

Name: Sujal.S.Tekwani
Class: D15B
Roll: 63

Lab 10

The screenshot shows the 'Launch an instance' page in the AWS Management Console. The page is titled 'Launch an instance' and includes a brief description of Amazon EC2. The 'Name and tags' section has a text input field for 'Name' containing 'Clinet-Node'. The 'Application and OS Images (Amazon Machine Image)' section shows a search bar and a grid of AMIs. The 'Summary' section on the right lists the configuration: Number of instances (1), Software Image (AMI) (Canonical, Ubuntu, 24.04, amd64), Virtual server type (instance type) (t2.micro), Firewall (security group) (New security group), and Storage (volumes) (1 volume(s) - 8 GiB). A 'Free tier' notification is displayed, stating that the first year includes 750 hours of t2.micro (or t3.micro) 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 GiB of snapshots, and 100 GB of bandwidth to the internet. The 'Launch instance' button is highlighted in orange.

The screenshot shows the 'Instances' page in the AWS Management Console. The page displays a list of instances with the following columns: Name, Instance ID, Instance state, Instance type, Status check, Alarm status, Availability Zone, Public IPv4 DNS, Public IPv4, and Elastic IP. The table shows two instances: 'Clinet-Node' (Instance ID: i-0b6fb736edc840689) and 'nagios-lab10' (Instance ID: i-01047bd56a71011ec). Both instances are in the 'Running' state. The 'Status check' column shows 'Initializing' for 'Clinet-Node' and '2/2 checks passed' for 'nagios-lab10'. The 'Alarm status' column shows 'View alarms' for both instances. The 'Availability Zone' is 'us-east-1d' for both. The 'Public IPv4 DNS' is 'ec2-3-81-125-234.com...' for 'Clinet-Node' and 'ec2-184-73-125-243.co...' for 'nagios-lab10'. The 'Public IPv4' is '3.81.125.234' for 'Clinet-Node' and '184.73.125.243' for 'nagios-lab10'. The 'Elastic IP' column is empty for both instances.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4	Elastic IP
Clinet-Node	i-0b6fb736edc840689	Running	t2.micro	Initializing	View alarms	us-east-1d	ec2-3-81-125-234.com...	3.81.125.234	-
nagios-lab10	i-01047bd56a71011ec	Running	t2.micro	2/2 checks passed	View alarms	us-east-1d	ec2-184-73-125-243.co...	184.73.125.243	-

```
ubuntu@ip-172-31-36-186: ~  
Setting up binutils (2.42-4ubuntu2) ...  
Setting up gcc-13 (13.2.0-23ubuntu4) ...  
Setting up cpp (4:13.2.0-7ubuntu1) ...  
Setting up gcc-x86-64-linux-gnu (4:13.2.0-7ubuntu1) ...  
Setting up gcc (4:13.2.0-7ubuntu1) ...  
Setting up libheif-plugin-aomdec:amd64 (1.17.6-1ubuntu4) ...  
Setting up libheif1:amd64 (1.17.6-1ubuntu4) ...  
Setting up libheif-plugin-libde265:amd64 (1.17.6-1ubuntu4) ...  
Setting up libheif-plugin-aomenc:amd64 (1.17.6-1ubuntu4) ...  
Processing triggers for libc-bin (2.39-0ubuntu8.3) ...  
Processing triggers for man-db (2.12.0-4build2) ...  
Processing triggers for sgml-base (1.31) ...  
Setting up libfontconfig1:amd64 (2.15.0-1.1ubuntu2) ...  
Setting up libgd3:amd64 (2.3.3-9ubuntu5) ...  
Setting up libc-devtools (2.39-0ubuntu8.3) ...  
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-172-31-36-186:~$
```

```
perl-threads-shared-1.61-458.amzn2023.0.2.x86_64  
perl-utils-5.32.1-477.amzn2023.0.6.noarch  
perl-version-7:0.99.29-1.amzn2023.0.2.x86_64  
perl-vmsish-1.04-477.amzn2023.0.6.noarch  
python3-pyparsing-2.4.7-6.amzn2023.0.2.noarch  
sombok-2.4.0-14.amzn2023.0.2.x86_64  
systemtap-sdt-devel-4.8-3.amzn2023.0.6.x86_64  
  
Complete!  
[ec2-user@ip-172-31-36-178 ~]$ cd /tmp  
wget --no-check-certificate -O nrpe.tar.gz https://github.com/NagiosEnterprises/nrpe/archive/nrpe-4.0.3  
.tar.gz  
--2024-10-15 11:09:09-- https://github.com/NagiosEnterprises/nrpe/archive/nrpe-4.0.3.tar.gz  
Resolving github.com (github.com)... 140.82.114.4  
Connecting to github.com (github.com)|140.82.114.4|:443... connected.  
HTTP request sent, awaiting response... 302 Found  
Location: https://codeload.github.com/NagiosEnterprises/nrpe/tar.gz/refs/tags/nrpe-4.0.3 [following]  
--2024-10-15 11:09:09-- https://codeload.github.com/NagiosEnterprises/nrpe/tar.gz/refs/tags/nrpe-4.0.3  
Resolving codeload.github.com (codeload.github.com)... 140.82.112.9  
Connecting to codeload.github.com (codeload.github.com)|140.82.112.9|:443... connected.  
HTTP request sent, awaiting response... 200 OK  
Length: unspecified [application/x-gzip]  
Saving to: 'nrpe.tar.gz'  
  
nrpe.tar.gz [ <=> ] 511.92K --.-KB/s in 0.03s  
  
2024-10-15 11:09:09 (16.3 MB/s) - 'nrpe.tar.gz' saved [524202]  
  
[ec2-user@ip-172-31-36-178 tmp]$
```

