

NAGIOS

or: *“What I did on my summer vacation at Rutgers University”*

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NAGIOS

- What is NAGIOS?
- What do NAGIOS do?
- Case Study: Rutgers Operations Center
- NAGIOS for non-admins
- Tricks & Tips
- Resources

What is NAGIOS?

- *”Nagios® is an Open Source host, service and network monitoring program.” (source: nagios.org)*
- Monitors:
 - Servers (ping, serial comms, disk usage, mounts, etc.)
 - Networks (routers using TCP/IP pings)
 - Services (TCP/IP connections)
 - Custom monitors

Case Study: Rutgers Operations Ctr.

- 100's of servers; dozens of clusters/groups
- Physically distributed across NJ
- One or more services/websites per server
- Numerous customers, each with specific instructions for reporting / handling
- Organizational process management is critical!

Case study 2: personal LAN

- Uh oh! Disk space critical!

The screenshot shows the Nagios web interface in a Mozilla Firefox browser window. The address bar displays `http://192.168.0.8/nagios2/`. The interface includes a left sidebar with navigation links for General, Monitoring, and Reporting. The main content area displays the 'Current Network Status' and 'Host Status Totals'.

Current Network Status
Last Updated: Mon Oct 1 16:17:29 EDT 2007
Updated every 30 seconds
Nagios® - www.nagios.org
Logged in as *mkazin*

Host Status Totals

Up	Down	Unreachable	Pending
4	0	0	0

Service Status Totals

Ok	Warning	Unknown	Critical	Pending
10	0	0	1	0

Service Status Details For All Hosts

Host	Service	Status	Last Check	Duration	Attempt	Status Information
CrystalBall	HTTP	OK	2007-10-01 16:12:31	0d 19h 20m 46s	1/4	HTTP OK: HTTP/1.1 200 OK - 1088 bytes in 0.004 seconds
	PING	OK	2007-10-01 16:14:20	0d 19h 18m 57s	1/4	PING OK - Packet loss = 0%, RTA = 0.36 ms
	SSH	OK	2007-10-01 16:16:09	0d 19h 17m 8s	1/4	SSH OK - OpenSSH_4.3p2 Debian-Subunur1 (protocol 2.0)
Google	PING	OK	2007-10-01 16:12:58	0d 0h 18m 39s	1/4	PING OK - Packet loss = 0%, RTA = 38.16 ms
Router	PING	OK	2007-10-01 16:14:47	0d 19h 35m 29s	1/4	PING OK - Packet loss = 0%, RTA = 1.29 ms
localhost	Current Load	OK	2007-10-01 16:16:36	20d 23h 57m 42s	1/4	OK - load average: 0.01, 0.05, 0.02
	Current Users	OK	2007-10-01 16:13:25	20d 23h 56m 16s	1/4	USERS OK - 3 users currently logged in
	Disk Space	CRITICAL	2007-10-01 16:15:14	20d 23h 54m 51s	4/4	DISK CRITICAL - free space: / 1266 MB (13% inode=75%); /lib/init/rw 310 MB (100% inode=99%); /dev/shm 310 MB (99% inode=99%); /home 305 MB (2% inode=98%); /pub 7863 MB (10% inode=99%); /pub_2 1111 MB (14% inode=99%); /pub/Movies 10029 MB (13% inode=99%);
	HTTP	OK	2007-10-01 16:17:03	20d 23h 58m 25s	1/4	OK - HTTP/1.1 302 Found - 0.001 second response time
	SSH	OK	2007-10-01 16:13:52	20d 23h 58m 59s	1/4	SSH OK - OpenSSH_4.6p1 Debian-5 (protocol 2.0)
	Total Processes	OK	2007-10-01 16:15:42	20d 23h 55m 33s	1/4	PROCS OK: 84 processes

11 Matching Service Entries Displayed

Case study 2: personal LAN

- # rm -Rf /pub/pr0n

Nagios - Mozilla Firefox

File Edit View History Bookmarks ScrapBook Tools Help del.icio.us

http://192.168.0.8/nagios2/

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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 16:53:53 EDT 2007

Updated every 90 seconds

Nagios® - www.nagios.org

Logged in as [mkazin](#)

[View History For all hosts](#)

[View Notifications For All Hosts](#)

[View Host Status Detail For All Hosts](#)

Host Status Totals

Up	Down	Unreachable	Pending
4	0	0	0

[All Problems](#) [All Types](#)

0 4

Service Status Totals

Ok	Warning	Unknown	Critical	Pending
10	1	0	0	0

[All Problems](#) [All Types](#)

1 11

Service Status Details For All Hosts

Host	Service	Status	Last Check	Duration	Attempt	Status Information
CrystalBall	HTTP	OK	2007-10-01 16:51:30	0d 19h 57m 10s	1/4	HTTP OK: HTTP/1.1 200 OK - 1088 bytes in 0.004 seconds
	PING	OK	2007-10-01 16:53:19	0d 19h 55m 21s	1/4	PING OK - Packet loss = 0%, RTA = 0.35 ms
	SSH	OK	2007-10-01 16:50:08	0d 19h 53m 32s	1/4	SSH OK - OpenSSH_4.3p2 Debian-Subuntul (protocol 2.0)
Google	PING	OK	2007-10-01 16:51:57	0d 0h 29m 55s	1/4	PING OK - Packet loss = 0%, RTA = 35.06 ms
Router	PING	OK	2007-10-01 16:46:46	0d 20h 11m 53s	1/4	PING OK - Packet loss = 0%, RTA = 1.29 ms
localhost	Current Load	OK	2007-10-01 16:50:35	21d 0h 34m 6s	1/4	OK - load average: 0.00, 0.00, 0.00
	Current Users	OK	2007-10-01 16:52:24	21d 0h 32m 40s	1/4	USERS OK - 3 users currently logged in
	Disk Space	WARNING	2007-10-01 16:49:13	0d 0h 24m 40s	4/4	DISK WARNING - free space: / 1266 MB (13% inode=75%); /lib/init/rw 310 MB (100% inode=99%); /dev/shm 310 MB (99% inode=99%); /home 1376 MB (7% inode=98%); /pub 7863 MB (10% inode=99%); /pub_2 1111 MB (14% inode=99%); /pub/Movies 10029 MB (13% inode=99%)
	HTTP	OK	2007-10-01 16:51:02	21d 0h 34m 49s	1/4	OK - HTTP/1.1 302 Found - 0.001 second response time
	SSH	OK	2007-10-01 16:52:51	21d 0h 33m 23s	1/4	SSH OK - OpenSSH_4.6p1 Debian-5 (protocol 2.0)
	Total Processes	OK	2007-10-01 16:49:41	21d 0h 31m 57s	1/4	PROCS OK: 84 processes

