A dark blue vertical bar runs down the left side of the page. A blue arrow points to the right from this bar, containing the date.

12/11/2019

INSTALLATION D'UN OUTIL DE SUPERVISION

Centreon

Several thin, curved lines in dark blue and light grey originate from the bottom left and sweep upwards and to the right.

Agostini Charles, Didier Joël, Marjolet Louis,
Vicente Vaz

GROUPE 3

INSTALLATION DE CENTREON

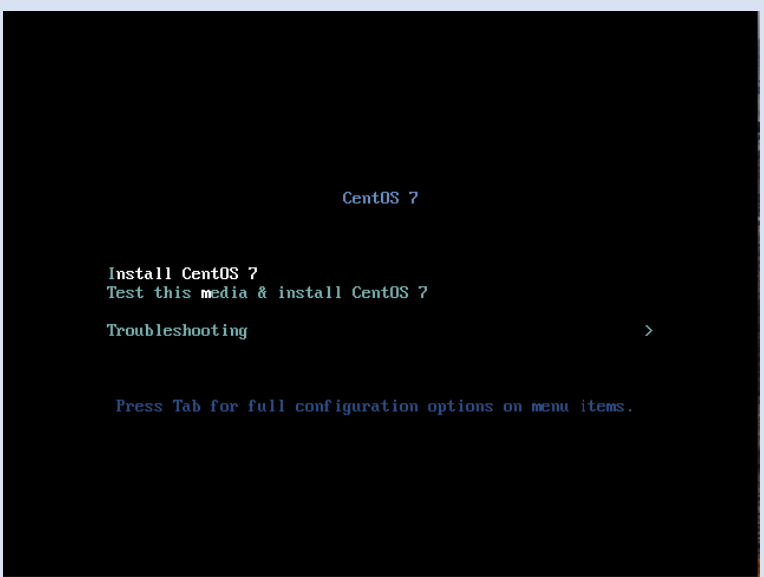
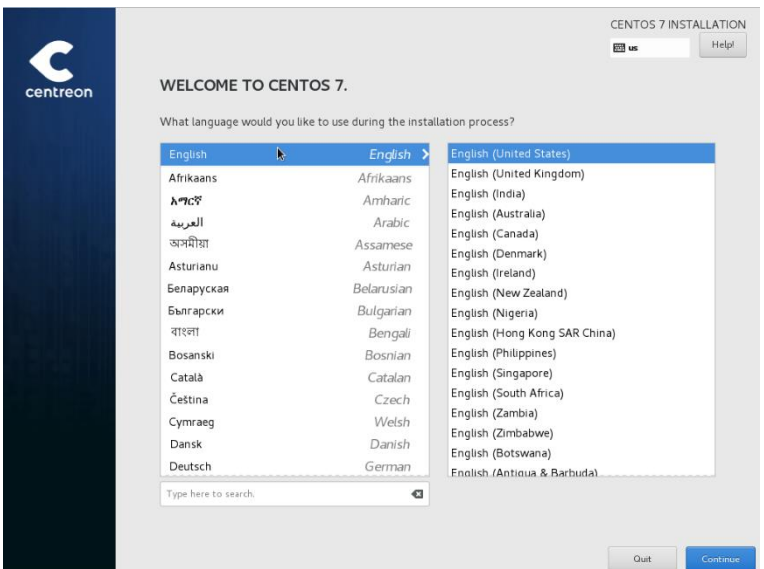
Centreon est l'outil de Supervision que nous avons choisi de mettre en place.


