

# Installation NRPE sur Centos7

1. Add the EPEL repository

Lignes de commande :

### > yum install epel-release

2. Install NRPE and the plugins that is required to add the services.

```
yum install nrpe nagios-plugins-users nagios-plugins-loadnagios-plugins-swap nagios-plugins-disk nagios-plugins-procs
```

3. Configure the agent to utilize the plugins.

Create a new file called /etc/nrpe.d/op5\_commands.cfg containing the following information:

```
########
# op5-nrpe command configuration file
#
# COMMAND DEFINITIONS
# Syntax:
# command[<command_name>]=<command_line>
command[users]=/usr/lib64/nagios/plugins/check_users -w 5 -c 10
command[load]=/usr/lib64/nagios/plugins/check_load -w 15,10,5 -c
30,25,20
command[check load]=/usr/lib64/nagios/plugins/check load -w 15,10,5 -c
30,25,20
command[swap]=/usr/lib64/nagios/plugins/check swap -w 20% -c 10%
command[root_disk]=/usr/lib64/nagios/plugins/check_disk -w 20% -c 10% -p
/ -m
command[usr_disk]=/usr/lib64/nagios/plugins/check_disk -w 20% -c 10% -p
/usr -m
command[var_disk]=/usr/lib64/nagios/plugins/check_disk -w 20% -c 10% -p
/var -m
command[zombie procs]=/usr/lib64/nagios/plugins/check procs -w 5 -c 10
-s Z
command[total procs]=/usr/lib64/nagios/plugins/check procs -w 190 -c 200
command[proc named]=/usr/lib64/nagios/plugins/check procs -w 1: -c 1:2
C named
command[proc crond]=/usr/lib64/nagios/plugins/check procs -w 1: -c 1:5
-C crond
command[proc_syslogd]=/usr/lib64/nagios/plugins/check_procs -w 1: -c 1:2
-C syslog-ng
command[proc_rsyslogd]=/usr/lib64/nagios/plugins/check_procs -w 1: -c
1:2 -C rsyslogd
```

4. Now edit /etc/nagios/nrpe.cfg and change all text by :

```
# If a log file is specified in this option, nrpe will write to
# that file instead of using syslog.
#log_file=/var/run/nrpe.log
# DEBUGGING OPTION
# This option determines whether or not debugging messages are logged to
# syslog facility.
# Values: 0=debugging off, 1=debugging on
debug=0
# PID FILE
# The name of the file in which the NRPE daemon should write it's
process ID
# number. The file is only written if the NRPE daemon is started by the
# user and is running in standalone mode.
pid file=/var/run/nrpe/nrpe.pid
# PORT NUMBER
# Port number we should wait for connections on.
# NOTE: This must be a non-privileged port (i.e. > 1024).
# NOTE: This option is ignored if NRPE is running under either inetd or
xinetd
server port=5666
# SERVER ADDRESS
# Address that nrpe should bind to in case there are more than one
interface
# and you do not want nrpe to bind on all interfaces.
# NOTE: This option is ignored if NRPE is running under either inetd or
xinetd
#server_address=127.0.0.1
# LISTEN QUEUE SIZE
# Listen queue size (backlog) for serving incoming connections.
# You may want to increase this value under high load.
#listen queue size=5
# NRPE USER
# This determines the effective user that the NRPE daemon should run as.
# You can either supply a username or a UID.
# NOTE: This option is ignored if NRPE is running under either inetd or
xinetd
nrpe_user=nrpe
# NRPE GROUP
# This determines the effective group that the NRPE daemon should run
# You can either supply a group name or a GID.
# NOTE: This option is ignored if NRPE is running under either inetd or
xinetd
nrpe_group=nrpe
# 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
# COMMAND ARGUMENT PROCESSING
```

