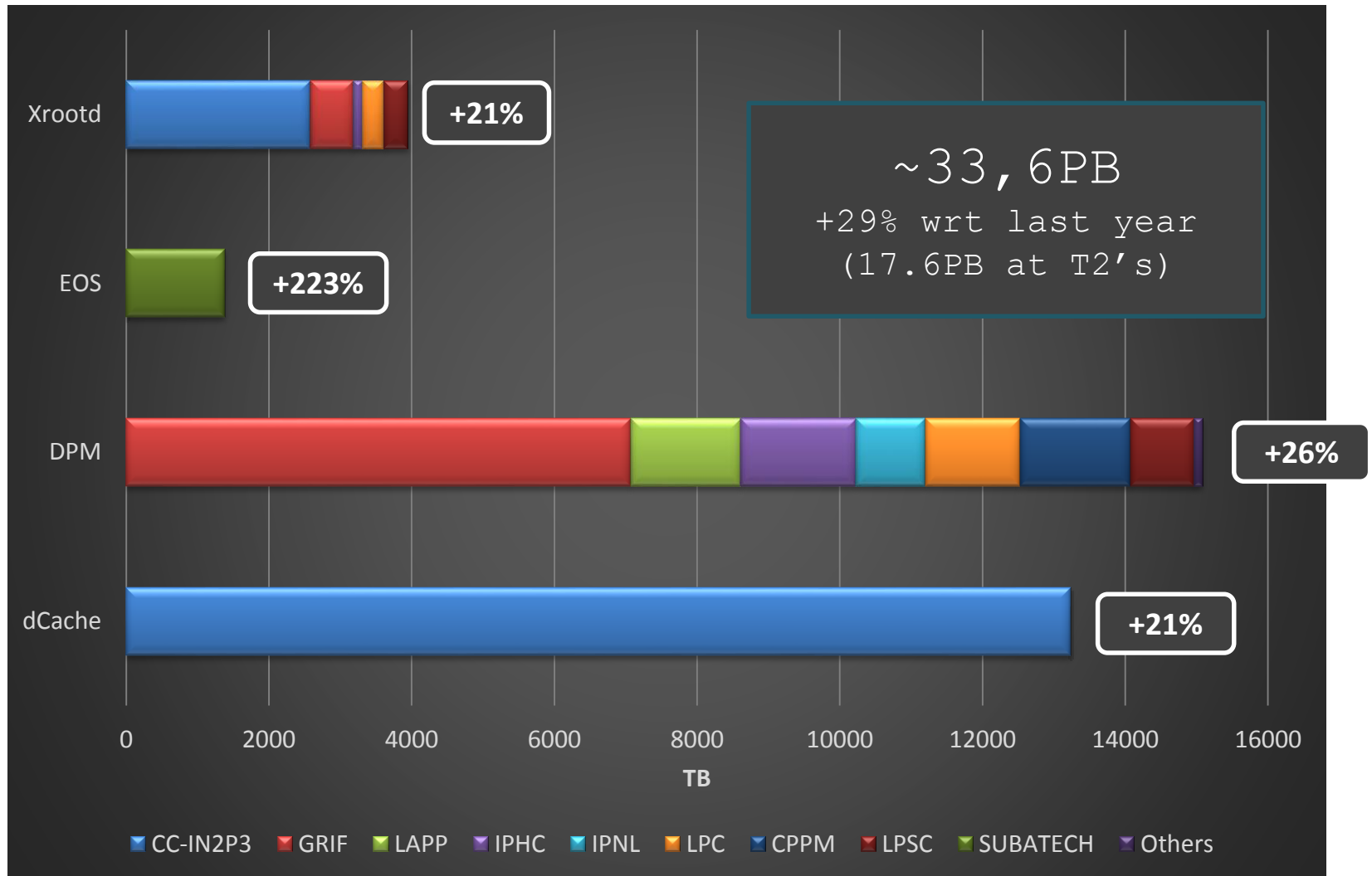


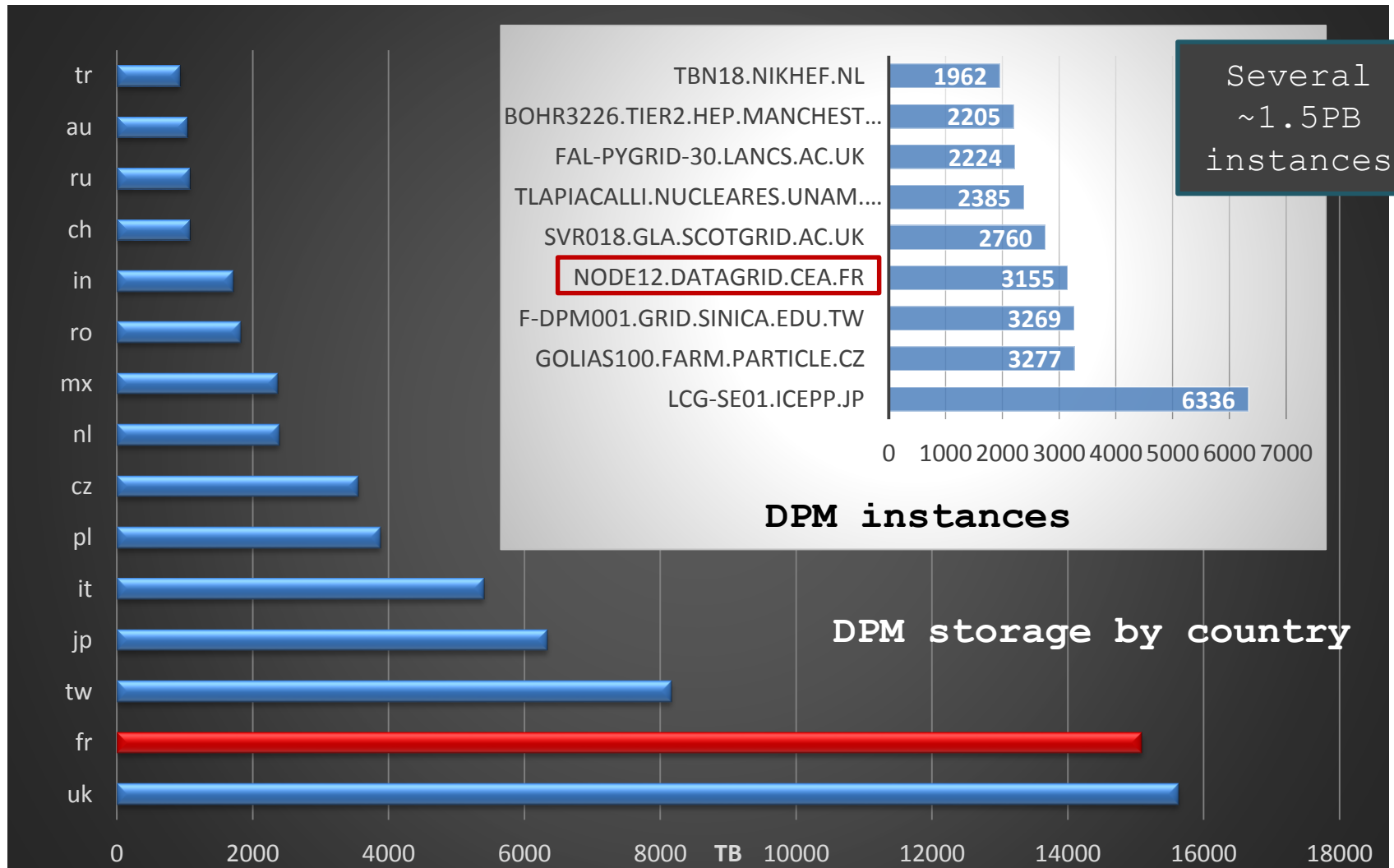
Status Report from France.

A. Sartirana

Grid Storage in FR.



FR DPM Community.



➤ Big community

- ❑ 15 DPM instances, **~15PB in production**

 - ❖ 2nd larger national community;

 - ❖ most used grid storage in FR;

