

Screenshots for Experiment 10


```

* nagios.service - Nagios Core 4.4.14
   Loaded: loaded (/lib/systemd/system/nagios.service; enabled; vendor preset: enabled)
   Active: active (running) since Sat 2023-09-30 08:54:01 UTC; 20s ago
     Docs: https://www.nagios.org/documentation
   Process: 55285 ExecStartPre=/usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg (code=exited, status=0/SUCCESS)
   Process: 55286 ExecStart=/usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg (code=exited, status=0/SUCCESS)
   Main PID: 55287 (nagios)
    Tasks: 6 (limit: 1141)
   Memory: 5.3M
     CPU: 252ms
   CGroup: /system.slice/nagios.service
           └─55287 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
             └─55288 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
               └─55289 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                 └─55290 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                   └─55291 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                     └─55292 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg

Sep 30 08:54:01 ip-172-31-44-151 nagios[55287]: qh: Socket '/usr/local/nagios/var/rw/nagios.qh' successfully initialized
lines 1-19


```

Monitoring a Linux machine, create an Ubuntu 20.04 server EC2 Instance in AWS.



New EC2 Experience

Tell us what you think



EC2 Dashboard


EC2 Global View

Events

▼ Instances

Instances (16)

Info



Connect


Instance state ▼










Actions ▼

Launch Instances ▼

Find instance by attribute or tag (case-sensitive)

< 1 >



<input type="checkbox"/>	Name ▼	Instance ID	Instance state ▼	Instance type ▼	Status check	Alarm status	Availability
<input type="checkbox"/>	cutenagios_se...	i-09d6b0d2e181a7287	 Running  	t2.micro	–	No alarms	+ ap-south-
<input type="checkbox"/>	cutenagios_cli...	i-0e36968400dac0991	 Running  	t2.micro	–	No alarms	+ ap-south-
<input type="checkbox"/>	cutenagios_se...	i-03a3e79fc5ab0a056	 Stopped  	t2.micro	–	No alarms	+ ap-south-

```

sudo apt update -y
sudo apt install gcc -y
sudo apt install -y nagios-nrpe-server nagios-plugins

```

```

*** System restart required ***
Last login: Sat Sep 30 08:31:30 2023 from 13.233.177.3
ubuntu@ip-172-31-44-151:~$ sudo apt install gcc -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
gcc is already the newest version (4:11.2.0-1ubuntu1).
gcc set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 2 not upgraded.
ubuntu@ip-172-31-44-151:~$

root@ip-172-31-44-151:/home/ubuntu# sudo apt install nagios-nrpe-server nagios-plugins
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Note, selecting 'monitoring-plugins' instead of 'nagios-plugins'
monitoring-plugins is already the newest version (2.3.1-1ubuntu4).
nagios-nrpe-server is already the newest version (4.0.3-1ubuntu2).
0 upgraded, 0 newly installed, 0 to remove and 2 not upgraded.

Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Fetched 229 kB in 1s (290 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
2 packages can be upgraded. Run 'apt list --upgradable' to see them.
root@ip-172-31-44-151:/home/ubuntu# sudo apt install gcc -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
gcc is already the newest version (4:11.2.0-1ubuntu1).
0 upgraded, 0 newly installed, 0 to remove and 2 not upgraded.
root@ip-172-31-44-151:/home/ubuntu# sudo apt install -y nagios-nrpe-server nagios-plugins
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Note, selecting 'monitoring-plugins' instead of 'nagios-plugins'
monitoring-plugins is already the newest version (2.3.1-1ubuntu4).
nagios-nrpe-server is already the newest version (4.0.3-1ubuntu2).
0 upgraded, 0 newly installed, 0 to remove and 2 not upgraded.

```

sudo nano /etc/nagios/nrpe.cfg

```
GNU nano 6.2 /etc/nagios/nrpe.cfg
# SERVER ADDRESS
# Address that nrpe should bind to in case there are more than one interface
# and you do not want nrpe to bind on all interfaces.
# NOTE: This option is ignored if NRPE is running under either inetd or xinetd
#server_address=127.0.0.1

# LISTEN QUEUE SIZE
# Listen queue size (backlog) for serving incoming connections.
# You may want to increase this value under high load.
#listen_queue_size=5
[]
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   ^U Undo       ^M Set Mark
^X Exit      ^R Read File  ^N Replace    ^P Paste      ^J Justify    ^/_ Go To Line ^E Redo       ^G Copy
```

```
GNU nano 6.2 /etc/nagios/nrpe.cfg *
95 # that are allowed to talk to the NRPE daemon. Network addresses with a bit mask
96 # (i.e. 192.168.1.0/24) are also supported. Hostname wildcards are not currently
97 # supported.
98 #
99 # Note: The daemon only does rudimentary checking of the client's IP
100 # address. I would highly recommend adding entries in your /etc/hosts.allow
101 # file to allow only the specified host to connect to the port
102 # you are running this daemon on.
103 #
104 # NOTE: This option is ignored if NRPE is running under either inetd or xinetd
105
106 allowed_hosts=127.0.0.1,::1,13.235.0.144
107 server_address=0.0.0.0[]
108
109
110
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   ^U Undo       ^M Set Mark
^X Exit      ^R Read File  ^N Replace    ^P Paste      ^J Justify    ^/_ Go To Line ^E Redo       ^G Copy
```

