

## Experiment 9

**Aim:** To Understand Continuous monitoring and Installation and configuration of Nagios Core, Nagios Plugins and NRPE (Nagios Remote Plugin Executor) on Linux Machine.

**Theory:**

**What is Nagios?**

Nagios is an open-source software for continuous monitoring of systems, networks, and infrastructures. It runs plugins stored on a server that is connected with a host or another server on your network or the Internet. In case of any failure, Nagios alerts about the issues so that the technical team can perform the recovery process immediately.

Nagios is used for continuous monitoring of systems, applications, service and business processes in a DevOps culture.

**Why We Need Nagios tool?**

Here are the important reasons to use Nagios monitoring tool:

- Detects all types of network or server issues
- Helps you to find the root cause of the problem which allows you to get the permanent solution to the problem
- Active monitoring of your entire infrastructure and business processes
- Allows you to monitor and troubleshoot server performance issues
- Helps you to plan for infrastructure upgrades before outdated systems create failures
- You can maintain the security and availability of the service
- Automatically fix problems in a panic situation

**Features of Nagios**

Following are the important features of Nagios monitoring tool:

- Relatively scalable, Manageable, and Secure
- Good log and database system
- Informative and attractive web interfaces
- Automatically send alerts if condition changes
- If the services are running fine, then there is no need to do check that host is an alive
- Helps you to detect network errors or server crashes
- You can troubleshoot the performance issues of the server.

- You can monitor the entire business process and IT infrastructure with a single pass
- The product's architecture is easy to write new plugins in the language of your choice
- Nagios allows you to read its configuration from an entire directory which helps you to decide how to define individual files
- Utilizes topology to determine dependencies
- Monitor network services like HTTP, SMTP, HTTP, SNMP, FTP, SSH, POP, etc.
- Helps you to define network host hierarchy using parent hosts
- Ability to define event handlers that runs during service or host events for proactive problem resolution
- Support for implementing redundant monitoring hosts

## Nagios Architecture

Nagios is a client-server architecture. Usually, on a network, a Nagios server is running on a host, and plugins are running on all the remote hosts which should be monitored.

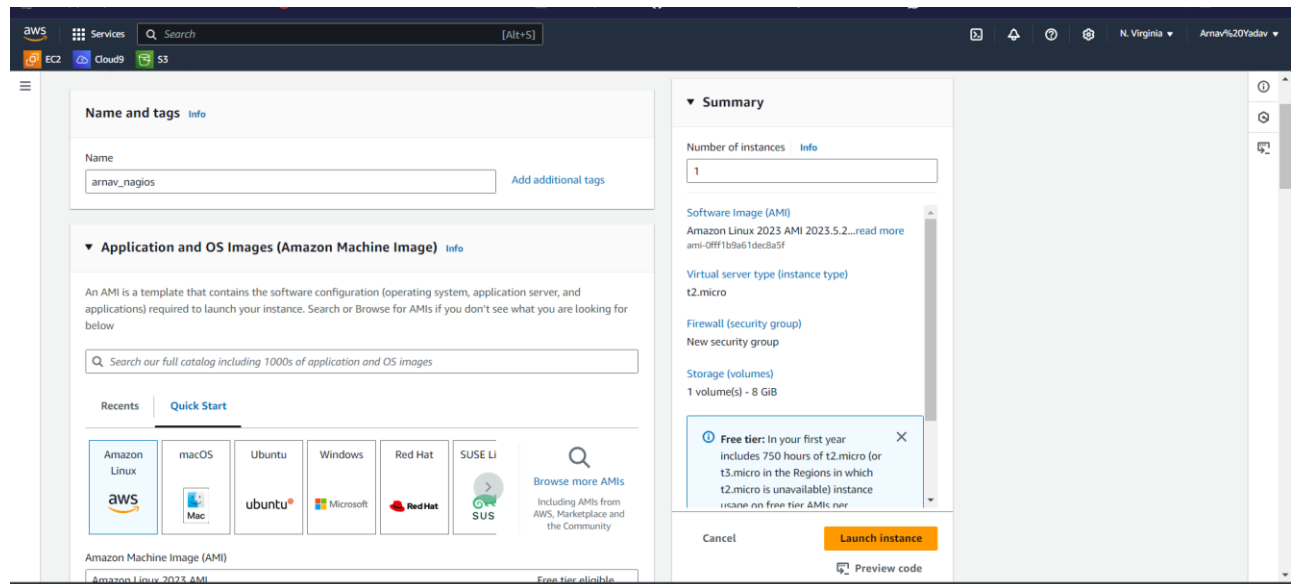
1. The scheduler is a component of the server part of Nagios. It sends a signal to execute the plugins at the remote host.
2. The plugin gets the status from the remote host
3. The plugin sends the data to the process scheduler
4. The process scheduler updates the GUI and notifications are sent to admins.

## Installation of Nagios

Prerequisites: AWS Free

Tier Steps:

