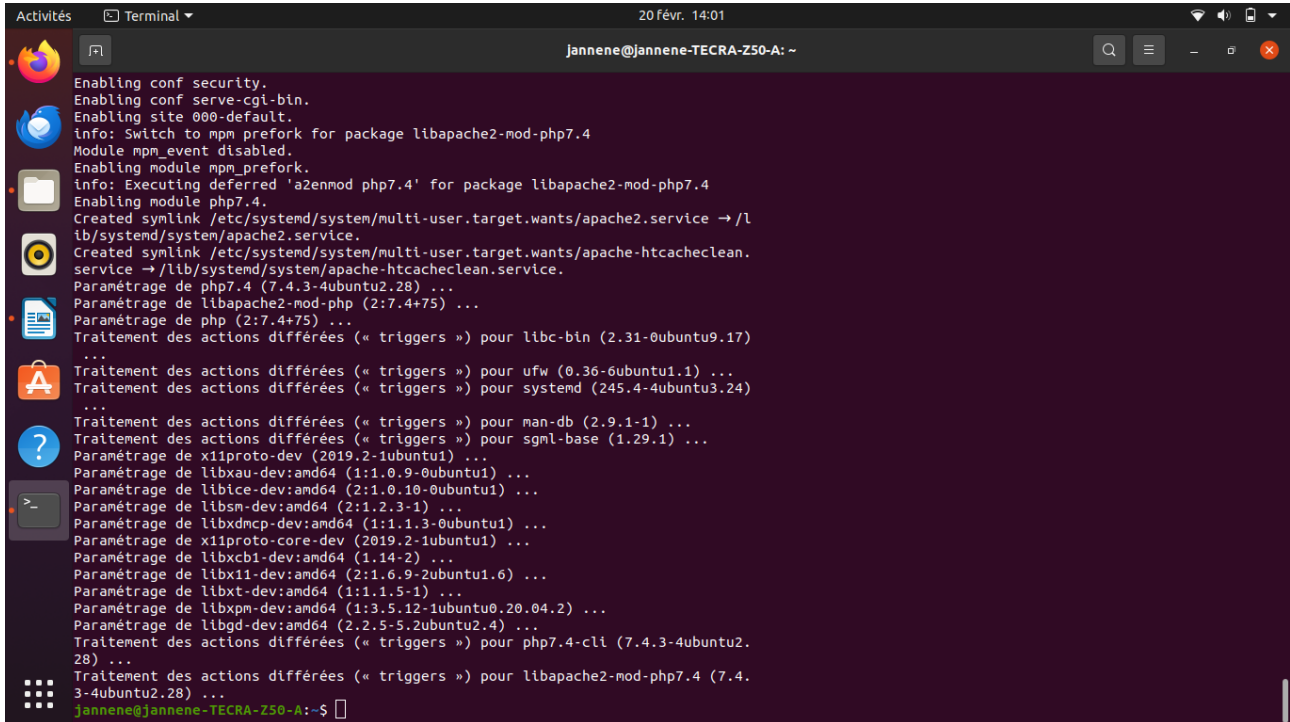


Install and configure Nagios on Ubuntu

22.04

Step2: Install Prerequisites

`sudo apt install build-essential apache2 php libgd-dev libapache2-mod-php libperl-dev libssl-dev`



```
Enabling conf security.
Enabling conf serve-cgi-bin.
Enabling site 000-default.
info: Switch to mpm prefork for package libapache2-mod-php7.4
Module mpm_event disabled.
Enabling module mpm_prefork.
info: Executing deferred 'a2enmod php7.4' for package libapache2-mod-php7.4
Enabling module php7.4.
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service → /lib/systemd/system/apache2.service.
Created symlink /etc/systemd/system/multi-user.target.wants/apache-htcacheclean.service → /lib/systemd/system/apache-htcacheclean.service.
Paramétrage de php7.4 (7.4.3-4ubuntu2.28) ...
Paramétrage de libapache2-mod-php (2:7.4+75) ...
Paramétrage de php (2:7.4+75) ...
Traitement des actions différées (« triggers ») pour libc-bin (2.31-0ubuntu9.17) ...
Traitement des actions différées (« triggers ») pour ufw (0.36-6ubuntu1.1) ...
Traitement des actions différées (« triggers ») pour systemd (245.4-4ubuntu3.24) ...
Traitement des actions différées (« triggers ») pour man-db (2.9.1-1) ...
Traitement des actions différées (« triggers ») pour sgml-base (1.29.1) ...
Paramétrage de x11proto-dev (2019.2-1ubuntu1) ...
Paramétrage de libxau-dev:amd64 (1:1.0.9-0ubuntu1) ...
Paramétrage de libice-dev:amd64 (2:1.0.10-0ubuntu1) ...
Paramétrage de libsm-dev:amd64 (2:1.2.3-1) ...
Paramétrage de libxdmcp-dev:amd64 (1:1.1.3-0ubuntu1) ...
Paramétrage de x11proto-core-dev (2019.2-1ubuntu1) ...
Paramétrage de libxcb1-dev:amd64 (1.14-2) ...
Paramétrage de libx11-dev:amd64 (2:1.6.9-2ubuntu1.6) ...
Paramétrage de libxt-dev:amd64 (1:1.1.5-1) ...
Paramétrage de libxpm-dev:amd64 (1:3.5.12-1ubuntu0.20.04.2) ...
Paramétrage de libgd-dev:amd64 (2.2.5-5.2ubuntu2.4) ...
Traitement des actions différées (« triggers ») pour php7.4-cli (7.4.3-4ubuntu2.28) ...
Traitement des actions différées (« triggers ») pour libapache2-mod-php7.4 (7.4.3-4ubuntu2.28) ...
jannene@jannene-TECRA-Z50-A:~$
```

Step 3: Create a Nagios User and Group

```
# sudo useradd nagios
# sudo groupadd nagcmd
# sudo usermod -a -G nagcmd nagios
# sudo usermod -a -G nagios,nagcmd www-data
```

