Grid visualization

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Friday, 22 February 2008
Last Updated Wednesday, 27 February 2008

If you don't have enough local resources, grid is ideal solution for you. As mentioned in the distributive visualization article your input has to be split into parts and sent to grid by using the scripts.
Veppar project uses SEEgrid infrastructure where every job must be submitted with special scripts.Here is one example of those JDL scripts which are used for submission.

```
Executable = "run2.sh";
StdOutput = "out2";
StdError = "err2";
InputSandbox = {"run2.sh","2.ini"};
OutputSandbox = {"out2", "err2", "project.2.tar.gz"};
```

First line contains name of the executable file which may be script or binary file.
StdOutput and StdError are standard output and standard error files which can be used for knowing what happened.
Input sandbox contains a list of files which will be uploaded to grid. After computation finishes output files (output sandbox) will be downloaded from grid.

Here is example of script which runs on grid (run2.sh):

```
#!/bin/bash
globus-url-copy gsiftp://grid2.irb.hr/dpm/irb.hr/home/seegrid/vbojovic/povray file://$PWD/povray
chmod 755 povray
globus-url-copy gsiftp://grid2.irb.hr/dpm/irb.hr/home/seegrid/vbojovic/x.pov.gz file://$PWD/x.pov.gz
gzip -d *.gz
./povray 2.ini  +H768 +W1024
tar -czf project.2.tar.gz *.png
```

Firtst line calls interpreter which is (in this case) bash. First line after downloads povray binary fie from storage element. Otherwise povray should be included in input sandbox which is about 1.5MB. There is also solution to download it with wget or some other software from povray homepage, but some machines in grid might not be configured for that action. After downlaoding the file, right permisions have to be sent to make povray binary file executable on that file system. When that action is done, we download source code (povray scene file) from sotage element and uncompress it with gzip and run ini script from povray which creates animation from our scene file.
When rendering finishes, all images will be compressed into one file (project2.tar.gz which is also mentioned in output sandbox), and downloaded on our demand.