Glasgow Test Environment

3/4/2013

Glasgow Test Env.

- 12 machines dedicated as server platforms.

- 11 for grid services and 1 for environment bootstrapping (dev001-v4).

- 21 "worker nodes" 2x2 AMD 280 Opterons

- 2 Dell Powerconnect 6248's

- Model for Grid Cluster deployment

- Automated build & configuration (hopefully!)

Cobbler / Puppet / Mirror	dev001-v4	
NAT	dev002-v4	Worker Nodes
CE	dev003-v4	
CE	dev004-v4	node001
Torque / Maui	dev005-v4	.
ARGUS	dev006-v4	.
BDII	dev007-v4	.
APEL	dev008-v4	node021
CVMFS	dev009-v4	
HDFS Meta Data	dev010-v4	Completed
UI	dev011-v4	In Progress
		Outstanding
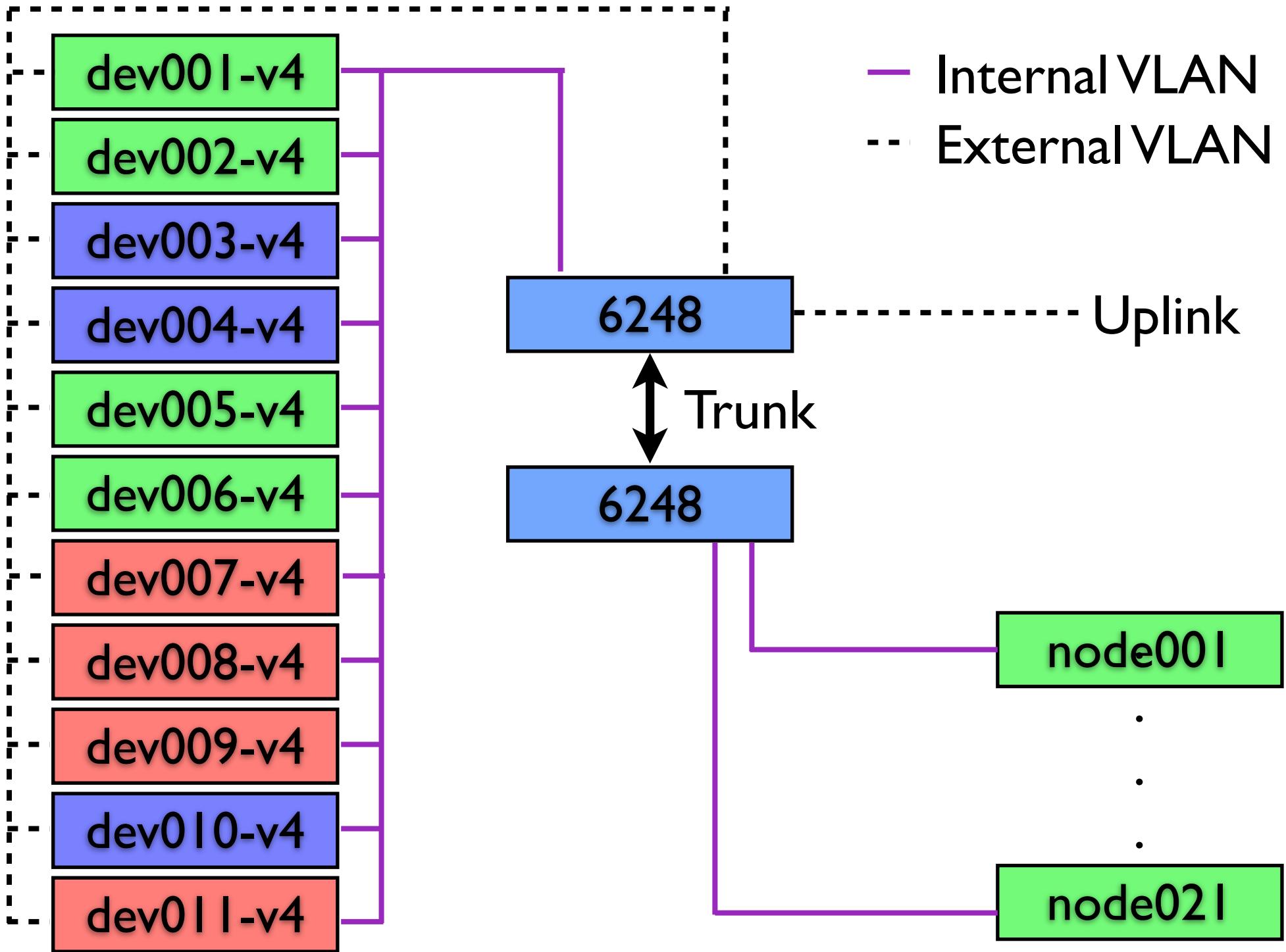
dev001-v4
dev002-v4
dev003-v4
dev004-v4
dev005-v4
dev006-v4
dev007-v4
dev008-v4
dev009-v4
dev010-v4
dev011-v4

