



OSG Site Installation

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Overview

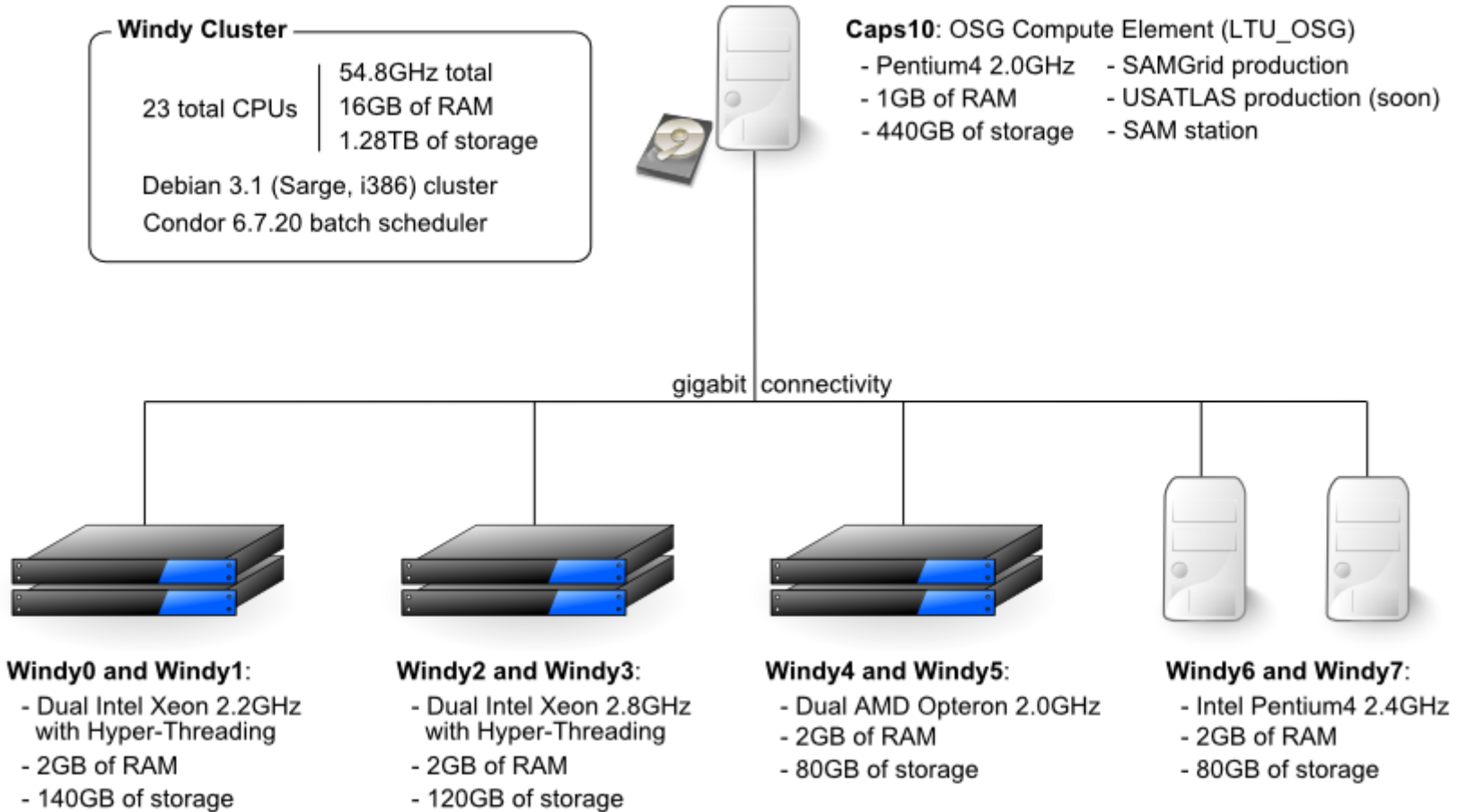
- Site Overview
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Site Overview

- Caps10 is our
 - OSG-0.4.1 Compute Element (CE),
 - SAMGrid head node, and
 - SAM station.
- Our worker nodes consist of
 - A small Debian cluster with 8 nodes (22 CPUs), and
 - Several Linux desktops (PII and PIII's).
- We're hoping to expand our site with
 - 100 or so Linux cluster nodes in Nov/Dec (??), and
 - 10TB of storage for USATLAS production.
- Also, we are **now** officially an OSG production site (LTU_OSG)!

Cluster Overview





Site Configuration

- OSG attributes:
 - Group: OSG (production)
 - Site name: **LTU_OSG**
 - Batch queue: Condor
- Virtual Organizations supported:
 - USATLAS
 - DZero
 - DOSAR
 - MIS (used for GridCat/GridScan)

- Local storage configuration:

Variable	Description	Location	Exported
OSG_LOCATION	OSG CE software	/data/osg/ce	No
OSG_GRID	OSG WN client software	/data/grid/wn	Yes, rw
OSG_APP	VO application software	/data/grid/app	Yes, rw
OSG_DATA	Staging area	/data/grid/data	Yes, rw
OSG_WN_TMP	Local working directory	/var/scratch	Local partition, rw

- More information can be found at: <https://www.phys.latech.edu/grid/>



Compute Element Installation

- Simplified procedure:
 - Installed Condor and Pacman
 - Installed OSG:ce with
 - `pacman -get OSG:ce`
 - `pacman -get OSG:Globus-Condor-Setup`
 - Setup DOEGrids certificate authority
 - Requested an LDAP and user certificate (already had a host cert)
 - Configured the OSG attributes
 - Configured the Monitoring and Information Services Core Infrastructure (MIS-CI)
 - Configured the Generic Information Providers (GIP)
 - Setup CE authorization using the Grid3 or Local configuration
 - Verified our site with the `site-verify.pl` script
 - Activated and registered our site

- OSG-0.4.1 Documentation:
 - <http://osg.ivdgl.org/twiki/bin/view/ReleaseDocumentation/CEInstallGuide>



Worker Node Installation

- Simplified procedure:
 - Installed the worker node client software:
 - `pacman -get OSG:wn-client`
 - Then, added the following to `cron.daily`:
 - `rsync -auv --delete`
`/data/osg/ce/globus/share/certificates/`
`/data/grid/wn/globus/share/certificates`
 - So that we could keep the `wn-client`'s certificates in sync with the CE's. This had to be done because the `wn-client` software was installed on the CE.

- OSG-0.4.1 Documentation:
 - <http://osg.ivdgl.org/twiki/bin/view/ReleaseDocumentation/WorkerNodeClient>



Issues Encountered

- Pacman couldn't read it's DB because of a Ctrl-C, so I had to reinstall OSG:ce.
- Ports not open on our firewall.
- While trying to register our site, Dr. Greenwood had to track down his p12 certificate. Always keep a backup!
- The LDAP certificate request failed because of OSG-0.4.1's outdated Cert-Scripts package (v1.7 -> v1.9).
- MIS-CI needed VO/users enabled for GridCat and GridScan to work.
- For some odd reason, our site is currently showing a location of UNITEDKINGDOM.



Next Steps

- Run a complete and successful SAMGrid test request.
 - Start running SAMGrid jobs upon completion.
- Begin ATLAS production once we:
 - Acquire extra storage (10TB) from LTU's PetaShare grant, and
 - Get faster connectivity when LONI is connected from our cluster to Baton Rouge.
- In November/December, we are hoping to use LTU's new Linux cluster (100 or more) for both SAMGrid and USATLAS production.



Questions?

- if questions == True:
 - Answer()
- else:
 - EndPresentation()