



ESCAPE

European Science Cluster of Astronomy &
Particle physics ESFRI research Infrastructures



ESAP HPC&HTC integration working group update

Sara Bertocco

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Focus group update

Only discussion about requirements.

Main open questions identified:

- HPC&HTC infrastructures require Authentication&Authorization:
a model is needed
- A Job/Task description is needed?



Authentication and authorization

Authn and Authz are not an option in HPC and HTC infrastructures

- resource access policies
- billing policies

Authn and Authz have two levels

- platform level
- computing center level

both must be managed.



Job/task description

Run analysis software in a computing infrastructure HPC or HTC requires:

- Data staging/access

if an already existing infrastructure is exploited, data staging is needed

- A Job/Task description is needed?



Job Description Language Example

```

Type = "Job";
JobType = "Normal";
#JobType = "Interactive" # MPI, simple, ....
Executable = "/bin/hostname";
Arguments = "-f";
Requirements = other.GlueCEInfoLRMSType == "PBS" &&
other.GlueCEInfoTotalCPUs > 1;
StdOutput = "simple.out";
StdError = "simple.err";
InputSandbox={"myscript.sh"};
#InputSandbox = {"gsiftp://example.it:5678/tmp/my_analysis.py"}
OutputSandbox = {"simple.out", "simple.err", "image.png"};

```

Job Type
interactive/not interactive

Analysis software

Requirements/Environment

Where are data

Transfer Protocol

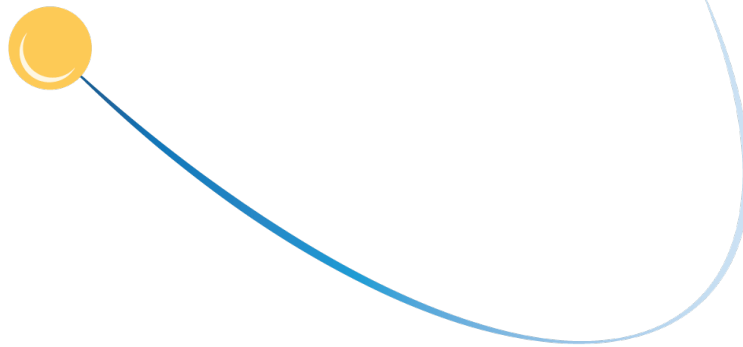
Where put results



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Thank you !