1. Create an Amazon Linux EC2 Instance in AWS and name it – nagios-host

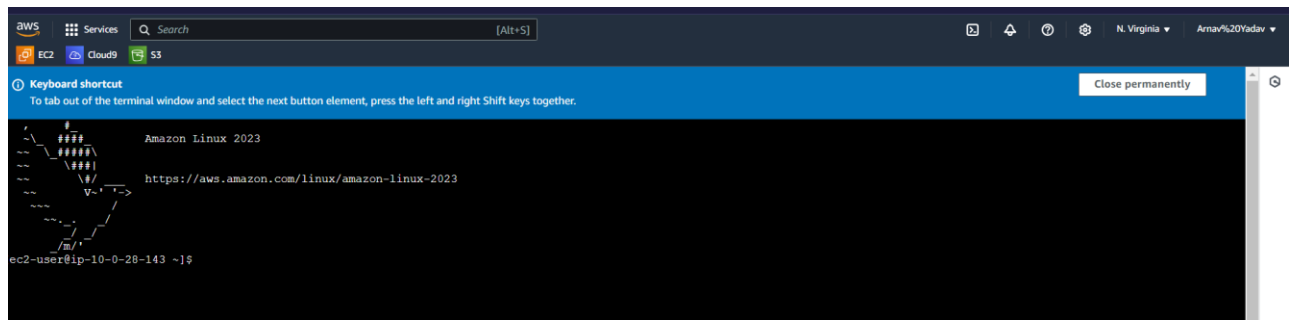


2. Under Security Group, make sure HTTP, HTTPS, SSH, ICMP are open from everywhere.

Inbound rules (7)										
Filter security group rules										
<input type="checkbox"/>	Name	Security group rule...	IP version	Type	Protocol	Port range	Source	Description		
<input type="checkbox"/>	...	sgr-06968184311c69...	IPv6	HTTP	TCP	80	::/0	-		
<input type="checkbox"/>	...	sgr-0ef2b7b0ba4fa4a3b	IPv6	All ICMP - IPv6	IPv6 ICMP	All	::/0	-		
<input type="checkbox"/>	...	sgr-0642522c2a7a765...	IPv4	HTTPS	TCP	443	0.0.0.0/0	-		
<input type="checkbox"/>	...	sgr-076c55f3b7dd80fe	IPv4	All traffic	All	All	0.0.0.0/0	-		
<input type="checkbox"/>	...	sgr-07a8c3049a00dbee6	IPv4	SSH	TCP	22	0.0.0.0/0	-		
<input type="checkbox"/>	...	sgr-04c83c4a2db4537...	IPv4	Custom TCP	TCP	5666	0.0.0.0/0	-		
<input type="checkbox"/>	...	sgr-04d54b6dd961b1...	IPv4	All ICMP - IPv4	ICMP	All	0.0.0.0/0	-		

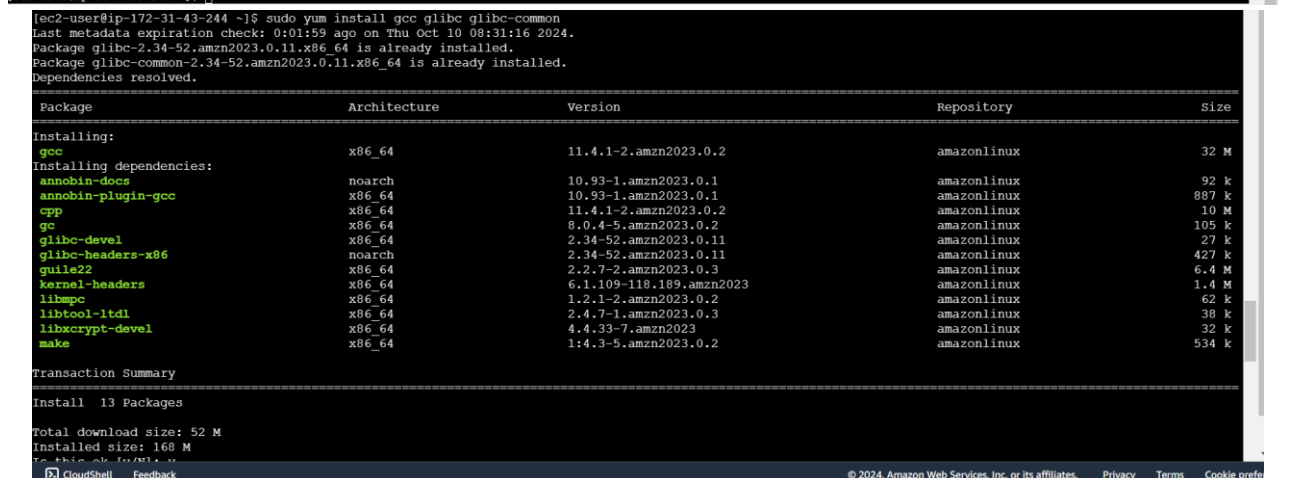
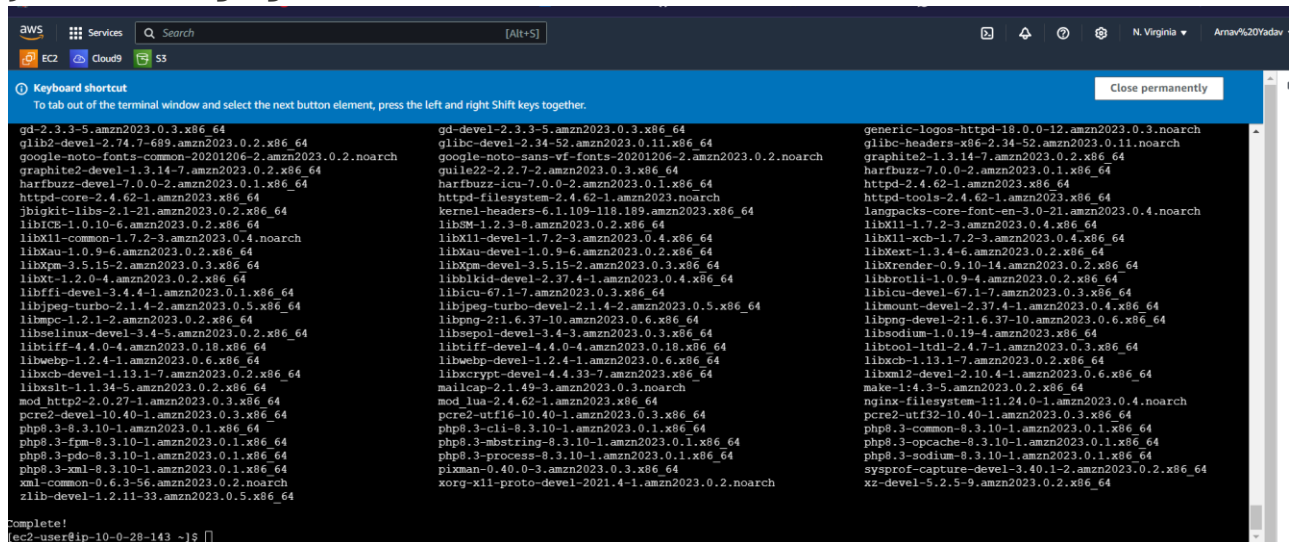
You have to edit the inbound rules of the specified Security Group for this.