The screenshot shows a Blackboard assessment page titled "Services et Administration des Réseaux_4SAE2". A terminal window is open in the foreground, displaying the following commands and output:

```

jannene@jannene-TECRA-Z50-A: ~
Traitement des actions différées (« triggers ») pour sgml-base (1.29.1) ...
Paramétrage de x11proto-dev (2019.2-1ubuntu1) ...
Paramétrage de libxau-dev:amd64 (1:1.0.9-0ubuntu1) ...
Paramétrage de libice-dev:amd64 (2:1.0.10-0ubuntu1) ...
Paramétrage de libsm-dev:amd64 (2:1.2.3-1) ...
Paramétrage de libxdmcp-dev:amd64 (1:1.1.3-0ubuntu1) ...
Paramétrage de x11proto-core-dev (2019.2-1ubuntu1) ...
Paramétrage de libxcb1-dev:amd64 (1.14-2) ...
Paramétrage de libx11-dev:amd64 (2:1.6.9-2ubuntu1.6) ...
Paramétrage de libxt-dev:amd64 (1:1.1.5-1) ...
Paramétrage de libxpm-dev:amd64 (1:3.5.12-1ubuntu0.20.04.2) ...
Paramétrage de libgd-dev:amd64 (2.2.5-5.2ubuntu2.4) ...
Traitement des actions différées (« triggers ») pour php7.4-cli (7.4.3-4ubuntu2
28) ...
Traitement des actions différées (« triggers ») pour libapache2-mod-php7.4 (7.4
3-4ubuntu2.28) ...
jannene@jannene-TECRA-Z50-A:~$ sudo useradd nagios
jannene@jannene-TECRA-Z50-A:~$ sudo groupadd nagcmd
jannene@jannene-TECRA-Z50-A:~$ sudo usermod -a -G nagcmd nagios
jannene@jannene-TECRA-Z50-A:~$ sudo usermod -a -G nagios,nagcmd www-data
jannene@jannene-TECRA-Z50-A:~$

```

The background page shows "Détails et informations" for the assessment, including the deadline "26/02/2024 00:00 (UTC+1)" and a status of "En retard". It also indicates "1 tentative restante" and a maximum score of "100 points".

Step 4: Download Nagios on Ubuntu

```
# cd ~
```

```
# wget https://github.com/NagiosEnterprises/nagioscore/releases/download/nagios-4.4.6/nagios-4.4.6.tar.gz
```

The screenshot shows a terminal window with the following commands and output:

```

jannene@jannene-TECRA-Z50-A: ~
Traitement des actions différées (« triggers ») pour php7.4-cli (7.4.3-4ubuntu2.
28) ...
Traitement des actions différées (« triggers ») pour libapache2-mod-php7.4 (7.4
3-4ubuntu2.28) ...
jannene@jannene-TECRA-Z50-A:~$ sudo useradd nagios
jannene@jannene-TECRA-Z50-A:~$ sudo groupadd nagcmd
jannene@jannene-TECRA-Z50-A:~$ sudo usermod -a -G nagcmd nagios
jannene@jannene-TECRA-Z50-A:~$ sudo usermod -a -G nagios,nagcmd www-data
jannene@jannene-TECRA-Z50-A:~$ cd ~
jannene@jannene-TECRA-Z50-A:~$ wget https://github.com/NagiosEnterprises/nagioscore/releases/download/nagios-
4.4.6/nagios-4.4.6.tar.gz
--2025-02-20 14:07:17-- https://github.com/NagiosEnterprises/nagioscore/releases/download/nagios-
4.4.6/nagios-4.4.6.tar.gz
Résolution de github.com (github.com)... 140.82.121.3
Connexion à github.com (github.com)|140.82.121.3|:443... connecté.
requête HTTP transmise, en attente de la réponse... 404 Not Found
2025-02-20 14:07:18 erreur 404 : Not Found.

jannene@jannene-TECRA-Z50-A:~$ 4.4.6/nagios-4.4.6.tar.gz
bash: 4.4.6/nagios-4.4.6.tar.gz: Aucun fichier ou dossier de ce type
jannene@jannene-TECRA-Z50-A:~$ wget https://github.com/NagiosEnterprises/nagioscore/releases/download/nagios-4.4.6/nagios-4.4.6.tar.gz
--2025-02-20 14:08:11-- https://github.com/NagiosEnterprises/nagioscore/releases/download/nagios-4.4.6/nagios-4.4.6.tar.gz
Résolution de github.com (github.com)... 140.82.121.4
Connexion à github.com (github.com)|140.82.121.4|:443... connecté.
requête HTTP transmise, en attente de la réponse... 302 Found
Emplacement : https://objects.githubusercontent.com/github-production-release-asset-2e65be/16119670/6195cc80-8969-11ea-9b68-e3a8c5b15c0e?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=releaseassetproduction%2F20250220%2Fus-east-1%2F3%2Faws4_request&X-Amz-Date=20250220T130812Z&X-Amz-Expires=300&X-Amz-Signature=c0c7644d5ea40b0bd2ea7b6ccb1c4707dec7021ea1c8b6a9a09bc0e3c06188dc&X-Amz-SignedHeaders=host&response-content-disposition=attachment%3B%20filename%3Dnagios-4.4.6.tar.gz&response-content-type=application%2Foctet-stream [suivant]
--2025-02-20 14:08:12-- https://objects.githubusercontent.com/github-production-release-asset-2e65be/16119670/6195cc80-8969-11ea-9b68-e3a8c5b15c0e?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=releaseassetproduction%2F20250220%2Fus-east-1%2F3%2Faws4_request&X-Amz-Date=20250220T130812Z&X-Amz-Expires=300&X-Amz-Signature=c0c7644d5ea40b0bd2ea7b6ccb1c4707dec7021ea1c8b6a9a09bc0e3c06188dc&X-Amz-SignedHeaders=host&response-content-disposition=attachment%3B%20filename%3Dnagios-4.4.6.tar.gz&response-content-type=application%2Foctet-stream
Résolution de objects.githubusercontent.com (objects.githubusercontent.com)... 185.199.108.133, 185.199.111.133, 185.199.109.133, ...
Connexion à objects.githubusercontent.com (objects.githubusercontent.com)|185.199.108.133|:443... connecté.
requête HTTP transmise, en attente de la réponse... 200 OK
Taille : 11333414 (11M) [application/octet-stream]
Enregistre : «nagios-4.4.6.tar.gz»

nagios-4.4.6.tar.gz 6%[====>] 726,35K 29,8KB/s tps 3m 52s