- ❑ **3 testbeds**

 - ❖ epel testing;

 - ❖ Quattor/Puppet conf validation;

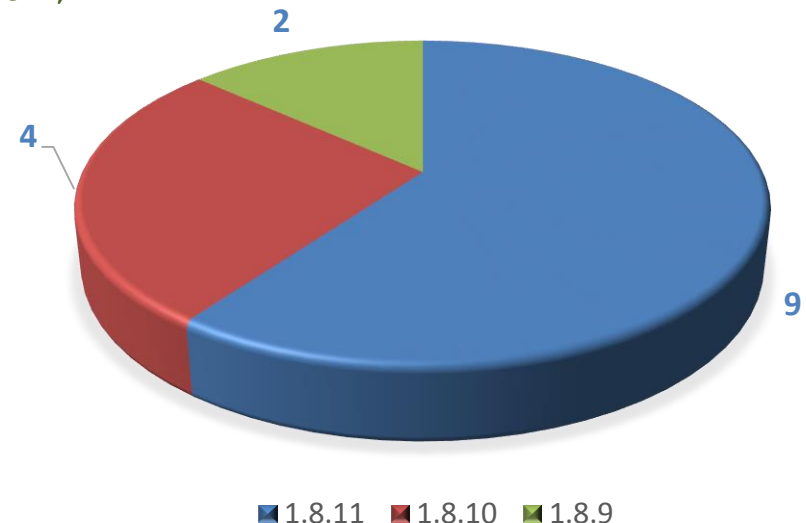
 - ❖ Atlas and CMS MW validation.

➤ DPM releases in Prod

- ❑ **most of the sites in 1.8.11;**

- ❑ a couple still in 1.8.9

 - ❖ just lack of time. No particular problems.