3. SSH into Your EC2 instance or simply use EC2 Instance Connect from the browser.



#### 4. Update the package indices and install the following

```
packages using yum sudo yum update
sudo yum install httpd php
sudo yum install gcc glibc glibc-commonsudo
yum install gd gd-devel
```



```

aws Services Search [Alt+S] N. Virginia voclabs/user3398183=2022.mohammed.ansari@ves.ac.in @ 7202-82
to tab out of the terminal window and select the next button element, press the left and right Shift keys together.

libmpc-1.2.1-2.amzn2023.0.2.x86_64 libtool-ltdl-2.4.7-1.amzn2023.0.3.x86_64 libxcrypt-devel-4.4.33-7.amzn2023.x86_64
make-1:4.3-5.amzn2023.0.2.x86_64

Complete!
[ec2-user@ip-172-31-43-244 ~]$ sudo yum install gd gd-devel
Last metadata expiration check: 0:03:19 ago on Thu Oct 10 08:31:16 2024.
Dependencies resolved.

Package Architecture Version Repository Size
Installing:
gd x86_64 2.3.3-5.amzn2023.0.3 amazonlinux 139 k
gd-devel x86_64 2.3.3-5.amzn2023.0.3 amazonlinux 38 k
Installing dependencies:
brotli x86_64 1.0.9-4.amzn2023.0.2 amazonlinux 314 k
brotli-devel x86_64 1.0.9-4.amzn2023.0.2 amazonlinux 31 k
bzip2-devel x86_64 1.0.8-6.amzn2023.0.2 amazonlinux 214 k
cairo x86_64 1.17.6-2.amzn2023.0.1 amazonlinux 684 k
cmake-filesystem x86_64 3.22.2-1.amzn2023.0.4 amazonlinux 16 k
fontconfig x86_64 2.13.94-2.amzn2023.0.2 amazonlinux 273 k
fontconfig-devel x86_64 2.13.94-2.amzn2023.0.2 amazonlinux 128 k
fonts-filesystem noarch 1:2.0.5-12.amzn2023.0.2 amazonlinux 9.5 k
freetype x86_64 2.13.2-5.amzn2023.0.1 amazonlinux 423 k
freetype-devel x86_64 2.13.2-5.amzn2023.0.1 amazonlinux 912 k
glib2-devel x86_64 2.74.7-689.amzn2023.0.2 amazonlinux 486 k
google-noto-fonts-common noarch 20201206-2.amzn2023.0.2 amazonlinux 15 k
google-noto-sans-vf-fonts noarch 20201206-2.amzn2023.0.2 amazonlinux 492 k
graphite2 x86_64 1.3.14-7.amzn2023.0.2 amazonlinux 97 k
graphite2-devel x86_64 1.3.14-7.amzn2023.0.2 amazonlinux 21 k
harfbuzz x86_64 7.0.0-2.amzn2023.0.1 amazonlinux 868 k
harfbuzz-devel x86_64 7.0.0-2.amzn2023.0.1 amazonlinux 404 k
harfbuzz-icu x86_64 7.0.0-2.amzn2023.0.1 amazonlinux 18 k
jbigkit-libs x86_64 2.1-21.amzn2023.0.2 amazonlinux 54 k

```

5. Create a new Nagios User with its password. You'll have to enter the password twice for confirmation.

```

sudo adduser -m
nagiossudo passwd
nagios

```

```

us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?address-family=ipv4&connType=standard&instanceId=i-004637ec3ae249b26
Annav_pipelinepro C... NVIDIA RTX Voice: S... Strivers AZZ DSA Co... Strivers AZZ DSA Co... (26) Post | LinkedIn PrasadBelure/turbo... yaser367/frontend-t... ac All Bookmarks
AWS Services Search [Alt+S] N. Virginia Annav%20Yadav
Keyboard shortcut To tab out of the terminal window and select the next button element, press the left and right Shift keys together. Close permanently

zlib-devel-1.2.11-33.amzn2023.0.5.x86_64

Complete!
[ec2-user@ip-10-0-28-143 ~]$ sudo adduser -m nagios
sudo passwd nagios
sudo groupadd nagcmd
sudo usermod -a -G nagcmd nagios
sudo usermod -a -G nagcmd apache
Changing password for user nagios.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
Sorry, passwords do not match.
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/systematic
Retype new password:
passwd: all authentication tokens updated successfully.
[ec2-user@ip-10-0-28-143 ~]$ mkdir ~/downloads
cd ~/downloads
wget http://prdownloads.sourceforge.net/sourceforge/nagios/nagios-4.0.8.tar.gz
wget http://nagios-plugins.org/download/nagios-plugins-2.0.3.tar.gz
tar xzvf nagios-4.0.8.tar.gz
--2024-10-14 16:32:25-- http://prdownloads.sourceforge.net/sourceforge/nagios/nagios-4.0.8.tar.gz
Resolving prdownloads.sourceforge.net (prdownloads.sourceforge.net)... 204.68.111.105
Connecting to prdownloads.sourceforge.net (prdownloads.sourceforge.net)|204.68.111.105|:80... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: http://downloads.sourceforge.net/project/nagios/nagios-4.x/nagios-4.0.8/nagios-4.0.8.tar.gz [following]
--2024-10-14 16:32:25-- http://downloads.sourceforge.net/project/nagios/nagios-4.x/nagios-4.0.8/nagios-4.0.8.tar.gz
Resolving downloads.sourceforge.net (downloads.sourceforge.net)... 204.68.111.105
Reusing existing connection to prdownloads.sourceforge.net:80.
HTTP request sent, awaiting response... 302 Found

```

6. Create a new user group

```

sudo groupadd nagcmd

```

7. Use these commands so that you don't have to use sudo for Apache and Nagios

```

sudo usermod -a -G nagcmd nagios
sudo usermod -a -G nagcmd apache

```

8. Create a new directory for Nagios downloads

```
mkdir  
~/downloads  
~/downloads
```

```
password: all authentication tokens updated successfully.  
[ec2-user@ip-172-31-43-244 ~]$ sudo groupadd nagcmd  
[ec2-user@ip-172-31-43-244 ~]$ sudo usermod -a -G nagcmd nagios  
sudo usermod -a -G nagcmd apache  
[ec2-user@ip-172-31-43-244 ~]$ mkdir ~/downloads  
cd ~/downloads
```

9. Use wget to download the source zip files.

```
wget  
http://prdownloads.sourceforge.net/sourceforge/nagios/nagios-4.0.8.tar.gz
```

```
wget http://nagios-plugins.org/download/nagios-plugins-2.0.3.tar.gz
```

