

# 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>

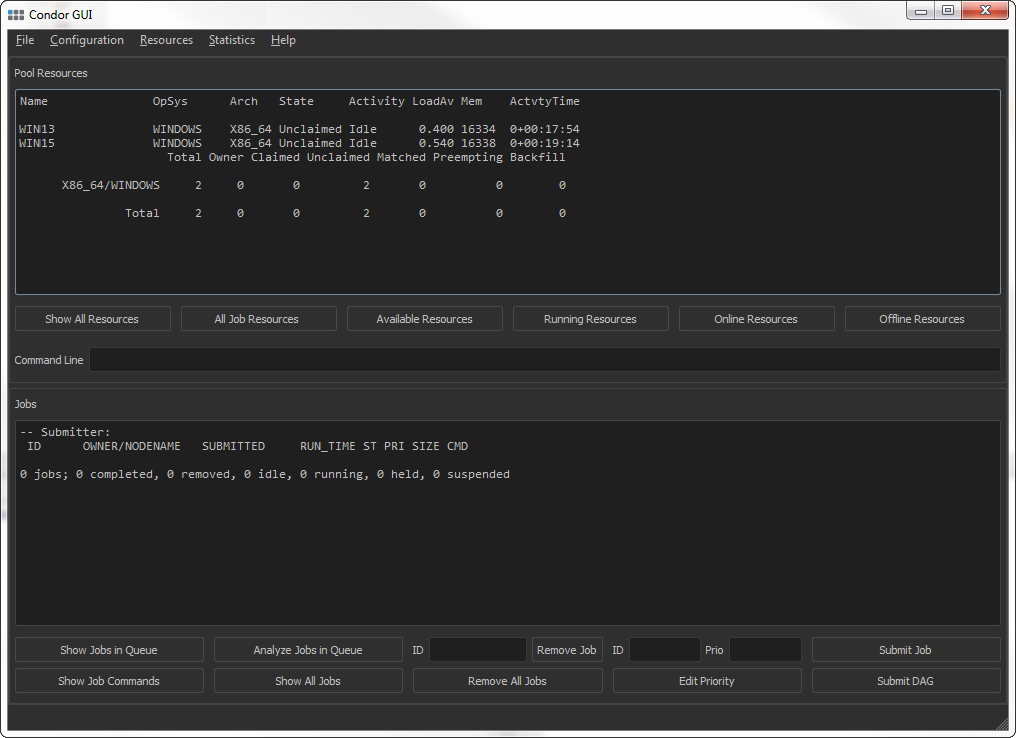
### Running from the Source Code

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.



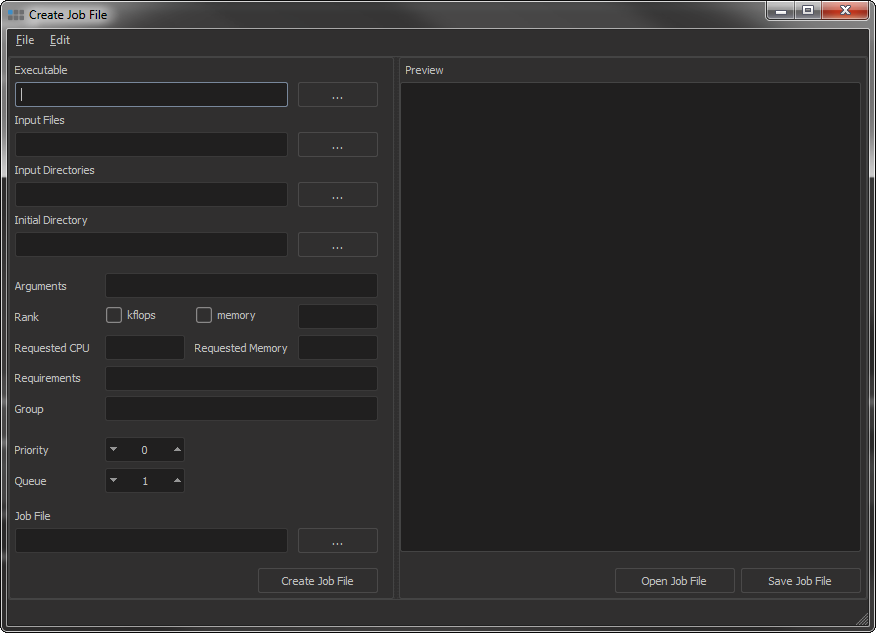
### Submit Jobs

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

D:\_Austausch\_work\Condor_GUI_dev\Condor_GUI\screenshots\submit.png

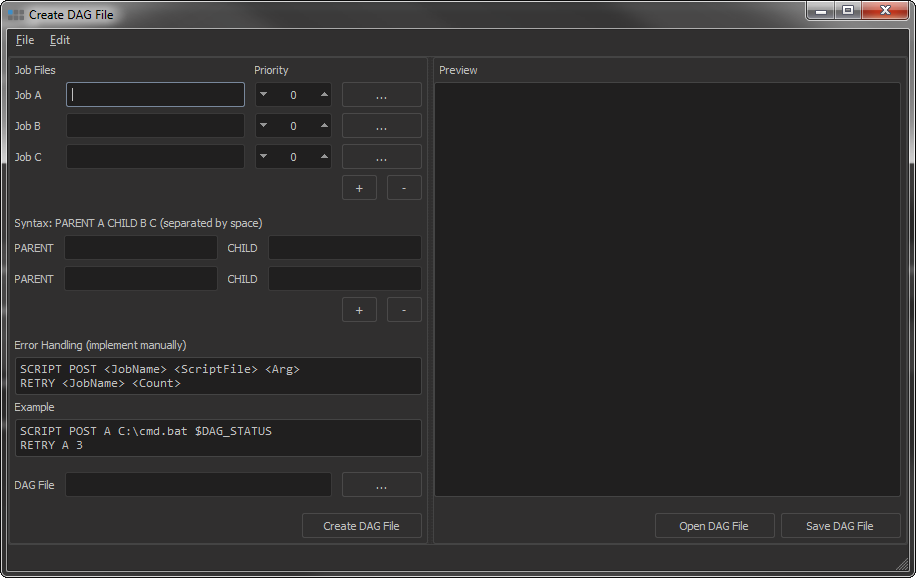
### Create Job File

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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Condor GUI includes parts of the following software and modules:

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

1. Compiling source code

For compiling the sources we use PyInstaller (Ver. 3.2) ([www.pyinstaller.org](http://www.pyinstaller.org)) and the file *setup\_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 *setup\_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