



# Condor GUI

Condor GUI is a tool for managing and working with one or more HTCondor pools. It was developed at the Otto von Guericke University Magdeburg, Germany, to support the daily work using HTCondor.

## Requirements

To use the whole functionality of Condor GUI some packages and additional software are required.

### Python Packages

Condor GUI is developed in Python 3.4. The program uses the LGPL-licensed PySide bindings for Qt 4.8 and the package QDarkStyleSheet (optional). The Python packages must be installed to run the source code directly. We recommend using *pip* for installing the required packages.

The binary distribution contains all packages.

### HTCondor

To use Condor GUI HTCondor is required. Version 8.4.4 was used for developing. Other Versions should work, too.

<https://research.cs.wisc.edu/htcondor/>

## Running Condor GUI

It is possible to run Condor GUI in different ways:

### Running the Executable on Windows

The simplest way to run the program double click on the *Condor\_GUI.exe* file. The current director is set where the exe file or a submitted job or DAG description file is located.

To set the current working directory use the *-cwd* option:

```
Condor_GUI.exe -cwd <directory>
```

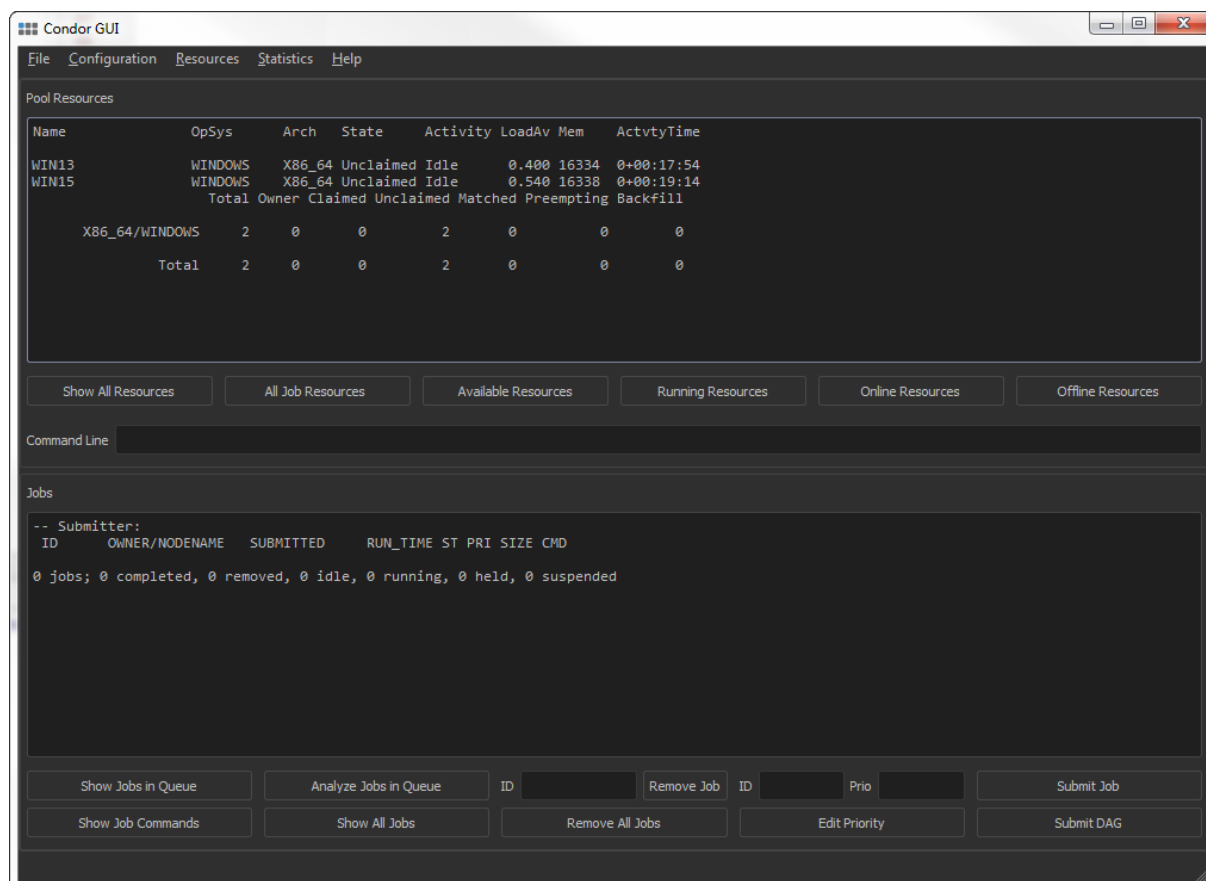
### Running from the Source Code

To run Condor GUI directly from the source code execute *condor\_gui.py*. This method works on both Windows and Linux platforms.

