

# Experiences with Multi-VO Rucio

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# Rucio UI

- Started with pip install of rucio client on server (at Imperial)
- Encountered GFAL2/python issues
- Followed instructions provided by Daniela to install rucio client with Conda – worked well
- Using UKeScienceRoot-2007.pem from CVMFS

# rucio.cfg

[client]

rucio\_host = https://rucio-server.gridpp.rl.ac.uk:443

auth\_host = https://rucio-server.gridpp.rl.ac.uk:443

auth\_type = x509\_proxy

ca\_cert = /cvmfs/grid.cern.ch/etc/grid-security/certificates/UKeScienceRoot-2007.pem

client\_cert = \$X509\_USER\_PROXY

client\_key = \$X509\_USER\_PROXY

client\_x509\_proxy = \$X509\_USER\_PROXY

request\_retries = 3

account = xxxxx

vo = gpp

[common]

multi\_vo = True



?

# Adding RSE properties and attributes

```
rucio-admin rse add-protocol --hostname gfe02.grid.hep.ph.ic.ac.uk --scheme gsiftp \  
--prefix '/pnfs/hep.ph.ic.ac.uk/data/gridpp/ral_rucio_test' --port 2811 \  
--domain-json '{"wan": {"read": 1, "write": 1, "third_party_copy": 1, "delete": 1}, \  
"lan": {"read": 1, "write": 1, "third_party_copy": 1, "delete": 1}}' UKI-LT2-IC-HEP
```

```
rucio-admin rse add-attribute --rse UKI-LT2-IC-HEP --key fts --value 'https://fts00.grid.hep.ph.ic.ac.uk:8446'  
rucio-admin rse set-attribute --rse UKI-LT2-IC-HEP --key country --value UK  
rucio-admin rse set-attribute --rse UKI-LT2-IC-HEP --key tier --value 2
```

# Uploading a file

```
rucio --verbose upload --rse UKI-LT2-IC-HEP --scope user.xxxxx --name 'testfile-10MB-03' testfile-10MB-03
```

# Replication and deletion

- Added replication rule which worked but no replication was made
- Not sure how to debug such issues – logs?
- Deleting rules resulted in files left on storage
- Apparently the appropriate daemons not working yet
  
- Waiting for a robot certificate...

# Swapping VOs

- Now also have access to dteam VO (dtm)
- Able to swap between the two

```
rucio --vo dtm whoami
```

# Monitoring

- Monitoring website is nice
- Select which VO to use at login
- But apparently not operational yet..