```

Step 5: Extract downloaded tar.gz file

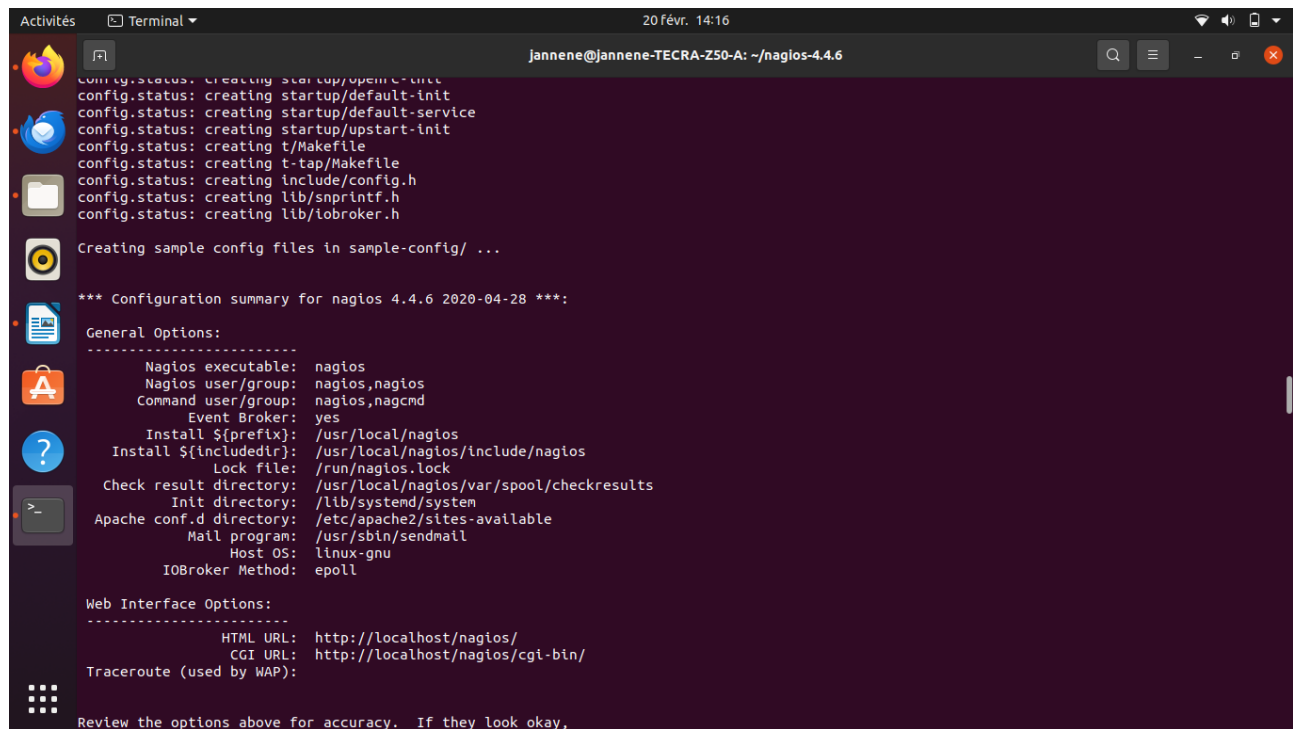
```
tar -xzf nagios-4.4.6.tar.gz
```

Step6: Compile Nagios Core

```
cd nagios-4.4.6
```

```
sudo ./configure --with-nagios-group=nagios --with-command-group=nagcmd
```

```
sudo make all
```

