

EXPERIMENT NO. 10

Aim: To perform Port, Service monitoring, and Windows/Linux server monitoring using Nagios.

1. To Confirm Nagios is running on the server side

Perform the following command on your Amazon Linux Machine (Nagios-host).

`sudo systemctl status nagios`

```
[ec2-user@ip-172-31-13-224 ~]$ sudo systemctl status nagios
● nagios.service - Nagios Core 4.5.5
   Loaded: loaded (/etc/systemd/system/nagios.service; enabled; preset: disabled)
   Active: active (running) since Sat 2024-10-05 19:22:57 UTC; 2min 1s ago
     Main PID: 74867 (nagios)
        Tasks: 6 (limit: 1112)
      Memory: 5.6M
         CPU: 233ms
       CGroup: /system.slice/nagios.service
               └─74867 /usr/local/nagios/bin/nagios /usr/local/nagios/etc/nagios.cfg
                 └─74868 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                 └─74869 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                 └─74870 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                 └─74871 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                 └─74872 /usr/local/nagios/bin/nagios /usr/local/nagios/etc/nagios.cfg

Oct 05 19:22:57 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[74867]: wproc: Registry request: name=Core Worker 74869;pid=
Oct 05 19:22:57 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[74867]: wproc: Registry request: name=Core Worker 74868;pid=
Oct 05 19:22:57 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[74867]: Successfully launched command file worker with pid 7
Oct 05 19:22:57 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[74867]: Successfully launched command file worker with pid 7
Oct 05 19:22:57 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[74867]: HOST ALERT: localhost;DOWN;SOFT;1;(No output on stdo
Oct 05 19:23:34 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[74867]: SERVICE ALERT: localhost;Current Load;CRITICAL;HARD;
Oct 05 19:23:57 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[74867]: HOST ALERT: localhost;DOWN;SOFT;2;(No output on stdo
Oct 05 19:24:12 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[74867]: SERVICE ALERT: localhost;Current Users;CRITICAL;HARD;
Oct 05 19:24:49 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[74867]: SERVICE ALERT: localhost;HTTP;CRITICAL;HARD;1;(No ou
Oct 05 19:24:57 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[74867]: HOST ALERT: localhost;DOWN;SOFT;3;(No output on stdo
lines 1-25/25 (END)
```

You can now proceed if you get the above message/output.

2. Now Create a new EC2 instance. Name: Nagios-client, AMI: Ubuntu Instance Type: t2.micro.

Launch an instance

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags

Name

Add additional tags

Application and OS Images (Amazon Machine Image)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

Recents

Quick Start

Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Summary

Number of instances

Software Image (AMI)

Canonical, Ubuntu, 24.04, amd64...read more

ami-001f2488b35ca8aad

Virtual server type (instance type)

t2.micro

Firewall (security group)

nagios

Storage (volumes)

1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots and 100

Cancel

Launch instance

Review commands

For Key pair : Click on create key and make key of type RSA with extension .pem . Key will be downloaded to your local machine. Now select that key in the key pair if you already have a key with type RSA and extension .pem no need to create a new key but you must have that key downloaded.

▼ Instance type [Info](#) | [Get advice](#)

Instance type

t2.micro

Family: t2 1 vCPU 1 GiB Memory Current generation: true

On-Demand SUSE base pricing: 0.0146 USD per Hour

On-Demand Linux base pricing: 0.0146 USD per Hour

On-Demand Windows base pricing: 0.0192 USD per Hour

On-Demand RHEL base pricing: 0.029 USD per Hour

Free tier eligible

☐ All generations

[Compare instance types](#)

Additional costs apply for AMIs with pre-installed software

▼ Key pair (login) [Info](#)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - *required*

disco

[Create new key pair](#)

▼ Network settings [Info](#)

Network [Info](#)

vpc-0340ce013f393caf4

Subnet [Info](#)

No preference (Default subnet in any availability zone)

Auto-assign public IP [Info](#)

[Edit](#)

▼ Summary

Number of instances [Info](#)

1

Software Image (AMI)

Canonical, Ubuntu, 24.04, amd64...[read more](#)

ami-001f2488b35ca8aad

Virtual server type (instance type)

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×

Cancel

[Launch instance](#)

[Review commands](#)

Select the Existing Security Group and select the Security Group that we have created in Experiment no 9 or the same one you have used for the Nagios server (Nagios-host).

