

Advance DevOps

Experiment 10

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

Steps:

1. Firstly, we will check whether nagios is running on the server side by using the command “sudo systemctl status nagios” on the host machine (host machine is the instance connected to the terminal in experiment 9, ensure that you have started the instance created for exp9, also check status of apache).

```
[ec2-user@ip-172-31-87-75 ~]$ sudo systemctl status nagios
● ip-172-31-87-75.ec2.internal
   State: running
     Units: 295 loaded (incl. loaded aliases)
    Jobs: 1 queued
  Failed: 0 units
   Since: Wed 2024-10-02 06:17:29 UTC; 2min 42s ago
 systemd: 252.23-2.amzn2023
 CGroup: /
```

```
[ec2-user@ip-172-31-87-75 ~]$ sudo service httpd restart
Redirecting to /bin/systemctl restart httpd.service
[ec2-user@ip-172-31-87-75 ~]$ sudo systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service;
   Drop-In: /usr/lib/systemd/system/httpd.service.d
            └─php-fpm.conf
   Active: active (running) since Wed 2024-10-02 06:26:51
     Docs: man:httpd.service(8)
  Main PID: 3242 (httpd)
    Status: "Started, listening on: port 80"
    Tasks: 177 (limit: 1112)
   Memory: 13.1M
      CPU: 47ms
   CGroup: /system.slice/httpd.service
           └─3242 /usr/sbin/httpd -DFOREGROUND
             └─3243 /usr/sbin/httpd -DFOREGROUND
               └─3244 /usr/sbin/httpd -DFOREGROUND
                 └─3245 /usr/sbin/httpd -DFOREGROUND
                   └─3246 /usr/sbin/httpd -DFOREGROUND
```

2. Now we will launch a new instance. Select ubuntu for the OS.

Launch an instance Info

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 Info

Name

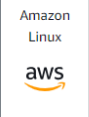
[Add additional tags](#)

▼ Application and OS Images (Amazon Machine Image) Info


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




Amazon Linux




macOS



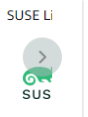
Ubuntu



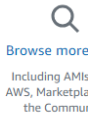
Windows



Red Hat



SUSE Linux



[Browse more AMIs](#)
Including AMIs from AWS, Marketplace and the Community

3. Select the key pair which was created and used in the exp 9.

▼ 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*

[Create new key pair](#)

4. Select existing security group and from the list of options select the security group created for exp 9. Previously it was launch wizard 32 and so here I have selected the same.

▼ Network settings Info

Edit

Network Info

vpc-0d1089189551d9d25

Subnet Info

No preference (Default subnet in any availability zone)

Auto-assign public IP Info

Enable

Additional charges apply when outside of free tier allowance

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

launch-wizard-32 sg-0588f70648d484edd X
VPC: vpc-0d1089189551d9d25

↻ Compare security group rules

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

5. Open a new terminal to connect to the client machine. Copy the SSH command provided in the SSH client section during connection of instance. When pasting the command into your terminal, ensure you specify the full path to your .pem file instead of just the file name.

```
PS C:\Users\Dell> ssh -i "C:\Users\Dell\Downloads\nagios_practical.pem" ubuntu@ec2-18-207-191-20.compute-1.amazonaws.com

The authenticity of host 'ec2-18-207-191-20.compute-1.amazonaws.com (18.207.191.20)' can't be established.
ED25519 key fingerprint is SHA256:NPJPUfsGZXQUXK8GQ9sw/fIzAFXOnabRjiCiAFdyYiU.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-18-207-191-20.compute-1.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 Wed Oct  2 06:36:10 UTC 2024

System load:  0.15           Processes:    106
Usage of /:   22.9% of 6.71GB Users logged in:  0
Memory usage: 21%           IPv4 address for enx0: 172.31.40.130
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
```

6. Now go back to your host machine and run the following command

```
ps -ef | grep nagios
```

```
[ec2-user@ip-172-31-87-75 ~]$ ps -ef | grep nagios
nagios      2002      1  0 06:17 ?        00:00:00 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
nagios      2003     2002  0 06:17 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios      2004     2002  0 06:17 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios      2005     2002  0 06:17 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios      2006     2002  0 06:17 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios      2007     2002  0 06:17 ?        00:00:00 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
ec2-user    4389    2306  0 06:43 pts/0    00:00:00 grep --color=auto nagios
[ec2-user@ip-172-31-87-75 ~]$
```

