

Certification testbed

A little update about the certification Testbed

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- **The certification TB is now a full operational service under SLC4**
- **DPM, LFC and WN on 64bits**
- **All machines are equivalent to production nodes**
 - 8 cores 64bit, 16 Gig of RAM, 160 Gig HD (RAID 5)
- **All info to extend our TB with external site**
 - <https://twiki.cern.ch/twiki/bin/view/EGEE/EGEETestbeds>
- **Security centrally manage trough the GD tool**
- **Monitoring of security package up-to-date : pakiti**
- **User access based of AFS at cern**
- **The certification TB is a GRID**

Goal : To be able to give a reliable site, up-to-date with the latest certified patches. Can be use as base for your services.

UI	BDII site and top
lcg CE	Cream CE
Torque server	WMS/LB
MON	VOMS
DPM + DPM Pool (64 bits)	LFC (64 bits)
classic SE	2 WNs (32bits & 64bits)
FTS	PROXY
File server	Monitor : SAM + NAGIOS ...

SITE NAME	SITE SPECIALITY
CESGA	Sun Grid Engine
PIC	Condor
GRNET	Torque (real condition case)
MON	VOMS
Desy	Dcache
INFN	LSF
CYPRUS	AMGA
CESGA	Sun Grid Engine

- **Installation of Os : anaconda + PXE + cern internal tools**
- **Installation middleware : YUM**
- **Configuration : YAIM with centrally managed site info**
 - Use by all testbeds machines (physical and virtual)
- **Update : yum auto update every 4 hours generating alarm if problem**
- **Access and firewall : lcg-fw (internal tools) ccdb (cern)**
- **Monitoring**
 - Physical : lemon
 - Os + security : pakiti
 - middleware : SAM + Nagios
- **Testing after installation/configuration : manual + nagios**
- **Nagios configuration : NCG (multi-site)**

- **NAGIOS**
 - I am currently using the nagios setting made by WLCG team
 - Simple monitoring test like port checking
 - Advanced one : run storage element command, running jobs etc ...
- **NCG the Nagios configuration tools**
 - Permit to configure NAGIOS with a BDII request or a gocdb like database (not use)
- **Multisite vs monostite**
 - In production now the mono-site one
 - Can check all services behind the network firewall
 - On the TB the multisite one
 - All test are running from the same place
 - Only one nagios to maintain
 - Firewall problems
- **We have to create nagios compatible tests to integrate them and keep then running with the Nagios scheduler**

- **There is two configuration tools**
 - Steve one based on YAIM
 - Emmir using NCG
 - both of them can use the BDII, manual setting in the configuration tool (ncg) or a gocdb database
 - NCG can be configured in multisite (not 100% support)
- **NAGIOS has a big problem all the configuration is made trough files and there is no db to store all of that**
- **Reference :**
 - <https://twiki.cern.ch/twiki/bin/view/LCG/GridServiceMonitoringInfo>
 - <https://tb-nagios.cern.ch> (ask for access to Louis.Poncet@cern.ch)

- **WE CAN'T IGNORE SECURITY AT ALL**
- **We are not stable (patch in certification, not certified)**
- **Apply all basic recommended by your security officer in your IT department and :**
 - Advanced root authentication (no shared password), kerberos, ssh keys ...
 - Only useful packages installed (don't give the knife that will stab you)
 - Protect all authentication data (ssh keys, CA ...)
 - Try to be in auto-update
 - Security package automatically install
 - Certification that this upgrade does not disturb our services
 - Firewall as much as possible
 - Intrusion detection system is good
 - syslog server (to keep your logs safe)
- **We have to share good idea and experience**

- **Links :**
 - CERN testbed : <http://tb-map.cern.ch/>
 - NAGIOS : <http://tb-nagios.cern.ch>
 - Nagios configuration : <https://twiki.cern.ch/twiki/bin/view/LCG/GridMonitoringNagiosInstall>
 - Twiki testbed reference : <https://twiki.cern.ch/twiki/bin/view/EGEE/EGEETestbeds>
- **Need feed back from you, to increase the quality of service.**
- **Increase your security level :**
 - We are really visible
- **Send your question to :**
 - Louis.Poncet@cern.ch