

adv devops 10

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Steps:

Prerequisites: AWS Free Tier, Nagios Server running on Amazon Linux Machine.

1. To Confirm that Nagios is running on the server side, run this sudo systemctl status nagios on the "NAGIOS HOST".

```
Last login: Thu Oct 10 08:58:32 2024 from 18.206.107.27
[ec2-user@ip-172-31-39-132 ~]$ sudo systemctl status nagios
● nagios.service - Nagios Core 4.4.6
   Loaded: loaded (/usr/lib/systemd/system/nagios.service; enabled; preset: disabled)
   Active: active (running) since Sun 2024-10-13 11:51:57 UTC; 16min ago
     Docs: https://www.nagios.org/documentation
   Process: 1993 ExecStartPre=/usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg (code=exited, status=0/SUCCESS)
   Process: 1995 ExecStart=/usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg (code=exited, status=0/SUCCESS)
   Main PID: 1997 (nagios)
    Tasks: 6 (limit: 1112)
   Memory: 2.7M
      CPU: 150ms
   CGroup: /system.slice/nagios.service
           └─1997 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
             └─1998 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
               └─1999 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                 └─2000 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                   └─2001 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                     └─2007 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg

Oct 13 11:51:57 ip-172-31-39-132.ec2.internal nagios[1997]: qh: Socket '/usr/local/nagios/var/rw/nagios.qh' successfully
Oct 13 11:51:57 ip-172-31-39-132.ec2.internal nagios[1997]: qh: core query handler registered
Oct 13 11:51:57 ip-172-31-39-132.ec2.internal nagios[1997]: qh: echo service query handler registered
Oct 13 11:51:57 ip-172-31-39-132.ec2.internal nagios[1997]: qh: help for the query handler registered
Oct 13 11:51:57 ip-172-31-39-132.ec2.internal nagios[1997]: wproc: Successfully registered manager as @wproc with query
Oct 13 11:51:57 ip-172-31-39-132.ec2.internal nagios[1997]: wproc: Registry request: name=Core Worker 2000;pid=2000
Oct 13 11:51:57 ip-172-31-39-132.ec2.internal nagios[1997]: wproc: Registry request: name=Core Worker 2001;pid=2001
Oct 13 11:51:57 ip-172-31-39-132.ec2.internal nagios[1997]: wproc: Registry request: name=Core Worker 1999;pid=1999
```

2. Before we begin,

To monitor a Linux machine, create an Ubuntu 20.04 server EC2 Instance in AWS. Provide it with the same security group as the Nagios Host and name it 'linux-client' alongside the host.

Instances (1/2) info

Last updated less than a minute ago

Refresh

Connect

Instance state ▾

Actions ▾

Launch instances ▾










Find Instance by attribute or tag (case-sensitive)

All states ▾

Instance state = running ✕

Clear filters

< 1 > ⚙

<input checked="" type="checkbox"/>	Name 	Instance ID	Instance state ▾	Instance type ▾	Status check 	Alarm status	Availability Zone ▾	Public IPv4 DNS
<input checked="" type="checkbox"/>	linux-client	i-0b6bed130a57a0757	 Running  	t2.micro	 2/2 checks passed	View alarms +	us-east-1c	ec2-184-73-136
<input type="checkbox"/>	NAGIOS-TAR	i-03597d5178582435b	 Running  	t2.micro	...	View alarms +	us-east-1c	ec2-18-232-71-

3. On the server, run this command

ps -ef | grep nagios

```
[ec2-user@ip-172-31-39-132 ~]$ ps -ef | grep nagios
nagios    1997      1   0 11:51 ?        00:00:00 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
nagios    1998    1997   0 11:51 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagio
s.qh
nagios    1999    1997   0 11:51 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagio
s.qh
nagios    2000    1997   0 11:51 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagio
s.qh
nagios    2001    1997   0 11:51 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagio
s.qh
nagios    2007    1997   0 11:51 ?        00:00:00 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
ec2-user  3125    2836   0 12:15 pts/0    00:00:00 grep --color=auto nagios
[ec2-user@ip-172-31-39-132 ~]$
```