*** Configuration summary for nrpe 4.0.3 2020-04-28 ***:

General Options:

```
-----
NRPE port:      5666
NRPE user:      nagios
NRPE group:     nagios
Nagios user:    nagios
Nagios group:   nagios
```

Review the options above for accuracy. If they look okay,
type 'make all' to compile the NRPE daemon and client
or type 'make' to get a list of make options.

```
cd ./src/; make
make[1]: Entering directory '/tmp/nrpe-nrpe-4.0.3/src'
gcc -g -O2 -DHAVE_CONFIG_H -I ../include -I ../../include -o nrpe ./nrpe.c ./utils.c ./acl.c
gcc -g -O2 -DHAVE_CONFIG_H -I ../include -I ../../include -o check_nrpe ./check_nrpe.c ./utils.c
make[1]: Leaving directory '/tmp/nrpe-nrpe-4.0.3/src'
```

*** Compile finished ***

You can now continue with the installation or upgrade process.

Read the PDF documentation (docs/NRPE.pdf) for information on the next
steps you should take to complete the installation or upgrade.

[ec2-user@ip-172-31-36-178 nrpe-nrpe-4.0.3]\$ |

```
# service-name port/protocol [aliases ...] [# comment]
```

```
:cpmux      1/tcp      # TCP port service multiplexer
:cpmux      1/udp      # TCP port service multiplexer
:je         5/tcp      # Remote Job Entry
:je         5/udp      # Remote Job Entry
```

```
:cho        7/tcp
:cho        7/udp
:iscard      9/tcp      sink null
:iscard      9/udp      sink null
```

Nagios services

```
nrpe        5666/tcp
:ystat      11/tcp      users
:ystat      11/udp      users
:laytime    13/tcp
:laytime    13/udp
:otd        17/tcp      quote
:otd        17/udp      quote
:hargen      19/tcp      ttytst source
:hargen      19/udp      ttytst source
:tp-data    20/tcp
:tp-data    20/udp
```

21 is registered to ftp, but also used by fsp

```
:tp         21/tcp
:tp         21/udp      fsp fspd
```

