

# Batch Processing technical meeting

Declared scope:

- focus on technical solutions for integrating Rosetta and ESAP
- make a proposal to be discussed with a range of stakeholders

In general:

- identify technical solutions to access computing facilities to run batch processing software
- 
- identify what we mean with “batch processing software”



# Batch Processing software

“Identification”:

- It runs unattended, does not require human intervention
- it automatizes some computing operations
- it starts from a specific configuration user's provided



# Batch Processing vs interactive

“Identification”:

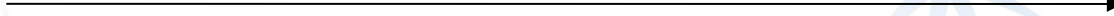
- Need (?) a-priori configuration
- No human intervention
- Need to monitor the “working task”



# General use case



user looks for data



user looks for software



user selects/config computing  
resources/infrastructure



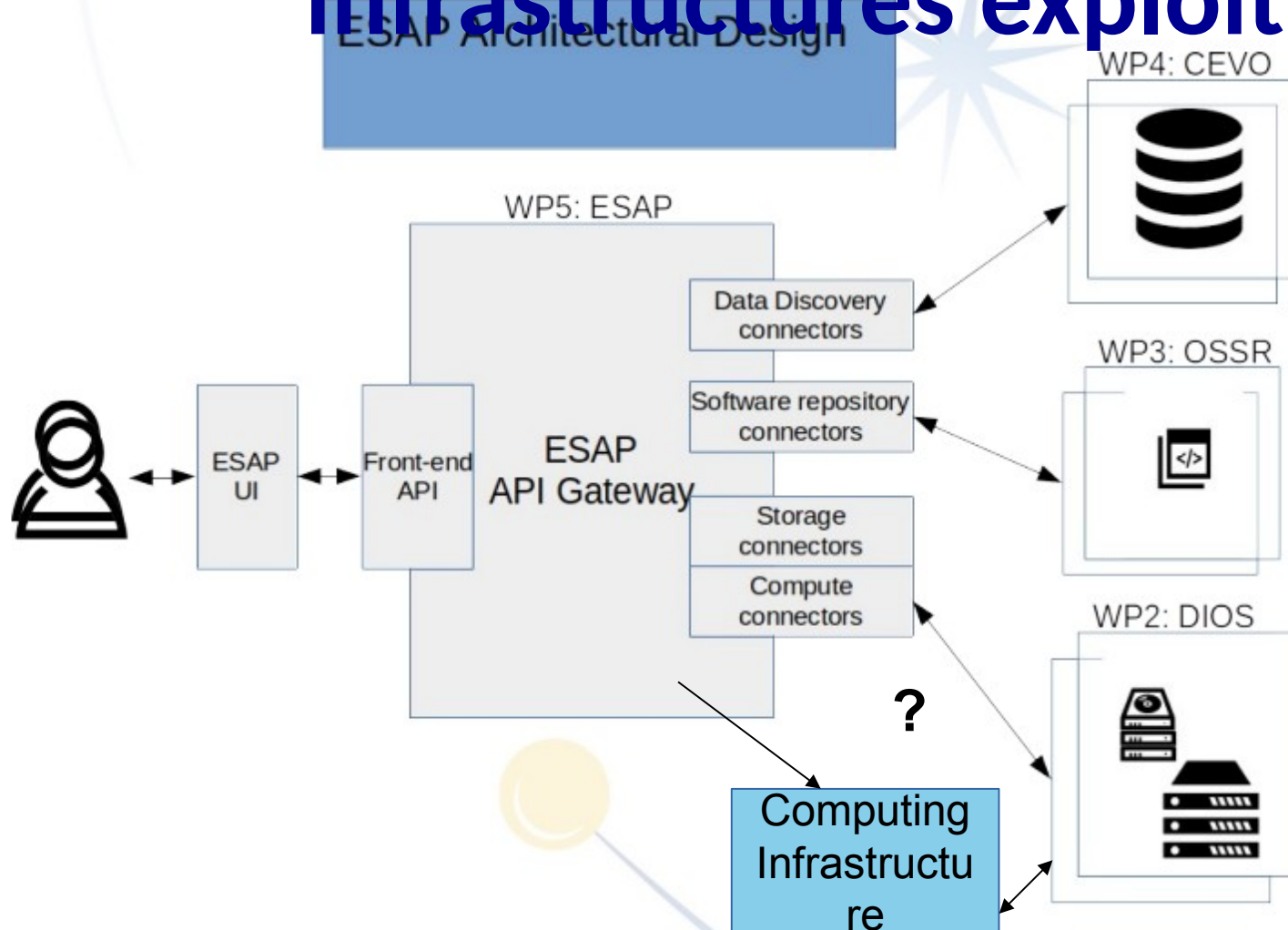
user run analysis  
in the selected infrastructure



ESAP



# Workflow in case of HPC&HPC infrastructures exploiting



Slide @Zheng Meyer-Zhao



# 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

Job Type  
interactive/not interactive

Analysis software

```
Type = "Job";
```

```
JobType = "Normal";
```

```
#JobType = "Interactive" # MPI, simple, ...
```

```
Executable = "/bin/hostname";
```

Requirements/Environment

```
Arguments = "-f";
```

```
Requirements = other.GlueCEInfoLRMSType == "PBS" &&
```

```
other.GlueCEInfoTotalCPUs > 1;
```

Where are data

```
StdOutput = "simple.out";
```

Transfer Protocol

```
StdError = "simple.err";
```

```
InputSandbox = {"myscript.sh"};
```

```
#InputSandbox = {"gsiftp://example.it:5678/tmp/my_anlysis.py"
```

Where put results

```
OutputSandbox = {"simple.out", "simple.err", "image.png"};
```

