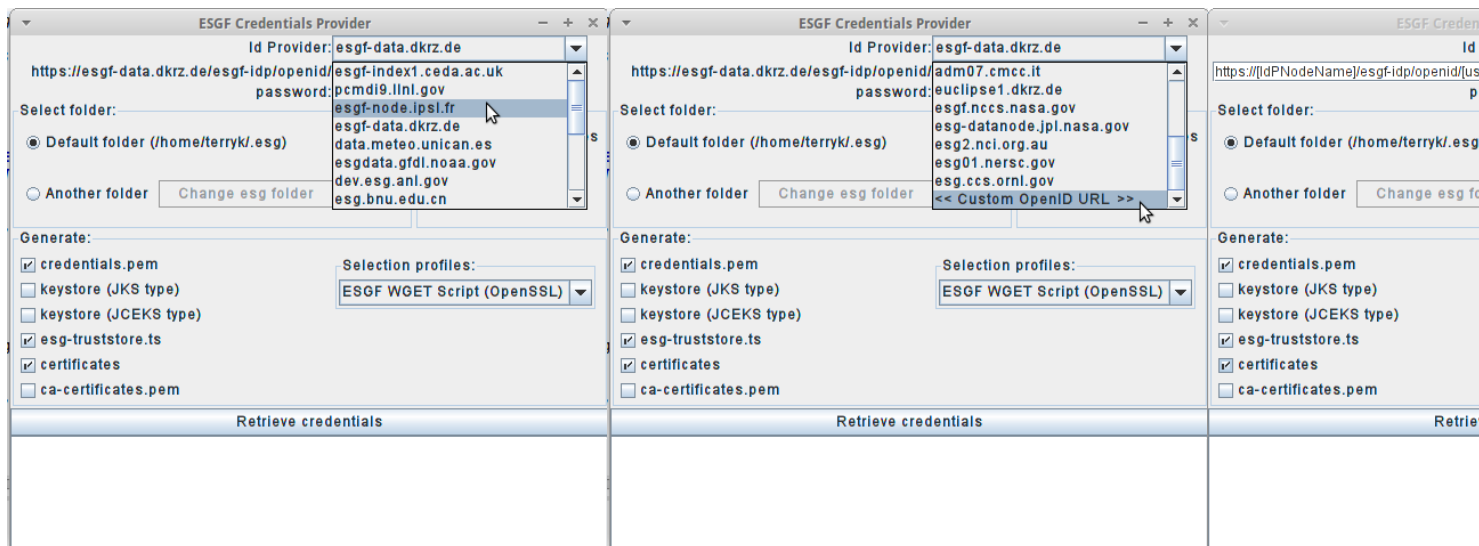
Graphic UI Guide

- In Windows:
 - Open ESGFToolsUI-v0.8.jar
- Command-line interpreter:

```
java -jar ESGFToolsUI-v0.8.jar
```

Setting user

You can select your IdP provider in the top drop-down list. If your IdP provider isn't in the list of providers. Select "Custom OpenID URL", with this option the GUI interface change to be able write OpenID URL's



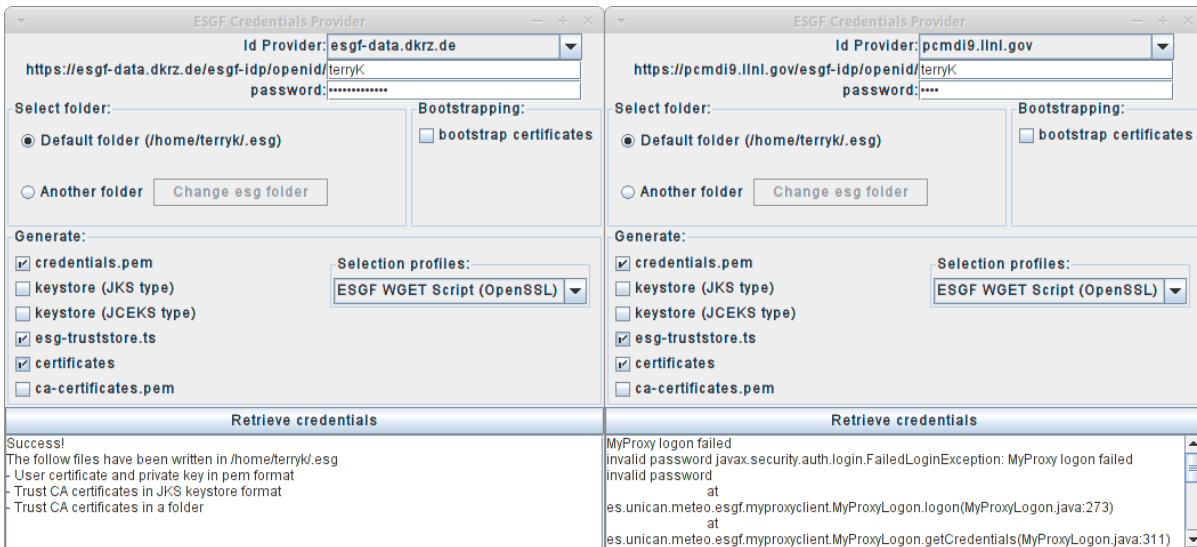
Setting output files

You can select in "Generate" section what output files will be generated in the output folder.