Note that Python 3.4, PySide are required. QDarkStyleSheet is an optional package to set the style of the GUI.

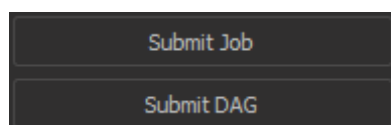
## User Interface

The user interface contains two domains: the resource domain and the job domain. Both domains are refreshed every 5 seconds.



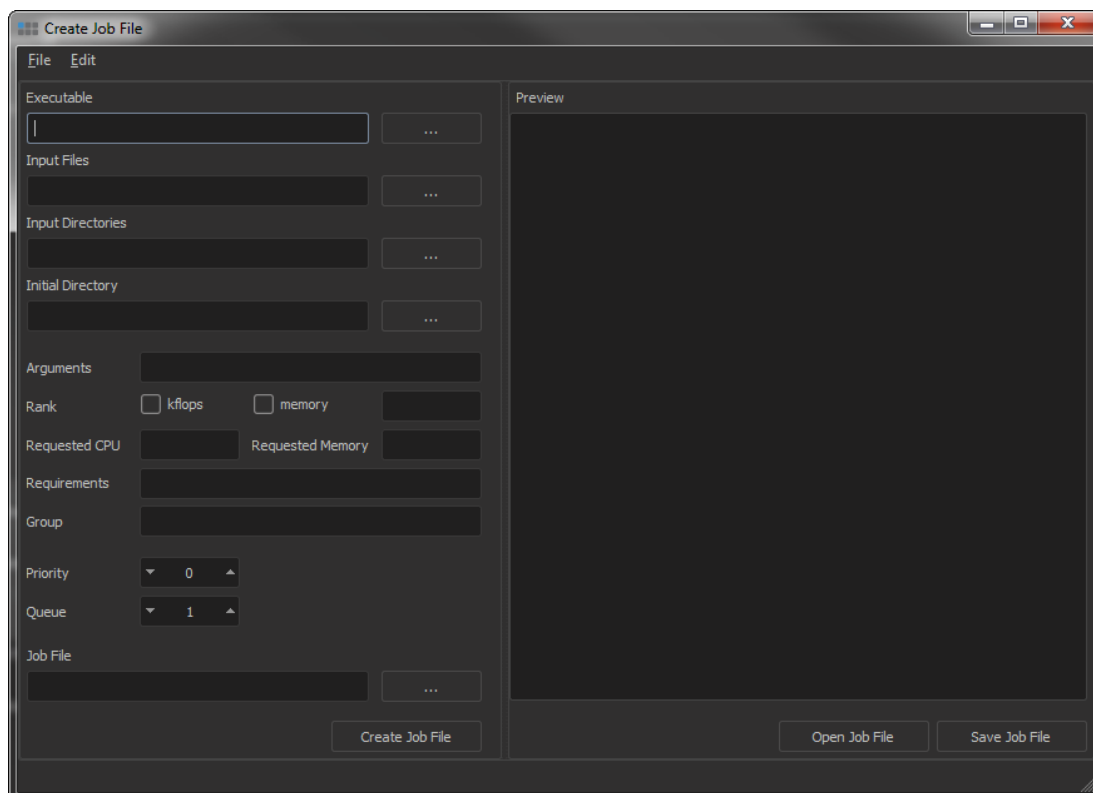
## Submit Jobs

To submit a job or a DAG select *Submit Job* or *Submit DAG* and select a job description file or a DAG description file.