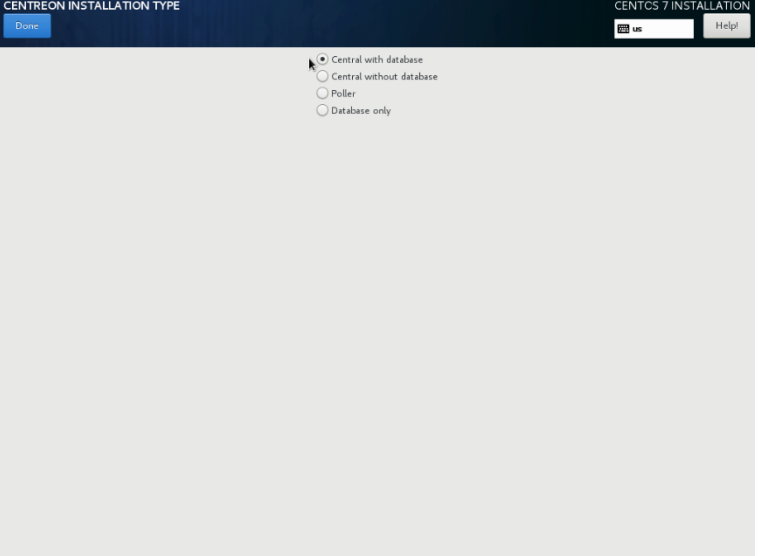

TABLE DES MATIERES


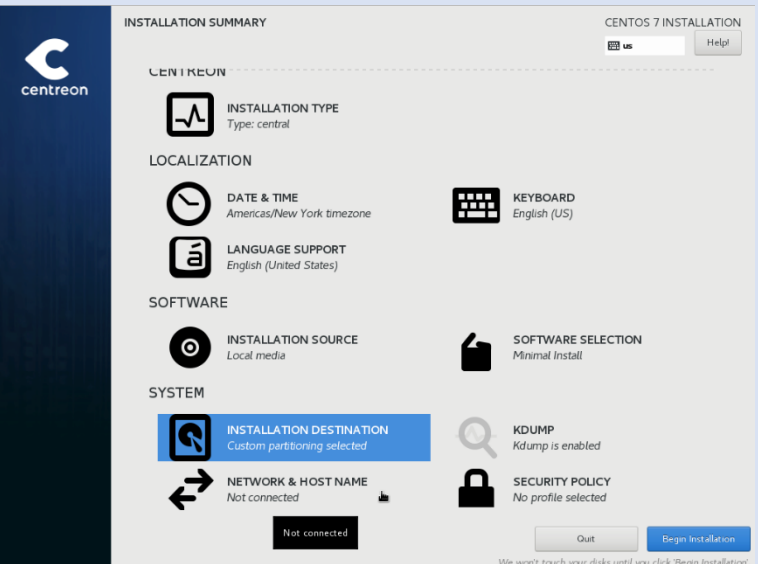
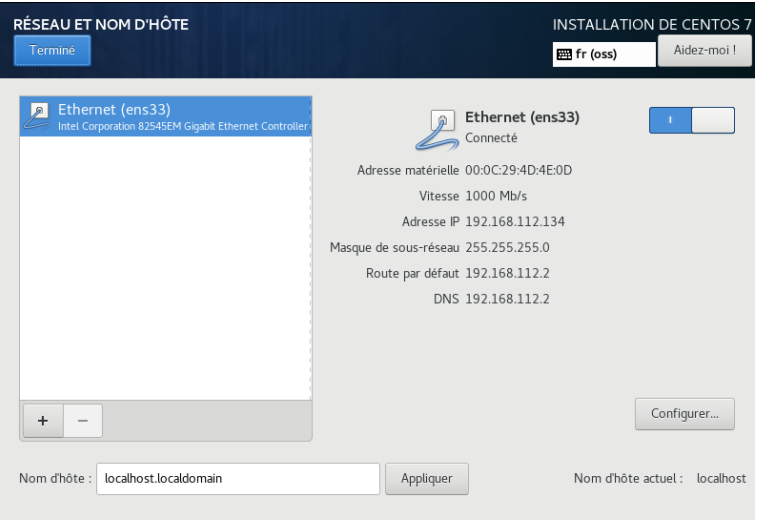
Installation du Central.....	2
Installation de l'OS	2
Configuration de l'interface graphique du central.....	7
Installation du Poller	11
Installation de l'OS	11
Ajout du collecteur à l'interface graphique	16
Ajout des Hôtes.....	19
Sous Debian :.....	19
Ajout des services	21
CPU.....	21
RAM.....	23
Espace disque.....	24
Traffic Réseau	25
DNS.....	26
DHCP	27

