



# Network Management & Monitoring

**NAGIOS**



# Introduction

## Network Monitoring Tools


- **Availability**
- Reliability
- Performance

*Nagios actively monitors the **availability** of devices and services*

# Introduction

- Possibly the most used open source network monitoring software
- Web interface for viewing status, browsing history, scheduling downtime etc
- Sends out alerts via E-mail. Can be configured to use other mechanisms, e.g. SMS

# Example: Service Detail view



**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
  - Unhandled
- Host Problems
  - Unhandled
- 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: Thu Sep 3 14:46:07 CDT 2009  
 Updated every 90 seconds  
 Nagios® 3.0.2 - [www.nagios.org](http://www.nagios.org)  
 Logged in as *guest*

[View History For all hosts](#)  
[View Notifications For All Hosts](#)  
[View Host Status Detail For All Hosts](#)

**Host Status Totals**

Up	Down	Unreachable	Pending
41	0	0	0

All Problems	All Types
0	41

**Service Status Totals**

Ok	Warning	Unknown	Critical	Pending
46	0	0	0	0

All Problems	All Types
0	46

**Service Status Details For All Hosts**

Host ↑	Service ↑	Status ↑	Last Check ↑	Duration ↑	Attempt ↑	Status Information
<a href="#">DNS-ROOT</a>	SSH	OK	2009-09-03 14:43:51	43d 0h 55m 19s	1/4	SSH OK - OpenSSH_5.1p1 Debian-3ubuntu1 (protocol 2.0)
<a href="#">ISP-DNS</a>	SSH	OK	2009-09-03 14:41:21	16d 3h 57m 24s	1/4	SSH OK - OpenSSH_5.1p1 Debian-3ubuntu1 (protocol 2.0)
<a href="#">ISP-RTR</a>	SSH	OK	2009-09-03 14:43:57	43d 5h 35m 13s	1/4	SSH OK - Cisco-1.25 (protocol 2.0)
<a href="#">NOC-TLD1</a>	SSH	OK	2009-09-03 14:41:27	1d 0h 1m 59s	1/4	SSH OK - OpenSSH_5.1p1 Debian-3ubuntu1 (protocol 2.0)
<a href="#">NOC-TLD2</a>	SSH	OK	2009-09-03 14:44:04	1d 22h 44m 22s	1/4	SSH OK - OpenSSH_5.1p1 Debian-3ubuntu1 (protocol 2.0)
<a href="#">NOC-TLD3</a>	SSH	OK	2009-09-03 14:41:34	1d 22h 40m 58s	1/4	SSH OK - OpenSSH_5.1p1 Debian-3ubuntu1 (protocol 2.0)
<a href="#">NOC-TLD4</a>	SSH	OK	2009-09-03 14:44:10	1d 22h 44m 16s	1/4	SSH OK - OpenSSH_5.1p1 Debian-3ubuntu1 (protocol 2.0)
<a href="#">NOC-TLD5</a>	SSH	OK	2009-09-03 14:41:40	1d 22h 41m 46s	1/4	SSH OK - OpenSSH_5.1p1 Debian-3ubuntu1 (protocol 2.0)
<a href="#">NOC-TLD6</a>	SSH	OK	2009-09-03 14:44:17	1d 22h 44m 9s	1/4	SSH OK - OpenSSH_5.1p1 Debian-3ubuntu1 (protocol 2.0)
<a href="#">NOC-TLD7</a>	SSH	OK	2009-09-03 14:41:47	1d 22h 41m 39s	1/4	SSH OK - OpenSSH_5.1p1 Debian-3ubuntu1 (protocol 2.0)
<a href="#">NOC-TLD8</a>	SSH	OK	2009-09-03 14:44:23	1d 22h 44m 3s	1/4	SSH OK - OpenSSH_5.1p1 Debian-3ubuntu1 (protocol 2.0)
<a href="#">NS1-TLD1</a>	SSH	OK	2009-09-03 14:41:53	1d 0h 1m 33s	1/4	SSH OK - OpenSSH_5.1p1 Debian-3ubuntu1 (protocol 2.0)
<a href="#">NS1-TLD2</a>	SSH	OK	2009-09-03 14:44:30	1d 22h 43m 56s	1/4	SSH OK - OpenSSH_5.1p1 Debian-3ubuntu1 (protocol 2.0)
<a href="#">NS1-TLD3</a>	SSH	OK	2009-09-03 14:42:00	1d 22h 41m 26s	1/4	SSH OK - OpenSSH_5.1p1 Debian-3ubuntu1 (protocol 2.0)
<a href="#">NS1-TLD4</a>	SSH	OK	2009-09-03 14:44:36	1d 22h 43m 50s	1/4	SSH OK - OpenSSH_5.1p1 Debian-3ubuntu1 (protocol 2.0)
<a href="#">NS1-TLD5</a>	SSH	OK	2009-09-03 14:42:06	1d 22h 41m 20s	1/4	SSH OK - OpenSSH_5.1p1 Debian-3ubuntu1 (protocol 2.0)
<a href="#">NS1-TLD6</a>	SSH	OK	2009-09-03 14:44:42	1d 22h 43m 42s	1/4	SSH OK - OpenSSH_5.1p1 Debian-3ubuntu1 (protocol 2.0)

# Features

Utilizes topology to determine dependencies.

- Differentiates between what is *down* vs. what is *unreachable*. Avoids running unnecessary checks and sending redundant alarms

Allows you to define how to send notifications based on combinations of:

- Contacts and lists of contacts
- Devices and groups of devices
- Services and groups of services
- Defined hours by persons or groups.
- The state of a service.

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