



Enabling Grids for E-scienceE

# quattor

## Virtualisation update

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[www.eu-egee.org](http://www.eu-egee.org)



Information Society  
and Media



- Xen
- OpenVZ
- Enclosures?

- **ncm-xen component stable but needs some work**
  - Should delete managed configuration files when removed from profile
  - Filesystems code should be removed (use ncm-filesystems)

- **QWG helper code**

- “database” mapping guests to hosts:

```
template site/db/xen;
```

```
variable XEN_DB = nlist(  
"xenhost1.example.org", list("ui.example.org",  
                             "monbox.example.org",  
                             "ce.example.org"),  
"xenhost2.example.org", list("sam.example.org"));
```

- `xen/configure_guests()`:
  - Populates `/software/components/xen/domains` from guest templates
  - Automatically sets `/hardware/location` of guest to name of host machine
- `xen/auto_network`, `xen/grub`, `xen/independent_wallclock`

- **Hosts and guests in different clusters**

- Quite likely: e.g. all Xen hosts in cluster “servers-xen” at TCD
- Normally not possible in QWG for host to get to guest profiles ...
- Solution is to add the guest’s cluster to the include path for the host cluster:

Index: `cfg/qwg/trunk/clusters/example-xen/cluster.build.properties`

```
cluster.pan.includes=sites/example sites/example/**/* clusters/example*/**/*
grid/glite-3.1 os standard
```

- Checked in to QWG example site
- Need to be a little careful about which cluster’s files are pulled in ...

Site	Technology	Host/guest deps		Details
TCD	Xen	QWG		46 hosts, 164 guests
NIKHEF	Xen	~QWG		Custom scheme for HW due to cross-cluster problem
CERN	Xen	Enclosures		Will look into migration
Morgan Stanley	VMware	No		Component injects XML from config into hypervisor

- **People are clearly interested!**
- **Only proposal so far is from Luis: see his page on [quattor.org](http://quattor.org)**
- **Is it within the scope of quattor as it stands or should it be integrated in some new lifecycle workflow manager?**

- **Developed by Luis, used at UAM**
- **Anywhere else?**

- **Proposal for modelling host/guests dependencies**
  - VMs
  - Blades
  - ...
- **Used at CERN, elsewhere?**