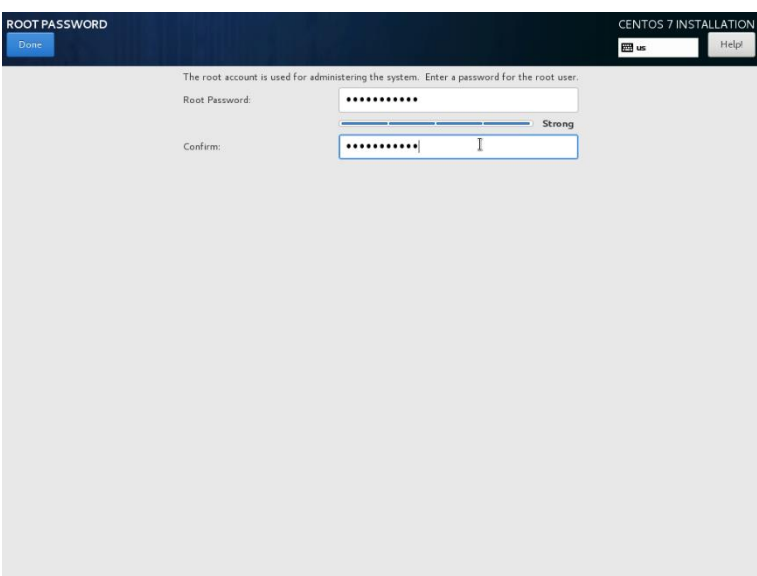
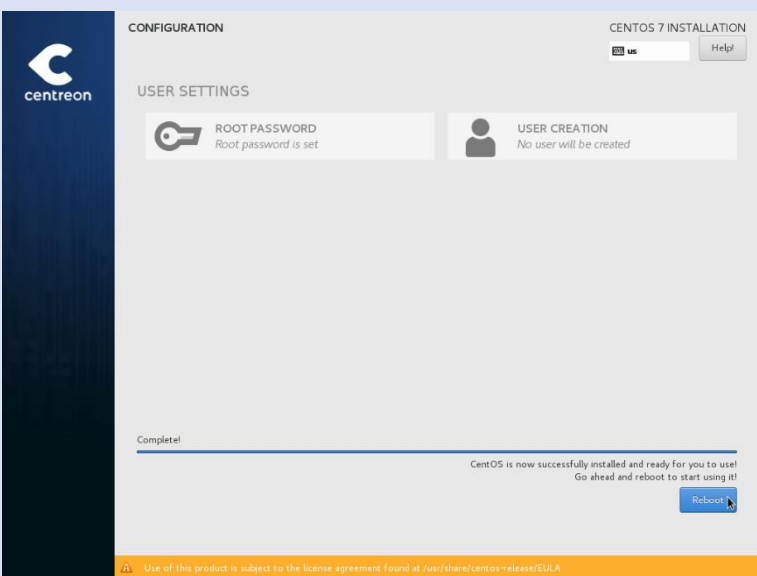
INSTALLATION DU CENTRAL

INSTALLATION DE L'OS

<p>Charger l'iso Centreon</p>	 <p>The image shows the CentOS 7 installation boot screen. It is a black terminal window with white text. At the top, it says 'CentOS 7'. Below that, it says 'Install CentOS 7', 'Test this media & install CentOS 7', and 'Troubleshooting'. At the bottom, it says 'Press Tab for full configuration options on menu items.'.</p>
<p>Renseigner la langue</p>	 <p>The image shows the CentOS 7 installation language selection screen. It has a grey background with a blue sidebar on the left containing the 'centreon' logo. The main area is titled 'WELCOME TO CENTOS 7.' and asks 'What language would you like to use during the installation process?'. There are two lists of languages: one on the left and one on the right. The left list includes languages like Afrikaans, Amharic, Arabic, Assamese, Asturian, Belarusian, Bulgarian, Bengali, Bosnian, Catalan, Czech, Welsh, Danish, and German. The right list includes English (United States), English (United Kingdom), English (India), English (Australia), English (Canada), English (Denmark), English (Ireland), English (New Zealand), English (Nigeria), English (Hong Kong SAR China), English (Philippines), English (Singapore), English (South Africa), English (Zambia), English (Zimbabwe), English (Botswana), and English (Antigua & Barbuda). A search bar is at the bottom left. 'Quit' and 'Continue' buttons are at the bottom right.</p>

