

UNICORE 6 Testgrid

A Short Introduction

Rebecca Breu
unicore-support@lists.sourceforge.net

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1 Installation

In order to use the UNICORE 6 testgrid, you will have to download a preconfigured client bundle from www.unicore.eu/testgrid. Please make sure that you have Java 1.5 or higher installed on your computer.

Start the graphical installer by double-clicking on the jar file or by entering in the command line:

```
java -jar GPE4Unicore1.4.4-Testgrid.jar
```

Check the installation directory and finish the installation.

2 GPE Application Client

The GPE Application Client is a simple-to-use client for submitting single tasks. For each application you want to use you need a special plugin, a so called GridBean, which provides an interface for passing user input to the application. This section shows how to submit a simple PovRay job.

Start the Application Client by executing the file

```
Unicore_TestGrid_Clients/bin/application.sh
```

or the according bat-file on Windows.

The Application Client will launch and ask you for a password, which is **unicore**. After the password dialogue disappears, you should see a registry entry in the upper left panel of the Application Client called **omiiei.zam.kfa-juelich.de**. Right-click on the registry and select **Refresh** from the popup-menu to load the target systems known to that registry. Right-click on each target system and select **Connect** from the popup-menu, see figure 1.

Create a job: Load the appropriate GridBean by selecting **File->Download GridBean** from the menu and opening **Povray**

Select the second tab, which now should be labeled **PovRay**. You will see the interface for configuring the PovRay job, select the **Source File** tab to specify the input file (see figure 2). Via **File->Open...** in the source file menu, load the PovRay source file

```
Unicore_TestGrid_Clients/tutorial/files/Example.pov
```

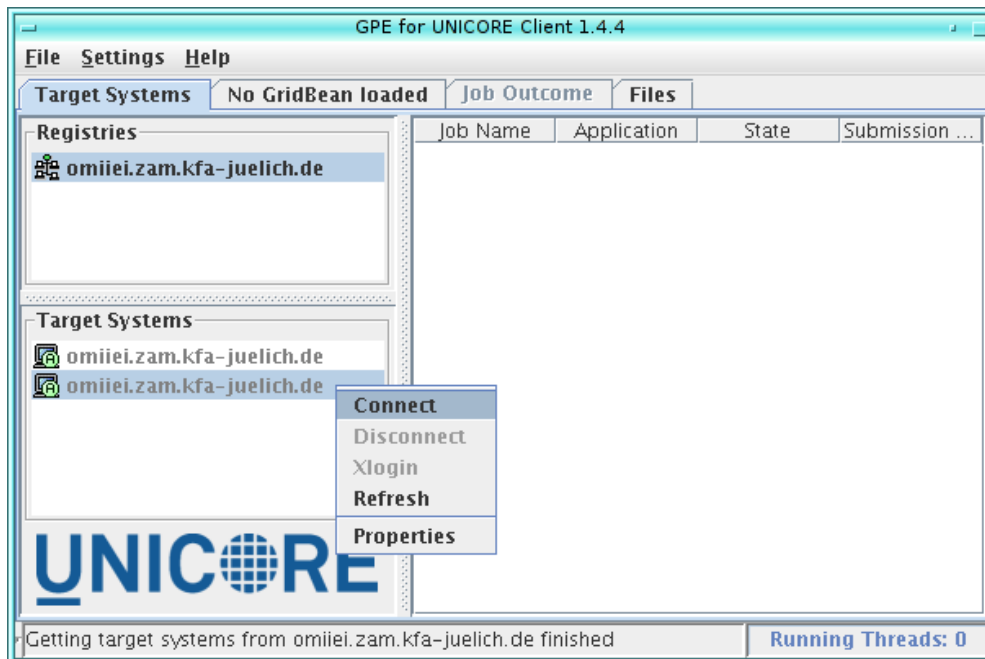


Figure 1: Application Client with loaded registries and target systems

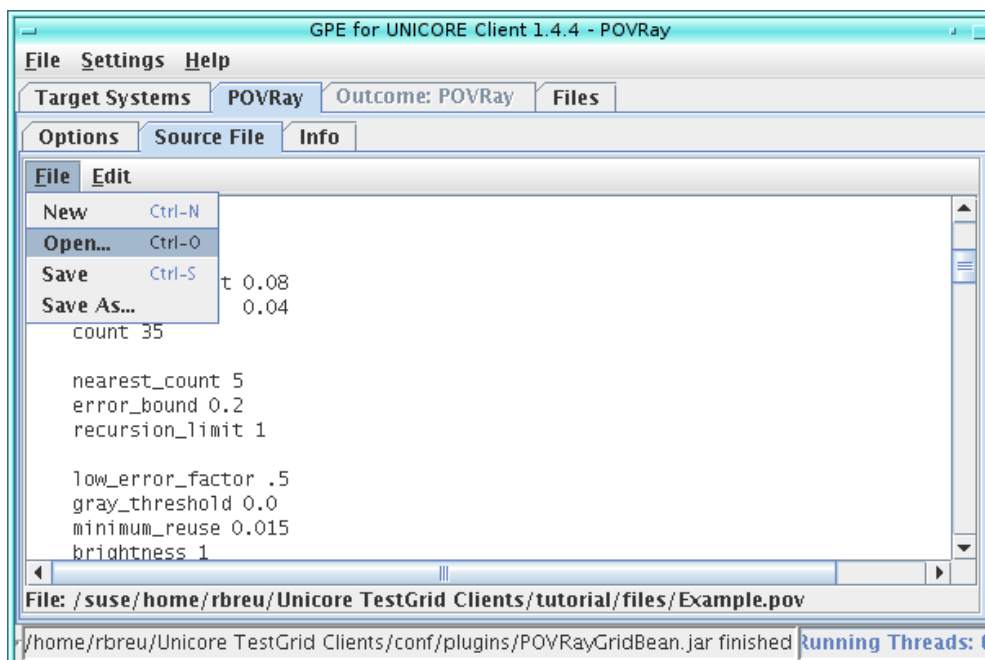


Figure 2: PovRay GridBean: Load a source file

Submit the job: Go back to the Target Systems tab and make sure that one of the two target systems is selected. Now you can submit the job by selecting **File->Submit** from the menu. Confirm the maximal lifetime of the job. In the right panel an entry for the submitted job should appear.

Get the outcome: When the job is successful, right-click on its entry in the right panel and select **Fetch Outcome** from the popup-menu. You should see that the Job Outcome tab now becomes active. In the outcome tab, select the image tab to view the rendered image.

3 Commandline Client (UCC)

UCC is a command line based client. In order to use the UCC, open the command line of your system and change to the installation directory of you testgrid clients.

First, you have to connect to the UNICORE registry entered in the configuration file:

```
ucc-1.0.1/bin/ucc connect
```

To get a list of all available target systems, enter

```
ucc-1.0.1/bin/ucc list-sites
```

The ucc takes job descriptions in the form of Groovy scripts. You can find examples for simple jobs in the directory `ucc-1.0/samples`. You can submit a Groovy job script with the command

```
ucc-1.0.1/bin/ucc run -v ucc-1.0.1/samples/date.u
```

The `-v` option (`v` for verbose) produces more output than usual and can be omitted. The job outcome (in this case standard error and standard output) is automatically fetched after the job is finished. If you want to specify the target system where your job runs, use

```
ucc-1.0.1/bin/ucc run -s Alpha-Site ucc-1.0.1/samples/date.u
```

You can get a list of all submitted jobs with

```
ucc-1.0.1/bin/ucc list-jobs
```