



VM-based resources in the LHCb VO Feed

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VM-based resources in LHCb VO Feed

- LHCb VO Feed is published by a service which reads directly from the DIRAC Configuration Service
- This month added VAC and VCYCLE services at sites
 - VM-based resources on Vac or Vcycle/OpenStack
- They look like CEs in GOCDB, APEL, and now VO Feed
 - “t2vacuum.physics.ox.ac.uk”
 - “vac01.ph.liv.ac.uk”
- For operational reasons, these are at separate sites in DIRAC
 - “VAC.Manchester.uk”
- But we fold these into the main site in the VO Feed
 - eg “LCG.Manchester.ac.uk” has both Vac and CREAM

LCG.Manchester.uk with Vac added

```
<atp_site name="UKI-NORTHGRID-MAN-HEP">
<service flavour="CREAM-CE" hostname="ce01.tier2.hep.manchester.ac.uk" />
<service flavour="CREAM-CE" hostname="ce02.tier2.hep.manchester.ac.uk" />
<service flavour="CREAM-CE" hostname="ce03.tier2.hep.manchester.ac.uk" />

<service flavour="VAC" hostname="vac01.tier2.hep.manchester.ac.uk" />
<service flavour="VAC" hostname="vac02.tier2.hep.manchester.ac.uk" />
<service flavour="VAC" hostname="vac03.tier2.hep.manchester.ac.uk" />
<service flavour="VAC" hostname="vac04.tier2.hep.manchester.ac.uk" />

<service flavour="SRMv2" hostname="bohr3226.tier2.hep.manchester.ac.uk"
path="/dpm/tier2.hep.manchester.ac.uk/home/lhcb" />

<group name="Tier 2" type="LHCb_Tier" />
<group name="LCG.Manchester.uk" type="LHCb_Site" />
<group name="LCG.Manchester.uk" type="All Sites" />
<group name="LCG.Manchester.uk" type="Tier 0/1/2D" />
<group name="LCG.Manchester.uk" type="Tier 2D" />
</atp_site>
```

LCG.UKI-LT2-UCL-HEP.uk now appears

- UCL disappeared when they decommissioned their CREAM
- But they continued with Vac for ATLAS, LHCb (and GridPP DIRAC)
- They are now back:

```
<atp_site name="UKI-LT2-UCL-HEP">  
<service flavour="VAC" hostname="vac01.hep.ucl.ac.uk"/>  
<group name="Tier 2" type="LHCb_Tier"/>  
<group name="LCG.UKI-LT2-UCL-HEP.uk" type="LHCb_Site"/>  
<group name="LCG.UKI-LT2-UCL-HEP.uk" type="All Sites"/>  
<group name="LCG.UKI-LT2-UCL-HEP.uk" type="Tier 2"/>  
</atp_site>
```



VO Feed and SAM (ETF) tests

- Immediate motivation for adding VM-based sites is so ETF can get a list of them to monitor
 - These resources are pull-based and CE-less so you can't just push SAM jobs into them
- DIRAC Pilot 3.0 can now run Nagios probes within the pilot
 - Deployed at all VM-based sites
 - Running most of the LHCb WN probes
- And PUT these results on an intermediate HTTPS fileserver
 - Eventually they will be recorded via DIRAC pilot logging
- Have a Nagios probe which can retrieve these results rather than submit a job to run them
- We're intending to apply this to non-VM sites when we start using Pilot 3.0 at grid/batch sites during next year
 - This may become our preferred mechanism for all sites