<p>Cliquer sur « Installation Type »</p>	
<p>Choisir « Central with database »</p>	
<p>Cliquer sur « Installation Destination »</p>	

<p>Sélectionner « Configurer automatiquement le partitionnement »</p>	
<p>Cliquer sur « Network & Hostname »</p>	
<p>Activer le réseau</p>	

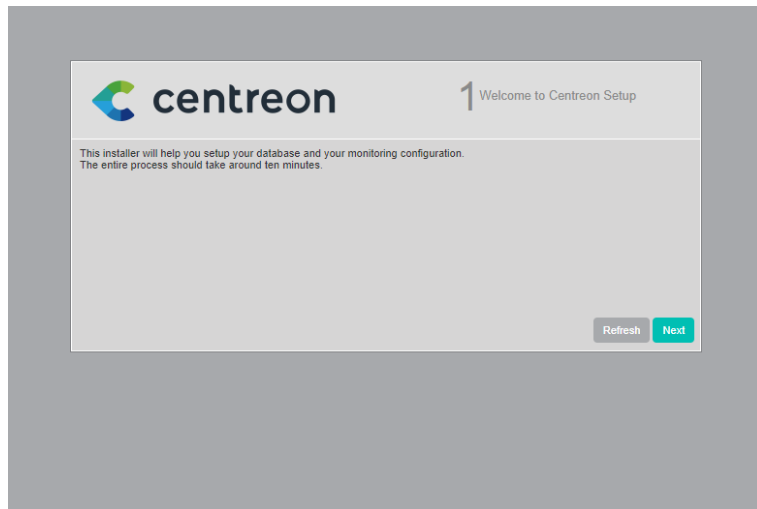
<p>Cliquer sur « Démarrer l'installation »</p> <p>Puis</p> <p>Cliquer sur « Root Password »</p>	 <p>The screenshot shows the 'CONFIGURATION' screen of the CentOS 7 installation. Under 'USER SETTINGS', the 'ROOT PASSWORD' section is highlighted with a red box, indicating that the root password is not yet set. The 'USER CREATION' section shows that no user will be created. At the bottom, there is a progress bar and a link to the 'Centreon Online Documentation'.</p>
<p>Renseigner le mot de passe de l'utilisateur root</p>	 <p>The screenshot shows the 'ROOT PASSWORD' screen. It prompts the user to enter a password for the root user. The 'Root Password' field is filled with dots, and the 'Confirm' field is also filled with dots. A strength indicator shows 'Strong'.</p>
<p>Cliquer sur « Reboot »</p>	 <p>The screenshot shows the 'CONFIGURATION' screen again. The 'ROOT PASSWORD' section now indicates that the root password is set. The 'USER CREATION' section remains the same. At the bottom, a message states 'CentOS is now successfully installed and ready for you to use! Go ahead and reboot to start using it!' with a 'Reboot' button.</p>
<p>Dans le CLI, saisir :</p>	<pre>[~]\$ yum -y update</pre>

	<pre>[~]\$ yum -y install git [~]\$ cd /usr/tmp [~]\$ git clone https://github.com/centreon/centreon- plugins.git [~]\$ cd centreon-plugins [~]\$ chmod +x centreon_plugins.pl [~]\$ cp -R * /usr/lib/centreon/plugins/</pre>
Afin de visualiser les plugins installer, saisir :	<pre>[~]\$ /usr/lib/centreon/plugins/centreon_plugins.pl - -list-plugin</pre>
Veiller à ce que les services de centreon soient lancés	<pre>[~]\$ systemctl enable centengine [~]\$ systemctl enable centcore [~]\$ systemctl enable cbd [~]\$ systemctl start centengine [~]\$ systemctl start centcore [~]\$ systemctl start cbd</pre>