# LOG FILE

```
# 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
dont blame nrpe=0
# BASH COMMAND SUBSTITUTION
# This option determines whether or not the NRPE daemon will allow
clients
# to specify arguments that contain bash command substitutions of the
form
\# $(...). This option only works if the daemon was configured with both
# the --enable-command-args and --enable-bash-command-substitution
configure
# script options.
# *** ENABLING THIS OPTION IS A HIGH SECURITY RISK! ***
# Read the SECURITY file for information on some of the security
implications
# of enabling this variable.
# Values: 0=do not allow bash command substitutions,
# 1=allow bash command substitutions
allow bash command substitution=0
# COMMAND PREFIX
# This option allows you to prefix all commands with a user-defined
string.
# A space is automatically added between the specified prefix string and
# command line from the command definition.
# *** THIS EXAMPLE MAY POSE A POTENTIAL SECURITY RISK, SO USE WITH
CAUTION! ***
# Usage scenario:
# Execute restricted commmands using sudo. For this to work, you need
# the nagios user to your /etc/sudoers. An example entry for allowing
# execution of the plugins from might be:
# nagios ALL=(ALL) NOPASSWD: /usr/lib/nagios/plugins/
# This lets the nagios user run all commands in that directory (and only
them)
# without asking for a password. If you do this, make sure you don't
# random users write access to that directory or its contents!
# command prefix=/usr/bin/sudo
# COMMAND TIMEOUT
# This specifies the maximum number of seconds that the NRPE daemon will
# allow plugins to finish executing before killing them off.
command_timeout=60
# CONNECTION TIMEOUT
# This specifies the maximum number of seconds that the NRPE daemon will
# wait for a connection to be established before exiting. This is
sometimes
# seen where a network problem stops the SSL being established even though
# all network sessions are connected. This causes the nrpe daemons to
# accumulate, eating system resources. Do not set this too low.
```

```
connection timeout=300
# WEAK RANDOM SEED OPTION
# This directive allows you to use SSL even if your system does not have
# a /dev/random or /dev/urandom (on purpose or because the necessary
patches
# were not applied). The random number generator will be seeded from a
file
# which is either a file pointed to by the environment valiable
$RANDFILE
# or $HOME/.rnd. If neither exists, the pseudo random number generator
# be initialized and a warning will be issued.
# Values: 0=only seed from /dev/[u]random, 1=also seed from weak
randomness
#allow_weak_random_seed=1
# SSL/TLS OPTIONS
# These directives allow you to specify how to use SSL/TLS.
# SSL VERSION
# This can be any of: SSLv2 (only use SSLv2), SSLv2+ (use any version),
# SSLv3 (only use SSLv3), SSLv3+ (use SSLv3 or above), TLSv1
# TLSv1), TLSv1+ (use TLSv1 or above), TLSv1.1 (only use
TLSv1.1),
# TLSv1.1+ (use TLSv1.1 or above), TLSv1.2 (only use TLSv1.2),
# TLSv1.2+ (use TLSv1.2 or above)
# If an "or above" version is used, the best will be negotiated. So if
# ends are able to do TLSv1.2 and use specify SSLv2, you will get
TLSv1.2.
# If you are using openssl 1.1.0 or above, the SSLv2 options are not
available.
#ssl version=SSLv2+
# SSL USE ADH
# This is for backward compatibility and is DEPRECATED. Set to 1 to
enable
# ADH or 2 to require ADH. 1 is currently the default but will be
changed
# in a later version.
#ssl_use_adh=1
# SSL CIPHER LIST
# This lists which ciphers can be used. For backward compatibility, this
# defaults to 'ssl_cipher_list=ALL:!MD5:@STRENGTH' in this version but
# will be changed to something like the example below in a later version
of NRPE.
#ssl cipher list=ALL:!MD5:@STRENGTH
#ssl cipher list=ALL:!aNULL:!eNULL:!SSLv2:!LOW:!EXP:!RC4:!MD5:@STRENGTH
# SSL Certificate and Private Key Files
#ssl_cacert_file=/etc/ssl/servercerts/ca-cert.pem
#ssl_cert_file=/etc/ssl/servercerts/nagios-cert.pem
#ssl_privatekey_file=/etc/ssl/servercerts/nagios-key.pem
# SSL USE CLIENT CERTS
# This options determines client certificate usage.
# Values: 0 = Don't ask for or require client certificates (default)
# 1 = Ask for client certificates
# 2 = Require client certificates
#ssl client certs=0
# SSL LOGGING
# This option determines which SSL messages are send to syslog. OR
# together to specify multiple options.
# Values: 0x00 (0) = No additional logging (default)
# 0x01 (1) = Log startup SSL/TLS parameters
\# 0x02 (2) = Log remote IP address
\# 0x04 (4) = Log SSL/TLS version of connections
\# 0x08 (8) = Log which cipher is being used for the connection
\# 0x10 (16) = Log if client has a certificate
\# 0x20 (32) = Log details of client's certificate if it has one
```

```
\# -1 or 0xff or 0x2f = All of the above
#ssl logging=0x00
# NASTY METACHARACTERS
# This option allows you to override the list of characters that cannot
# be passed to the NRPE daemon.
# nasty_metachars="|`&><'\\[]{};\r\n"</pre>
# INCLUDE CONFIG FILE
# This directive allows you to include definitions from an external
config file.
#include=<somefile.cfg>
# INCLUDE CONFIG DIRECTORY
# This directive allows you to include definitions from config files
# .cfg extension) in one or more directories (with recursion).
include dir=/etc/nrpe.d/
# COMMAND DEFINITIONS
# Command definitions that this daemon will run. Definitions
# are in the following format:
# command[<command_name>]=<command_line>
# When the daemon receives a request to return the results of
<command name>
# it will execute the command specified by the <command line> argument.
# Unlike Nagios, the command line cannot contain macros - it must be
# typed exactly as it should be executed.
# Note: Any plugins that are used in the command lines must reside
# on the machine that this daemon is running on! The examples below
# assume that you have plugins installed in a /usr/local/nagios/libexec
# directory. Also note that you will have to modify the definitions
# to match the argument format the plugins expect. Remember, these are
# examples only!
# The following examples use hardcoded command arguments...
command[check users]=/usr/lib64/nagios/plugins/check users -w 5 -c 10
command[check load]=/usr/lib64/nagios/plugins/check load -r -w
.15,.10,.05 -c .30,.25,.20
command[check_hda1]=/usr/lib64/nagios/plugins/check_disk -w 20% -c 10%
-p /dev/hda1
command[check_zombie_procs]=/usr/lib64/nagios/plugins/check_procs -w 5
-c 10 -s Z
command[check total procs]=/usr/lib64/nagios/plugins/check procs -w 150
command[check_wildfly_procs]=/usr/lib64/nagios/plugins/check_procs -w 3:
-c 1: -u wildfly
command[check_java_procs]=/usr/lib64/nagios/plugins/check_procs -c 1: -C
command[check mysql procs]=/usr/lib64/nagios/plugins/check procs -c 1:
-u mysql
command[check_apache_procs]=/usr/lib64/nagios/plugins/check_procs -w 5:
-c 1: -u apache
command[check_wildfly_http]=/usr/lib64/nagios/plugins/check_http -I
localhost -p 8080
command[check_sso_client_login_http]=/usr/lib64/nagios/plugins/check htt
p -H 172.16.15.122 -p 9001 -u /client/login -T "application/json" -j
POST -P '{"clientId":"uaa-echosens-client",
"clientSecret":"EMPrhXTUxpcM"}' -v
# The following examples allow user-supplied arguments and can
# only be used if the NRPE daemon was compiled with support for
# command arguments *AND* the dont_blame_nrpe directive in this
# config file is set to '1'. This poses a potential security risk, so
# make sure you read the SECURITY file before doing this.
#command[check_users]=/usr/lib64/nagios/plugins/check_users -w $ARG1$ -c
$ARG2$
#command[check load]=/usr/lib64/nagios/plugins/check load -w $ARG1$ -c
```

```
$ARG2$
#command[check_disk]=/usr/lib64/nagios/plugins/check_disk -w $ARG1$ -c
$ARG2$ -p $ARG3$
#command[check_procs]=/usr/lib64/nagios/plugins/check_procs -w $ARG1$ -c
$ARG2$ -s $ARG3
```

