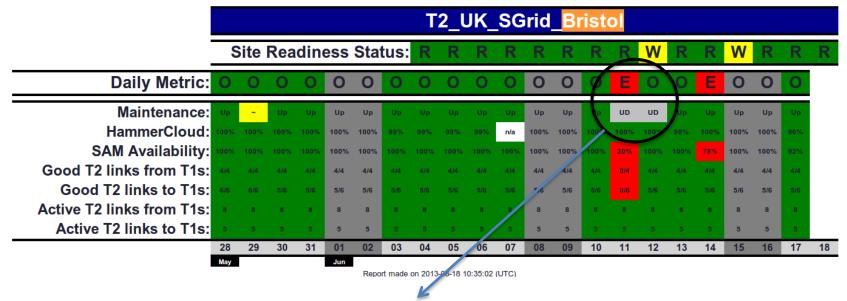# Bristol T2

A short site report

Past few weeks

NFS server for gridmapdir/host for Apel EMI-2 node died

NFS migrated to another server

Recovered CEs and SE with the help of Kashif (needed re-yaim)

Current status

- Everything is working again except accounting

- Preparing new EMI-3

  - Following the yaim free user guide

  - Putting the information into puppet

- Next step will be to update the Apel parser on the CEs

Next few weeks

- Finish new Apel Publisher + update on Ces

- Add new SL 6.4 CE (EMI-3)
  - This will be used for the experimental cluster (DICE)
  - Configured via Puppet

- Configure DICE WNs

- Add Bristol T2 under Puppet control
  - Initially without major changes
  - Migrate to SL 6 and full Puppet control once happy with DICE

Hardware T2

- ## 23 WNs

  - 2 x AMD Opteron 2378 (2.4 GHz, 4C)

  - 16 GB RAM

  - 2 x 1 TB HDDs

- ## 9 WNs

  - 2 x Intel Xeon E5405 (2 GHz, 4C, 6M Cache)

  - 16 GB RAM

  - 1 x 1 TB HDD

Hardware DICE

- **11 x WNs Dell R510**

  – 2 x Intel Xeon E5645 Processor (2.40GHz, 6C, 12M Cache, 5.86 GT/s QPI, 80W TDP, Turbo, HT)

  – 24 GB RAM

  – 12 x 2 TB HDDs

- **12 x WNs Dell R415**

  – 2 x AMD Opteron 4284 Processor (3.0GHz, 8C, 8M L2/8M L3 Cache, 95W)

  – 32 GB RAM

  – 2 x 2 TB HDDs (1 with 3 x 4 TB)

Total hardware

- ## Current T2

  - ### 256 cores, 512 GB RAM

  - ### 55 TB of mostly not used disk

  - ### 117 to 200 TB of GPFS storage

- ## DICE

  - ### 324 cores, 648 GB RAM

  - ### 284.2 TB as HDFS (not only HEP though)

Staff

- 1 – 1.2 FTE (me + some fraction of Winnie's 20% for PP)

- Hope to reduce my contribution in a few months in favour of physics

- Puppet should help to make this possible

Since HEPSYSMAN

- Puppet was a big topic at HEPSYSMAN
- Continued on TB-support mailing list (awaiting admin approval to contribute to the discussion)
- Topics covered there:
  - Modules should be site-independent
  - Data-code separation (hiera, scripts)
  - Role/node/atom model
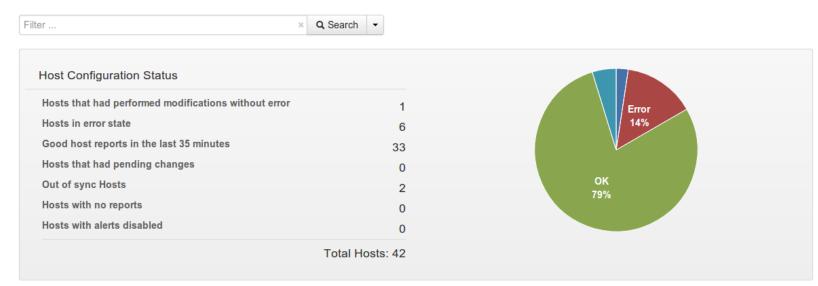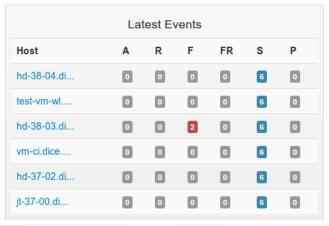- Topics not covered:
  - Monitoring of puppet

Foreman

- At Bristol we use Puppet 3.2.2 + Foreman 1.2RC2

- Foreman acts as:

  - Monitoring of puppet distribution (reports)

  - Provider of Roles/node definitions (puppet site.pp is empty!): assigns puppet classes

  - Provides data (hiera alternative, works

  - Collector of facts and their historic evolution (aka trends)

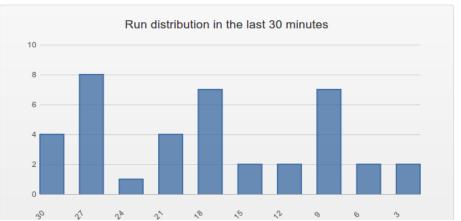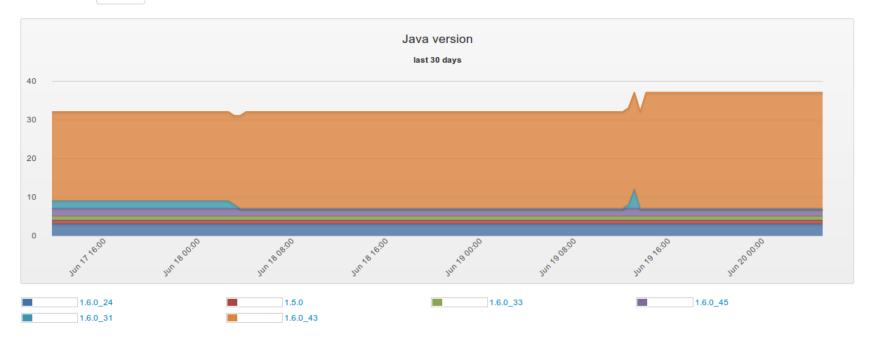 - And provisioning of machines, etc. (too much to cover here)

Foreman

Foreman

Foreman