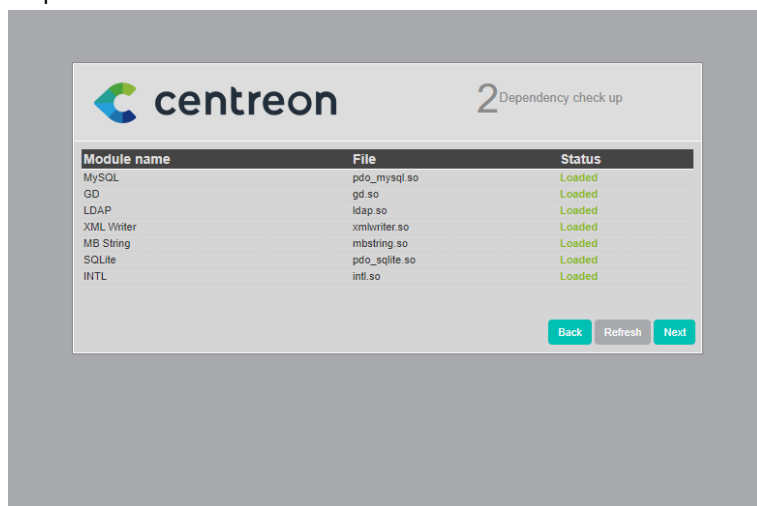
CONFIGURATION DE L'INTERFACE GRAPHIQUE DU CENTRAL

Connectez-vous à l'adresse du Central sur un navigateur

Cliquer sur « next »



Cliquer sur « next »



Cliquer sur « next »

The screenshot shows the Centreon web interface at step 3, titled "Monitoring engine information". The interface includes the Centreon logo and a header with the step number and title. Below the header, there is a table with six rows, each containing a label and a text input field. The labels are: "Centreon Engine directory *", "Centreon Engine Stats binary *", "Centreon Engine var lib directory *", "Centreon Engine Connector path", "Centreon Engine Library (*.so) directory *", and "Centreon Plugins Path *". The input fields contain the following values: "/usr/share/centreon-engine", "/usr/sbin/centenginestats", "/var/lib/centreon-engine", "/usr/lib64/centreon-connector", "/usr/lib64/centreon-engine", and "/usr/lib/centreon/plugins/". At the bottom right of the form, there are three buttons: "Back", "Refresh", and "Next".

Monitoring engine information	
Centreon Engine directory *	/usr/share/centreon-engine
Centreon Engine Stats binary *	/usr/sbin/centenginestats
Centreon Engine var lib directory *	/var/lib/centreon-engine
Centreon Engine Connector path	/usr/lib64/centreon-connector
Centreon Engine Library (*.so) directory *	/usr/lib64/centreon-engine
Centreon Plugins Path *	/usr/lib/centreon/plugins/

Cliquer sur « next »

The screenshot shows the Centreon web interface at step 4, titled "Broker module information". The interface includes the Centreon logo and a header with the step number and title. Below the header, there is a table with five rows, each containing a label and a text input field. The labels are: "Centreon Broker etc directory *", "Centreon Broker module (cbmod.so)", "Centreon Broker log directory *", "Retention file directory *", and "Centreon Broker lib (*.so) directory *". The input fields contain the following values: "/etc/centreon-broker", "/usr/lib64/nagios/cbmod.so", "/var/log/centreon-broker", "/var/lib/centreon-broker", and "/usr/share/centreon/lib/centreon-broker". At the bottom right of the form, there are three buttons: "Back", "Refresh", and "Next".

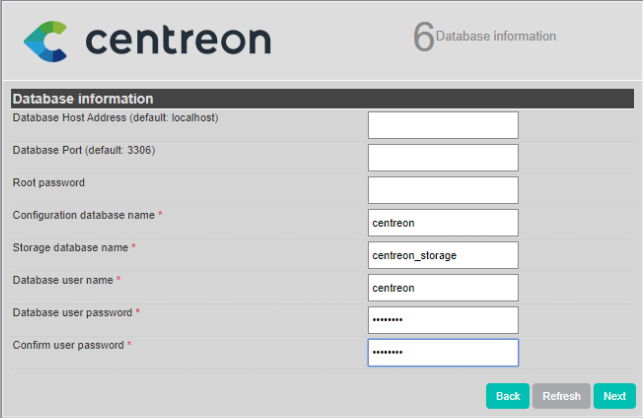
Monitoring engine information	
Centreon Broker etc directory *	/etc/centreon-broker
Centreon Broker module (cbmod.so)	/usr/lib64/nagios/cbmod.so
Centreon Broker log directory *	/var/log/centreon-broker
Retention file directory *	/var/lib/centreon-broker
Centreon Broker lib (*.so) directory *	/usr/share/centreon/lib/centreon-broker