sudo systemctl restart nagios-nrpe-server

```
Restarting services...
Service restarts being deferred:
/etc/needrestart/restart.d/dbus.service
systemctl restart getty@tty1.service
systemctl restart networkd-dispatcher.service
systemctl restart systemd-logind.service
systemctl restart unattended-upgrades.service
systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-172-31-41-41:/home/ubuntu# sudo nano /etc/nagios/nrpe.cfg
root@ip-172-31-41-41:/home/ubuntu# sudo nano /etc/nagios/nrpe.cfg
root@ip-172-31-41-41:/home/ubuntu# sudo systemctl restart nagios-nrpe-server
root@ip-172-31-41-41:/home/ubuntu# sudo systemctl status nagios-nrpe-server
* nagios-nrpe-server.service - Nagios Remote Plugin Executor
```

```

root@ip-172-31-41-41:/home/ubuntu# sudo systemctl status nagios-nrpe-server
● nagios-nrpe-server.service - Nagios Remote Plugin Executor
   Loaded: loaded (/lib/systemd/system/nagios-nrpe-server.service; enabled; vendor preset: enabled)
   Active: active (running) since Sat 2023-09-30 09:27:17 UTC; 6s ago
     Docs: http://www.nagios.org/documentation
   Main PID: 7349 (nrpe)
    Tasks: 1 (limit: 1141)
   Memory: 1.5M
      CPU: 9ms
   CGroup: /system.slice/nagios-nrpe-server.service
           └─7349 /usr/sbin/nrpe -c /etc/nagios/nrpe.cfg -f

Sep 30 09:27:17 ip-172-31-41-41 systemd[1]: nagios-nrpe-server.service: Deactivated successfully.
Sep 30 09:27:17 ip-172-31-41-41 systemd[1]: Stopped Nagios Remote Plugin Executor.
Sep 30 09:27:17 ip-172-31-41-41 systemd[1]: Started Nagios Remote Plugin Executor.
Sep 30 09:27:17 ip-172-31-41-41 nrpe[7349]: Starting up daemon
Sep 30 09:27:17 ip-172-31-41-41 nrpe[7349]: Server listening on 0.0.0.0 port 5666.
Sep 30 09:27:17 ip-172-31-41-41 nrpe[7349]: Listening for connections on port 5666
Sep 30 09:27:17 ip-172-31-41-41 nrpe[7349]: Allowing connections from: 127.0.0.1,::1,13.235.0.144
root@ip-172-31-41-41:/home/ubuntu# █

```

ps -ef | grep nagios

```

root@ip-172-31-44-151:/home/ubuntu# ps -ef | grep nagios
nagios    55287      1    0 08:54 ?        00:00:00 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
nagios    55288    55287    0 08:54 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios    55289    55287    0 08:54 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios    55290    55287    0 08:54 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios    55291    55287    0 08:54 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios    55292    55287    0 08:54 ?        00:00:00 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
nagios    56327      1    0 08:58 ?        00:00:00 /usr/sbin/nrpe -c /etc/nagios/nrpe.cfg -f
root      60903    60158    0 09:32 pts/1    00:00:00 grep --color=auto nagios
root@ip-172-31-44-151:/home/ubuntu# sudo su
root@ip-172-31-44-151:/home/ubuntu# mkdir /usr/local/nagios/etc/objects/monitorhosts
root@ip-172-31-44-151:/home/ubuntu# mkdir /usr/local/nagios/etc/objects/monitorhosts/linuxhosts

```

1.sudo su 2.mkdir /usr/local/nagios/etc/objects/monitorhosts 3.mkdir /usr/local/nagios/etc/objects/monitorhosts/linuxhosts Copy the sample localhost.cfg file to linuxhost folder 4.cp /usr/local/nagios/etc/objects/localhost.cfg /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg

```

root@ip-172-31-44-151:/home/ubuntu# cp /usr/local/nagios/etc/objects/localhost.cfg /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
root@ip-172-31-44-151:/home/ubuntu# nano /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg

```

```
GNU nano 6.2 /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
#####
# Define a host for the local machine
#
define host {
    use                linux-server          ; Name of host template to use
                                           ; This host definition will inherit all variables that are defined
                                           ; in (or inherited by) the linux-server host template definition.

    host_name          localhost
    alias              localhost
    address            127.0.0.1
}

^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   M-U Undo      M-A Set Mark
^X Exit      ^R Read File  ^\ Replace    ^U Paste      ^J Justify    ^/_ Go To Line  M-E Redo      M-6 Copy

i-03a3e79fc5ab0a056 (cutenagios_server)
```

```
GNU nano 6.2 /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg *
#####
# HOST GROUP DEFINITION
#
#####
# Define an optional hostgroup for Linux machines
#
define hostgroup {
    hostgroup_name     linux-servers        ; The name of the hostgroup
    alias              Linux Servers        ; Long name of the group
    members             localhost           ; Comma separated list of hosts that belong to this group
}

^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   M-U Undo      M-A Set Mark
^X Exit      ^R Read File  ^\ Replace    ^U Paste      ^J Justify    ^/_ Go To Line  M-E Redo      M-6 Copy
```

```
GNU nano 6.2 /usr/local/nagios/etc/nagios.cfg *
# You can also tell Nagios to process all config files (with a .cfg
# extension) in a particular directory by using the cfg_dir
# directive as shown below:
#
#cfg_dir=/usr/local/nagios/etc/servers
#cfg_dir=/usr/local/nagios/etc/printers
#cfg_dir=/usr/local/nagios/etc/switches
#cfg_dir=/usr/local/nagios/etc/routers
cfg_dir=/usr/local/nagios/etc/objects/monitorhosts/

# OBJECT CACHE FILE
# This option determines where object definitions are cached when
# Nagios starts/restarts. The CGIs read object definitions from
#
Save modified buffer?
Y Yes
N No      ^G Cancel
```

```
root@ip-172-31-44-151:/home/ubuntu# nano /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
root@ip-172-31-44-151:/home/ubuntu# /usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg

Nagios Core 4.4.14
Copyright (c) 2009-present Nagios Core Development Team and Community Contributors
Copyright (c) 1999-2009 Ethan Galstad
Last Modified: 2023-08-01
License: GPL

Website: https://www.nagios.org
Reading configuration data...
  Read main config file okay...
  Read object config files okay...

Running pre-flight check on configuration data...

Checking objects...
  Checked 8 services.
  Checked 1 hosts.
  Checked 1 host groups.
```

```
Checked 1 contacts.
Checked 1 contact groups.
Checked 24 commands.
Checked 5 time periods.
Checked 0 host escalations.
Checked 0 service escalations.
Checking for circular paths...
Checked 1 hosts
Checked 0 service dependencies
Checked 0 host dependencies
Checked 5 timeperiods
Checking global event handlers...
Checking obsessive compulsive processor commands...
Checking misc settings...

Total Warnings: 0
Total Errors: 0

Things look okay - No serious problems were detected during the pre-flight check
root@ip-172-31-44-151:/home/ubuntu# nano /usr/local/nagios/etc/nagios.cfg
```

Sudo systemctl status nagios

```
● nagios.service - Nagios Core 4.4.14
   Loaded: loaded (/lib/systemd/system/nagios.service; enabled; vendor preset: enabled)
   Active: active (running) since Sat 2023-09-30 08:54:01 UTC; 20s ago
     Docs: https://www.nagios.org/documentation
   Process: 55285 ExecStartPre=/usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg (code=exited, status=0/SUCCESS)
   Process: 55286 ExecStart=/usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg (code=exited, status=0/SUCCESS)
  Main PID: 55287 (nagios)
    Tasks: 6 (limit: 1141)
   Memory: 5.3M
      CPU: 252ms
   CGroup: /system.slice/nagios.service
           └─55287 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
             └─55288 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
               └─55289 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                 └─55290 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                   └─55291 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                     └─55292 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg

Sep 30 08:54:01 ip-172-31-44-151 nagios[55287]: qh: Socket '/usr/local/nagios/var/rw/nagios.qh' successfully initialized
lines 1-19
```