6248

6248

Trunk

node001

node021

⎯⎯ Internal VLAN
- - - External VLAN

Uplink

Cobbler / Puppet / Mirror `dev001-v4`
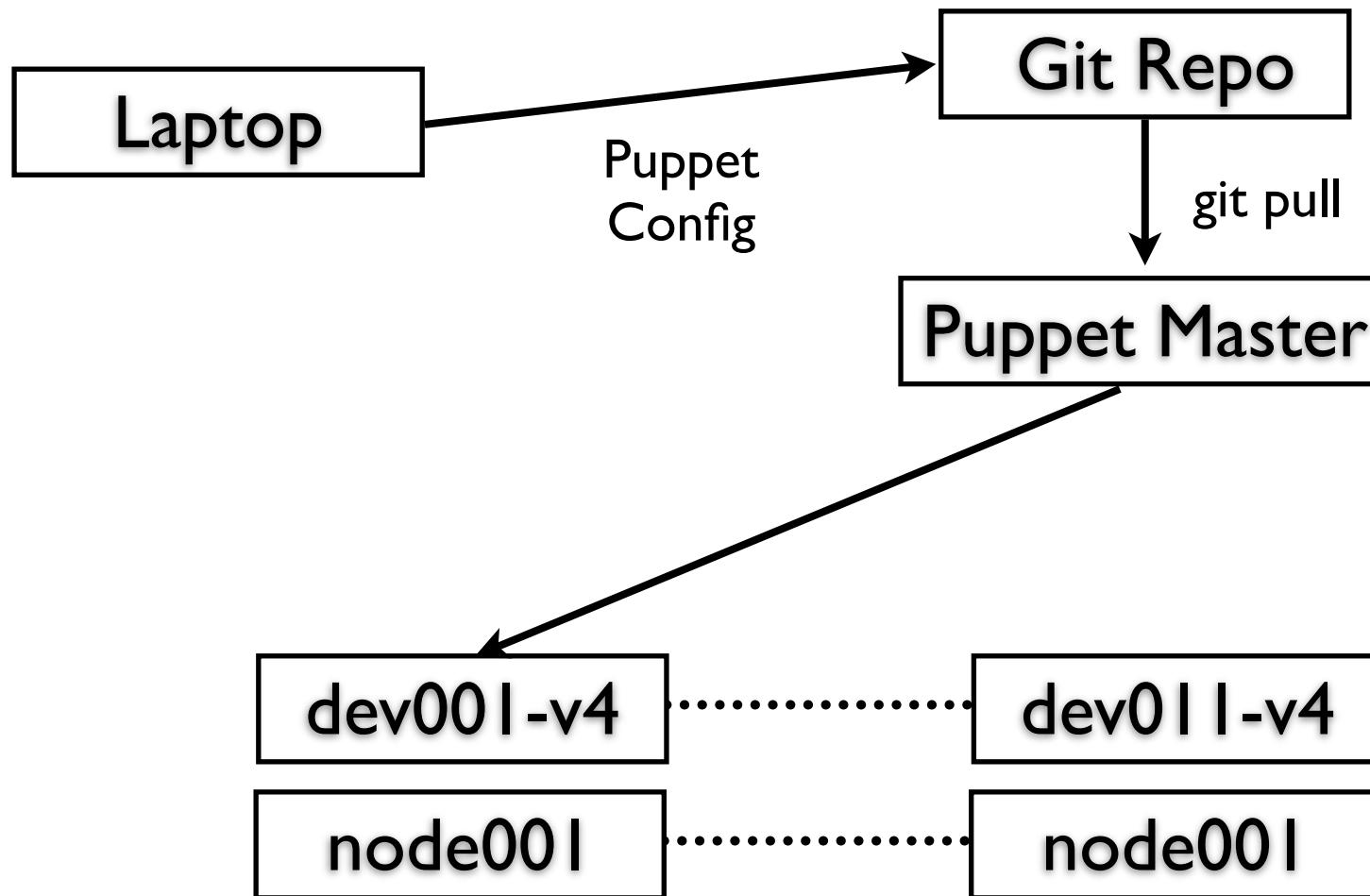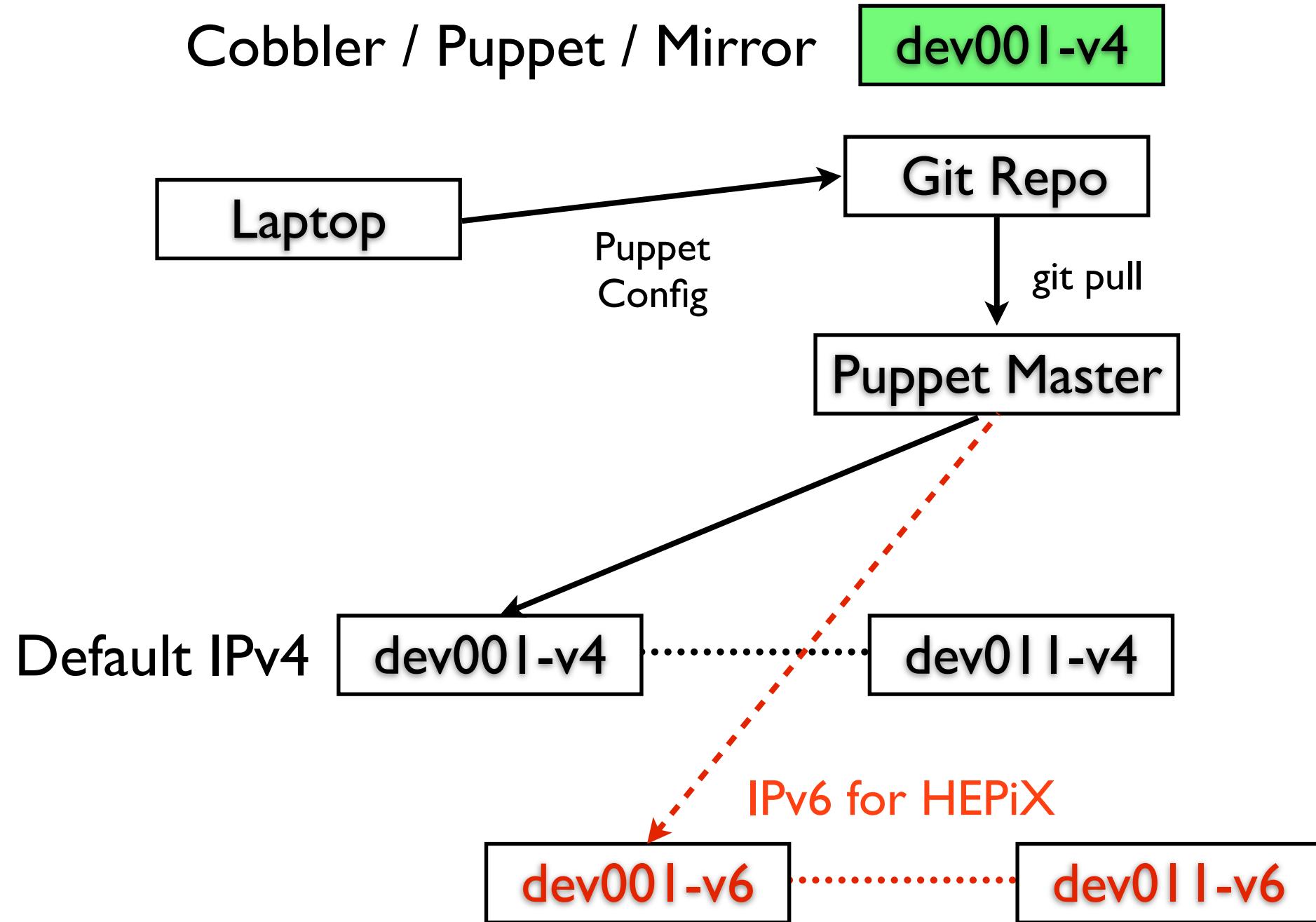
- Cobbler for bare metal provisioning