5. Now edit line 106 and add your Monitor server(s) address(es) to the allowed\_hosts parameter as a comma-separated list, example:

### > allowed hosts=127.0.0.1,10.0.0.10,10.0.0.11

6. Restart the nrpe agent on the host, and make sure that nrpe is started at boot:

```
> systemctl restart nrpe
> systemctl enable nrpe0
```

- 7. Install nagios plugins
  - a. install common prerequisites

```
> yum install -y gcc glibc glibc-common make gettext automake autoconf wget openssl-devel net-
snmp net-snmp-utils epel-release
> yum install -y perl-Net-SNMP
```

b. Downloading the source

```
> cd /tmp
> wget --no-check-certificate -0 nagios-plugins.tar.gz
> https://github.com/nagios-plugins/nagios-plugins/archive/release-2.2.1.tar.gz
> tar zxf nagios-plugins.tar.gz
```

c. Compile and install

```
c. comple and matem
> cd /tmp/nagios-plugins-release-2.2.1/
./tools/setup
./configure
> make
> make
> make install
```

- d. Copy all files from "/usr/local/nagios/libexec" to "/usr/lib64/nagios/plugins/" (remplace existing files)
- e. Change permissions for execute files
- > cd /usr/lib64/nagios/plugins
- > chmod 755 \*

## II. Installation de Centreon

Edit the file "etc/selinux/config" and remplace "enforcing" by "disabled"

### > SELINUX= disabled

Reboot the server

> reboot

Make a update

> yum update

Install "wget"

> yum install wget

Do Centreon install commands

> wget http://yum.centreon.com/standard/3.4/el7/stable/noarch/RPMS/centreon-release-

3.44.el7.centos.noarch.rpm

> yum install --nogpgcheck

> centreon-release-3.4-4.el7.centos.noarch.rpm

> yum install centreon-base-config-centreon-engine centreon

Install Maria BD

> yum install MariaDB-server

Restart mySql service

> service mysqld restart

Create a file "php-timezone.ini" in "/etc/php.d" and add this line

> date.timezone = Europe/Paris

Create a folder "mariadb.service.d" in "/etc/systemd/system". And in this folder create a file named "limits.conf" and edit with "[Service]\nLimitNOFILE=32000\n"

> mkdir -p /etc/systemd/system/mariadb.service.d

> echo -ne "[Service]\nLimitNOFILE=32000\n" | tee

/etc/systemd/system/mariadb.service.d/limits.conf

Reload services

> systemctl daemon-reload

> service mysqld restart

> service httpd restart

Stop & disable firewalld

> service firewalld stop

> service firewalld disable

Go to "http://{IP Adress}/centreon



Welcome to Centreon Setup

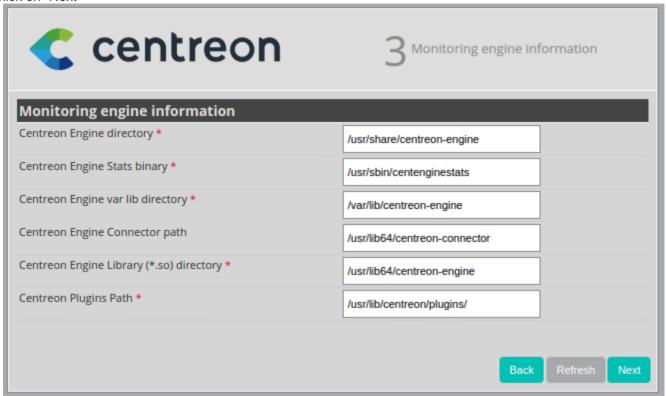
This installer will help you setup your database and your monitoring configuration. The entire process should take around ten minutes.

Refresh

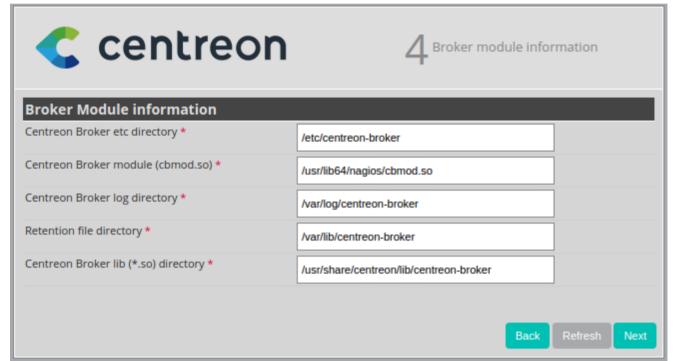
Next



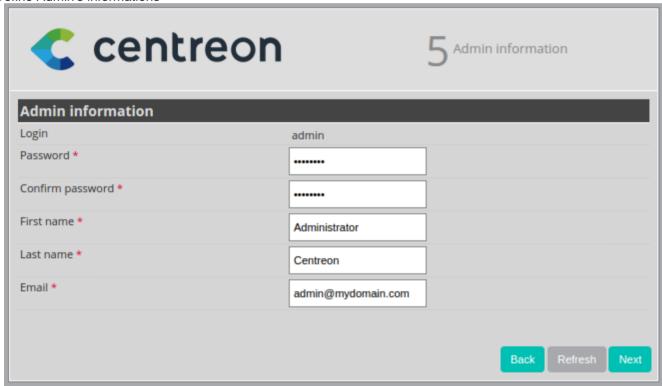
Click on "Next"