➤ Standard access protocols: **xrootd, gsiftp, https**

- ❑ integrated in the xrootd feds (CMS/Atlas/Alice);
- ❑ Atlas and LHCb sites have configured HTTPS access
 - ❖ On Nagios monitoring everything looks rather fine.

➤ DPM is configured using **Quattor at most sites**

- ❑ GRIF_LAL/LPNHE/IPNO, LAPP, IPHC, IPNL, LPSC;
- ❑ templates maintained by the QWG
- ❑ hybrid puppet/quattor (using dpm puppet modules within quattor): GRIF_LLRL;

➤ some sites have **migrated to puppet**

- ❑ GRIF_IRFU, CPPM, **LPC**;
- ❑ profiting of the ready-to-use dpm puppet modules;

Sites Feedback...

➤ Issues reported at the **2015 DPM workshop**...

❑ lack of **communication of the new releases** and pains with the UMD meta-packages

✓ communication **much improved**: for 1.8.11 it was just fine;

✓ UMD MP are no longer there (and no longer needed by quattor sites);

❑ **puppet modules**: few glitches and not obvious to pick up the correct modules versions

✓ in the doc, a very **useful list modules versions** corresponding to a given DPM release.

✓ **puppet modules** are getting **more and more stable and trustable**;

❖ few (very rare!) glitches: e.g accidental gsiftp redirection activation...

...*Sites Feedback*...

- **Readability of the logs** is becoming an issue
 - ❑ **too verbose**. It is very difficult to find out the relevant information;
 - ❑ **information** of one single connection/transaction/event is often **spread over multiple log files**.

- Features requests: **load balance and load mgmt**
 - ❑ **concern about scalability**
 - ❖ bigger HW, remote access, etc;
 - ❖ need ways to prevent/fix overload situations;
 - ❑ **redistributing files** over the disk servers
 - ❖ balance occupation/replicate pop files;
 - ❖ would be better to have an "official" tool;
 - ❑ VO's/users «quotas» on connections/bandwidth.



➤ **Documentation** has much **improved**

- ❑ still room for improvement: e.g. aggregate some VO specific configurations;
- ❑ xrootd related doc may be improved (we quickly end up on the pure xrootd doc).

➤ Few bugs/issues

- ❑ some sites report of **HTTPS recurrent crashes** on the disk servers;
- ❑ IPHC reported of service **blocked at dpm restart** for several (~30) minutes
 - ❖ while executing `dpm_reallocate`, `dpm_updfreespace`.

...*Sites Feedback*...

- With **epel** we **lost the historical view** of releases
 - ❑ sites depend on their mirror snapshots;
 - ❑ we agree with the policy of pushing sites to be up-to-date
 - ❖ but, maybe, we can still have an historical archive for the dpm pkgs (and closest dependencies).

- **Puppet v3** support will **soon end** (Jan 2017?)
 - ❑ are all the modules and the dependencies ready for v4?

- **No more draining issues** to report.

➤ **T2_FR_GRIF_LL**R testbed for **CMS MW validation**

□ small instance (3VM, 1.5TB) using epel-testing

- ❖ **hybrid quattor/puppet configuration**: validation of new puppet modules;
- ❖ standard and CMS specific SAM tests;
- ❖ PhEDEx transfers to/from IRFU and PIC in Dev instance;
- ❖ hammercloud tests running on T2_FR_GRIF_LLR (by A.Sciaba);

□ recent activity

- ❖ testing **gfal2** for PhEDEx and HC workflows;
- ❖ running PhEDEx/HC in **srm-less mode** using the gsiftp redirection;
- ❖ currently upgraded to **CentOS7, DPM 1.9.0**. Testing «**Dome flavour**».

➤ **LAPP** testbed for **Atlas MW Validation**

- 1 VM Head node and 1 "old" diskserver

- ❖ constantly updated to latest epel-testing releases
- ❖ standard and Atlas specific functionality tests;
- ❖ FTS transfers via DDM;
- ❖ not in the federation;
- ❖ Panda prod and analysis test jobs;

- ongoing activity

- ❖ **srm-less** atlas workflows: gsiftp redirection and http access;
- ❖ testing functionalities of **1.9.0** in «**dome flavour**».

➤ GRIF_LAL

- constantly updated to latest epel-testing releases
 - ❖ monitored by SAM test;
 - ❖ **development and validation of the quattor templates** for DPM configuration;
- ongoing activity
 - ❖ updated to **1.9.0 on CentOS7**;
 - ❖ All protocols (gsiftp, HTTP, xrootd);
 - ❖ working on the full quattor support;
 - ❖ still running with legacy services. Planning to **soon move to DOME**.

➤ FR DPM community

- ❑ **~15PB** of DPM storage **in production**;
- ❑ almost all sites **up-to-date with 1.8.11**.

➤ Feedback from sites

- ❑ **log readability** is an issue;
- ❑ concerns about **load management, scalability**.

➤ Testbeds activity

- ❑ **MW readiness** (atlas/CMS), **Quattor** conf validation;
- ❑ testing **1.9.0 (with DOME)**, **srm-less, CentOS7**.