A terminal window titled 'Terminal' with the date '20 févr. 14:16' and the user 'jannene@jannene-TECRA-Z50-A: ~/nagios-4.4.6'. The terminal output shows the configuration status for Nagios 4.4.6, listing the creation of various files and directories. It then displays a configuration summary for Nagios 4.4.6, dated 2020-04-28. The summary includes general options such as the Nagios executable, user/group, command user/group, event broker, install prefix, include directory, lock file, check result directory, init directory, Apache conf.d directory, mail program, host OS, and IOBroker method. It also lists web interface options like the HTML and CGI URLs, and the traceroute used by WAP. The summary concludes with a prompt to review the options for accuracy.

```
Activités Terminal 20 févr. 14:16 jannene@jannene-TECRA-Z50-A: ~/nagios-4.4.6

config.status: creating startup/openmct-init
config.status: creating startup/default-init
config.status: creating startup/default-service
config.status: creating startup/upstart-init
config.status: creating t/Makefile
config.status: creating t-tap/Makefile
config.status: creating include/config.h
config.status: creating lib/snprintf.h
config.status: creating lib/tobroker.h

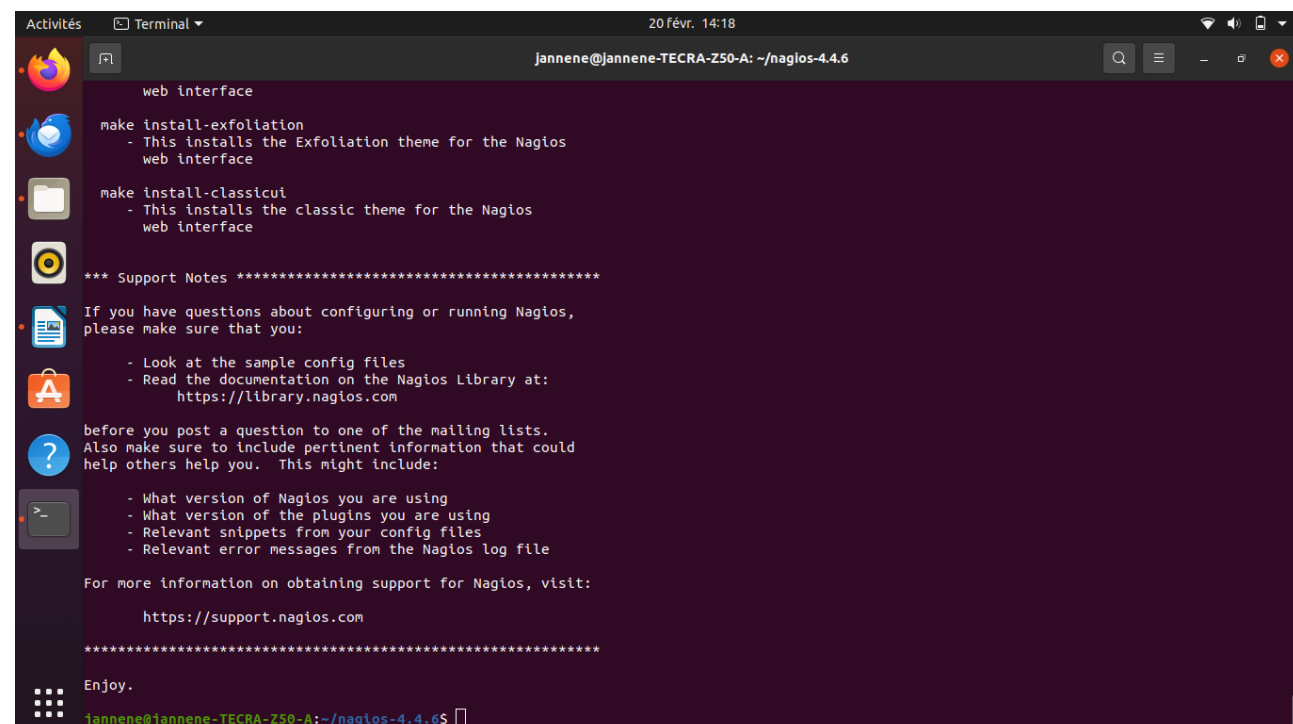
Creating sample config files in sample-config/ ...

*** Configuration summary for nagios 4.4.6 2020-04-28 ***:

General Options:
-----
Nagios executable: nagios
Nagios user/group: nagios,nagios
Command user/group: nagios,nagcmd
Event Broker: yes
Install ${prefix}: /usr/local/nagios
Install ${includedir}: /usr/local/nagios/include/nagios
Lock file: /run/nagios.lock
Check result directory: /usr/local/nagios/var/spool/checkresults
Init directory: /lib/systemd/system
Apache conf.d directory: /etc/apache2/sites-available
Mail program: /usr/sbin/sendmail
Host OS: linux-gnu
IOBroker Method: epoll

Web Interface Options:
-----
HTML URL: http://localhost/nagios/
CGI URL: http://localhost/nagios/cgi-bin/
Traceroute (used by WAP):

Review the options above for accuracy. If they look okay,
```

A terminal window titled 'Terminal' with the date '20 févr. 14:18' and the user 'jannene@jannene-TECRA-Z50-A: ~/nagios-4.4.6'. The terminal output shows instructions for installing the Nagios web interface, including the 'make install-exfoliation' and 'make install-classicui' commands. It then displays support notes, including a list of questions to ask when configuring or running Nagios, and a list of information to include when posting a question to a mailing list. The support notes conclude with a prompt to visit the Nagios support website for more information.

```
Activités Terminal 20 févr. 14:18 jannene@jannene-TECRA-Z50-A: ~/nagios-4.4.6

web interface

make install-exfoliation
- This installs the Exfoliation theme for the Nagios
web interface

make install-classicui
- This installs the classic theme for the Nagios
web interface

*** Support Notes *****

If you have questions about configuring or running Nagios,
please make sure that you:

- Look at the sample config files
- Read the documentation on the Nagios Library at:
https://library.nagios.com

before you post a question to one of the mailing lists.
Also make sure to include pertinent information that could
help others help you. This might include:

- What version of Nagios you are using
- What version of the plugins you are using
- Relevant snippets from your config files
- Relevant error messages from the Nagios log file

For more information on obtaining support for Nagios, visit:

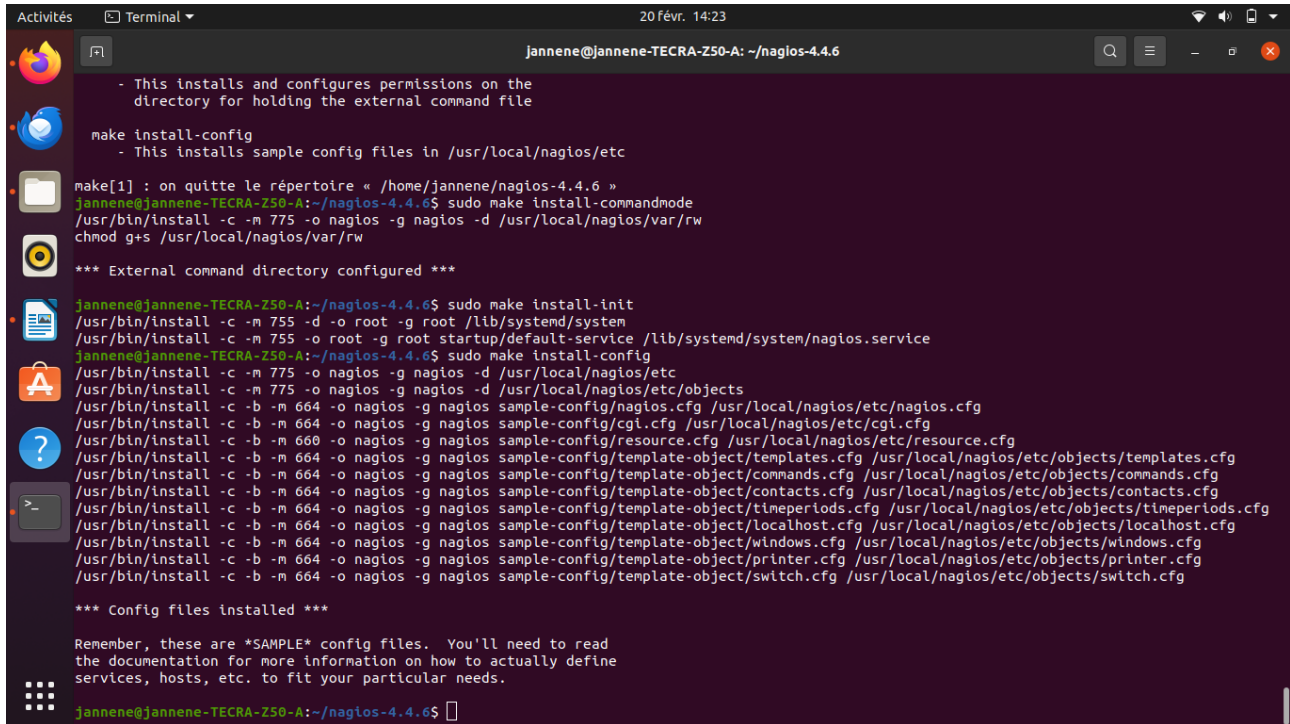
https://support.nagios.com

*****

Enjoy.

jannene@jannene-TECRA-Z50-A:~/nagios-4.4.6$
```

