



SMU US Atlas Tier 3

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Experiences

- Initial learning curve is quite steep
- Documentation is improving significantly
- Other groups are very helpful
 - Huge thanks to UTA and BNL
- Interested in integration – will start attending calls

SMU Physics Computing

- 1 Gatekeeper
- 1 Storage Element
 - 8 TB Usable Disk
 - Infortrend Eonstor (very pleased – quite fast)
 - Data populated manually
- 25 Compute Nodes
 - Mixed Hardware – From dual quad core to dual single core
 - ~ 85k SI2K
- 2 Interactive Analysis Nodes
 - Dual quad core, 16 GB RAM
- Current Internet2 connectivity ~150 Mb

Cluster Setup

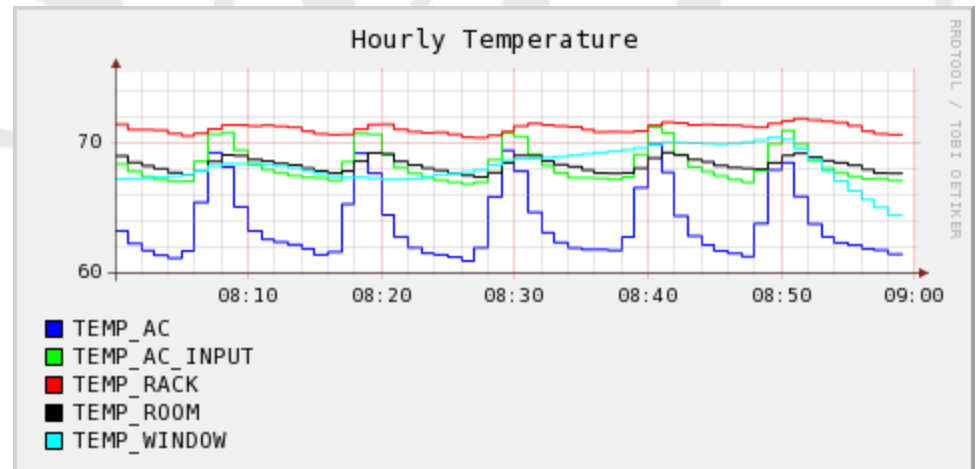
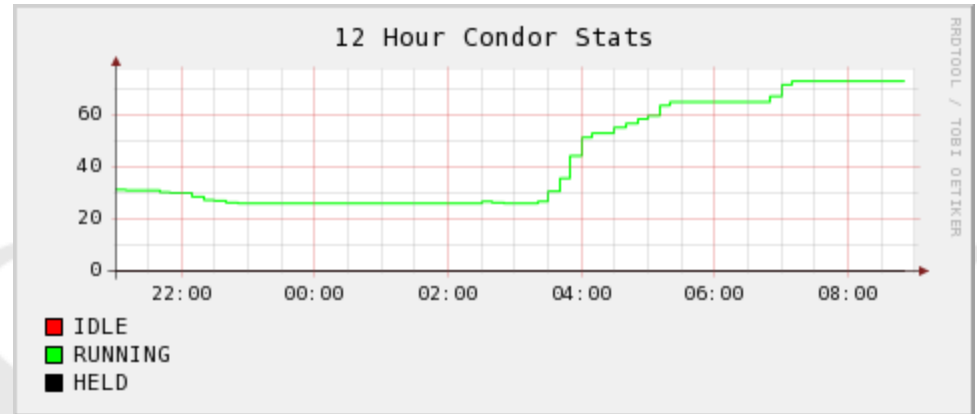
- Kickstart installs fully automated
 - Static DHCP via ethernet address
 - USB thumb drive with boot image and kickstart command
 - Reinstall all 25 worker nodes with 10 minutes of effort and all nodes are up and running within another 10-20 minutes
- Condor batch system
- Gridmap file not gums
- Releases installed by Xin

Issues

- Current issue with Geant custom code
 - glibc errors
 - All compat libs installed
 - Works at BNL
- Upgrade to OSG 0.8.0 needed

System Monitoring

- Monitoring done with Nagios
- Dual homed machine
 - Monitors both internet and private network facing machines
- Usage
- Environmental



More Monitoring

- SNMP monitoring of disk array

Host	Service	Status	Last Check	Duration	Attempt	Status Information
diskarray	PING	OK	02-27-2008 08:59:53	20d 16h 45m 4s	1/3	PING OK - Packet loss = 0%, RTA = 0.36 ms
	SNMP_LDFAILEDDRVCNT	OK	02-27-2008 09:02:18	20d 16h 51m 7s	1/3	OK - All Drives Online
	SNMP_LDONLINEDRVCNT	OK	02-27-2008 09:04:43	20d 16h 51m 7s	1/3	OK - 9 Drive(s) Online
	SNMP_LDSTATUS	OK	02-27-2008 08:57:14	20d 19h 6m 37s	1/3	OK - Array Status: Good
	SNMP_LUDEVSTATUS_1	OK	02-27-2008 08:59:56	20d 16h 51m 7s	1/3	OK - Power Supply Online
	SNMP_LUDEVSTATUS_2	OK	02-27-2008 09:02:22	20d 16h 51m 7s	1/3	OK - Power Supply Online