7. Now perform these commands on the host terminal

```
sudo su
```

```
mkdir -p /usr/local/nagios/etc/objects/monitorhosts/linuxhosts
```

```
[root@ip-172-31-87-75 ec2-user]# mkdir -p /usr/local/nagios/etc/objects/monitorhosts/linuxhosts
[root@ip-172-31-87-75 ec2-user]#
```

```
cp /usr/local/nagios/etc/objects/localhost.cfg
```

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

```
[root@ip-172-31-87-75 ec2-user]# cp /usr/local/nagios/etc/objects/localhost.cfg /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
[root@ip-172-31-87-75 ec2-user]#
```

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

The above given command will open the nano text editor wherein you have to do the following changes:

i. Change the hostgroup name to linux-servers1

```
#####
#
# HOST GROUP DEFINITION
#
#####
# Define an optional hostgroup for Linux machines
define hostgroup {
    hostgroup_name    linux-servers1        ; The name of the hostgroup
    alias              Linux Servers        ; Long name of the group
    members            linuxserver          ; Comma separated list of hosts that belong to this group
}

```

ii. Change host name and alias from localhost to linuxserver everywhere in the file

```
# Define a service to "ping" the local machine
define service {
    use                local-service        ; Name of service template to use
    host_name          linuxserver
    service_description PING
    check_command       check_ping!100.0,20%!500.0,60%
}

```

- iii. Change the address to the public IPv4 address of the ubuntu instance (You will find the ip address when you select the instance on the ec2 instances dashboard)

```
# 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              linuxserver
    address            18.207.191.20
}
```

8. Open the Nagios Config file by using this command:
nano /usr/local/nagios/etc/nagios.cfg
nano text editor will get opened

```
#####
#
# NAGIOS.CFG - Sample Main Config File for Nagios 4.5.5
#
# Read the documentation for more information on this configuration
# file.  I've provided some comments here, but things may not be so
# clear without further explanation.
#
#
#####

# LOG FILE
# This is the main log file where service and host events are logged
# for historical purposes.  This should be the first option specified
# in the config file!!!

log_file=/usr/local/nagios/var/nagios.log

# 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

# Definitions for monitoring the local (Linux) host
cfg_file=/usr/local/nagios/etc/objects/localhost.cfg

# Definitions for monitoring a Windows machine
```

9. In the text editor add “cfg_dir=/usr/local/nagios/etc/objects/monitorhosts/” this line

```
# 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/
```

10. Now we will verify the configuration files

```
/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
[root@ip-172-31-87-75 ec2-user]# |
```

If there are no errors we can proceed further

11. We will now restart the nagios service
service nagios restart

```
[root@ip-172-31-87-75 ec2-user]# service nagios restart
Redirecting to /bin/systemctl restart nagios.service
[root@ip-172-31-87-75 ec2-user]# |
```

12. Now on the client machine (The ubuntu machine we created for this experiment) run the following command:

sudo apt update -y

```
ubuntu@ip-172-31-40-130:~$ sudo apt update -y
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:4 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]
Get:7 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [380 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 c-n-f Metadata [301 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [269 kB]
Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse Translation-en [118 kB]
Get:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Components [35.0 kB]
Get:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 c-n-f Metadata [8328 B]
Get:14 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [535 kB]
Get:15 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main Translation-en [130 kB]
Get:16 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 c-n-f Metadata [8676 B]
Get:17 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [380 kB]
Get:18 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [156 kB]
Get:19 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [45.0 kB]
Get:20 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [14.9 kB]
Get:21 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Packages [14.4 kB]
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse Translation-en [3608 B]
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [212 B]
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata [532 B]
```