Step7: Install Nagios Core Binaries and Web Interface Files

A terminal window titled "Terminal" with a dark background and light text. The window shows the installation process for Nagios 4.4.6. The user is jannene@jannene-TECRA-Z50-A in the directory ~/nagios-4.4.6. The terminal output includes instructions for installing permissions, sample config files, and the Nagios core binaries. It shows the execution of 'make install-config', 'make install-commandmode', and 'make install-init'. The final output lists the installed files and their permissions, followed by a reminder to read the documentation for configuration details.

```
20 févr. 14:23
jannene@jannene-TECRA-Z50-A: ~/nagios-4.4.6

- This installs and configures permissions on the
  directory for holding the external command file

make install-config
- This installs sample config files in /usr/local/nagios/etc

make[1] : on quitte le répertoire « /home/jannene/nagios-4.4.6 »
jannene@jannene-TECRA-Z50-A:~/nagios-4.4.6$ sudo make install-commandmode
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/var/rw
chmod g+s /usr/local/nagios/var/rw

*** External command directory configured ***

jannene@jannene-TECRA-Z50-A:~/nagios-4.4.6$ sudo make install-init
/usr/bin/install -c -m 755 -d -o root -g root /lib/systemd/system
/usr/bin/install -c -m 755 -o root -g root startup/default-service /lib/systemd/system/nagios.service
jannene@jannene-TECRA-Z50-A:~/nagios-4.4.6$ sudo make install-config
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/etc
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/etc/objects
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/nagios.cfg /usr/local/nagios/etc/nagios.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/cgi.cfg /usr/local/nagios/etc/cgi.cfg
/usr/bin/install -c -b -m 660 -o nagios -g nagios sample-config/resource.cfg /usr/local/nagios/etc/resource.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/templates.cfg /usr/local/nagios/etc/objects/templates.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/commands.cfg /usr/local/nagios/etc/objects/commands.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/contacts.cfg /usr/local/nagios/etc/objects/contacts.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/timeperiods.cfg /usr/local/nagios/etc/objects/timeperiods.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/localhost.cfg /usr/local/nagios/etc/objects/localhost.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/windows.cfg /usr/local/nagios/etc/objects/windows.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/printer.cfg /usr/local/nagios/etc/objects/printer.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/switch.cfg /usr/local/nagios/etc/objects/switch.cfg

*** Config files installed ***

Remember, these are *SAMPLE* config files. You'll need to read
the documentation for more information on how to actually define
services, hosts, etc. to fit your particular needs.

jannene@jannene-TECRA-Z50-A:~/nagios-4.4.6$
```