  - SL5 and SL6 images

  - Per node Kickstarts possible

- Puppet for configuration management

  - Versioned via a Git repository, head node automatically synced

  - At present wrapping YAIM but room to grow.

  - EMI-2 with potential to move to EMI-3

Cobbler / Puppet / Mirror dev001-v4

Laptop → Git Repo

Puppet
Config

git pull

Git Repo → Puppet Master

Puppet Master → dev001-v4

| dev001-v4 | .... | dev011-v4 |
| node001 | .... | node001 |

Cobbler / Puppet / Mirror `dev001-v4`

```
#NAT
node 'dev002-v4' inherits gridserver { include nat }

#CE
node 'dev003-v4' inherits gridserver { include munge }
node 'dev004-v4' inherits gridserver { include munge }

#TORQUE
node 'dev005-v4' inherits gridserver {
  include munge
  include torque
}

#ARGUS
node 'dev006-v4' inherits gridserver { include argus }

#BDII
node 'dev007-v4' inherits gridserver {}

#APEL
node 'dev008-v4' inherits gridserver {}

#CVMFS
node 'dev009-v4' inherits gridserver {}

#SPARE
node 'dev010-v4' inherits gridserver {}

#UI
node 'dev011-v4' inherits gridserver {}
```

```
#NAT
node 'dev002-v6' inherits gridserver { include nat }

#CE
node 'dev003-v6' inherits gridserver { include munge }
node 'dev004-v6' inherits gridserver { include munge }

#TORQUE
node 'dev005-v6' inherits gridserver {
  include munge
  include torque
}

#ARGUS
node 'dev006-v6' inherits gridserver { include argus }

#BDII
node 'dev007-v6' inherits gridserver {}

#APEL
node 'dev008-v6' inherits gridserver {}

#CVMFS
node 'dev009-v6' inherits gridserver {}

#SPARE
node 'dev010-v6' inherits gridserver {}

#UI
node 'dev011-v6' inherits gridserver {}
```

servers.pp   servers-v6.pp

Glasgow Test Env.

- Currently enabled for "DTEAM."

- Looking to enable other VO's for testing.

- Hoping for an Open Access model to allow rapid testing by all users.

- Version of configuration via Git & Puppet to allow roll back and automated building.