sudo apt install gcc -y

```
ubuntu@ip-172-31-40-130:~$ sudo apt install gcc -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  binutils binutils-common binutils-x86-64-linux-gnu cpp cpp-13 cpp-13-x86-64-linux-gnu cpp-x86-64-linux-gnu fontconfig-config fonts-dejavu-core
  fonts-dejavu-mono gcc-13 gcc-13-base gcc-13-x86-64-linux-gnu gcc-x86-64-linux-gnu libaom3 libasan8 libatomic1 libbinutils libc-dev-bin libc-devtools
  libc6-dev libcc1-0 libcrypt-dev libctf-nobfd0 libctf0 libde265-0 libdeflate0 libfontconfig1 libgcc-13-dev libgd3 libgomp1 libgprofng0
  libheif-plugin-aomdec libheif-plugin-aomenc libheif-plugin-libde265 libheif1 libhwasan0 libisl23 libitm1 libjbig0 libjpeg-turbo8 libjpeg8 liblerc4
  liblsan0 libmpc3 libquadmath0 libsframe1 libsharpyuv0 libtiff6 libtsan2 libubsan1 libwebp7 libxpm4 linux-libc-dev manpages-dev rpcsvc-proto
Suggested packages:
  binutils-doc gprofng-gui cpp-doc gcc-13-locales cpp-13-doc gcc-multilib make autoconf automake libtool flex bison gdb gcc-doc gcc-13-multilib gcc-13-doc
  gdb-x86-64-linux-gnu glibc-doc libgd-tools libheif-plugin-x265 libheif-plugin-ffmpegdec libheif-plugin-jpegdec libheif-plugin-jpegenc
  libheif-plugin-j2kdec libheif-plugin-j2kenc libheif-plugin-ravle libheif-plugin-svtenc
The following NEW packages will be installed:
  binutils binutils-common binutils-x86-64-linux-gnu cpp cpp-13 cpp-13-x86-64-linux-gnu cpp-x86-64-linux-gnu fontconfig-config fonts-dejavu-core
  fonts-dejavu-mono gcc gcc-13 gcc-13-base gcc-13-x86-64-linux-gnu gcc-x86-64-linux-gnu libaom3 libasan8 libatomic1 libbinutils libc-dev-bin libc-devtools
  libc6-dev libcc1-0 libcrypt-dev libctf-nobfd0 libctf0 libde265-0 libdeflate0 libfontconfig1 libgcc-13-dev libgd3 libgomp1 libgprofng0
  libheif-plugin-aomdec libheif-plugin-aomenc libheif-plugin-libde265 libheif1 libhwasan0 libisl23 libitm1 libjbig0 libjpeg-turbo8 libjpeg8 liblerc4
  liblsan0 libmpc3 libquadmath0 libsframe1 libsharpyuv0 libtiff6 libtsan2 libubsan1 libwebp7 libxpm4 linux-libc-dev manpages-dev rpcsvc-proto
0 upgraded, 57 newly installed, 0 to remove and 6 not upgraded.
Need to get 62.8 MB of archives.
After this operation, 222 MB of additional disk space will be used.
```


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

```
ubuntu@ip-172-31-40-130:~$ 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'
The following additional packages will be installed:
  libavahi-client3 libavahi-common-data libavahi-common3 libcups2t64 libdb5.3t64 libldb2 libmysqlclient21 libnet-snmp-perl libpq5 libradscli4 libsmbclient0
  libsnmp-base libsnmp40t64 libtalloc2 libtdb1 libtevent0t64 liburiparser1 libwbclient0 monitoring-plugins-basic monitoring-plugins-common
  monitoring-plugins-standard mysql-common python3-gpg python3-ldb python3-markdown python3-samba python3-talloc python3-tdb rpcbind samba-common
  samba-common-bin samba-dsdb-modules samba-libs smbclient snmp
Suggested packages:
  cups-common libcrypt-des-perl libdigest-hmac-perl libio-socket-inet6-perl snmp-mibs-downloader icinga2 nagios-plugins-contrib fping postfix
  | sendmail-bin | exim4-daemon-heavy | exim4-daemon-light qstat xinetd | inetd python-markdown-doc heimdal-clients python3-dnspython cifs-utils
The following NEW packages will be installed:
  libavahi-client3 libavahi-common-data libavahi-common3 libcups2t64 libdb5.3t64 libldb2 libmysqlclient21 libnet-snmp-perl libpq5 libradscli4 libsmbclient0
  libsnmp-base libsnmp40t64 libtalloc2 libtdb1 libtevent0t64 liburiparser1 libwbclient0 monitoring-plugins monitoring-plugins-basic
  monitoring-plugins-common monitoring-plugins-standard mysql-common nagios-nrpe-server python3-gpg python3-ldb python3-markdown python3-samba
  python3-talloc python3-tdb rpcbind samba-common samba-common-bin samba-dsdb-modules samba-libs smbclient snmp
0 upgraded, 37 newly installed, 0 to remove and 6 not upgraded.
Need to get 16.1 MB of archives.
After this operation, 72.0 MB of additional disk space will be used.
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 nagios-nrpe-server amd64 4.1.0-1ubuntu3 [356 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 rpcbind amd64 1.2.6-7ubuntu2 [46.5 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 libavahi-common-data amd64 0.8-13ubuntu6 [29.7 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 libavahi-common3 amd64 0.8-13ubuntu6 [23.3 kB]
```