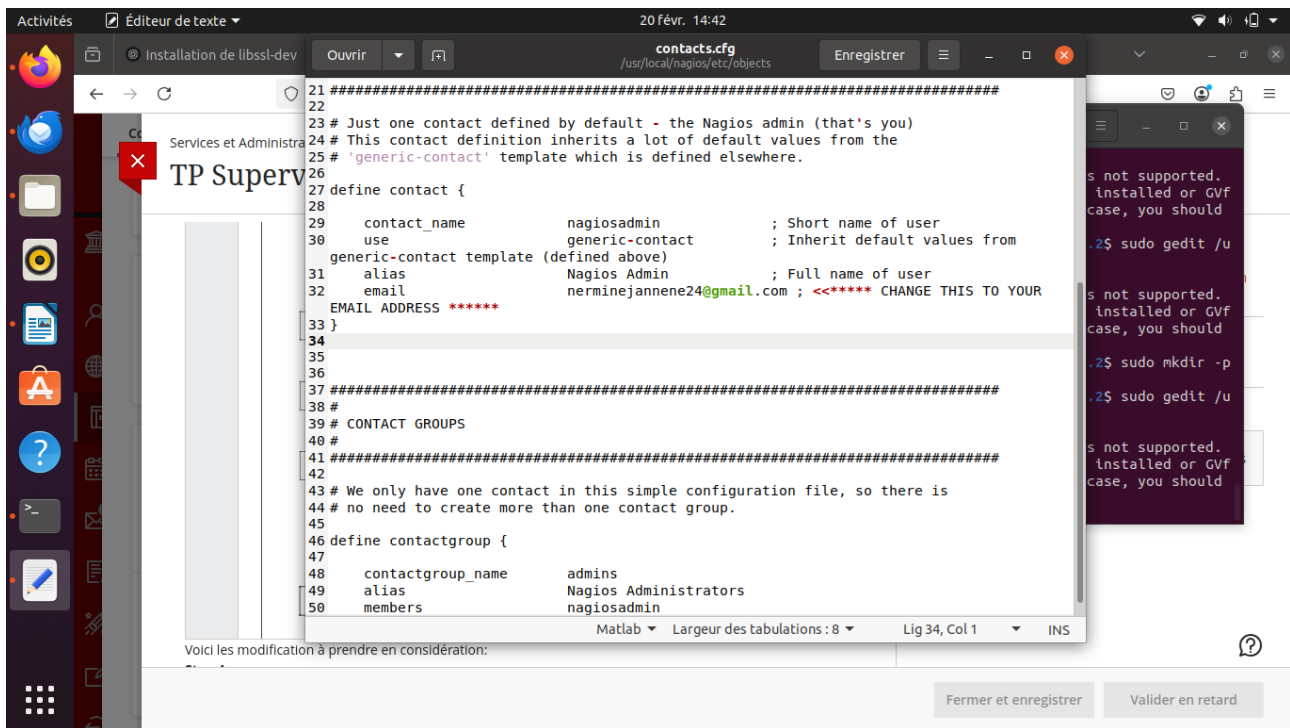
Step8: Download, Extract and Install Nagios on Ubuntu Plugins


```
20 févr. 14:32
jannene@jannene-TECRA-Z50-A: ~/nagios-4.4.6/nagios-plugins-2.1.2

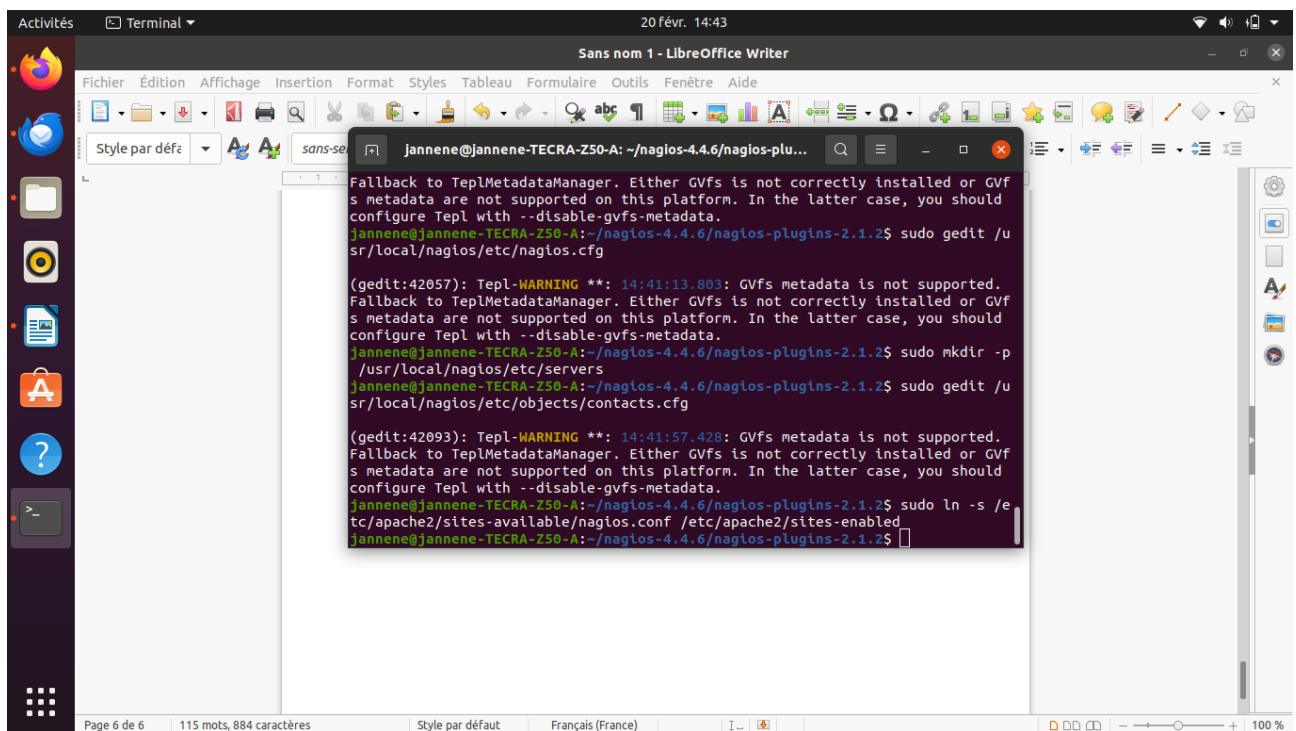
make[1] : on quitte le répertoire « /home/jannene/nagios-4.4.6/nagios-plugins-2.1.2/plugins-scripts »
Making install in plugins-root
make[1] : on entre dans le répertoire « /home/jannene/nagios-4.4.6/nagios-plugins-2.1.2/plugins-root »
make[2] : on entre dans le répertoire « /home/jannene/nagios-4.4.6/nagios-plugins-2.1.2/plugins-root »
/usr/bin/install -c -o nagios -g nagios check_dhcp /usr/local/nagios/libexec/check_dhcp
chown root /usr/local/nagios/libexec/check_dhcp
chmod ug=rx,u+s /usr/local/nagios/libexec/check_dhcp
/usr/bin/install -c -o nagios -g nagios check_icmp /usr/local/nagios/libexec/check_icmp
chown root /usr/local/nagios/libexec/check_icmp
chmod ug=rx,u+s /usr/local/nagios/libexec/check_icmp
make[2]: rien à faire pour « install-data-am ».
make[2] : on quitte le répertoire « /home/jannene/nagios-4.4.6/nagios-plugins-2.1.2/plugins-root »
make[1] : on quitte le répertoire « /home/jannene/nagios-4.4.6/nagios-plugins-2.1.2/plugins-root »
Making install in po
make[1] : on entre dans le répertoire « /home/jannene/nagios-4.4.6/nagios-plugins-2.1.2/po »
/usr/bin/mkdir -p /usr/local/nagios/share
installing fr.gmo as /usr/local/nagios/share/locale/fr/LC_MESSAGES/nagios-plugins.mo
installing de.gmo as /usr/local/nagios/share/locale/de/LC_MESSAGES/nagios-plugins.mo
if test "nagios-plugins" = "gettext-tools"; then \
  /usr/bin/mkdir -p /usr/local/nagios/share/gettext/po; \
  for file in Makefile.in remove-potcdate.sin Makevars.template; do \
    /usr/bin/install -c -o nagios -g nagios -m 644 ./\$file \
      /usr/local/nagios/share/gettext/po/\$file; \
  done; \
  for file in Makevars; do \
    rm -f /usr/local/nagios/share/gettext/po/\$file; \
  done; \
else \
  : ; \
fi
make[1] : on quitte le répertoire « /home/jannene/nagios-4.4.6/nagios-plugins-2.1.2/po »
make[1] : on entre dans le répertoire « /home/jannene/nagios-4.4.6/nagios-plugins-2.1.2 »
make[2] : on entre dans le répertoire « /home/jannene/nagios-4.4.6/nagios-plugins-2.1.2 »
make[2]: rien à faire pour « install-exec-am ».
make[2]: rien à faire pour « install-data-am ».
make[2] : on quitte le répertoire « /home/jannene/nagios-4.4.6/nagios-plugins-2.1.2 »
make[1] : on quitte le répertoire « /home/jannene/nagios-4.4.6/nagios-plugins-2.1.2 »
jannene@jannene-TECRA-Z50-A:~/nagios-4.4.6/nagios-plugins-2.1.2$
```