⌘G Help
⌘X Exit

⌘O Write Out
⌘R Read File

⌘W Where Is
⌘\ Replace

⌘K Cut
⌘U Paste

⌘T Execute
⌘J Justify

⌘C Location
⌘/ Go To Line

⌘-U Undo
⌘-E Redo

```
root@ip-172-31-42-101:/usr/local/nagios/etc/objects
GNU nano 5.8 client.cfg Modified

# Define a service to check the number of currently running procs
# on the local machine. Warning if > 250 processes, critical if
# > 400 processes.

define service {
    use                local-service          ; Name of service template to use
    host_name          Clinet-Node
    service_description Total Processes
    check_command       check_local_procs!250!400!RSZDT
}

# Define a service to check the load on the local machine.

define service {
    use                local-service          ; Name of service template to use
    host_name          Clinet-Node
    service_description Current Load
    check_command       check_local_load!5.0,4.0,3.0!10.0,6.0,4.0
}
[1]+  Help      [AO] Write Out  [AW] Where Is   [AK] Cut       [AT] Execute   [AC] Location  [M-U] Undo
[XX] Exit      [AR] Read File [AN] Replace   [AU] Paste     [AJ] Justify   [M-E] Redo
ec2-user@ip-172-31-36-178:/tmp/nrpe-nrpe-4.0.3

[1]+  Stopped                  sudo vi /usr/local/nagios/etc/nrpe.cfg
[ec2-user@ip-172-31-36-178 nrpe-nrpe-4.0.3]$ sudo vi /usr/local/nagios/etc/nrpe.cfg
[ec2-user@ip-172-31-36-178 nrpe-nrpe-4.0.3]$ sudo nano /usr/local/nagios/etc/nrpe.cfg
[ec2-user@ip-172-31-36-178 nrpe-nrpe-4.0.3]$ sudo systemctl restart nrpe.service
[ec2-user@ip-172-31-36-178 nrpe-nrpe-4.0.3]$ sudo systemctl status nrpe.service
● nrpe.service - Nagios Remote Plugin Executor
   Loaded: loaded (/usr/lib/systemd/system/nrpe.service; enabled; preset: disabled)
   Active: active (running) since Tue 2024-10-15 11:22:29 UTC; 51s ago
     Docs: http://www.nagios.org/documentation
  Main PID: 36116 (nrpe)
    Tasks: 1 (limit: 1112)
   Memory: 248.0K
      CPU: 4ms
   CGroup: /system.slice/nrpe.service
           └─36116 /usr/local/nagios/bin/nrpe -c /usr/local/nagios/etc/nrpe.cfg -f

Oct 15 11:22:29 ip-172-31-36-178.ec2.internal systemd[1]: Stopped nrpe.service - Nagios Remote Plugin
Oct 15 11:22:29 ip-172-31-36-178.ec2.internal systemd[1]: Started nrpe.service - Nagios Remote Plugin
Oct 15 11:22:29 ip-172-31-36-178.ec2.internal nrpe[36116]: Starting up daemon
Oct 15 11:22:29 ip-172-31-36-178.ec2.internal nrpe[36116]: Server listening on 0.0.0.0 port 5666.
Oct 15 11:22:29 ip-172-31-36-178.ec2.internal nrpe[36116]: Server listening on :: port 5666.
Oct 15 11:22:29 ip-172-31-36-178.ec2.internal nrpe[36116]: Listening for connections on port 5666
Oct 15 11:22:29 ip-172-31-36-178.ec2.internal nrpe[36116]: Allowing connections from: 127.0.0.1,::1,54
[ec2-user@ip-172-31-36-178 nrpe-nrpe-4.0.3]$ /usr/local/nagios/libexec/check_nrpe -H 18.234.228.215
CHECK_NRPE: Receive header underflow - only -1 bytes received (4 expected).
[ec2-user@ip-172-31-36-178 nrpe-nrpe-4.0.3]$ /usr/local/nagios/libexec/check_nrpe -H 127.0.0.1
NRPE v4.0.3
[ec2-user@ip-172-31-36-178 nrpe-nrpe-4.0.3]$
```

```

root@ip-172-31-42-101:/usr/local/nagios/etc/objects
Last login: Tue Oct 15 11:01:19 2024 from 171.48.81.227
[ec2-user@ip-172-31-42-101 ~]$ sudo su
[root@ip-172-31-42-101 ec2-user]# echo Sushant
Sushant
[root@ip-172-31-42-101 ec2-user]# sudo nano /usr/local/nagios/etc/nagios.cfg
[root@ip-172-31-42-101 ec2-user]# cd /usr/local/nagios/etc/objects
sudo cp localhost.cfg client.cfg
sudo chown nagios:nagios client.cfg
[root@ip-172-31-42-101 objects]# ls -lo
total 60
-rw-r--r--. 1 nagios 4777 Oct 15 11:26 client.cfg
-rw-rw-r--. 1 nagios 6747 Oct 15 08:26 commands.cfg
-rw-rw-r--. 1 nagios 1797 Oct 15 08:26 contacts.cfg
-rw-rw-r--. 1 nagios 4777 Oct 15 08:26 localhost.cfg
-rw-rw-r--. 1 nagios 3001 Oct 15 08:26 printer.cfg
-rw-rw-r--. 1 nagios 3484 Oct 15 08:26 switch.cfg
-rw-rw-r--. 1 nagios 12533 Oct 15 08:26 templates.cfg
-rw-rw-r--. 1 nagios 3512 Oct 15 08:26 timeperiods.cfg
-rw-rw-r--. 1 nagios 4074 Oct 15 08:26 windows.cfg
[root@ip-172-31-42-101 objects]# sudo node client.cfg
sudo: node: command not found
[root@ip-172-31-42-101 objects]# sudo nano client.cfg
[root@ip-172-31-42-101 objects]# sudo systemctl restart nagios
[root@ip-172-31-42-101 objects]#

ec2-user@ip-172-31-36-178:~
Oct 15 11:22:29 ip-172-31-36-178.ec2.internal nrpe[36116]: Listening for connections on port 5666
Oct 15 11:22:29 ip-172-31-36-178.ec2.internal nrpe[36116]: Allowing connections from: 127.0.0.1:::1,54
[ec2-user@ip-172-31-36-178 nrpe-nrpe-4.0.3]$ /usr/local/nagios/libexec/check_nrpe -H 18.234.228.215
CHECK_NRPE: Receive header underflow - only -1 bytes received (4 expected).
[ec2-user@ip-172-31-36-178 nrpe-nrpe-4.0.3]$ /usr/local/nagios/libexec/check_nrpe -H 127.0.0.1
NRPE v4.0.3
[ec2-user@ip-172-31-36-178 nrpe-nrpe-4.0.3]$ client_loop: send disconnect: Connection reset by peer

susha@DESKTOP-TUH3NL7 MINGW64 ~/Desktop
$ ssh -i "exp_9.pem" ec2-user@18.234.228.215
#_
####
#####\
####|
\##|
\#/
V~' '->
https://aws.amazon.com/linux/amazon-linux-2023

Last login: Tue Oct 15 11:07:31 2024 from 171.48.81.227
[ec2-user@ip-172-31-36-178 ~]$ cd nrpe-nrpe-4.0.3
-bash: cd: nrpe-nrpe-4.0.3: No such file or directory
[ec2-user@ip-172-31-36-178 ~]$ ls
[ec2-user@ip-172-31-36-178 ~]$ sudo systemctl enable nrpe.service
sudo systemctl start nrpe.service
[ec2-user@ip-172-31-36-178 ~]$ /usr/local/nagios/libexec/check_nrpe -H 127.0.0.1
NRPE v4.0.3
[ec2-user@ip-172-31-36-178 ~]$