10. Use tar to unzip and change to that directory.

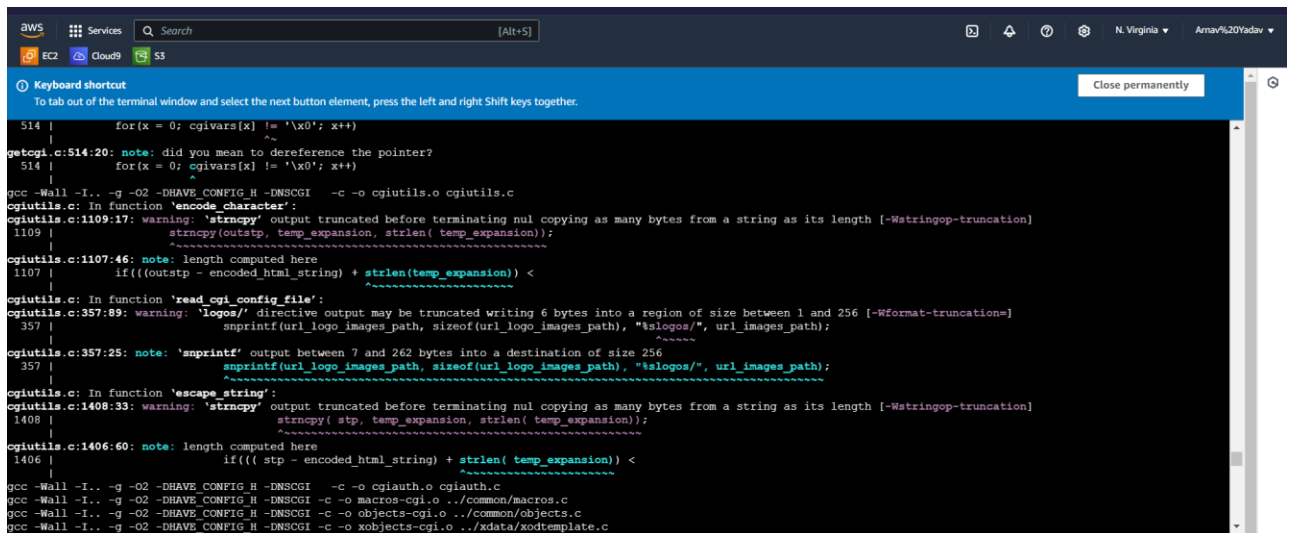
```
tar zxvf nagios-4.0.8.tar.gz
```

11. Run the configuration script with the same group name you previously created.

```
./configure --with-command-group=nagcmd  
[ec2-user@ip-172-31-43-244 downloads]$ cd nagios-4.0.8  
[ec2-user@ip-172-31-43-244 nagios-4.0.8]$ ./configure --with-command-group=nagcmd  
checking for a BSD-compatible install... /usr/bin/install -c  
checking build system type... x86_64-unknown-linux-gnu  
checking host system type... x86_64-unknown-linux-gnu  
checking for gcc... gcc  
checking for C compiler default output file name... a.out  
checking whether the C compiler works... yes  
checking whether we are cross compiling... no  
checking for suffix of executables...  
checking for suffix of object files... o  
checking whether we are using the GNU C compiler... yes  
checking whether gcc accepts -g... yes  
checking for gcc option to accept ISO C89... none needed  
checking whether make sets $(MAKE) ... yes
```

12. Compile the source code.

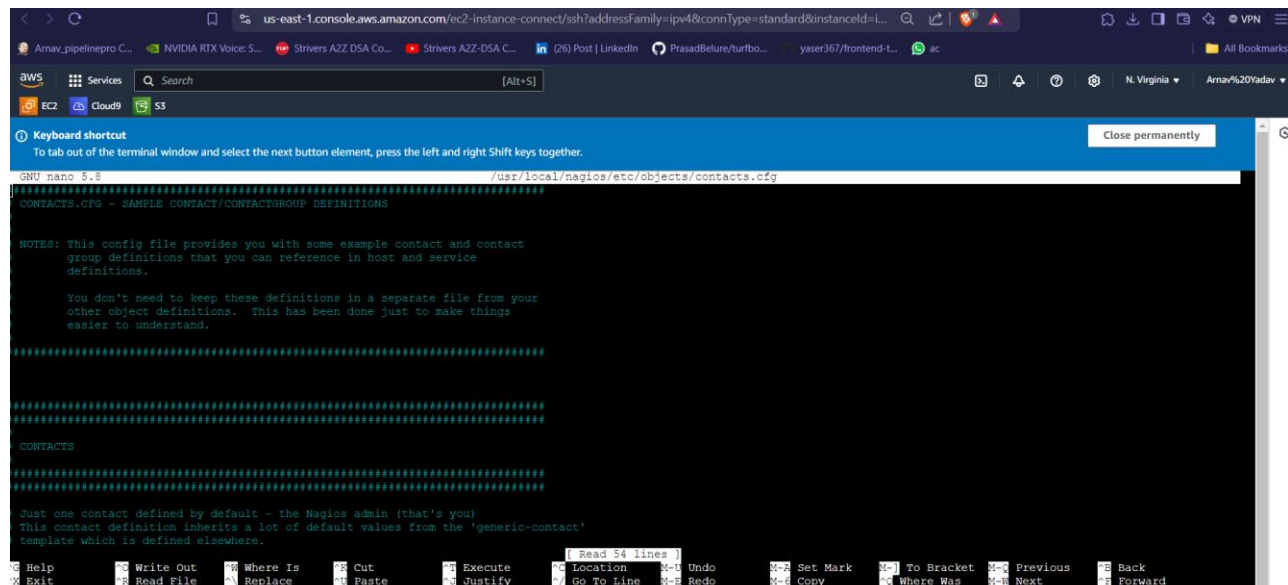
```
make all
```



```
514 |         for(x = 0; cgivars[x] != '\0'; x++)
      |         ^~
getcgi.c:514:20: note: did you mean to dereference the pointer?
514 |         for(x = 0; cgivars[x] != '\0'; x++)
      |         ^~
gcc -Wall -I.. -g -O2 -DHAVE_CONFIG_H -DNSCGI -c -o cgiutils.o cgiutils.c
cgiutils.c: In function 'encode_character':
cgiutils.c:1109:17: warning: 'strncpy' output truncated before terminating nul copying as many bytes from a string as its length [-Wstringop-truncation]
1109 |         strncpy(outstp, temp_expansion, strlen(temp_expansion));
      |         ^~~~~~
cgiutils.c:1107:46: note: length computed here
1107 |         if(((outstp - encoded_html_string) + strlen(temp_expansion)) <
      |         ^~~~~~
cgiutils.c: In function 'read CGI config file':
cgiutils.c:357:89: warning: 'sprintf' directive output may be truncated writing 6 bytes into a region of size between 1 and 256 [-Wformat-truncation=]
357 |         sprintf(url_logo_images_path, sizeof(url_logo_images_path), "%slogos/", url_images_path);
      |         ^~~~~~
cgiutils.c:357:25: note: 'sprintf' output between 7 and 262 bytes into a destination of size 256
357 |         sprintf(url_logo_images_path, sizeof(url_logo_images_path), "%slogos/", url_images_path);
      |         ^~~~~~
cgiutils.c: In function 'escape_string':
cgiutils.c:1408:33: warning: 'strncpy' output truncated before terminating nul copying as many bytes from a string as its length [-Wstringop-truncation]
1408 |         strncpy(stp, temp_expansion, strlen(temp_expansion));
      |         ^~~~~~
cgiutils.c:1406:60: note: length computed here
1406 |         if(((stp - encoded_html_string) + strlen(temp_expansion)) <
      |         ^~~~~~
gcc -Wall -I.. -g -O2 -DHAVE_CONFIG_H -DNSCGI -c -o cgilib.o cgilib.c
gcc -Wall -I.. -g -O2 -DHAVE_CONFIG_H -DNSCGI -c -o macros-cgi.o ../common/macros.c
gcc -Wall -I.. -g -O2 -DHAVE_CONFIG_H -DNSCGI -c -o objects-cgi.o ../common/objects.c
gcc -Wall -I.. -g -O2 -DHAVE_CONFIG_H -DNSCGI -c -o xobjects-cgi.o ../xdata/xodtemplate.c
```