credentials.pem	It's a pem file that contains the x509 user certificate and the RSA private key
keystore (JKS type)	It's a keystore in format JKS which is build with user cert, cert chain and private key
keystore (JCEKS type)	It's a keystore in format JCEKS which is build with user cert, cert chain and private key
esgf-truststore.ts	CA's certificates in keystore in format JKS
certificates	CA's certificate files and policy files in a folder
ca-certificates.pem	CA's certificates in pem format

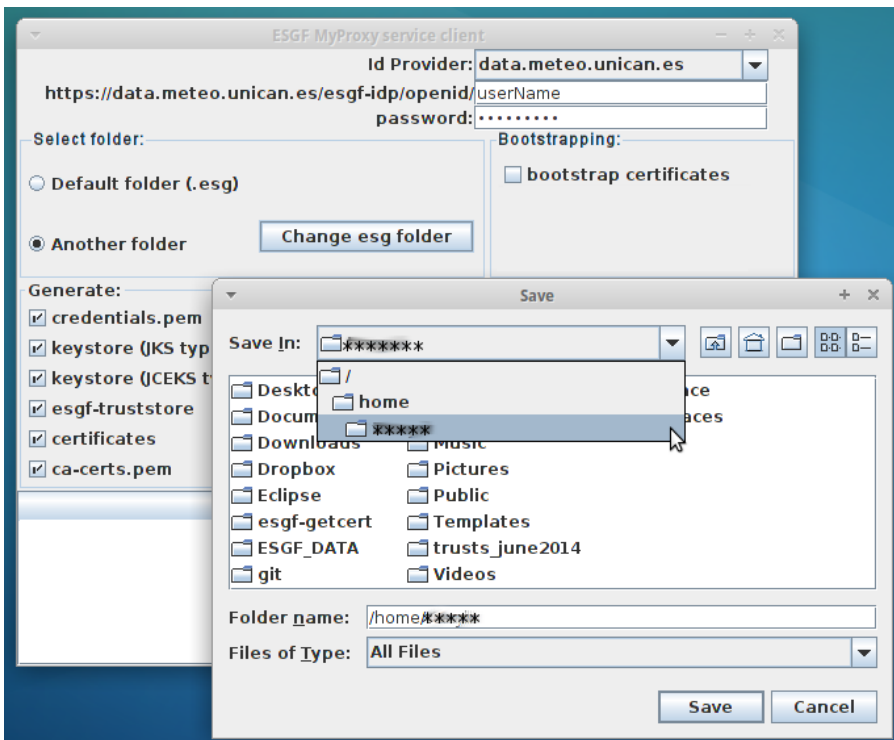
Retrieve credentials

Click on "retrieve credentials" button. If all goes well a success message is shown. However, if some error happens then the Exception is showed



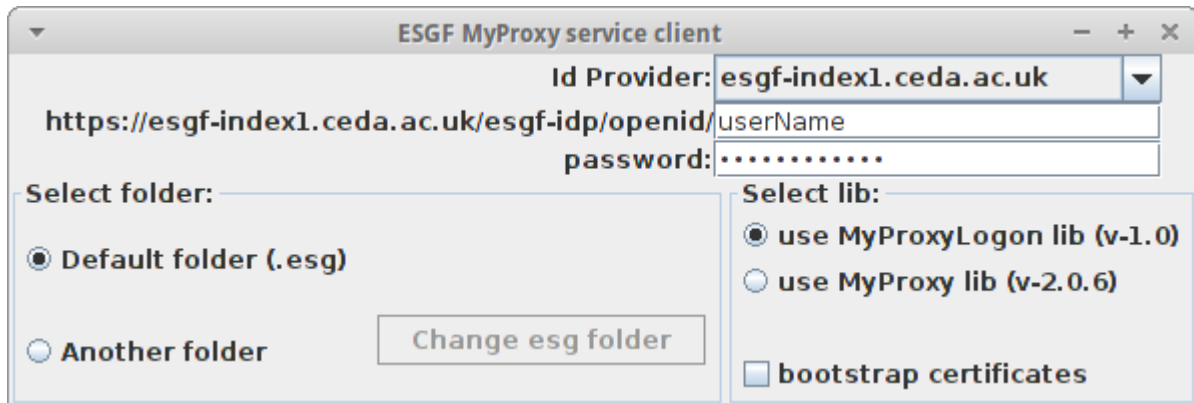
Advanced options

1. You can bootstrap the certificates. For that, select the check box "bootstrap certificates" in "Select Lib" section
1. You can change the output folder. The default is \$USER_HOME/.esg