13. Open nrpe.cfg file to make changes.

sudo nano /etc/nagios/nrpe.cfg

Under allowed_hosts, add your nagios host public IPv4 address:

```
#
# 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=127.0.0.1,54.163.184.143|

# COMMAND ARGUMENT PROCESSING
# This option determines whether or not the NRPE daemon will allow clients
# to specify arguments to commands that are executed. This option only works
# if the daemon was configured with the --enable-command-args configure script
# option.
#
# *** ENABLING THIS OPTION IS A SECURITY RISK! ***
# Read the SECURITY file for information on some of the security implications
# of enabling this variable.
#
# Values: 0=do not allow arguments, 1=allow command arguments
```

14. Now restart the NRPE server

sudo systemctl restart nagios-nrpe-server

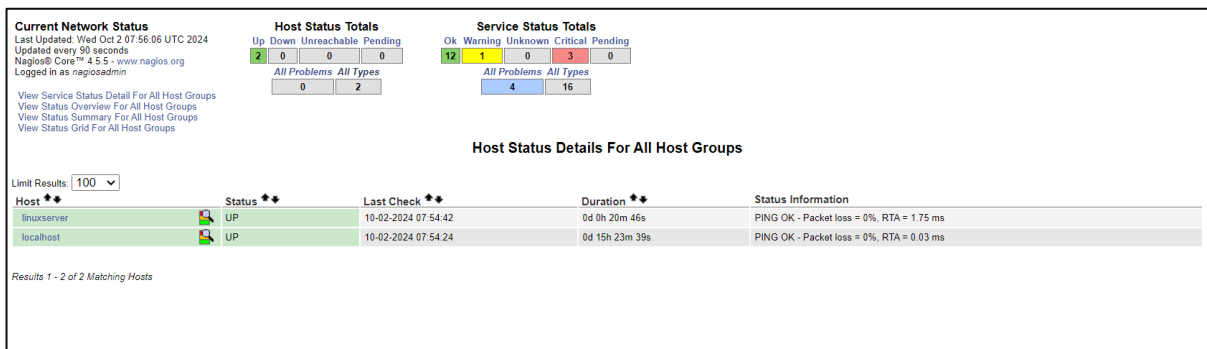
```
ubuntu@ip-172-31-40-130:~$ sudo systemctl restart nagios-nrpe-server
ubuntu@ip-172-31-40-130:~$ |
```


