

# GDB Monitoring Discussion

John Shade/SAM  
CERN, 8-OCT-2008



# EGEE'08 Istanbul

- Lots of interesting presentations available  
<http://indico.cern.ch/conferenceTimeTable.py?confId=32220>
- In particular:
  - Multi-level monitoring framework (James Casey)  
<http://indico.cern.ch/getFile.py/access?contribId=344&sessionId=53&resId=4&materialId=slides&confId=32220>
  - Introduction to Nagios (Ronald Starink)  
<http://indico.cern.ch/materialDisplay.py?contribId=239&sessionId=54&materialId=slides&confId=32220>
  - Grid Site Monitoring with Nagios (Emir Imamagic)  
<http://indico.cern.ch/getFile.py/access?contribId=240&sessionId=54&resId=0&materialId=slides&confId=32220>
  - And a great tutorial based on a live demo:  
Grid Site Monitoring Demo (Steve Traylen)  
<https://twiki.cern.ch/twiki/bin/view/LCG/GridMonitoringNcgYaimTutorial?slideshow=on;skin=print#GoSlide1>

# Operations Automation

- Please read the strategy document:  
<https://edms.cern.ch/document/927171/>
- Highlights:
  - Adopt messaging as integration middleware
  - Use Nagios for site and regional monitoring
  - Move responsibility for reliability of sites to the sites themselves (with support from their ROC)

# Nagios

- Well-known, widely used, open-source:  
<http://www.nagios.org/>
- Provides site admin-centric monitoring
- Coexistence of own probes and “official” ones
- Sensible alerts
  - Immediate e-mail/pager notifications, but dependencies avoid message floods
  - Tests can have dependencies for efficiency

# Nagios (contd.)

- Monitoring EGEE resources in Central Europe since 2006 (<http://nagios.ce-egee.org>)
  - gLite style meta packages egee-NAGIOS and egee-NRPE exist
  - YAIM module glite-yaim-nagios has been written
    - Configures Nagios to test your Site using NCG utilities (NCG = Nagios Configuration Generator)
    - Especially useful if you have limited or no NAGIOS experience
- We're trying to make things easy for you!

# Nagios

**General**

- Home
- Documentation

**Monitoring**

- Tactical Overview
- Service Detail
- Host Detail
- Hostgroup Overview
- Hostgroup Summary
- Hostgroup Grid
- Servicegroup Overview
- Servicegroup Summary
- Servicegroup Grid
- Status Map
- 3-D Status Map

Service Problems

- Host Problems
- Network Outages

Show Host:

- Comments
- Downtime

**Process Info**

- Performance Info
- Scheduling Queue

**Reporting**

- Trends
- Availability
- Alert Histogram
- Alert History
- Alert Summary
- Notifications
- Event Log

**Configuration**

- View Config

**Current Network Status**

Last Updated: Mon Oct 1 14:35:52 CEST 2007  
 Updated every 90 seconds  
 Nagios® - [www.nagios.org](http://www.nagios.org)  
 Logged in as *guest*

[View History For This Host](#)  
[View Notifications For This Host](#)  
[View Service Status Detail For All Hosts](#)