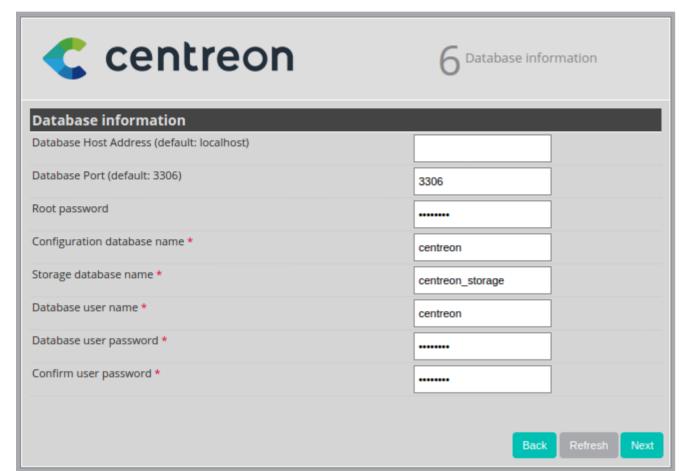
Click on "Next"



Define Admin's informations



Define a database user password



Click on "Next"



Click on "Finish"

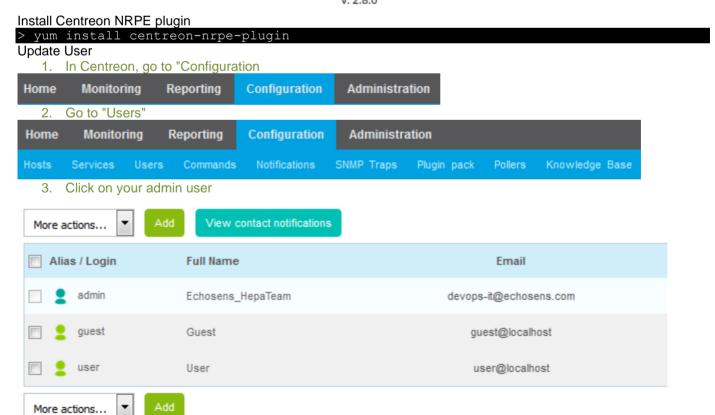


Now, you can log in

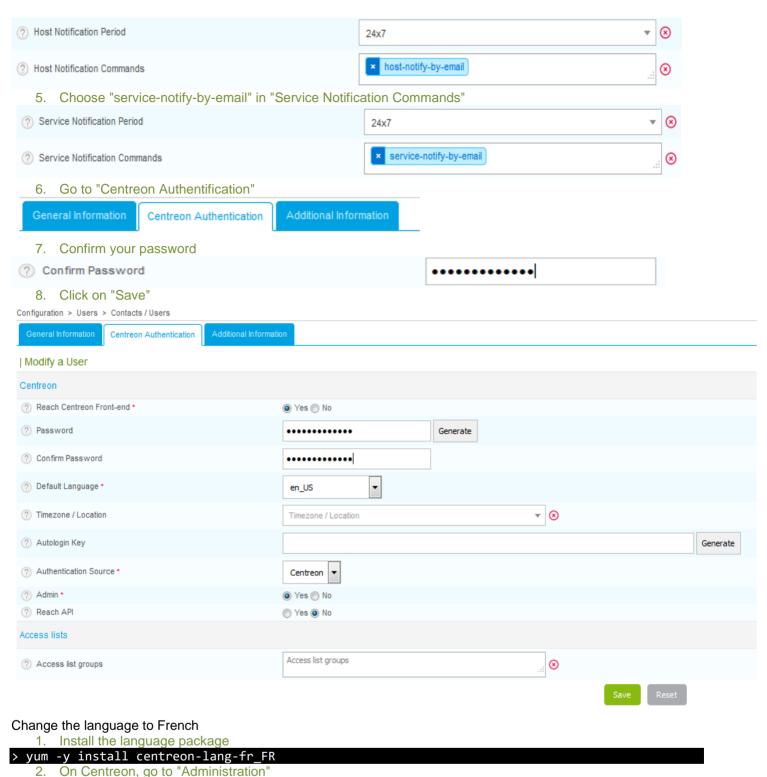