```

```

root@ip-172-31-42-101:/usr/local/nagios/etc/objects
Last login: Tue Oct 15 11:01:19 2024 from 171.48.81.227
[ec2-user@ip-172-31-42-101 ~]$ sudo su
[root@ip-172-31-42-101 ec2-user]# echo Sushant
Sushant
[root@ip-172-31-42-101 ec2-user]# sudo nano /usr/local/nagios/etc/nagios.cfg
[root@ip-172-31-42-101 ec2-user]# cd /usr/local/nagios/etc/objects
sudo cp localhost.cfg client.cfg
sudo chown nagios:nagios client.cfg
[root@ip-172-31-42-101 objects]# ls -lo
total 60
-rw-r--r--. 1 nagios 4777 Oct 15 11:26 client.cfg
-rw-rw-r--. 1 nagios 6747 Oct 15 08:26 commands.cfg
-rw-rw-r--. 1 nagios 1797 Oct 15 08:26 contacts.cfg
-rw-rw-r--. 1 nagios 4777 Oct 15 08:26 localhost.cfg
-rw-rw-r--. 1 nagios 3001 Oct 15 08:26 printer.cfg
-rw-rw-r--. 1 nagios 3484 Oct 15 08:26 switch.cfg
-rw-rw-r--. 1 nagios 12533 Oct 15 08:26 templates.cfg
-rw-rw-r--. 1 nagios 3512 Oct 15 08:26 timeperiods.cfg
-rw-rw-r--. 1 nagios 4074 Oct 15 08:26 windows.cfg
[root@ip-172-31-42-101 objects]# sudo node client.cfg
sudo: node: command not found
[root@ip-172-31-42-101 objects]# sudo nano client.cfg
[root@ip-172-31-42-101 objects]# sudo systemctl restart nagios
[root@ip-172-31-42-101 objects]#

ec2-user@ip-172-31-36-178:~
Oct 15 11:22:29 ip-172-31-36-178.ec2.internal nrpe[36116]: Listening for connections on port 5666
Oct 15 11:22:29 ip-172-31-36-178.ec2.internal nrpe[36116]: Allowing connections from: 127.0.0.1:::1,54
[ec2-user@ip-172-31-36-178 nrpe-nrpe-4.0.3]$ /usr/local/nagios/libexec/check_nrpe -H 18.234.228.215
CHECK_NRPE: Receive header underflow - only -1 bytes received (4 expected).
[ec2-user@ip-172-31-36-178 nrpe-nrpe-4.0.3]$ /usr/local/nagios/libexec/check_nrpe -H 127.0.0.1
NRPE v4.0.3
[ec2-user@ip-172-31-36-178 nrpe-nrpe-4.0.3]$ client_loop: send disconnect: Connection reset by peer

susha@DESKTOP-TUH3NL7 MINGW64 ~/Desktop
$ ssh -i "exp_9.pem" ec2-user@18.234.228.215
#_
####
#####\
###|
\#/
V~' '->
https://aws.amazon.com/linux/amazon-linux-2023

Last login: Tue Oct 15 11:07:31 2024 from 171.48.81.227
[ec2-user@ip-172-31-36-178 ~]$ cd nrpe-nrpe-4.0.3
-bash: cd: nrpe-nrpe-4.0.3: No such file or directory
[ec2-user@ip-172-31-36-178 ~]$ ls
[ec2-user@ip-172-31-36-178 ~]$ sudo systemctl enable nrpe.service
sudo systemctl start nrpe.service
[ec2-user@ip-172-31-36-178 ~]$ /usr/local/nagios/libexec/check_nrpe -H 127.0.0.1
NRPE v4.0.3
[ec2-user@ip-172-31-36-178 ~]$

