Tier-1 Status Update

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ATLAS Tier-1 Computing Team

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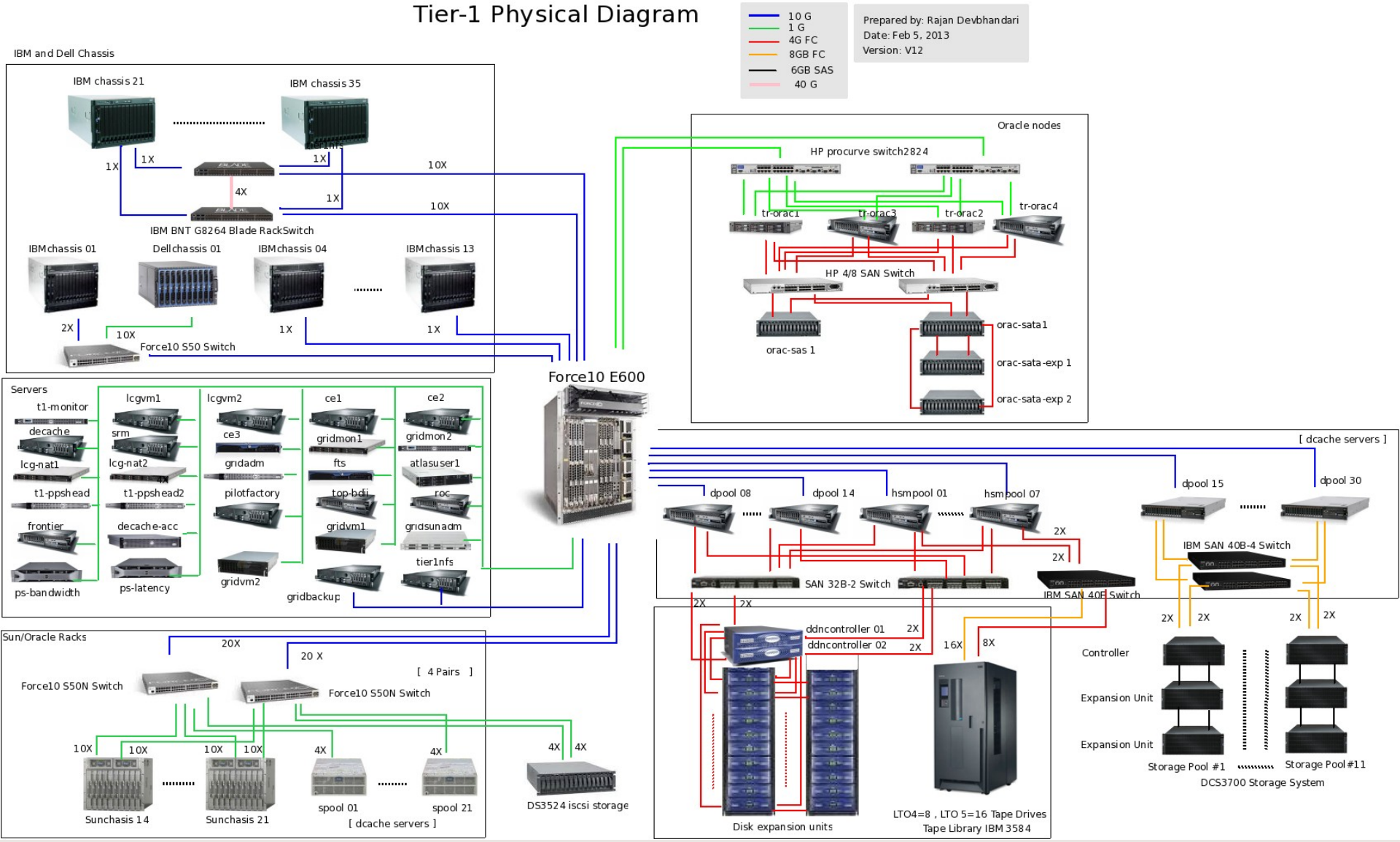
Physical Diagram



Oracle Databases

ATLAS 3D Conditions Oracle RAC Database (database name: TRAC)

Two Oracle RAC Servers: tr-orac1 & tr-orac2

Each server with the following specs:

IBM dualcore
CPU speed 2.6 GHz
24 GB RAM
Red Hat Enterprise Linux ES Rel 5 - 64bit
Oracle Clusterware 11.2.0.4

SAS Storage
16 SAS disks, 450GB each
IBM DS5020(1814 20A)
Two RAID6, each has 5 LUNS (2*1.25TB + 3*300MB)
Two FC connection to the hosts, multipath has been configured.

ATLAS FroNTier / Squid

Two FroNTier/Squid Servers (1&2):

1. frontier.triumf.ca

x86_64 Linux 2.6.18-308.13.1.el5
single socket Intel quad-core @ ~3.0 GHz
8 GB RAM

2. tier1nfs.triumf.ca

x86_64 Linux 2.6.18-308.13.1.el5
4 CPU @ 2988MHz
12GB RAM

Plus, 3 FroNTier Squid servers for internal (workernodes) use
(t1-squid3, t1-squid4, t1-squid5)

***** ALL configured with DNS Round Robin**

Oracle Databases (for TAG)

TAG Oracle RAC (database name TAGPRD)
Two Oracle RAC Servers: tr-orac3 & tr-orac4

Each server with the following specs:
IBM x3650 M2
Intel quad-core @ ~2.53 GHz
12 GB RAM
Red Hat Enterprise Linux ES Rel 5 - 64bit
Oracle Clusterware 11.2.0.4

SATA Storage
32 SATA disks, 1TB each
IBM DS5020(1814 20A) + disk expansion (1814 52A).
Two RAID6, each has 8 LUNS(1.6TB available).
Two FC connection to the hosts, multipath has been configured.

IELSSI Service: to build TAG queries to the TAGPRD Database

Server: elssi.triumf.ca (for TAG)
X86_64 RHEL5
1 CPU @ 2666MHz
1.5GB RAM

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Golden Gate Test RAC

Two Oracle RAC Servers: t1-pps12 & t1-pps13 (database name RACTST)

4 CPU's @ 3MHZ
12 GB RAM
Scientific Linux 5.10
Oracle Clusterware 11.2.0.4
Instance Names – RACTST1 & RACTST2

*** All of our Oracle Servers are managed with Oracle Grid Control 12c on Scientific Linux 6.4
- one node (tr-oem)

Other Database Administration

PostgreSQL Databases
- Used for dcache, srm & dcache archive databases

MySQL Databases
-Used for ROC-Nagios, monbox & Smallhsm, network monitoring
-MySQL databases also used for various web tools (LAMP).
(Linux/Apache/Mysql/PHP)

2014 Future Plans:

- No hardware upgrades planned.
- Upgrade to RHEL 6
- Upgrade to Oracle 12c
- Golden Gate implementation

TRIUMF

Canada's national laboratory for particle and nuclear physics

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et en physique des particules

Thank you!
Merci

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