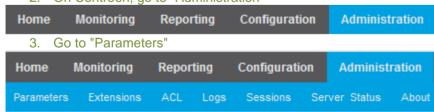


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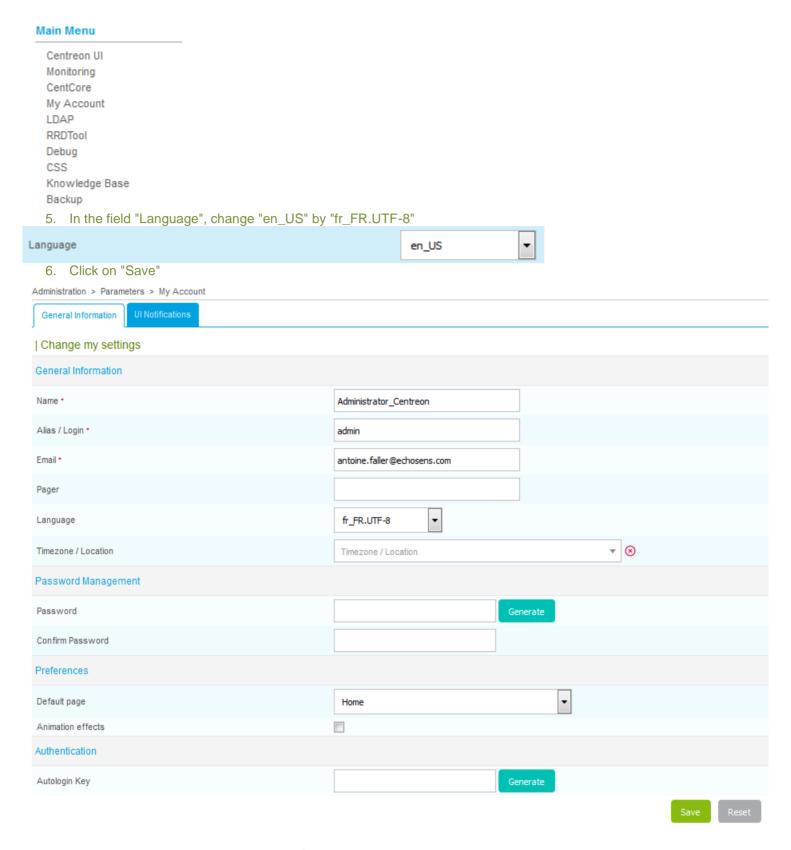


4. Choose "host-notify-by-email" in "Host Notification Commands"





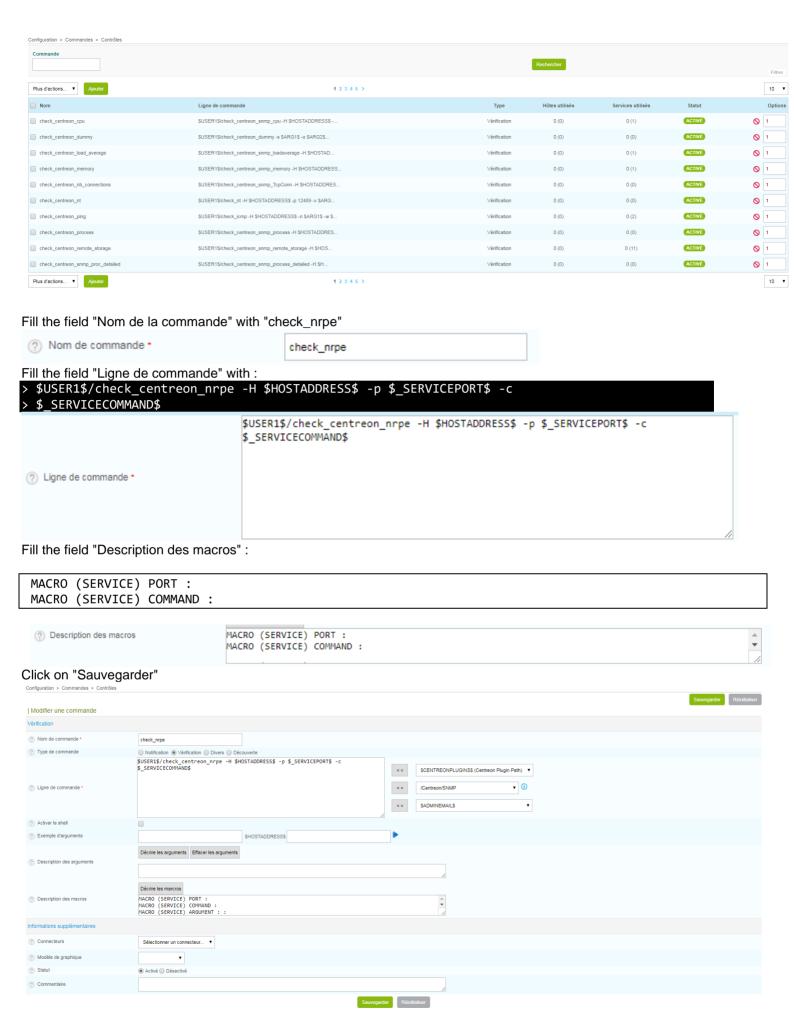
4. In the left menu go to "My Account"