13. Install binaries, init script and sample config files. Lastly, set permissions on the external command directory.

```
sudo make install
sudo make install-
init
sudo make install-config
sudo make install-
commandmode
```



```
GNU nano 5.8 /usr/local/nagios/etc/objects/contacts.cfg
CONTACTS.CFG - SAMPLE CONTACT/CONTACTGROUP DEFINITIONS

NOTES: This config file provides you with some example contact and contact
group definitions that you can reference in host and service
definitions.

You don't need to keep these definitions in a separate file from your
other object definitions. This has been done just to make things
easier to understand.

CONTACTS

Just one contact defined by default - the Nagios admin (that's you)
This contact definition inherits a lot of default values from the 'generic-contact'
template which is defined elsewhere.
```

14. Edit the config file and change the email address.

```
sudo nano /usr/local/nagios/etc/objects/contacts.cfg
```

```
# Just one contact defined by default - the Nagios admin (that's you)
# This contact definition inherits a lot of default values from the 'generic-contact'
# template which is defined elsewhere.

define contact{
    contact_name    nagiosadmin        ; Short name of user
    use              generic-contact    ; Inherit default values from generic-contact template (defined above)
    alias            Nagios Admin       ; Full name of user
    email            arnav20604@gmail.com ; <<***** CHANGE THIS TO YOUR EMAIL ADDRESS *****
}

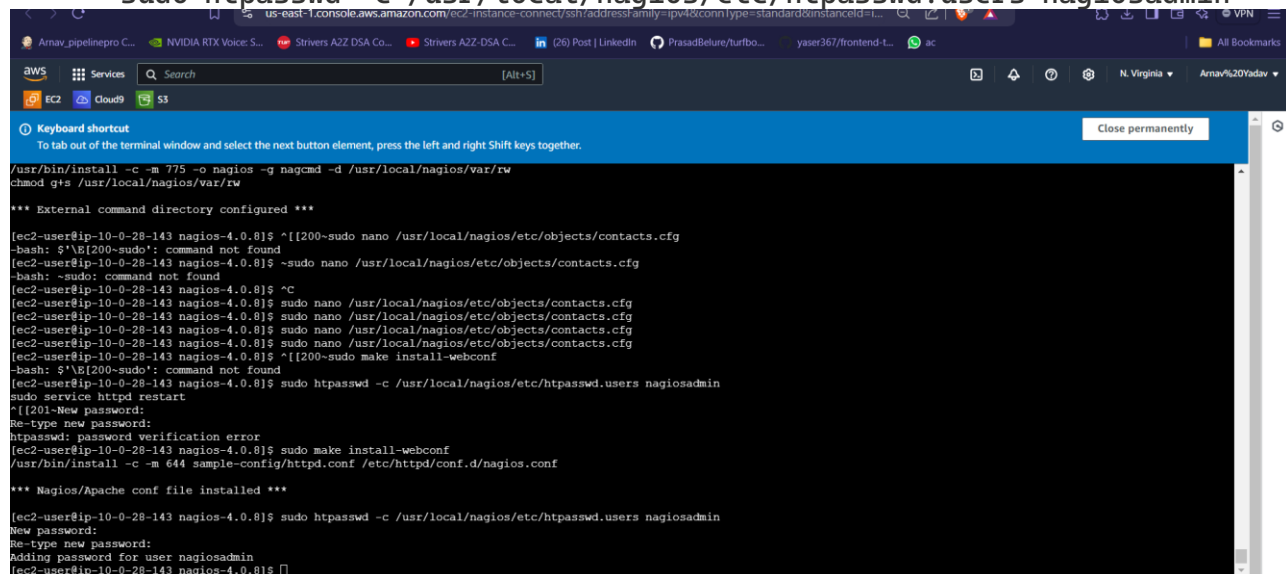
Help      Write Out  Where Is  Cut        Execute    Location  N-U      Set Mark   N-]      To Bracket  N-]      Previous  = Back
Exit      Read File  Replace   Paste       Justify    Go To Line M-E      Copy       M-]      Where Was  M-]      Next      = Forward
```