15. Go to the nagios dashboard and click on hosts



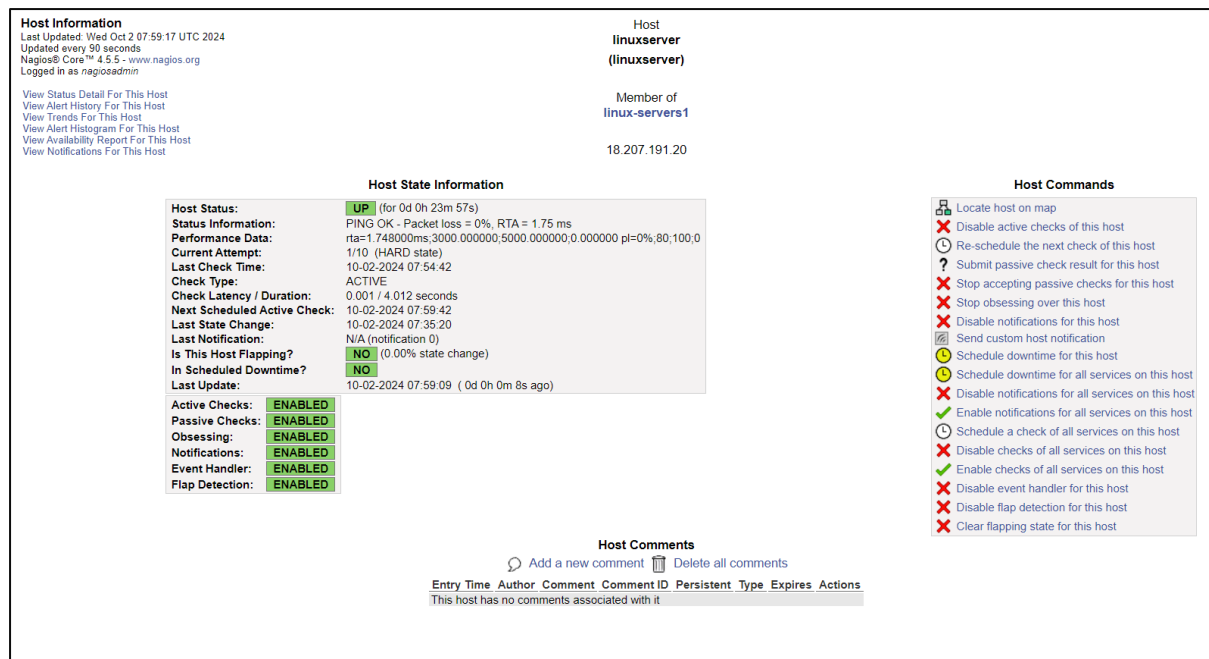
The screenshot shows the Nagios Core 4.5.5 dashboard. The left sidebar contains a navigation menu with sections: General (Home, Documentation), Current Status (Tactical Overview, Map, **Hosts**, Services, Host Groups, Summary, Grid, Service Groups, Summary, Grid), Problems (Services, Unhandled, Hosts, Network Outages), Quick Search, Reports (Availability, Trends, Alerts, History, Summary, Histogram, Notifications, Event Log), and System (Comments, Downtime, Process Info, Performance Info, Scheduling Queue, Configuration). The main content area displays the Nagios Core logo, version 4.5.5, and the date September 17, 2024. It also shows the daemon running with PID 7379. Below this, there are sections for 'Get Started', 'Latest News', 'Don't Miss...', and 'Quick Links'. The 'Get Started' section lists steps for monitoring infrastructure, changing the look and feel, extending Nagios with add-ons, getting support, getting training, and getting certified. The 'Quick Links' section lists links to Nagios Library, Nagios Labs, Nagios Exchange, Nagios Support, Nagios.com, and Nagios.org.

Click on linux server



The screenshot shows the 'Host Status Details for All Host Groups' page. It includes a 'Current Network Status' section with the last update time (Wed Oct 2 07:56:06 UTC 2024) and the Nagios Core version (4.5.5). Below this, there are 'Host Status Totals' and 'Service Status Totals' sections. The 'Host Status Totals' section shows a table with columns: Up, Down, Unreachable, Pending. The 'Service Status Totals' section shows a table with columns: Ok, Warning, Unknown, Critical, Pending. The main section is 'Host Status Details for All Host Groups', which displays a table with columns: Host, Status, Last Check, Duration, and Status Information. The table lists two hosts: linuxserver and localhost, both with a status of UP. The 'Status Information' column for linuxserver shows 'PING OK - Packet loss = 0%, RTA = 1.75 ms'.