```

The screenshot displays the Nagios Core 4.4.6 web interface at the URL 184.73.125.243/nagios/. The page features a top navigation bar with links like Home, Documentation, Current Status, Reports, and System. On the left sidebar, there are sections for General, Hosts, Services, Grid, and Problems. The main content area is titled "Host Status Details For All Host Groups". It includes summary statistics for Host Status Totals and Service Status Totals. Below these, a table shows the status of two hosts: "Client-Node" and "localhost", both currently UP. A search bar at the bottom allows filtering results.

Nagios®

Current Network Status
 Last Updated: Tue Oct 15 11:39:15 UTC 2024
 Updated every 90 seconds
 Nagios® Core™ 4.4.6 - www.nagios.org
 Logged In as nagiosadmin

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	3	7

All Problems All Types

2	16
---	----

General
[Home](#)
[Documentation](#)

Current Status
[Tactical Overview](#)
[Map \(Legacy\)](#)
Hosts
[Services](#)
[Host Groups](#)
[Summary](#)
[Grid](#)
Service Groups
[Summary](#)
[Grid](#)

Problems
[Services \(Unhandled\)](#)
[Hosts \(Unhandled\)](#)
[Network Outages](#)

Quick Search:

Reports
[Availability](#)
[Trends \(Legacy\)](#)
Alerts
[History](#)
[Summary](#)
[Histogram \(Legacy\)](#)

Notifications
[Event Log](#)

System
[Comments](#)
[Downtime](#)
[Process Info](#)
[Performance Info](#)
[Scheduling Queue](#)
[Configuration](#)

Host Status Details For All Host Groups

Limit Results:

Host ♦♦	Status ♦♦	Last Check ♦♦	Duration ♦♦	Status Information
Client-Node	UP	10-15-2024 11:38:15	0d 0h 1m 0s+	PING OK - Packet loss = 0%, RTA = 1.27 ms
localhost	UP	10-15-2024 11:37:17	0d 3h 12m 14s	PING OK - Packet loss = 0%, RTA = 0.03 ms

Results 1 - 2 of 2 Matching Hosts