15. Configure the web interface.

```
sudo make install-webconf
```

16. Create a nagiosadmin account for nagios login along with password. You'll have to specify the password twice.

```
sudo htpasswd -c /usr/local/nagios/etc/htpasswd.users nagiosadmin
```



```
/usr/bin/install -c -m 775 -o nagios -g nagcmd -d /usr/local/nagios/var/rw
chmod g+s /usr/local/nagios/var/rw

*** External command directory configured ***

[ec2-user@ip-10-0-28-143 nagios-4.0.8]$ ^[[200-sudo nano /usr/local/nagios/etc/objects/contacts.cfg
-bash: $'\B[200-sudo': command not found
[ec2-user@ip-10-0-28-143 nagios-4.0.8]$ ~sudo nano /usr/local/nagios/etc/objects/contacts.cfg
-bash: ~sudo: command not found
[ec2-user@ip-10-0-28-143 nagios-4.0.8]$ ^C
[ec2-user@ip-10-0-28-143 nagios-4.0.8]$ sudo nano /usr/local/nagios/etc/objects/contacts.cfg
[ec2-user@ip-10-0-28-143 nagios-4.0.8]$ sudo nano /usr/local/nagios/etc/objects/contacts.cfg
[ec2-user@ip-10-0-28-143 nagios-4.0.8]$ sudo nano /usr/local/nagios/etc/objects/contacts.cfg
[ec2-user@ip-10-0-28-143 nagios-4.0.8]$ sudo nano /usr/local/nagios/etc/objects/contacts.cfg
[ec2-user@ip-10-0-28-143 nagios-4.0.8]$ ^[[200-sudo make install-webconf
-bash: $'\B[200-sudo': command not found
[ec2-user@ip-10-0-28-143 nagios-4.0.8]$ sudo htpasswd -c /usr/local/nagios/etc/htpasswd.users nagiosadmin
sudo service httpd restart
^[[201-New password:
Re-type new password:
htpasswd: password verification error
[ec2-user@ip-10-0-28-143 nagios-4.0.8]$ sudo make install-webconf
/usr/bin/install -c -m 644 sample-config/httpd.conf /etc/httpd/conf.d/nagios.conf

*** Nagios/Apache conf file installed ***

[ec2-user@ip-10-0-28-143 nagios-4.0.8]$ sudo htpasswd -c /usr/local/nagios/etc/htpasswd.users nagiosadmin
New password:
Re-type new password:
Adding password for user nagiosadmin
[ec2-user@ip-10-0-28-143 nagios-4.0.8]$ ^]]
```

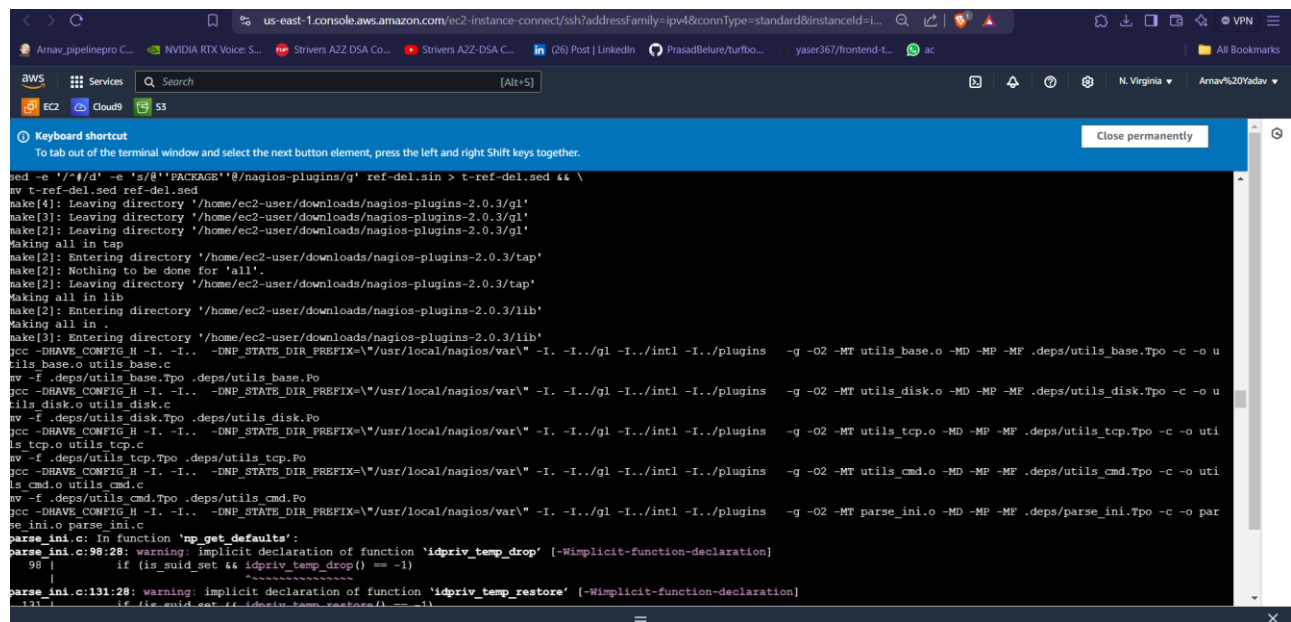
17. Restart Apache

```
sudo service httpd restart
```