Up	Down	Unreachable	Pending
1	0	0	0
All Problems		All Types	
0		1	

Ok	Warning	Unknown	Critical	Pending
31	0	0	0	0
All Problems		All Types		
0		31		

### Service Status Details For Host 'se1-egee.srce.hr'

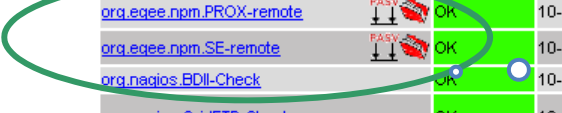
Host	Service	Status	Last Check	Duration	Attempt	Status Information
se1-egee.srce.hr	MyProxy-host-cert-valid-OPS-remote	OK	10-01-2007 13:30:37	6d 23h 47m 24s	1/4	MyProxy status: ok
	RGMA-host-cert-valid-OPS-remote	OK	10-01-2007 13:30:37	6d 23h 47m 24s	1/4	RGMA status: ok
	SE-lcq-cp-Atlas-remote	OK	09-22-2007 07:01:10	9d 7h 34m 42s	1/1	SE-lcq-cp-Atlas-remote status: ok
	SE-lcq-cp-DTeam-remote	OK	10-01-2007 14:26:13	5d 23h 31m 33s	1/4	SE-lcq-cp-DTeam-remote status: ok
	SE-lcq-cp-OPS-remote	OK	10-01-2007 14:26:13	5d 23h 31m 33s	1/4	SE-lcq-cp-OPS-remote status: ok
	SE-lcq-cr-Atlas-remote	OK	09-22-2007 07:00:56	9d 7h 34m 42s	1/1	SE-lcq-cr-Atlas-remote SAM status: ok
	SE-lcq-cr-DTeam-remote	OK	10-01-2007 14:26:24	7d 0h 41m 6s	1/1	SE-lcq-cr-DTeam-remote SAM status: ok
	SE-lcq-cr-OPS-remote	OK	10-01-2007 13:50:37	7d 0h 21h 26m 16s	1/1	SE-lcq-cr-OPS-remote SAM status: ok
	SE-lcq-del-Atlas-remote	OK	09-22-2007 07:01:10	9d 7h 34m 42s	1/1	SE-lcq-del-Atlas-remote SAM status: ok
	SE-lcq-del-DTeam-remote	OK	10-01-2007 14:05:35	7d 0h 40m 56s	1/1	SE-lcq-del-DTeam-remote SAM status: ok
	SE-lcq-del-OPS-remote	OK	10-01-2007 13:50:50	7d 0h 53m 9s	1/1	SE-lcq-del-OPS-remote SAM status: ok
	ch.cern.RGMA-Status-Check	OK	10-01-2007 14:28:28	6d 23h 47m 24s	1/4	OK
	hr.srce.CAdist-Version	OK	09-30-2007 17:17:58	6d 23h 12m 59s	1/4	IGTF version is 1.16. Valid distribution version found.
	hr.srce.DPNS-List	OK	10-01-2007 14:21:43	6d 23h 47m 33s	1/4	Content of /dpm succeeded. Directory contains domain srce.hr subdirectory.
	hr.srce.GridFTP-Transfer	OK	10-01-2007 14:29:58	6d 23h 50m 2s	1/4	Remote computer succeeded. Download from remote computer succeeded. File successfully removed from remote computer. Received file is valid.
	hr.srce.MyProxy-CertLifetime	OK	09-30-2007 17:22:28	5d 23h 27m 30s	1/4	Certificate will expire in 320.17 days (Aug 15 19:34:35 2008 GMT).
	hr.srce.MyProxy-ProxyLifetime	OK	10-01-2007 14:26:13	5d 23h 38m 51s	1/4	Proxy will expire in 17.10 days (Oct 18 14:50:37 2007 GMT).
	hr.srce.MyProxy-Store	OK	10-01-2007 14:21:43	6d 23h 47m 33s	1/4	myProxy credential created. Querying stored credential succeeded. MyProxy credential destroyed.
	hr.srce.SRM-Transfer	OK	10-01-2007 13:40:28	6d 23h 52m 41s	1/4	Upload to remote computer succeeded. Download from remote computer succeeded. File successfully removed from remote computer. Received file is valid.
	hr.srce.SRM1-CertLifetime	OK	09-30-2007 17:44:13	5d 23h 35m 36s	1/4	Certificate will expire in 320.16 days (Aug 15 19:34:35 2008 GMT).
	hr.srce.SRM1-Ping	OK	10-01-2007 14:33:43	5d 23h 31m 33s	1/4	SRM ping successful.
	hr.srce.SRM2-CertLifetime	OK	09-30-2007 17:22:28	5d 23h 27m 30s	1/4	Certificate will expire in 320.18 days (Aug 15 19:34:35 2008 GMT).
	org.egee.srce.MSN-remote	OK	10-01-2007 14:32:07	7d 0h 11m 42s	1/1	MSN response time
	org.egee.npm.PROX-remote	OK	10-01-2007 14:32:07	7d 0h 11m 42s	1/1	PROX response time
	org.egee.npm.SE-remote	OK	10-01-2007 14:32:07	7d 0h 11m 42s	1/1	SE response time
	org.nagios.BDI-Check	OK	10-01-2007 14:26:13	5d 23h 38m 51s	1/4	BDI response time
	org.nagios.GridFTP-Check	OK	10-01-2007 14:29:58	6d 23h 50m 2s	1/4	GridFTP response time on port 2811 [220 se1-egee.srce.hr DPM GridFTP ready]
	org.nagios.GridCE-Check	OK	10-01-2007 14:33:43	6d 23h 54m 27s	1/4	GridCE response time [1.12 GSI type Globus/GSI wu-2.6.2 (gcc32dbg, 1069715860-42) ready.]
	org.nagios.SRM1-PortCheck	OK	10-01-2007 14:22:28	5d 23h 42m 54s	1/4	TCP OK - 0.000 second response time on port 8445
	org.nagios.SRM2-PortCheck	OK	10-01-2007 14:26:13	5d 23h 38m 51s	1/4	TCP OK - 0.022 second response time on port 8446
	org.nagios.Tomcat-Check	OK	10-01-2007 14:29:58	6d 23h 50m 2s	1/4	TCP OK - 0.009 second response time on port 8443



Central probes (SAM)



Local probes



Network monitoring

# Changes for SAM

- SAM as we know it today will morph into something that uses NAGIOS as the submission framework
- We are already testing probes that use the messaging system in Validation
- We are gaining Nagios experience
- Currently working on ‘how to do alarming’ and storage of test results

# Site Availability

- WLCG and EGEE publish monthly availability reports
  - Your site's availability impacts your Tier/Region's availability
  - It affects your reputation and possibly your funding
  - How reliable is your site?
  - Are you happy with your current monitoring tools?