Firewall (security groups) [Info](#)

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

☐ Create security group

☒ Select existing security group

Common security groups [Info](#)

Select security groups

nagios sg-07366110359b11766 ✕

VPC: vpc-0340ce013f393caf4

[Compare security group rules](#)

Security groups that you add or remove here will be added to or removed from all your network interfaces.

▼ Configure storage [Info](#)

1x 8 GiB gp3 Root volume (Not encrypted)

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage

×

[Add new volume](#)

The selected AMI contains more instance store volumes than the instance allows. Only the first 0 instance store volumes from the AMI will be accessible from the instance

Click refresh to view backup information

↻

The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.

0 x File systems

[Edit](#)

▼ Summary

Number of instances [Info](#)

1

Software Image (AMI)

Canonical, Ubuntu, 24.04, amd64...[read more](#)

ami-001f2488b35ca8aad

Virtual server type (instance type)

t2.micro

Firewall (security group)

nagios

Storage (volumes)

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×

Cancel

[Launch instance](#)

[Review commands](#)

- Now After creating the EC2 Instance click on connect and then copy the command which is given as example in the SSH Client section . Now open the terminal in the folder where your key(RSA key with .pem) is located. and paste that copied command.

```
PS C:\Users\bhumi> cd "C:\Users\bhumi\OneDrive\Desktop\New folder"
PS C:\Users\bhumi\OneDrive\Desktop\New folder> ssh -i "disco.pem" ubuntu@ec2-3-25-84-91.ap-southeast-2.compute.amazonaws.com
The authenticity of host 'ec2-3-25-84-91.ap-southeast-2.compute.amazonaws.com (3.25.84.91)' can't be established.
ED25519 key fingerprint is SHA256:zIXx3ATmWCr9U4e6inijfig4vG+8ji+Xm8Lz0cDdHCc.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-3-25-84-91.ap-southeast-2.compute.amazonaws.com' (ED25519) to the list of known hosts.
Welcome to Ubuntu 24.04.1 LTS (GNU/Linux 6.8.0-1016-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Sat Oct  5 18:51:05 UTC 2024

System load:  0.0          Processes:            105
Usage of /:   23.0% of 6.71GB Users logged in:      0
Memory usage: 20%         IPv4 address for enx0: 172.31.5.17
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

Last login: Sat Oct  5 18:26:23 2024 from 13.239.158.3
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
```

Successfully connected to the instance.

Now perform all the commands on the Nagios-host till step 10

- Now on the server Nagios-host run the following command.

ps -ef | grep nagios

```
[ec2-user@ip-172-31-13-224 ~]$ ps -ef | grep nagios
nagios    74867      1  0 19:22 ?        00:00:00 /usr/local/nagios/bin/nagios /usr/local/nagios/etc/nagios.cfg
nagios    74868    74867  0 19:22 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios    74869    74867  0 19:22 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios    74870    74867  0 19:22 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios    74871    74867  0 19:22 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios    74872    74867  0 19:22 ?        00:00:00 /usr/local/nagios/bin/nagios /usr/local/nagios/etc/nagios.cfg
ec2-user  75110    75013  0 19:26 pts/1    00:00:00 grep --color=auto nagios
[ec2-user@ip-172-31-13-224 ~]$
```

- Now Become root user and create root directories.

sudo su

mkdir /usr/local/nagios/etc/objects/monitorhosts

mkdir /usr/local/nagios/etc/objects/monitorhosts/linuxhosts

```
ec2-user  75110    75013  0 19:26 pts/1    00:00:00 grep --color=auto nagios
[ec2-user@ip-172-31-13-224 ~]$ sudo su
[root@ip-172-31-13-224 ec2-user]# mkdir /usr/local/nagios/etc/objects/monitorhosts
[root@ip-172-31-13-224 ec2-user]# mkdir /usr/local/nagios/etc/objects/monitorhosts/linuxhosts
[root@ip-172-31-13-224 ec2-user]#
```

- Copy the sample localhost.cfg to linuxhost.cfg by running the following command.
(Below command should come in one line see screenshot below)

```
cp /usr/local/nagios/etc/objects/localhost.cfg
/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
```

```
[root@ip-172-31-13-224 ec2-user]# cp /usr/local/nagios/etc/objects/localhost.cfg /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
[root@ip-172-31-13-224 ec2-user]#
```

