

# How to run a grid job for Minerva

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1/27/2009

## 1. Getting trained

First read and do the exercises in

<http://cd-docdb.fnal.gov/cgi-bin/ShowDocument?docid=2615>

this gets your grid certificate stuff set up (lab1) and has useful examples.

this will take a while but you will be happier.

You can do them on minerva05 if the server is running – if it is not, someone needs to log into minerva05 as root and

```
source /hd2/grid/osg-client/setup.sh
```

```
vdt-control --on
```

to restart the batch stuff.

Otherwise you need to ask Steve Timm for access to fnpcsrv1 and practice there.

## 2. Setting up your stuff

The grid has one area for executables and others for data. The grid node can execute code on the /grid/app area and it can write to the /grid/data area but not vice versa.

Our releases are in /grid/fermiapp/minerva/minervasw

I put some example code in /grid/app/minerva/schellma/batchMega

It writes the output to /grid/data/minerva/schellma

This is a lot like the condor submit example from [docdb 2884](#).

### 3. Running the job

Log in to minerva05

Authenticate by running

```
/grid/app/minerva/schellma/batchMega/authenticate
```

The first line sets up the grid code. This one is for running from minerva05. See Steve Timm's directions if you are running from fnpcsrv1 as the code is in a different location on that machine.

Then go to a non-afs disk area like /hd2 and make yourself a directory to run your tests from

```
cd /hd2/schellma
```

I type

```
condor_submit /grid/app/minerva/schellma/batchMega/submitMega.txt
```

and get

```
<minerva05> condor_submit  
/grid/app/minerva/schellma/batchMega/submitMega.txt
```

```
Submitting job(s).
```

```
Logging submit event(s).
```

```
1 job(s) submitted to cluster 10.
```

I get these output files on minerva05

```
<minerva05> ls -c1 *10.0
```

```
grid_mega.log.10.0
```

```
grid_mega.err.10.0
```

```
grid_mega.out.10.0
```

and my real output ends up on /grid/data/minerva/schellma as MEGA-v5r1.11.0.tar.gz

