

EBI-MuG PMES

Workflows and Distributed computing

March 30, 2017

1 Acces

OpenStack acces:

```
URL: https://extcloud05.ebi.ac.uk/dashboard/project/  
username: XXX@bsc.es  
password: XXXX
```

First acces to the VM with floating point.

```
ssh -vv -i XXX.pem -l ubuntu 193.62.52.104
```

Then acces to the VM which is hosting the PMES service:

```
ssh -i XXX.pem -l ubuntu 192.168.0.27
```

Finally change to the user PMES.

```
sudo su pmes
```

2 OCCI

The occi endpoint is <https://extcloud05.ebi.ac.uk:8787/occi1.1/>

The occi authentication mode is token. To get the token you have to do the following steps:

- source a file with the following parameters:

```
export OS_NO_CACHE=True  
export OS_CLOUDNAME=overcloud  
export OS_AUTH_URL=https://extcloud05.ebi.ac.uk:13000/v2.0  
export NOVA_VERSION=1.1  
export COMPUTE_API_VERSION=1.1  
export OS_USERNAME=XXX@bsc.es  
export OS_PASSWORD=XXXX  
export OS_TENANT_NAME=BSC-MuG
```

- execute the following command:

```
curl -v -s -X POST $OS_AUTH_URL/tokens -H "Content-Type: application/json"  
-d '{"auth": {"tenantName": "'"$OS_TENANT_NAME"'", "passwordCredentials":  
{"username": "'"$OS_USERNAME"'", "password":  
"'"$OS_PASSWORD"'"}}}' | python3 -m json.tool >> data.json
```

- get token from data.json and export the following variable:

```
export OS_TOKEN=toke_from_data.json
```

With the token you can execute occi commands with auth mode token.
For example:

```
occi --endpoint https://extcloud05.ebi.ac.uk:8787/occi1.1/ --auth token
-q $OS_TOKEN --action list --resource resource_tpl
```

3 PMES

PMES service is already installed using tomcat7. The endpoint is <http://localhost:8080/pmes/pmes/>.

You can call the service using curl or you can call the service using the python script `/home/pmes/pmes/scripts/curlPmesApi.py`.

```
# api call getSystemStatus
python3 curlPmesApi.py getSystemStatus
# api call getActivityReport
python3 curlPmesApi.py getActivityReport job_id
# api call terminateActivity
python3 curlPmesApi.py terminateActivity job_id
# api call createActivity
python3 curlPmesApi.py createActivity createVM.json
```

`createVM.json` is a json file with a job definition. For example:

```
[{ "jobName": "HelloTest2_584817558cb7550b5e9970b0",
  "wallTime": "5",
  "minimumVMs": "1",
  "maximumVMs": "1",
  "limitVMs": "1",
  "initialVMs": "1",
  "memory": "1.0",
  "cores": "1",
  "disk" : "1.0",
  "inputPaths": ["/home/"],
  "outputPaths": ["/home/"],
  "mountPath": "",
  "numNodes": "1",
  "user":
    { "username": "lcodo",
      "credentials":
        { "pem": "",
          "key": "",
          "token": "6718197acbb04f7d9695f832cfb2e38f" }
    },
  "img":
    { "imageName": "os_tpl#4f916ede-218b-47e4-93aa-b795a5acf813",
      "imageType": "resource_tpl#721112dd-2f33-40eb-8975-7bd34dbabfc8"
```

```
    },
    "app":
    { "name": "HelloTest2",
      "target": "/home/pmes/testSimple",
      "source": "launch.sh",
      "args": { "val1": "Hola", "val2": "Mundo" } ,
      "type": "COMPSs"
    },
    "compss_flags": {}
  ]
}
```