7. Open linuxserver.cfg using nano and make the following changes everywhere in the file.
Change hostname to linuxserver.
Change address to the public IP of your Linux client.
Set hostgroup_name to linux-servers1.

nano /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg

```
[root@ip-172-31-13-224 ec2-user]# sudo sed -i 's/^ *host_name.*/ host_name linuxserver/' /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
sudo sed -i 's/^ *address.*/ address 3.25.70.155/' /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
sudo sed -i 's/^ *hostgroup_name.*/ hostgroup_name linux-servers1/' /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
[root@ip-172-31-13-224 ec2-user]# nano /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
[root@ip-172-31-13-224 ec2-user]# nano /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
```

```
#####
#
# HOST DEFINITION
#
#####
# 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          linuxserver
    alias               localhost
    address             3.25.70.155
}
```

8. Now update the Nagios config file .Add the following line in the file.

Line to add : cfg_dir=/usr/local/nagios/etc/objects/monitorhosts/
Run the command : nano /usr/local/nagios/etc/nagios.cfg

```
# OBJECT CONFIGURATION FILE(S)
# These are the object configuration files in which you define hosts,
# host groups, contacts, contact groups, services, etc.
# You can split your object definitions across several config files
# if you wish (as shown below), or keep them all in a single config file.

# You can specify individual object config files as shown below:
cfg_file=/usr/local/nagios/etc/objects/commands.cfg
cfg_file=/usr/local/nagios/etc/objects/contacts.cfg
cfg_file=/usr/local/nagios/etc/objects/timeperiods.cfg
cfg_file=/usr/local/nagios/etc/objects/templates.cfg
cfg_dir=/usr/local/nagios/etc/objects/monitorhosts/
```

9. Now Verify the configuration files by running the following commands.
/usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg

```
[root@ip-172-31-13-224 ec2-user]# /usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg

Nagios Core 4.5.5
Copyright (c) 2009-present Nagios Core Development Team and Community Contributors
Copyright (c) 1999-2009 Ethan Galstad
Last Modified: 2024-09-17
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 16 services.
  Checked 2 hosts.
  Checked 2 host groups.
  Checked 0 service 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 2 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
```

10. Now restart the services of nagios by running the following command.
service nagios restart

```
[root@ip-172-31-13-224 ec2-user]# service nagios restart
Redirecting to /bin/systemctl restart nagios.service
[root@ip-172-31-13-224 ec2-user]#
```

11. Now go to the **Nagios-client** ssh terminal and update and install the packages by running the following command.

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

```
ubuntu@ip-172-31-5-17:~$ sudo apt update -y
sudo apt install gcc -y
sudo apt install -y nagios-nrpe-server nagios-plugins
Hit:1 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:3 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:4 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
Get:5 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:6 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]
Get:7 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
Get:8 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 c-n-f Metadata [301 kB]
Get:9 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [269 kB]
Get:10 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/multiverse Translation-en [118 kB]
Get:11 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Components [35.0 kB]
Get:12 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 c-n-f Metadata [8328 B]
Get:13 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [537 kB]
Get:14 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main Translation-en [132 kB]
Get:15 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 c-n-f Metadata [8860 B]
Get:16 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [384 kB]
Get:17 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [159 kB]
```

```

Creating config file /etc/nagios-plugins/config/snmp.cfg with new version
Setting up monitoring-plugins (2.3.5-1ubuntu3) ...
Setting up libldb2:amd64 (2:2.8.0+samba4.19.5+dfsg-4ubuntu9) ...
Setting up libavahi-client3:amd64 (0.8-13ubuntu6) ...
Setting up samba-lsmb:amd64 (2:4.19.5+dfsg-4ubuntu9) ...
Setting up python3-ldb (2:2.8.0+samba4.19.5+dfsg-4ubuntu9) ...
Setting up samba-dsdb-modules:amd64 (2:4.19.5+dfsg-4ubuntu9) ...
Setting up libsmbclient0:amd64 (2:4.19.5+dfsg-4ubuntu9) ...
Setting up libcups2t64:amd64 (2.4.7-1.2ubuntu7.3) ...
Setting up python3-samba (2:4.19.5+dfsg-4ubuntu9) ...
Setting up smbclient (2:4.19.5+dfsg-4ubuntu9) ...
Setting up samba-common-bin (2:4.19.5+dfsg-4ubuntu9) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.3) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

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.
ubuntu@ip-172-31-5-17:~$