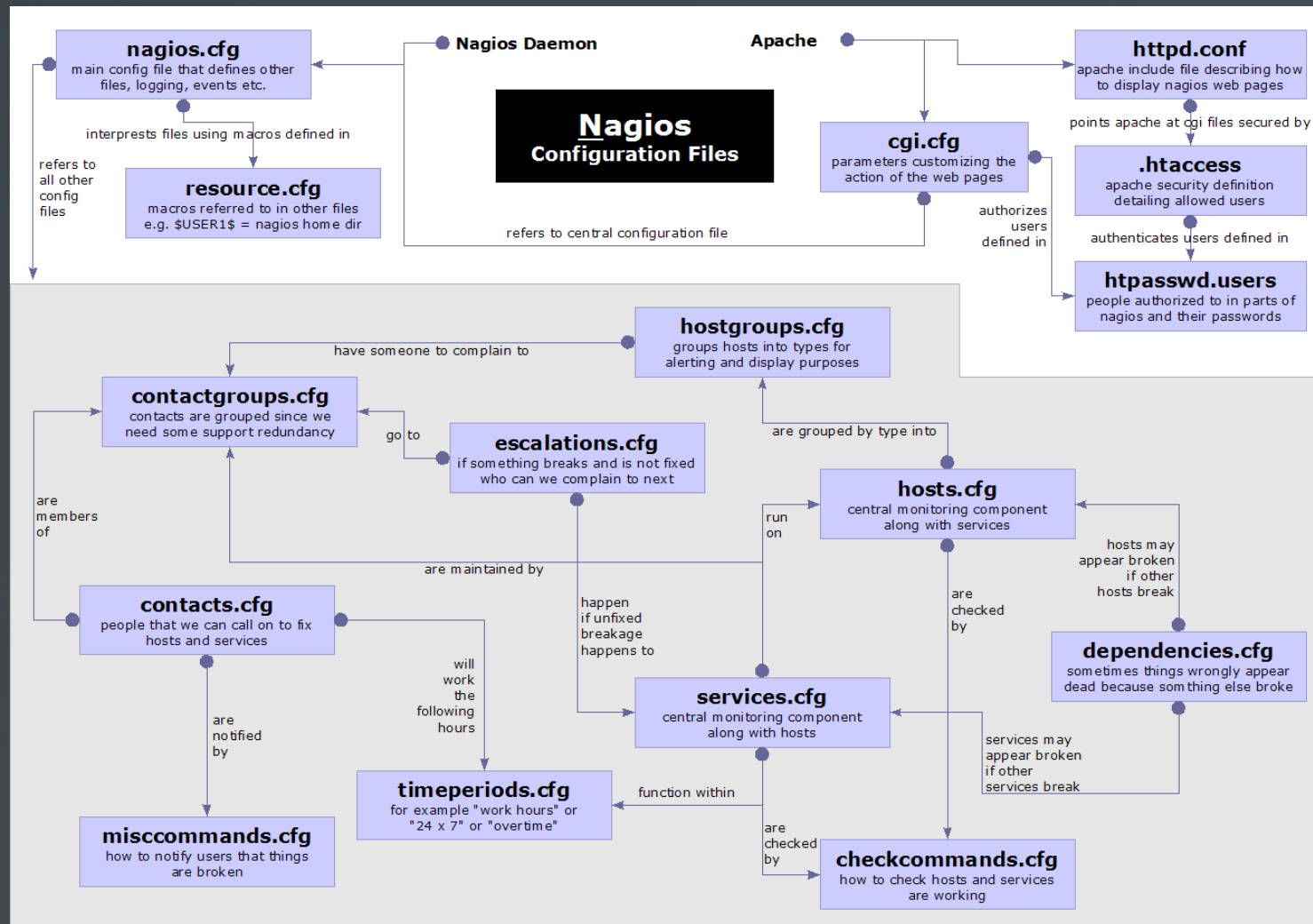
11 Matching Service Entries Displayed

Done

start Nagios - M... Microsoft ... mkazin@cr... 192.168.0... mkazin@cr... Personal BCS-F WMSL-UC 4:54 PM

Configuration diagram

- <http://nagios.sourceforge.net/download/contrib/documentation/misc/con>
- :



Resources

- Project website: <http://nagios.org>
- Installation on various Linux flavors:
nagioscommunity.org/wiki/index.php/Howtos:specific
- NAGIOS installation under Debian GNU/Linux:
wiki.tryphon.org/How_to_install_Nagios_under_Debian
- Nagios http site authentication:
nagios.sourceforge.net/docs/2_0/cgiauth.html

Q&A

- Please be gentle...

Backup