18. Go back to the downloads folder and unzip the plugins zip file.

```
cd ~/downloads
tar zxvf nagios-plugins-2.0.3.tar.gz
```





```
sed -e '/^#/d' -e 's/^#/'PACKAGE'/@/nagios-plugins/g' ref-del.sin > t-ref-del.sed && \
mv t-ref-del.sed ref-del.sed
make[4]: Leaving directory '/home/ec2-user/downloads/nagios-plugins-2.0.3/g1'
make[3]: Leaving directory '/home/ec2-user/downloads/nagios-plugins-2.0.3/g1'
make[2]: Leaving directory '/home/ec2-user/downloads/nagios-plugins-2.0.3/g1'
making all in tap
make[2]: Entering directory '/home/ec2-user/downloads/nagios-plugins-2.0.3/tap'
make[2]: Nothing to be done for 'all'.
make[2]: Leaving directory '/home/ec2-user/downloads/nagios-plugins-2.0.3/tap'
making all in lib
make[2]: Entering directory '/home/ec2-user/downloads/nagios-plugins-2.0.3/lib'
making all in .
make[3]: Entering directory '/home/ec2-user/downloads/nagios-plugins-2.0.3/lib'
gcc -DHAVE_CONFIG_H -I. -I... -DNP_STATE_DIR_PREFIX=\"/usr/local/nagios/var\" -I. -I../gl -I../intl -I../plugins -g -O2 -MT utils_base.o -MD -MP -MF .deps/utils_base.Tpo -c -o u
utils_base.o utils_base.c
mv -f .deps/utils_base.Tpo .deps/utils_base.Po
gcc -DHAVE_CONFIG_H -I. -I... -DNP_STATE_DIR_PREFIX=\"/usr/local/nagios/var\" -I. -I../gl -I../intl -I../plugins -g -O2 -MT utils_disk.o -MD -MP -MF .deps/utils_disk.Tpo -c -o u
utils_disk.o utils_disk.c
mv -f .deps/utils_disk.Tpo .deps/utils_disk.Po
gcc -DHAVE_CONFIG_H -I. -I... -DNP_STATE_DIR_PREFIX=\"/usr/local/nagios/var\" -I. -I../gl -I../intl -I../plugins -g -O2 -MT utils_tcp.o -MD -MP -MF .deps/utils_tcp.Tpo -c -o uti
ls_tcp.o utils_tcp.c
mv -f .deps/utils_tcp.Tpo .deps/utils_tcp.Po
gcc -DHAVE_CONFIG_H -I. -I... -DNP_STATE_DIR_PREFIX=\"/usr/local/nagios/var\" -I. -I../gl -I../intl -I../plugins -g -O2 -MT utils_cmd.o -MD -MP -MF .deps/utils_cmd.Tpo -c -o uti
ls_cmd.o utils_cmd.c
mv -f .deps/utils_cmd.Tpo .deps/utils_cmd.Po
gcc -DHAVE_CONFIG_H -I. -I... -DNP_STATE_DIR_PREFIX=\"/usr/local/nagios/var\" -I. -I../gl -I../intl -I../plugins -g -O2 -MT parse_ini.o -MD -MP -MF .deps/parse_ini.Tpo -c -o par
se_ini.o parse_ini.c
parse_ini.c: In function 'np_get_defaults':
parse_ini.c:98:28: warning: implicit declaration of function 'idpriv_temp_drop' [-Wimplicit-function-declaration]
   98 |         if (is_suid_set && idpriv_temp_drop() == -1)
       |                             ^
parse_ini.c:131:28: warning: implicit declaration of function 'idpriv_temp_restore' [-Wimplicit-function-declaration]
   131 |         if (is_suid_set && idpriv_temp_restore() == -1)
       |                             ^
```

## 19. Compile and install plugins

```
cd nagios-plugins-2.0.3
./configure --with-nagios-user=nagios --with-nagios-
group=nagiosmake
sudo make install
```

```
[ec2-user@ip-172-31-43-244 downloads]$ cd nagios-plugins-2.0.3
./configure --with-nagios-user=nagios --with-nagios-group=nagios
make
sudo make install
checking for a BSD-compatible install... /usr/bin/install -c
checking whether build environment is sane... yes
checking for a thread-safe mkdir -p... /usr/bin/mkdir -p
checking for gawk... gawk
checking whether make sets $(MAKE)... yes
checking whether to disable maintainer-specific portions of Makefiles... yes
checking build system type... x86_64-unknown-linux-gnu
checking host system type... x86_64-unknown-linux-gnu
checking for gcc... gcc
checking for C compiler default output file name... a.out
checking whether the C compiler works... yes
checking whether we are cross compiling... no
checking for suffix of executables...
checking for suffix of object files... o
checking whether we are using the GNU C compiler... yes
checking whether gcc accepts -g... yes
checking for gcc option to accept ISO C89... none needed
checking for style of include used by make... GNU
```

## 20. Start Nagios

Add Nagios to the list of system services

```
sudo chkconfig --add nagios
sudo chkconfig nagios on
```

Verify the sample configuration files

```
sudo /usr/local/nagios/bin/nagios -v
/usr/local/nagios/etc/nagios.cfg
```

If there are no errors, you can go ahead and start Nagios.

```
sudo service nagios start
```

```
[ec2-user@ip-172-31-43-244 nagios-plugins-2.0.3]$ sudo mkdir -p /usr/local/nagios/var/spool/checkresults
[ec2-user@ip-172-31-43-244 nagios-plugins-2.0.3]$ sudo chown -R nagios:nagios /usr/local/nagios/var/spool/checkresults
[ec2-user@ip-172-31-43-244 nagios-plugins-2.0.3]$ sudo /usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg

Nagios Core 4.0.8
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Copyright (c) 1999-2009 Ethan Galstad
Last Modified: 08-12-2014
License: GPL

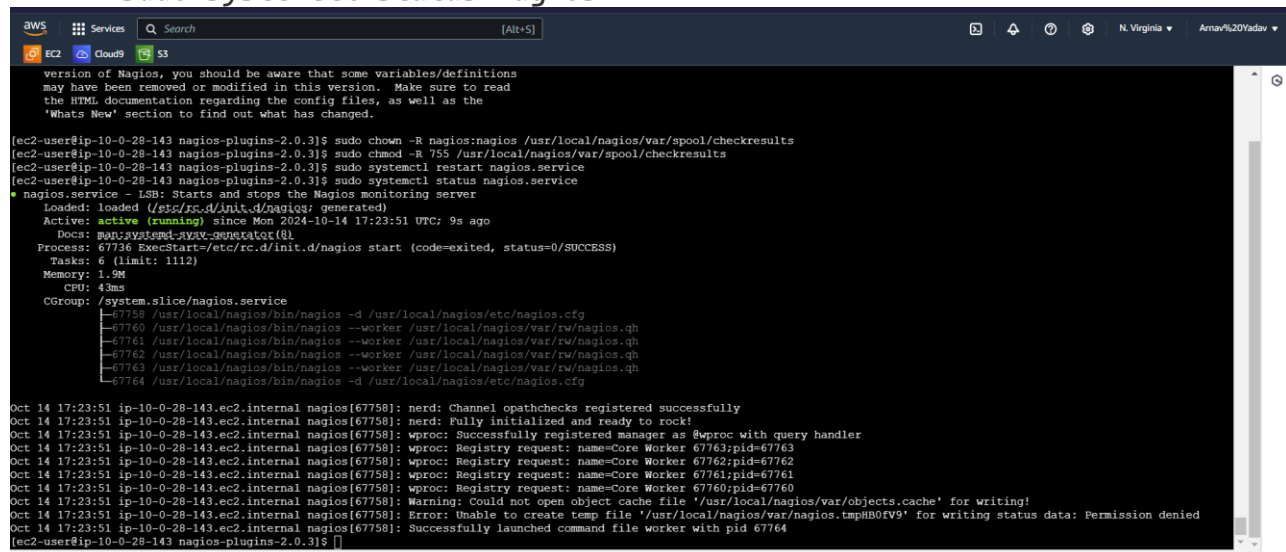
Website: http://www.nagios.org
Reading configuration data...
  Read main config file okay...
  Read object config files okay...

Running pre-flight check on configuration data...

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

21. Check the status of Nagios