```

12. Open nrpe.cfg file to make changes. Under allowed_hosts, add your nagios host IP address.

```
sudo nano /etc/nagios/nrpe.cfg
```

```

# ALLOWED HOST ADDRESSES
# This is an optional comma-delimited list of IP address or hostnames
# that are allowed to talk to the NRPE daemon. Network addresses with a bit mask
# (i.e. 192.168.1.0/24) are also supported. Hostname wildcards are not currently
# supported.
#
# Note: The daemon only does rudimentary checking of the client's IP
# address. I would highly recommend adding entries in your /etc/hosts.allow
# file to allow only the specified host to connect to the port
# you are running this daemon on.
#
# NOTE: This option is ignored if NRPE is running under either inetd or xinetd

allowed_hosts=127.0.0.1,:::1,3.25.70.155|

```

13. Now restart the NRPE server by this command.

```
sudo systemctl restart nagios-nrpe-server
```

```

ubuntu@ip-172-31-5-17:~$ sudo nano /etc/nagios/nrpe.cfg
ubuntu@ip-172-31-5-17:~$ sudo systemctl restart nagios-nrpe-server
ubuntu@ip-172-31-5-17:~$

```

14. Now again check the status of Nagios by running this command on Nagios-host and also check httpd is active and run the command to activate it.

```
sudo systemctl status nagios
```



```
[root@ip-172-31-13-224 ec2-user]# sudo systemctl status nagios
● nagios.service - Nagios Core 4.5.5
   Loaded: loaded (/etc/systemd/system/nagios.service; enabled; preset: disabled)
   Active: active (running) since Sat 2024-10-05 19:42:04 UTC; 22min ago
     Main PID: 76185 (nagios)
       Tasks: 6 (limit: 1112)
      Memory: 4.1M
         CPU: 252ms
    CGroup: /system.slice/nagios.service
            └─76185 /usr/local/nagios/bin/nagios /usr/local/nagios/etc/nagios.cfg
              └─76186 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                └─76187 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                  └─76188 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                    └─76189 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                      └─76190 /usr/local/nagios/bin/nagios /usr/local/nagios/etc/nagios.cfg

Oct 05 19:45:11 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[76185]: SERVICE ALERT: linuxserver;Root Partition;CRITICAL;HARD;1;(No o
Oct 05 19:45:49 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[76185]: SERVICE ALERT: linuxserver;SSH;CRITICAL;HARD;1;(No output on st
Oct 05 19:46:04 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[76185]: HOST ALERT: linuxserver;DOWN;SOFT;5;(No output on stdout) stder
Oct 05 19:46:26 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[76185]: SERVICE ALERT: linuxserver;Swap Usage;CRITICAL;HARD;1;(No outpu
Oct 05 19:47:04 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[76185]: SERVICE ALERT: linuxserver;Total Processes;CRITICAL;HARD;1;(No >
Oct 05 19:47:04 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[76185]: HOST ALERT: linuxserver;DOWN;SOFT;6;(No output on stdout) stder
Oct 05 19:48:04 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[76185]: HOST ALERT: linuxserver;DOWN;SOFT;7;(No output on stdout) stder
Oct 05 19:49:04 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[76185]: HOST ALERT: linuxserver;DOWN;SOFT;8;(No output on stdout) stder
Oct 05 19:50:04 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[76185]: HOST ALERT: linuxserver;DOWN;SOFT;9;(No output on stdout) stder
Oct 05 19:51:04 ip-172-31-13-224.ap-southeast-2.compute.internal nagios[76185]: HOST ALERT: linuxserver;DOWN;HARD;10;(No output on stdout) stder
lines 1-25/25 (END)
```