4. Become a root user and create 2 folders `sudo su`

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

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

5. Copy the sample `localhost.cfg` file to linuxhost folder

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

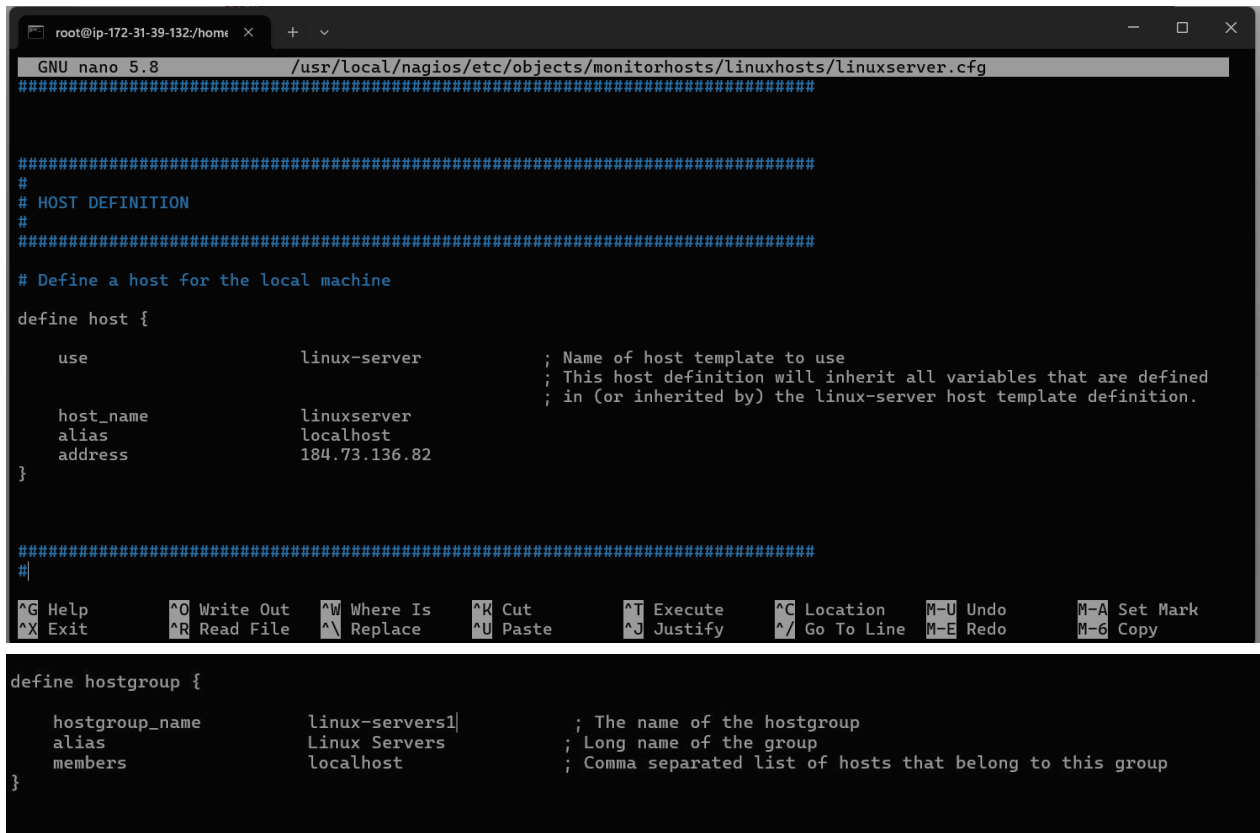
`/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg`

6. Open `linuxserver.cfg` using nano and make the following changes nano

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

Change the hostname to `linuxserver` (EVERYWHERE ON THE FILE)

Change address to the public IP address of your LINUX CLIENT.



```
GNU nano 5.8 /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            184.73.136.82
}

#####
#|

^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

define hostgroup {
    hostgroup_name    linux-servers1       ; 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
}
```

7. Open the Nagios Config file and add the following line

`nano /usr/local/nagios/etc/nagios.cfg`

`##Add this line`

`cfg_dir=/usr/local/nagios/etc/objects/monitorhosts/`

```
# 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
```

8. Verify the configuration files

9. Restart the nagios service

service nagios restart

10. Make a package index update and install gcc, nagios-nrpe-server and the plugins.

sudo apt update -y

sudo apt install gcc -y

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

11. Open nrpe.cfg file to make changes.

sudo nano /etc/nagios/nrpe.cfg

Under `allowed_hosts`, add your nagios host IP address like so

12. Restart the NRPE server

sudo systemctl restart nagios-nrpe-server

```
# 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, 13.232.100.28
```

13. Now, check your nagios dashboard and you'll see a new host being added.

Current Network Status

Last Updated: Sun Oct 24 09:54:26 UTC 2021
Updated every 90 seconds
Nagios Core™ 4.0.8 - www.nagios.org
Logged in as nagiosadmin

Host Status Totals

Up Down Unreachable Pending

2000

All Problems All Types

02

Service Status Totals

OK Warning Unknown Critical Pending

121030

All Problems All Types

416

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 Details For All Host Groups

Limit Results: 100

Host	Status	Last Check	Duration	Status Information
brunserver	UP	10-24-2021 09:51:50	0d 0h 16m 51s	PING OK - Packet loss = 0%, RTA = 0.49 ms
localhost	UP	10-24-2021 09:52:21	0d 1h 48m 49s	PING OK - Packet loss = 0%, RTA = 0.03 ms

Results 1 - 2 of 2 Matching Hosts

Current Network Status
 Last Updated: Wed Oct 2 18:47:25 UTC 2024
 Updated every 30 seconds
 Nagios® Core™ 4.4.6 - www.nagios.org
 Logged in as nagiosadmin

View Service Status Detail For All Host Groups
 View Host Status Detail For All Host Groups
 View Status Overview For All Host Groups
 View Status Grid For All Host Groups

Host Status Totals

Up	Down	Unreachable	Pending
1	0	0	0

All Problems All Types

0	1
---	---

Service Status Totals

Ok	Warning	Unknown	Critical	Pending
5	1	0	1	0

All Problems All Types

2	3
---	---

Status Summary For All Host Groups

Host Group	Host Status Summary	Service Status Summary	
		5 OK	
Linux Servers (linux-servers)	1 OK	1 WARNING	1 Unhandled
		1 CRITICAL	1 Unhandled