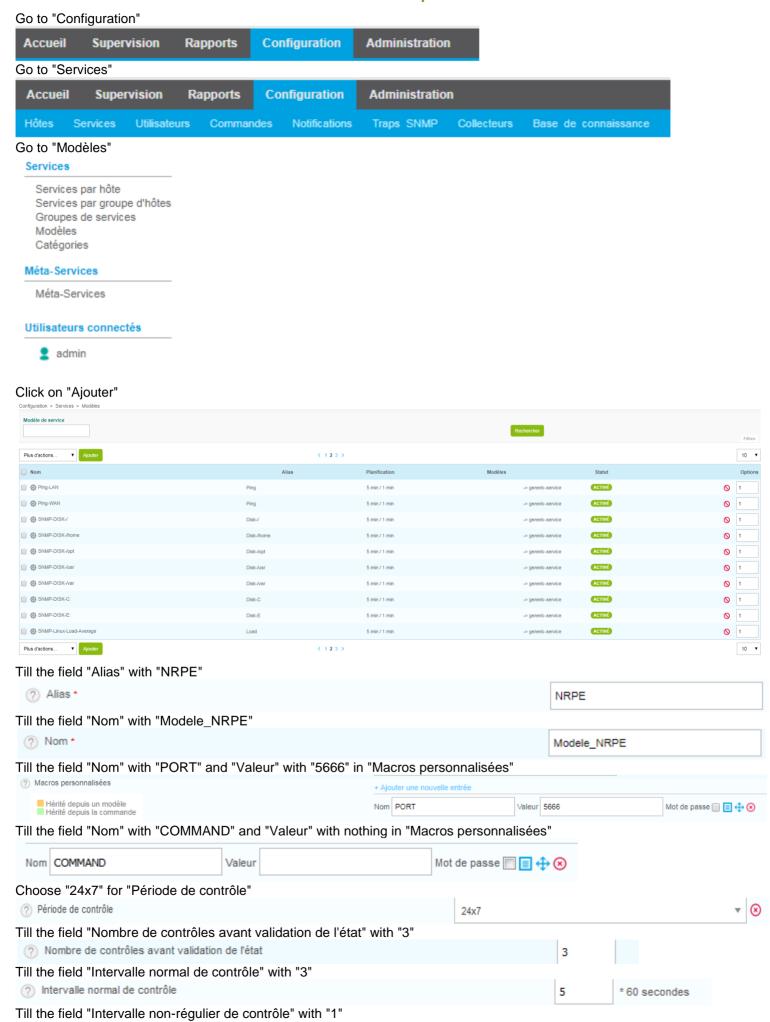
# III. Liaison de NRPE et Centreon

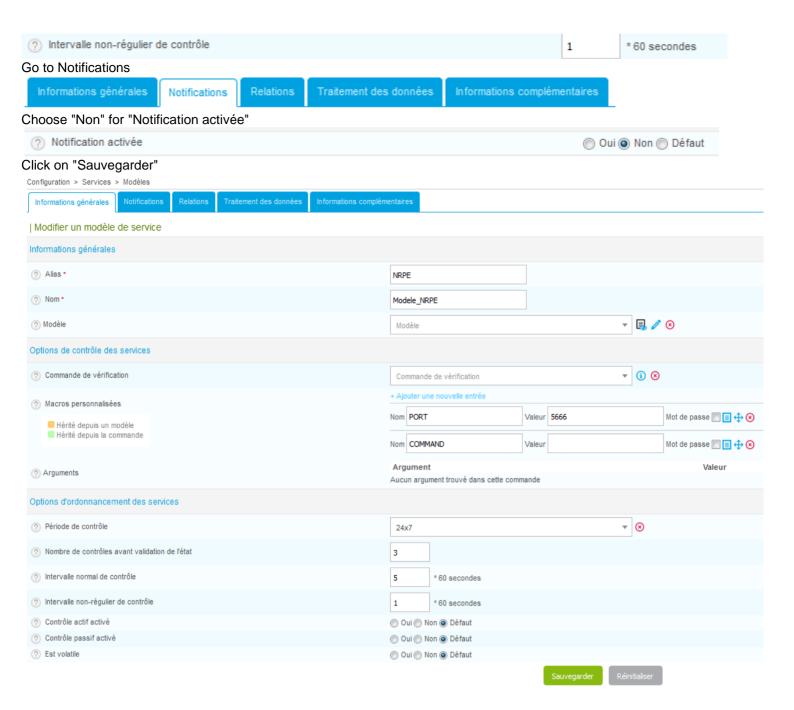


Click on "Ajouter"

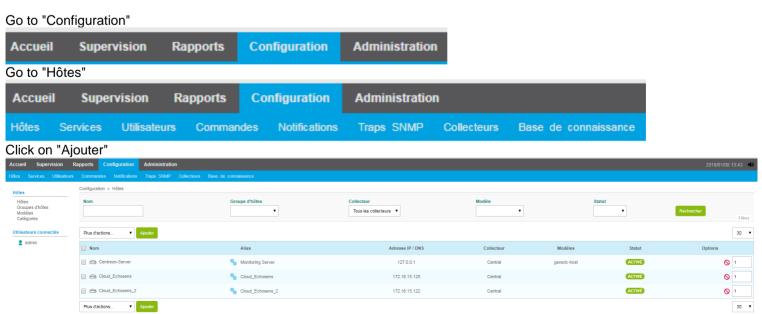


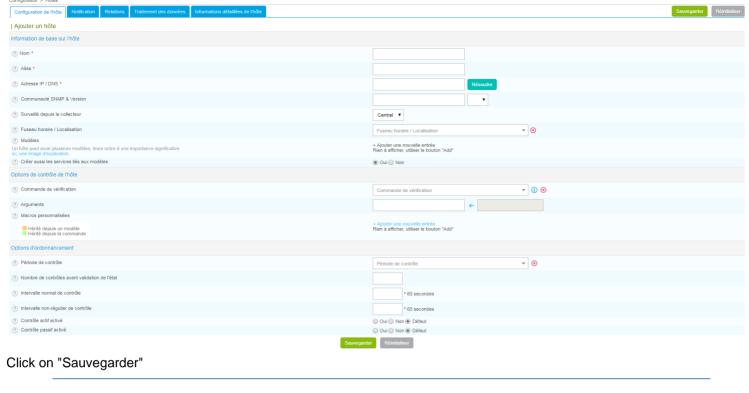
# IV. Création du modèle NRPE de supervision dans Centreon