sudo systemctl status httpd

sudo systemctl start httpd

sudo systemctl enable httpd

```
[root@ip-172-31-13-224 ec2-user]# sudo systemctl status httpd
sudo systemctl start httpd
sudo systemctl enable httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
   Drop-In: /usr/lib/systemd/system/httpd.service.d
            └─php-fpm.conf
   Active: active (running) since Sat 2024-10-05 19:12:34 UTC; 51min ago
     Docs: man:httpd.service(8)
    Main PID: 49647 (httpd)
      Status: "Total requests: 24; Idle/Busy workers 100/0;Requests/sec: 0.00772; Bytes served/sec: 52 B/sec"
       Tasks: 230 (limit: 1112)
      Memory: 21.5M
         CPU: 1.806s
    CGroup: /system.slice/httpd.service
            └─49647 /usr/sbin/httpd -DFOREGROUND
              └─49654 /usr/sbin/httpd -DFOREGROUND
                └─49655 /usr/sbin/httpd -DFOREGROUND
                  └─49656 /usr/sbin/httpd -DFOREGROUND
                    └─49657 /usr/sbin/httpd -DFOREGROUND
                      └─77500 /usr/sbin/httpd -DFOREGROUND

Oct 05 19:12:34 ip-172-31-13-224.ap-southeast-2.compute.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Oct 05 19:12:34 ip-172-31-13-224.ap-southeast-2.compute.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Oct 05 19:12:34 ip-172-31-13-224.ap-southeast-2.compute.internal httpd[49647]: Server configured, listening on: port 80
[root@ip-172-31-13-224 ec2-user]#
```

15. Now to check Nagios dashboard go to <http://<nagios-host-public-ip>/nagios>.

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Process Info

Nagios Core

✓ Process running with PID 116923

Nagios Core™

Version 4.5.5

September 17, 2024

Check for updates

Get Started

- Start monitoring your infrastructure
- Change the look and feel of Nagios
- Extend Nagios with hundreds of addons
- Get support
- Get training
- Get certified

Quick Links

- Nagios Library (tutorials and docs)
- Nagios Labs (development blog)
- Nagios Exchange (plugins and addons)
- Nagios Support (tech support)
- Nagios.com (company)
- Nagios.org (project)

Latest News

Don't Miss...

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Now Click on Hosts from left side panel

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Quick Search:

Current Network Status

Last Updated: Sat Oct 5 21:17:24 UTC 2024
Updated every 90 seconds
Nagios® Core™ 4.5.5 - 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	Unreachable	Pending
2	0	0	0

All Problems All Types

0	2
---	---

Service Status Totals

Ok	Warning	Unknown	Critical	Pending
7	1	0	8	0

All Problems All Types

9	16
---	----

Host Status Details For All Host Groups

Limit Results: 100

Host	Status	Last Check	Duration	Status Information
linuxserver	UP	10-05-2024 21:14:41	0d 0h 2m 43s	PING OK - Packet loss = 0%, RTA = 0.79 ms
localhost	UP	10-05-2024 21:15:31	0d 0h 1m 53s	PING OK - Packet loss = 0%, RTA = 0.03 ms

Results 1 - 2 of 2 Matching Hosts

We can see our linuxserver now click on it and we can see the host information.

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Quick Search:

Host Information

Last Updated: Sat Oct 5 21:17:53 UTC 2024
Updated every 90 seconds
Nagios® Core™ 4.5.5 - www.nagios.org
Logged in as nagiosadmin

View Status Detail For This Host
View Alert History For This Host
View Trends For This Host
View Alert Histogram For This Host
View Availability Report For This Host
View Notifications For This Host

Host: **linuxserver**
Host: **localhost (linuxserver)**
Member of: **No hostgroups**
3.25.70.155

Host State Information

Host Status: **UP** (for 0d 0h 3m 12s)

Status Information: PING OK - Packet loss = 0%, RTA = 0.79 ms

Performance Data: rta=0.789000ms;3000.000000;5000.000000;0.000000 pl=0%;80;100;0

Current Attempt: 1/10 (HARD state)

Last Check Time: 10-05-2024 21:14:41

Check Type: ACTIVE

Check Latency / Duration: 0.003 / 4.110 seconds

Next Scheduled Active Check: 10-05-2024 21:19:41

Last State Change: 10-05-2024 21:14:41

Last Notification: N/A (notification 0)

Is This Host Flapping? **NO** (5.59% state change)

In Scheduled Downtime? **NO**

Last Update: 10-05-2024 21:17:50 (0d 0h 0m 3s ago)

Active Checks: **ENABLED**

Passive Checks: **ENABLED**

Obsessing: **ENABLED**

Notifications: **ENABLED**

Event Handler: **ENABLED**

Flap Detection: **ENABLED**

Host Commands

- Locate host on map
- Disable active checks of this host
- Re-schedule the next check of this host
- Submit passive check result for this host
- Stop accepting passive checks for this host
- Stop obsessing over this host
- Disable notifications for this host
- Send custom host notification
- Schedule downtime for this host
- Schedule downtime for all services on this host
- Disable notifications for all services on this host
- Enable notifications for all services on this host
- Schedule a check of all services on this host
- Disable checks of all services on this host
- Enable checks of all services on this host
- Disable event handler for this host
- Disable flap detection for this host
- Clear flapping state for this host