We can see the host state information:



The screenshot shows the 'Host Information' page for the host 'linuxserver'. It includes a 'Host Information' section with the last update time (Wed Oct 2 07:59:17 UTC 2024) and the Nagios Core version (4.5.5). Below this, there are 'Host State Information' and 'Host Commands' sections. The 'Host State Information' section shows a table with columns: Host Status, Status Information, Performance Data, Current Attempt, Last Check Time, Check Type, Check Latency / Duration, Next Scheduled Active Check, Last State Change, Last Notification, Is This Host Flapping?, In Scheduled Downtime?, Last Update, Active Checks, Passive Checks, Obsessing, Notifications, Event Handler, and Flap Detection. The 'Host Commands' section lists various commands for the host, such as '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', and 'Clear flapping state for this host'. The 'Host Comments' section at the bottom shows a table with columns: Entry Time, Author, Comment, Comment ID, Persistent, Type, Expires, and Actions. The table is currently empty.

If you want to see all the services and ports being monitored then select the services option and you will see the page as shown below:

Current Network Status Last Updated: Wed Oct 2 07:58:01 UTC 2024 Updated every 50 seconds Nagios® Core™ 4.5.5 - 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 Up Down Unreachable Pending 2 0 0 0 All Problems All Types 0 2						
Service Status Totals Ok Warning Unknown Critical Pending 12 1 0 3 0 All Problems All Types 4 16						
Service Status Details For All Hosts						
Limit Results: 100						
Host	Service	Status	Last Check	Duration	Attempt	Status Information
linuxserver	Current Load	OK	10-02-2024 07:55:57	0d 0h 22m 4s	1/4	OK - load average: 0.00, 0.00, 0.00
	Current Users	OK	10-02-2024 07:56:35	0d 0h 21m 26s	1/4	USERS OK - 3 users currently logged in
	HTTP	CRITICAL	10-02-2024 07:55:12	0d 0h 17m 49s	4/4	connect to address 18.207.191.20 and port 80: Connection refused
	PING	OK	10-02-2024 07:57:50	0d 0h 20m 11s	1/4	PING OK - Packet loss = 0%, RTA = 2.11 ms
	Root Partition	OK	10-02-2024 07:53:27	0d 0h 19m 34s	1/4	DISK OK - free space / 6114 MIB (75.33% inode=98%):
	SSH	OK	10-02-2024 07:54:05	0d 0h 18m 56s	1/4	SSH OK - OpenSSH_9.6p1 Ubuntu-3ubuntu13.5 (protocol 2.0)
	Swap Usage	CRITICAL	10-02-2024 07:57:42	0d 0h 15m 19s	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	10-02-2024 07:55:20	0d 0h 17m 41s	1/4	PROCS OK: 38 processes with STATE = RSZDT
localhost	Current Load	OK	10-02-2024 07:53:09	0d 15h 24m 57s	1/4	OK - load average: 0.00, 0.00, 0.00
	Current Users	OK	10-02-2024 07:53:47	0d 15h 24m 19s	1/4	USERS OK - 3 users currently logged in
	HTTP	WARNING	10-02-2024 07:54:24	0d 1h 28m 37s	4/4	HTTP WARNING: HTTP/1.1 403 Forbidden - 319 bytes in 0.000 second response time
	PING	OK	10-02-2024 07:55:02	0d 15h 23m 4s	1/4	PING OK - Packet loss = 0%, RTA = 0.03 ms
	Root Partition	OK	10-02-2024 07:55:39	0d 15h 22m 27s	1/4	DISK OK - free space / 6114 MIB (75.33% inode=98%):
	SSH	OK	10-02-2024 07:56:17	0d 15h 21m 49s	1/4	SSH OK - OpenSSH_8.7 (protocol 2.0)
	Swap Usage	CRITICAL	10-02-2024 07:56:54	0d 15h 18m 12s	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	10-02-2024 07:57:32	0d 15h 20m 34s	1/4	PROCS OK: 38 processes with STATE = RSZDT

Results 1 - 16 of 16 Matching Services

Conclusion: For performing this experiment it is necessary to start the instance of the previous experiment as that will act as the host and the instance created in this experiment will be the client machine. There were errors when I tried to run the command to verify the Nagios configuration file and in order to resolve those errors I reinstalled the nagios plugins and restarted the nagios service after which the errors were fixed.