# V. Création d'un hôte dans Centreon



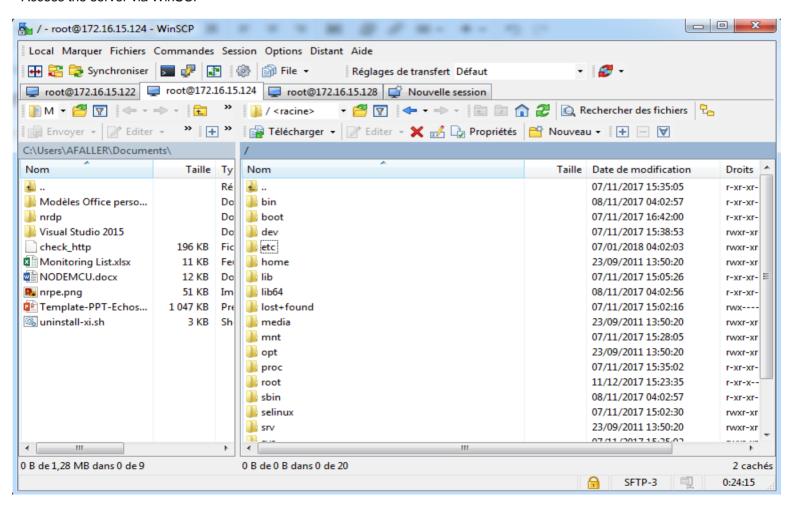


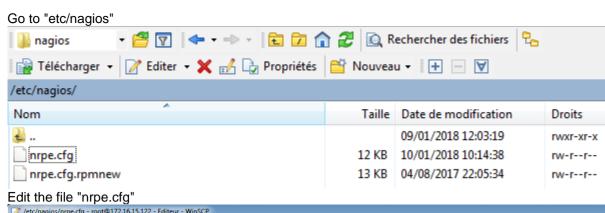
Your new host is create!

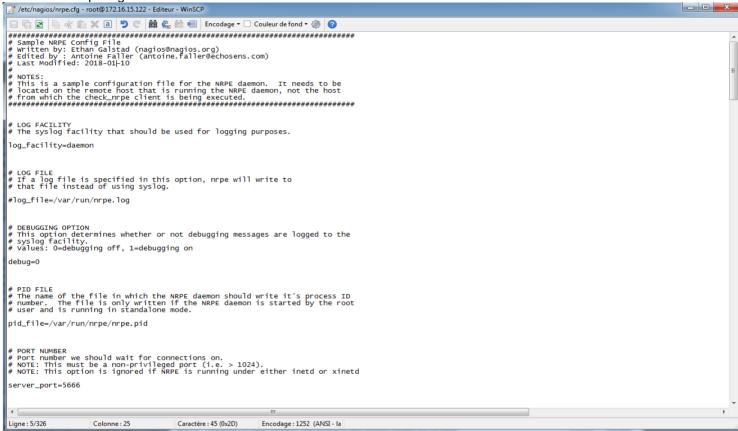
# VI. Configurer les commandes de supervision