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Current Network Status

Last Updated: Sat Sep 30 18:22:09 UTC 2023

Updated every 90 seconds

Nagios® Core™ 4.4.14 - www.nagios.org

Logged in as nagiosadmin

View Service Status Detail For All Host Groups

View Status Overview For All Host Groups

View Status Summary For All Host Groups

View Status Grid For All Host Groups

Host Status Totals

Up	Down	Unknown	Disabled	Missing
0	0	0	0	0
All Problems		All Types		
0		2		

Service Status Totals

Up	Warning	Unhandled	Service	Disabled
0	0	0	3	0
All Problems		All Types		
3		16		

Host Status Details For All Host Groups

Limit Results: 100

Host **	Status **	Last Check **	Duration **	Status Information
ip-172-31-44-151	UP	09-30-2023 18:17:06	0d 0h 5m 3s	PING OK - Packet loss = 0%, RTA = 0.62 ms
ip-172-31-44-151	UP	09-30-2023 18:20:14	0d 9h 28m 7s	PING OK - Packet loss = 0%, RTA = 0.04 ms

Results 1 - 2 of 2 Matching Hosts

← ↻ 🔒 Not secure | 13.233.247.135/nagios/

Nagios®

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Alerts

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- Summary
- Histogram (Legacy)

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Process Info

Performance Info

Scheduling Queue

Configuration

Current Network Status

Last Updated: Tue Oct 3 23:38:11 UTC 2023

Updated every 90 seconds

Nagios® Core™ 4.4.14 - www.nagios.org

Logged in as nagiosadmin

View History For all hosts

View Notifications For All Hosts

View Host Status Detail For All Hosts

Host Status Totals

No	Down	Unreachable	Pending
2	0	0	0
All Problems		All Types	
0		2	

Service Status Totals

No	Warning	Unknown	Critical	Pending
13	0	0	3	0
All Problems		All Types		
3		16		

Service Status Details For All Hosts

Limit Results: 100 ▾

Host **	Service **	Status **	Last Check **	Duration **	Attempt **	Status Information
linuxserver	Current Load	OK	10-03-2023 23:34:51	3d 13h 47m 10s	1/4	OK - load average: 0.00, 0.02, 0.00
	Current Users	OK	10-03-2023 23:35:29	3d 13h 46m 32s	1/4	USERS OK - 2 users currently logged in
	HTTP	CRITICAL	10-03-2023 23:36:06	0d 0h 12m 5s	4/4	CRITICAL - Socket timeout
	PING	OK	10-03-2023 23:36:44	0d 0h 1m 27s	1/4	PING OK - Packet loss = 0%, RTA = 0.60 ms
	Root Partition	OK	10-03-2023 23:37:21	3d 13h 44m 40s	1/4	DISK OK - free space: / 4859 MiB (62.78% inode=88%):
	SSH	OK	10-03-2023 23:37:59	0d 0h 0m 12s	1/4	SSH OK - OpenSSH_8.9p1 Ubuntu-3ubuntu0.1 (protocol 2.0)
	Swap Usage	CRITICAL	10-03-2023 23:33:36	3d 13h 43m 25s	4/4	SWAP CRITICAL - 0% free (0 MB out of 0 MB) - Swap is either disabled, not present, or of zero size.
	Total Processes	OK	10-03-2023 23:34:14	3d 13h 42m 47s	1/4	PROCS OK: 39 processes with STATE = RSZDT
localhost	Current Load	OK	10-03-2023 23:35:10	3d 14h 43m 33s	1/4	OK - load average: 0.00, 0.02, 0.00
	Current Users	OK	10-03-2023 23:35:47	3d 14h 42m 55s	1/4	USERS OK - 2 users currently logged in
	HTTP	OK	10-03-2023 23:36:25	3d 14h 42m 18s	1/4	HTTP OK: HTTP/1.1 200 OK - 10945 bytes in 0.000 second response time
	PING	OK	10-03-2023 23:37:02	3d 14h 41m 40s	1/4	PING OK - Packet loss = 0%, RTA = 0.04 ms
	Root Partition	OK	10-03-2023 23:37:40	3d 14h 41m 3s	1/4	DISK OK - free space: / 4859 MiB (62.78% inode=88%):
	SSH	OK	10-03-2023 23:33:17	3d 14h 40m 25s	1/4	SSH OK - OpenSSH_8.9p1 Ubuntu-3ubuntu0.4 (protocol 2.0)
	Swap Usage	CRITICAL	10-03-2023 23:33:55	3d 14h 36m 48s	4/4	SWAP CRITICAL - 0% free (0 MB out of 0 MB) - Swap is either disabled, not present, or of zero size.
	Total Processes	OK	10-03-2023 23:33:24	3d 14h 39m 10s	1/4	PROCS OK: 40 processes with STATE = RSZDT

Results 1 - 16 of 16 Matching Services