1. You can download a multilib myproxy version to select it in the "Select Lib" section
 - MyProxyLogon lib v1.0
 - MyProxy lib v2.0.6

MultiLib jar -> [getESGFCredentialsMultLib-0.1.jar](#) 2.3 MB new



Specific use cases

Aria2

1. Get a metalink of ESGF Files

- Download this metalink file -> [example_metalink](#)

For more info, ESGFToolsUI generates metalinks of ESGF files: <https://meteo.unican.es/trac/wiki/ESGFToolsUI#ExporttoMetalink>

1. Retrieve ESGF credentials in \$HOME/.esg

```
java -jar getESGFCredentials-0.1.jar --openid <openid> --password <password> --credentials --cacertspem
```

Run aria2c with credentials and **example_metalink**

```
aria2c --private-key=$USER_HOME/.esg/credentials.pem --certificate=$HOME/.esg/credentials.pem --check-certificate=true
```

WGET (OPENSSL)

1. Retrieve ESGF credentials in \$HOME/.esg

```
java -jar getESGFCredentials-0.1.jar --openid <openid> --password <password> --credentials --cacerts
```

Wget file

example_file:

http://wdcc-esgf.dkrz.de:8080/ESGF/fileServer/cmip5/output1/IPSL/IPSL-CM5A-LR/esmrcp85/6hr/atmos/6hrPlev/r1i1p1/v20120114/ta/ta_6hrPlev_IPSL-CM5A-LR

```
wget -c --ca-directory=$HOME/.esg/certificates --certificate=$HOME/.esg/credentials.pem --private-key=$HOME/.esg/creden
```

WGET (GNU TLS)

1. Retrieve ESGF credentials in \$HOME/.esg

```
java -jar getESGFCredentials-0.1.jar --openid <openid> --password <password> --credentials --cacertspem
```

Wget file

example_file:

http://wdcc-esgf.dkrz.de:8080/ESGF/fileServer/cmip5/output1/IPSL/IPSL-CM5A-LR/esmrcp85/6hr/atmos/6hrPlev/r1i1p1/v20120114/ta/ta_6hrPlev_IPSL-CM5A-LR

```
wget -c --certificate=$HOME/.esg/credentials.pem --private-key=$HOME/.esg/credentials.pem --save-cookies=$HOME/.esg/cool
```

ToolsUI

1. Retrieve ESGF credentials in \$HOME/.esg

```
java -jar getESGFCredentials-0.1.jar --openid <openid> --password <password> -keystorejks --cacertsjks
```

1. Start ToolsUI

```
java -Dkeystore=$HOME/keystore_jks.ks -Dkeystorepassword=changeit -Dtruststore=$HOME/.esg/esg-truststore.ts -Dtruststorepassword=changeit
```

1. This link is a ESGF OPENDAP resource

[?http://esgf-data1.ceda.ac.uk/thredds/dodsC/esg_dataroot/cmip5/output1/IPSL/IPSL-CM5A-LR/esmrcp85/6hr/atmos/6hrPlev/r1i1p1/v20120114/ta/ta_6hrPlev_IPSL](http://esgf-data1.ceda.ac.uk/thredds/dodsC/esg_dataroot/cmip5/output1/IPSL/IPSL-CM5A-LR/esmrcp85/6hr/atmos/6hrPlev/r1i1p1/v20120114/ta/ta_6hrPlev_IPSL)

For more: [?http://www.unidata.ucar.edu/software/thredds/current/netcdf-java/reference/Session.html](http://www.unidata.ucar.edu/software/thredds/current/netcdf-java/reference/Session.html)

ESGF WGET Script (Linux)

```
java -jar getESGFCredentials-0.0.2.jar -o <openid> -p <password> --credentials --cacerts --cacertsjks
```

ESGF WGET Script (cygwin)

```
java -jar getESGFCredentials-0.0.2.jar -o <openid> -p <password> --credentials --cacertspem --cacertsjks
```

NETCDF DAP

[?https://www.unidata.ucar.edu/software/netcdf/docs/netcdf/DAP-Support.html](https://www.unidata.ucar.edu/software/netcdf/docs/netcdf/DAP-Support.html)

```
java -jar getESGFCredentials-0.0.2.jar -o <openid> -p <password> --credentials --cacerts --cacertspem --output <path>
```

Developers Guide

Github

[?https://github.com/SantanderMetGroup/esgf-getcredentials](https://github.com/SantanderMetGroup/esgf-getcredentials)

Architecture

See Also

- [ESGFToolsUI - a desktop client for ?ESGF services](#)