### Go to etc/nagios/nrpe.cfg

Access the server via WinSCP





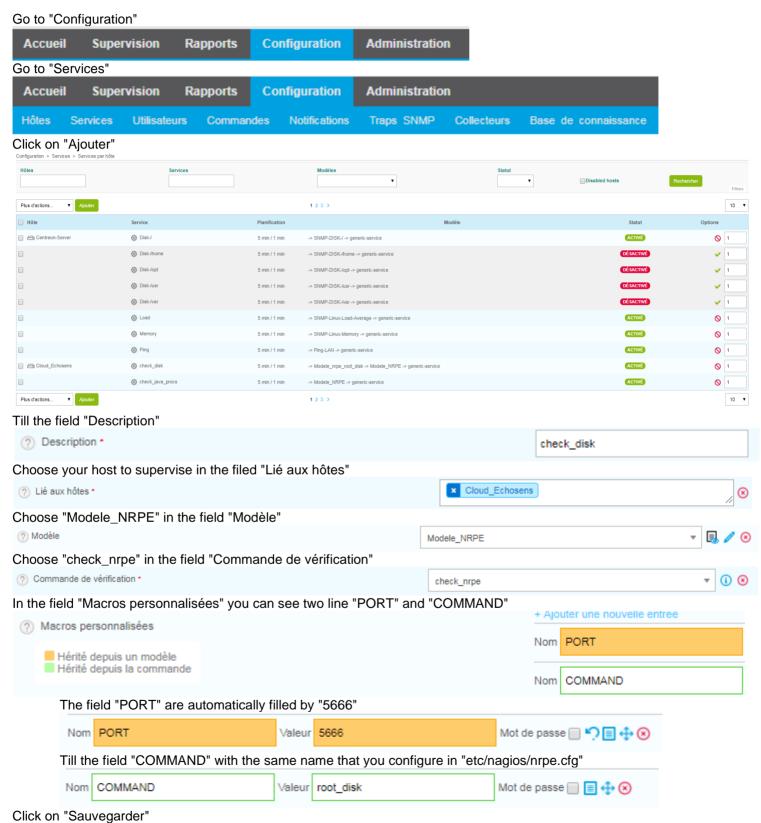


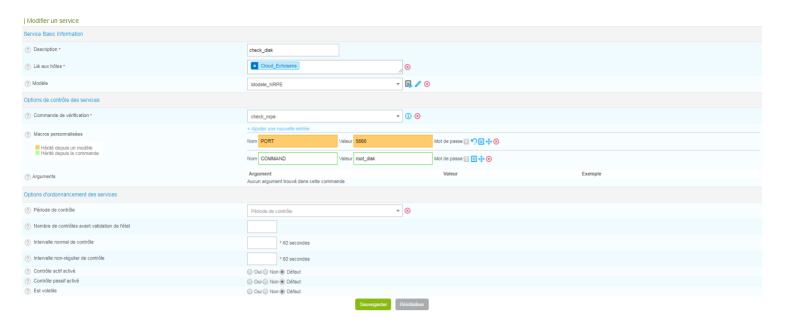
# Command Check\_users]-/usr/lib64/nagios/plugins/check\_users = v. 5 - c. 10 command (check\_users]-/usr/lib64/nagios/plugins/check\_users = v. 5 - c. 10 command (check\_users]-/usr/lib64/nagios/plugins/check\_users = v. 5 - c. 10 command (check\_users]-/usr/lib64/nagios/plugins/check\_procs - c. 1: c. c/users \*\*The following examples allow user-supplied graguents and command (check\_users)-/usr/lib64/nagios/plugins/check\_procs - c. 1: c. c/users \*\*The following examples use hardcoded command arguments... \*\*The following examples users \*\*The following examples users \*\*The following examples users \*\*The following examples allow user-supplied arguments and can command (check\_users)-/usr/lib64/nagios/plugins/check\_procs - v. vis. c. 1: c. c. jaw. possible users \*\*The following examples allow user-supplied arguments and can command check\_users... \*\*The following examples allow user-supplied arguments and can command check\_users... \*\*The following examples allow user-supplied arguments and can user users and can be users and can be user to be users and can be user to be user t

service nrpe restart

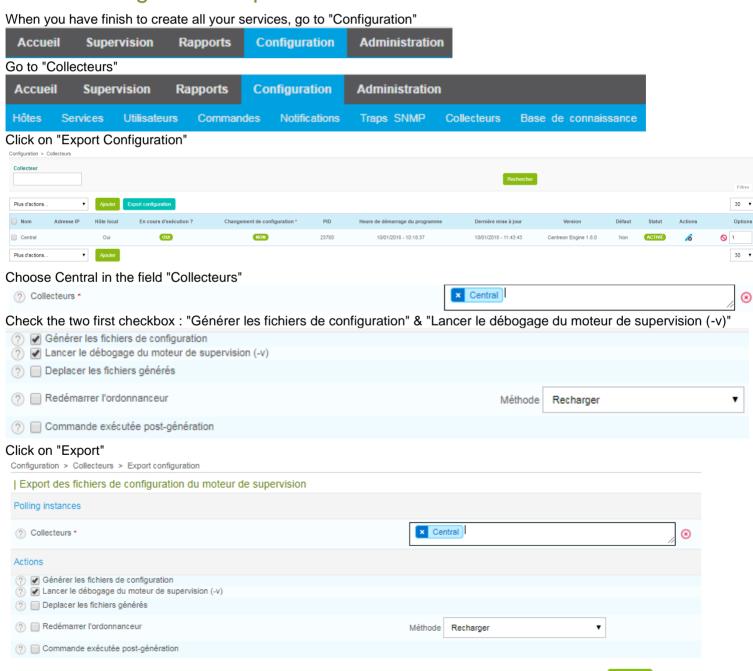
The newly added commands are now available via your Centreon server

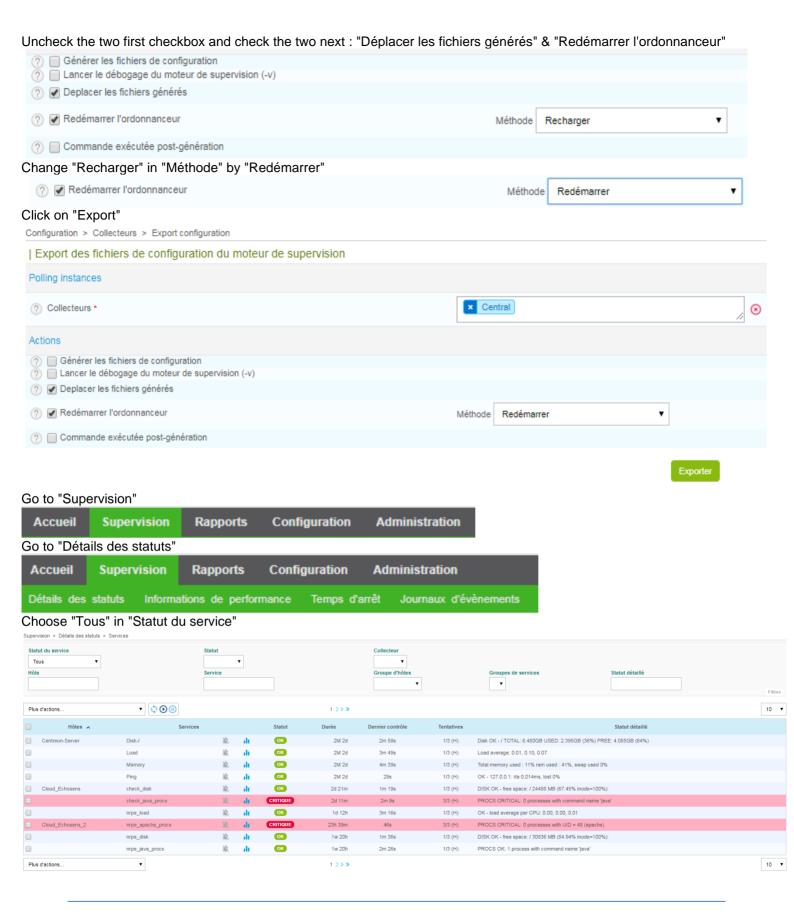
# VII. Création d'un service dans Centreon





# VIII. Affichage de la supervision





Congratulations! Your supervision is ready!