```
sudo systemctl status nagios
```



```
version of Nagios, you should be aware that some variables/definitions
may have been removed or modified in this version. Make sure to read
the README documentation regarding the config files, as well as the
'Whats New' section to find out what has changed.

[ec2-user@ip-10-0-28-143 nagios-plugins-2.0.3]$ sudo chown -R nagios:nagios /usr/local/nagios/var/spool/checkresults
[ec2-user@ip-10-0-28-143 nagios-plugins-2.0.3]$ sudo chmod -R 755 /usr/local/nagios/var/spool/checkresults
[ec2-user@ip-10-0-28-143 nagios-plugins-2.0.3]$ sudo systemctl restart nagios.service
[ec2-user@ip-10-0-28-143 nagios-plugins-2.0.3]$ sudo systemctl status nagios.service
● nagios.service - LSB: Starts and stops the Nagios monitoring server
   Loaded: loaded (/etc/rc.d/init.d/nagios; generated)
   Active: active (running) since Mon 2024-10-14 17:23:51 UTC; 9s ago
     Docs: man:systemd-sysv-generator(8)
  Process: 67736 ExecStart=/etc/rc.d/init.d/nagios start (code=exited, status=0/SUCCESS)
    Tasks: 6 (limit: 1112)
   Memory: 1.9M
      CPU: 43ms
  CGroup: /system.slice/nagios.service
          └─67758 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
             └─67760 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                └─67761 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                   └─67762 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                      └─67763 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                         └─67764 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg

Oct 14 17:23:51 ip-10-0-28-143.ec2.internal nagios[67758]: nerd: Channel opathchecks registered successfully
Oct 14 17:23:51 ip-10-0-28-143.ec2.internal nagios[67758]: nerd: Fully initialized and ready to rock!
Oct 14 17:23:51 ip-10-0-28-143.ec2.internal nagios[67758]: wproc: Successfully registered manager as @wproc with query handler
Oct 14 17:23:51 ip-10-0-28-143.ec2.internal nagios[67758]: wproc: Registry request: name=Core Worker 67763;pid=67763
Oct 14 17:23:51 ip-10-0-28-143.ec2.internal nagios[67758]: wproc: Registry request: name=Core Worker 67762;pid=67762
Oct 14 17:23:51 ip-10-0-28-143.ec2.internal nagios[67758]: wproc: Registry request: name=Core Worker 67761;pid=67761
Oct 14 17:23:51 ip-10-0-28-143.ec2.internal nagios[67758]: wproc: Registry request: name=Core Worker 67760;pid=67760
Oct 14 17:23:51 ip-10-0-28-143.ec2.internal nagios[67758]: Warning: Could not open object cache file '/usr/local/nagios/var/objects.cache' for writing!
Oct 14 17:23:51 ip-10-0-28-143.ec2.internal nagios[67758]: Error: Unable to create temp file '/usr/local/nagios/var/nagios.tmpH0IV9' for writing status data: Permission denied
Oct 14 17:23:51 ip-10-0-28-143.ec2.internal nagios[67758]: Successfully launched command file worker with pid 67764
[ec2-user@ip-10-0-28-143 nagios-plugins-2.0.3]$
```

22. Go back to EC2 Console and copy the Public IP address of this instance

23. Open up your browser and look for  
[http://<your\\_public\\_ip\\_address>/nagios](http://<your_public_ip_address>/nagios)

## Sign in

http://34.229.241.192

Your connection to this site is not private

Username

arnav

Password

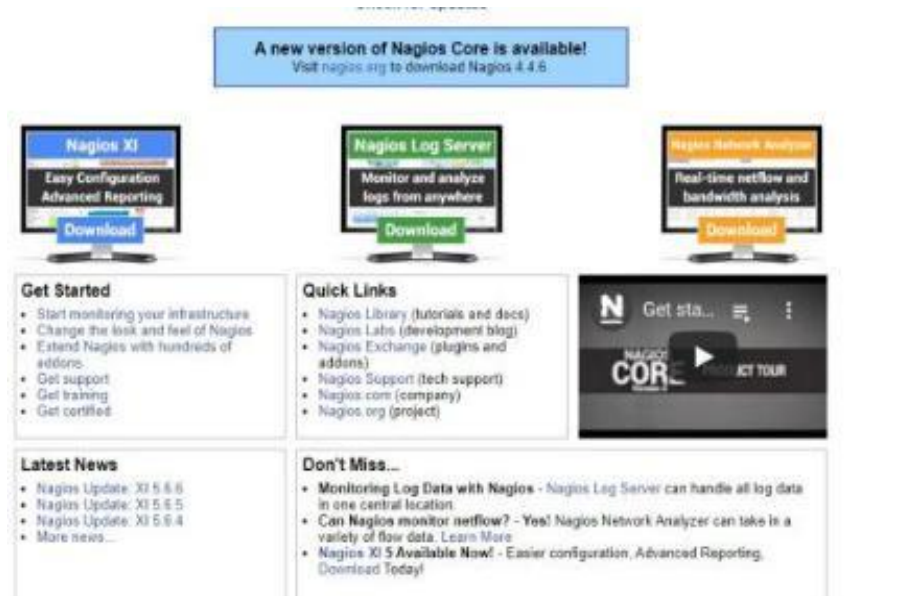
.....|

Sign in

Cancel

Enter username as nagiosadmin and password which you set in Step 16.

24. After entering the correct credentials, you will see this page.



This means that Nagios was correctly installed and configured with its plugins so far.

## Conclusion:

Thus, we learned about Nagios and successfully set it up as a host on our Amazon Linux machine.