Step9: Configuring Nagios

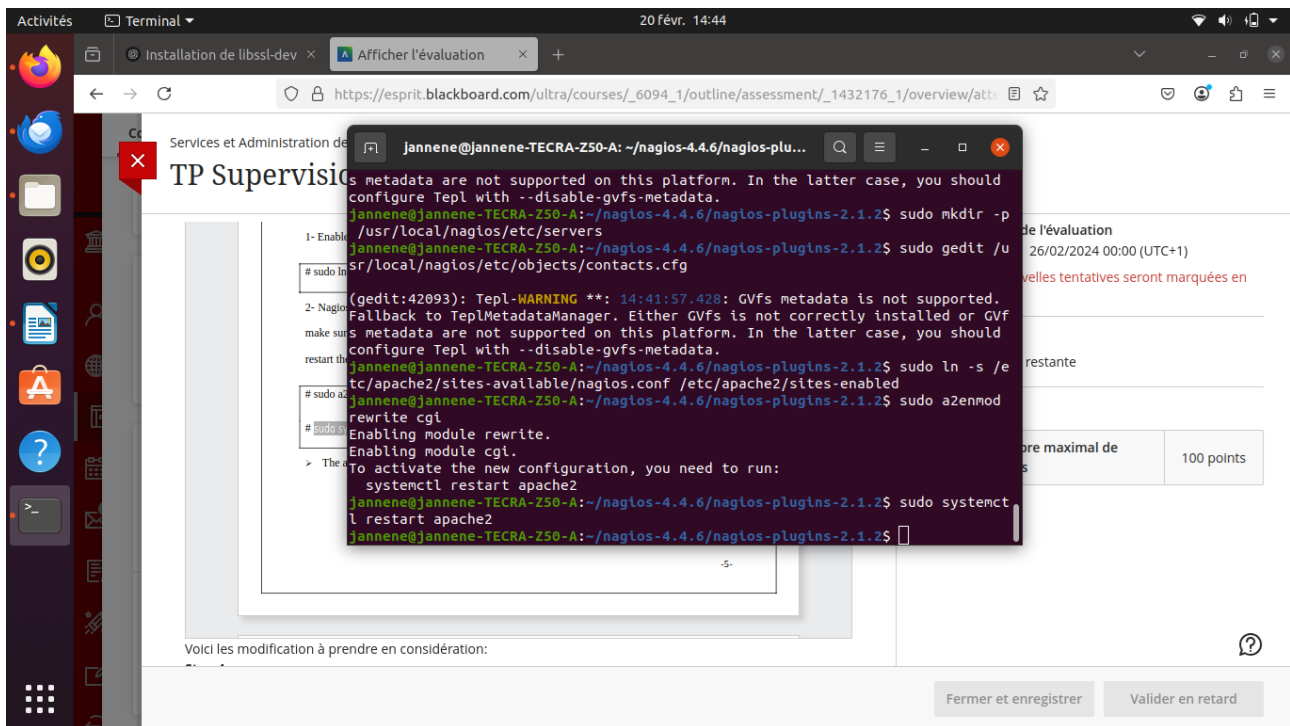
`sudo gedit /usr/local/nagios/etc/nagios.cfg`



