

Grid Training for Power Users Institute of Physics Belgrade

Hands-On Session: Parametric job submission

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- Parametric jobs overview
- Parametric jobs attributes
- Hands-On examples
- Links

- A parametric job causes a set of jobs to be generated from one JDL file
- Ideal in cases where many similar (but not identical) jobs must be run
- One or more parametric attributes is present in the JDL

- Key word `_PARAM_`
- That value will be replaced by the actual value of `Parameters` during the `jdl` expansion
- The `JobType` in the `JDL` is `Parametric`

```
[  
  JobType = "Parametric"; ← Type of job  
  Executable = "/bin/sh";  
  Arguments = "message_PARAM_.sh";  
  InputSandbox = "message_PARAM_.sh";  
  Parameters= 6;  
  ParameterStep =2;  
  ParameterStart = 0;  
  StdOutput = "myoutput_PARAM_.txt";  
  StdError = "myerror_PARAM_.txt";  
  OutputSandbox = {"myoutput_PARAM_.txt", "myerror_PARAM_.txt"};  
  Requirements = RegExp("ce64.ipb.ac.rs*",other.GlueCEUniqueID);  
]
```

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The attribute **Parameters** can be either a number, or a list of items (typically strings)

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ParameterStep is the increment of the running parameter between consecutive jobs

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```

ParameterStart is the
initial number of the
running parameter

- The attribute `Parameters` can be either a number, or a list of items (typically strings):
 - In the case of number, the value is the maximum value of the running parameter `_PARAM_`
 - In the second case, it is the list of the values the parameter must take
 - `Parameters = {red, green, blue};`

- Navigate to the following address:
 - http://wiki.ipb.ac.rs/index.php/Grid_examples
- Choose parametric job example and follow the instructions for submitting parametric jobs

- gLite job examples
 - http://wiki.ipb.ac.rs/index.php/Grid_examples
- gLite user guide:
 - <https://edms.cern.ch/file/722398//gLite-3-UserGuide.pdf>
- Quick user guide for submitting jobs
 - http://wiki.egee-see.org/index.php/Quick_User_Guide_for_Submitting_Jobs