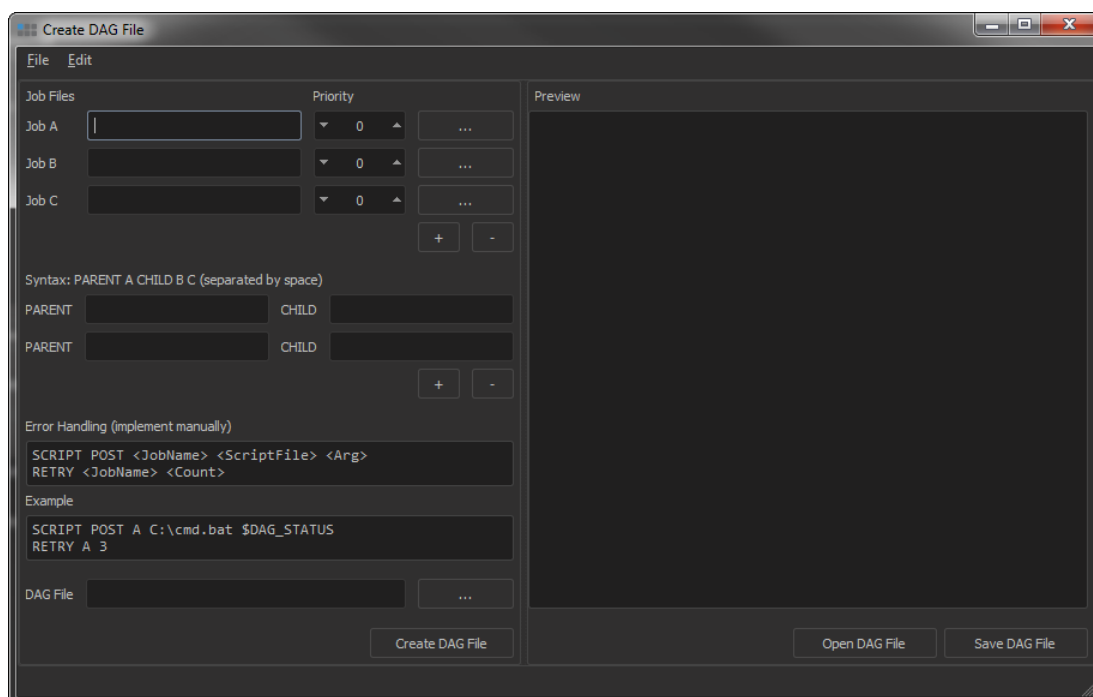
## Create Job File

To create a new job description file select *File* → *New Job (Ctrl+J)*. In the appearing dialog select the appropriate files and settings. An executable and a job file name are required to create a job file. Selecting *Create Job File* will create a temporary job description. The job file must be saved before closing the dialog.



## Create DAG File

To create a new DAG description file select *File* → *New DAG (Ctrl+D)*. In the appearing dialog select the appropriate job files, priorities and dependencies. Two job files and a DAG file name are required to create a DAG file. Selecting *Create DAG File* will create a temporary job description. The DAG file must be saved before closing the dialog.



**Show Statistics**

Selecting *Statistics* → *Show in Browser* will open *C:/condor\_extra/viewdir/index.html* in a web browser. The CondorView Client is required for that.

## License

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Software / Module	Copyright / Contact	License
PySide (Ver. 1.2.2)	<a href="http://www.pyside.org">http://www.pyside.org</a>	LGPL
QDarkStyleSheet (Ver. 2.1)	Copyright © 2013-2014, Colin Duquesnoy <a href="https://github.com/ColinDuquesnoy/QDarkStyleSheet">https://github.com/ColinDuquesnoy/QDarkStyleSheet</a>	MIT

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## Information for Developers

### Building on Windows

#### 1. Compiling resource files

Since we are using QtResource for icons and help file, the resource files must be recompiled after applying changes using *resource\_icon.bat* and *resource\_doc.bat* or the following commands:

```
pyside-rcc.exe resource_icon.qrc -o condor_gui_resource_icon.py
pyside-rcc.exe resource_doc.qrc -o condor_gui_resource_doc.py
```

In the Python files make the following changes:

qt_resource_data = "\x00	->	qt_resource_data = b"\x00
qt_resource_name = "\x00	->	qt_resource_name = b"\x00
qt_resource_struct = "\x00	->	qt_resource_struct = b"\x00

#### 2. Compiling source code

For compiling the sources we use PyInstaller (Ver. 3.2) ([www.pyinstaller.org](http://www.pyinstaller.org)) and the file *set-up\_pyinstaller\_build.bat* including the following command:

```
pyinstaller.exe --onefile ^
    --windowed ^
    --icon=icon_condor_gui.ico ^
    --distpath=./bin ^
    condor_gui.py
```

### Building on Linux

#### 1. Compiling source code

For compiling the sources we use PyInstaller (Ver. 3.2) ([www.pyinstaller.org](http://www.pyinstaller.org)) and the file *set-up\_pyinstaller\_build.sh* including the following command:

```
pyinstaller --onefile \
    --windowed \
    condor_gui.py
```

## Release Notes

### Version 0.9.3

- QDarkStyleSheet is an optional package now

### Version 0.9.2

- New layout of job file editor
- Keyword arguments in job file editor
- Linux compatibility