Host Comments

[Add a new comment](#) [Delete all comments](#)

Entry Time	Author	Comment	Comment ID	Persistent	Type	Expires	Actions
This host has no comments associated with it							

Current Network Status

→ ↺ ⚠ Not secure 3.25.70.155/nagios/ ☆ 📄 🗨 B ⋮

nagios

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Current Network Status

Last Updated: Sat Oct 5 21:19:42 UTC 2024

Updated every 90 seconds

Nagios® Core™ 4.5.5 - www.nagios.org

Logged in as nagiosadmin

View History For This Host

View Notifications For This Host

View Service Status Detail For All Hosts

Host Status Totals

Up

Down

Unreachable

Pending

2

0

0

0

All Problems

All Types

0

2

Service Status Totals

Ok

Warning

Unknown

Critical

Pending

12

2

0

2

0

All Problems

All Types

4

16

Service Status Details For Host 'localhost'

Limit Results: 100

Host	Service	Status	Last Check	Duration	Attempt	Status Information
linuxserver	Current Load	OK	10-05-2024 21:17:41	0d 0h 2m 1s	1/4	OK - load average: 0.03, 0.13, 0.07
	Current Users	OK	10-05-2024 21:18:19	0d 0h 1m 23s	1/4	USERS OK - 6 users currently logged in
	HTTP	WARNING	10-05-2024 21:18:56	0d 0h 0m 46s	4/4	HTTP WARNING: HTTP/1.1 403 Forbidden - 319 bytes in 0.001 second response time
	PING	OK	10-05-2024 21:19:34	0d 0h 5m 8s	1/4	PING OK - Packet loss = 0%, RTA = 0.66 ms
	Root Partition	OK	10-05-2024 21:15:11	0d 0h 4m 31s	1/4	DISK OK - free space: / 5568 MiB (68.61% inode=98%)
	SSH	OK	10-05-2024 21:15:49	0d 0h 3m 53s	1/4	SSH OK - OpenSSH_8.7 (protocol 2.0)
	Swap Usage	CRITICAL	10-05-2024 21:16:26	0d 1h 33m 16s	4/4	SWAP CRITICAL - 0% free (0 MB out of 0 MB) - Swap is either disabled, not present, or of zero size.
localhost	Total Processes	OK	10-05-2024 21:17:04	0d 0h 2m 38s	1/4	PROCS OK: 42 processes with STATE = RSZDT
	Current Load	OK	10-05-2024 21:18:34	0d 0h 1m 8s	1/4	OK - load average: 0.24, 0.17, 0.09
	Current Users	OK	10-05-2024 21:19:12	0d 0h 0m 30s	1/4	USERS OK - 6 users currently logged in
	HTTP	WARNING	10-05-2024 21:14:49	0d 0h 4m 53s	4/4	HTTP WARNING: HTTP/1.1 403 Forbidden - 319 bytes in 0.001 second response time
	PING	OK	10-05-2024 21:15:27	0d 0h 4m 15s	1/4	PING OK - Packet loss = 0%, RTA = 0.03 ms
	Root Partition	OK	10-05-2024 21:16:04	0d 0h 3m 38s	1/4	DISK OK - free space: / 5568 MiB (68.61% inode=98%)
	SSH	OK	10-05-2024 21:16:42	0d 0h 3m 0s	1/4	SSH OK - OpenSSH_8.7 (protocol 2.0)
localhost	Swap Usage	CRITICAL	10-05-2024 21:17:19	0d 1h 52m 23s	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	10-05-2024 21:17:57	0d 0h 1m 45s	1/4	PROCS OK: 42 processes with STATE = RSZDT

Results 1 - 16 of 16 Matching Services

Conclusion: In conclusion, the experiment focused on monitoring ports, services, and a Linux server using Nagios. Through the step-by-step process, we successfully configured Nagios to monitor essential network services on the Linux server. By setting up both the Nagios host and client, we were able to track system performance, ensure service availability, and monitor key metrics like CPU and memory usage.