Step 10: Configuring apache2

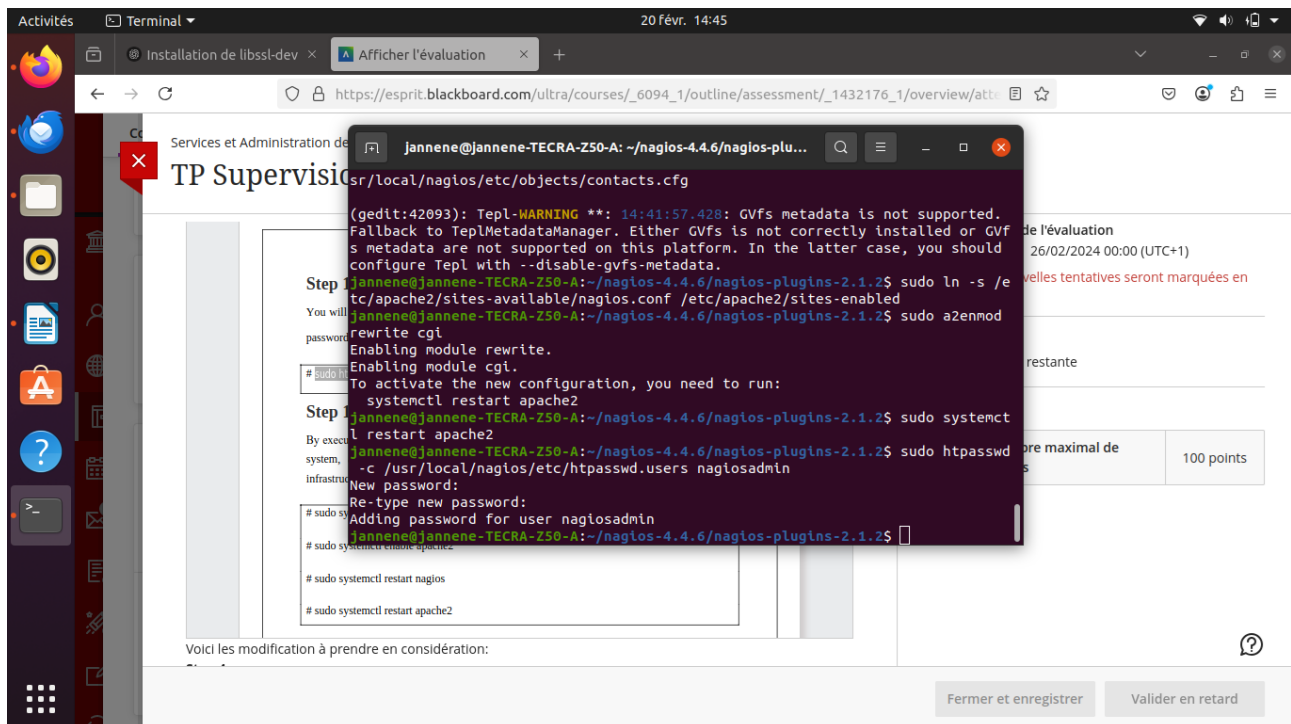


sudo systemctl restart apache2



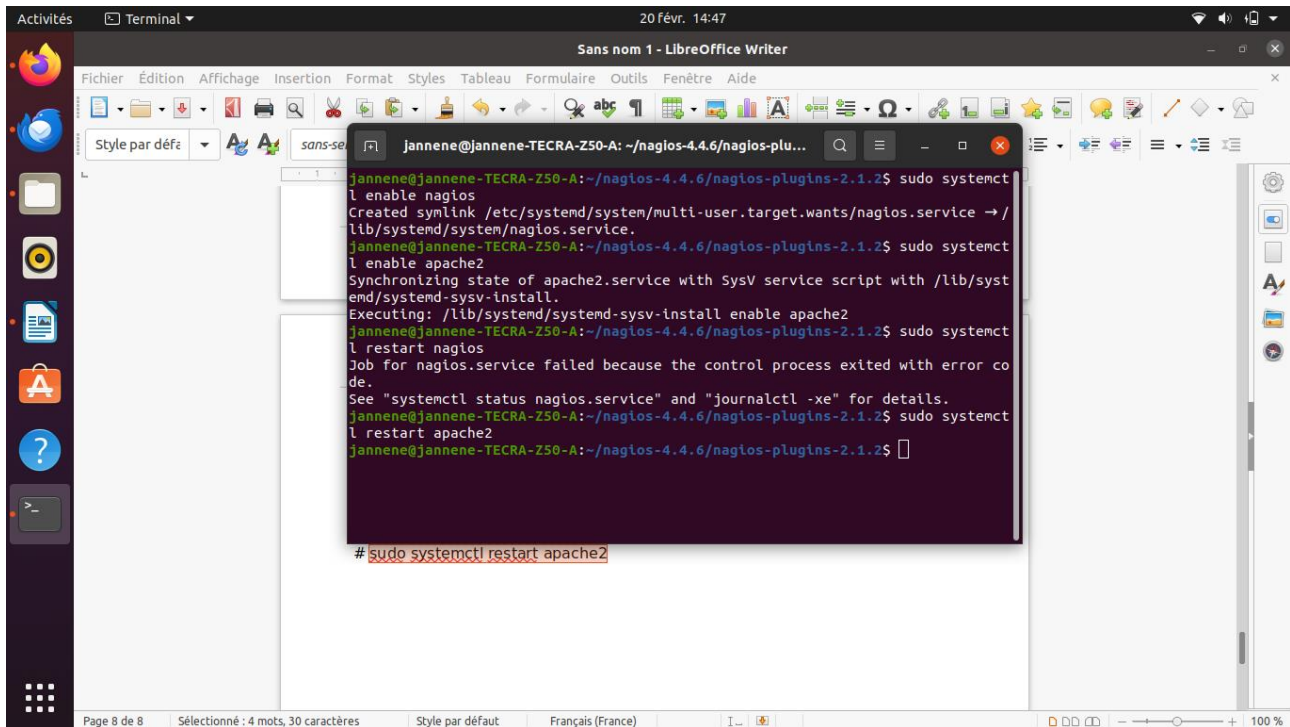
Step 11: Set Nagios Admin Password

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



Step 12: Start Nagios and Apache Services

```
sudo systemctl enable nagios
# sudo systemctl enable apache2
# sudo systemctl restart nagios
# sudo systemctl restart apache2
```

A screenshot of a Linux desktop environment. In the background, a LibreOffice Writer window is open with the title 'Sans nom 1 - LibreOffice Writer'. Overlaid on top of it is a terminal window. The terminal shows the following commands and output:

```
jannene@jannene-TECRA-Z50-A: ~/nagios-4.4.6/nagios-plugins-2.1.2$ sudo systemctl enable nagios
Created symlink /etc/systemd/system/multi-user.target.wants/nagios.service → /lib/systemd/system/nagios.service.
jannene@jannene-TECRA-Z50-A: ~/nagios-4.4.6/nagios-plugins-2.1.2$ sudo systemctl enable apache2
Synchronizing state of apache2.service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable apache2
jannene@jannene-TECRA-Z50-A: ~/nagios-4.4.6/nagios-plugins-2.1.2$ sudo systemctl restart nagios
Job for nagios.service failed because the control process exited with error code.
See "systemctl status nagios.service" and "journalctl -xe" for details.
jannene@jannene-TECRA-Z50-A: ~/nagios-4.4.6/nagios-plugins-2.1.2$ sudo systemctl restart apache2
jannene@jannene-TECRA-Z50-A: ~/nagios-4.4.6/nagios-plugins-2.1.2$
```

Below the terminal window, the text `# sudo systemctl restart apache2` is written in a light blue color.

Step 13: Access Nagios Web Dashboard

172.16.4.70