Renseigner les informations demandées et cliquer sur « next »

The screenshot shows the Centreon web interface at step 5, titled "Admin information". The interface includes the Centreon logo and a header with the step number and title. Below the header, there is a table with six rows, each containing a label and a text input field. The labels are: "Login", "Password *", "Confirm password *", "First name *", "Last name *", and "Email *". The input fields contain the following values: "admin", "*****", "*****", "Admin", "Centreon", and "admin.centreon@isec.com". At the bottom right of the form, there are three buttons: "Back", "Refresh", and "Next".

Admin information	
Login	admin
Password *	*****
Confirm password *	*****
First name *	Admin
Last name *	Centreon
Email *	admin.centreon@isec.com

Renseigner les informations demandées et cliquer sur « next »



6 Database information

Database information

Database Host Address (default: localhost)

Database Port (default: 3306)

Root password

Configuration database name *

Storage database name *

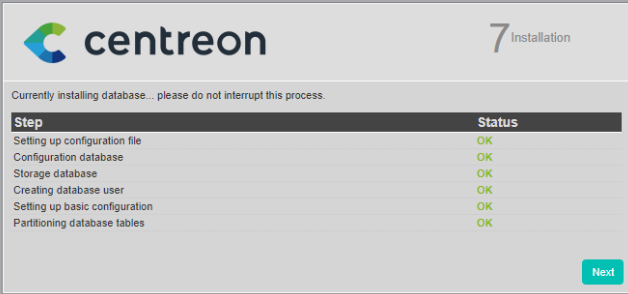
Database user name *

Database user password *

Confirm user password *

[Back](#) [Refresh](#) [Next](#)

Cliquer sur « next »




7 Installation

Currently installing database... please do not interrupt this process.

Step	Status
Setting up configuration file	OK
Configuration database	OK
Storage database	OK
Creating database user	OK
Setting up basic configuration	OK
Partitioning database tables	OK

[Next](#)

Cliquer sur « install », puis sur next



8 Modules installation

Module	Author	Version	
Centreon License Manager	Centreon	19.04.0	<input checked="" type="checkbox"/>
Centreon Plugin Packs Manager	Centreon	19.04.1	<input checked="" type="checkbox"/>
Centreon Auto Discovery	Centreon	19.04.0	<input checked="" type="checkbox"/>

[Refresh](#) [Install](#)

Cliquer sur « finish »



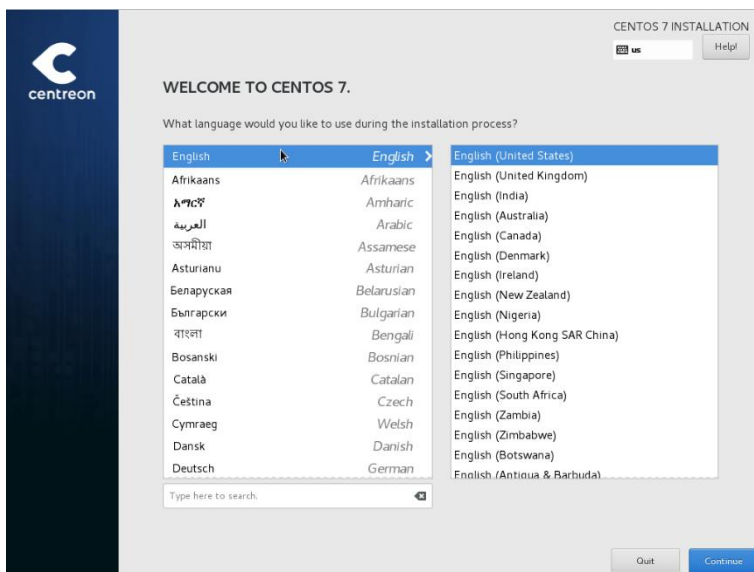
INSTALLATION DU POLLER

INSTALLATION DE L'OS

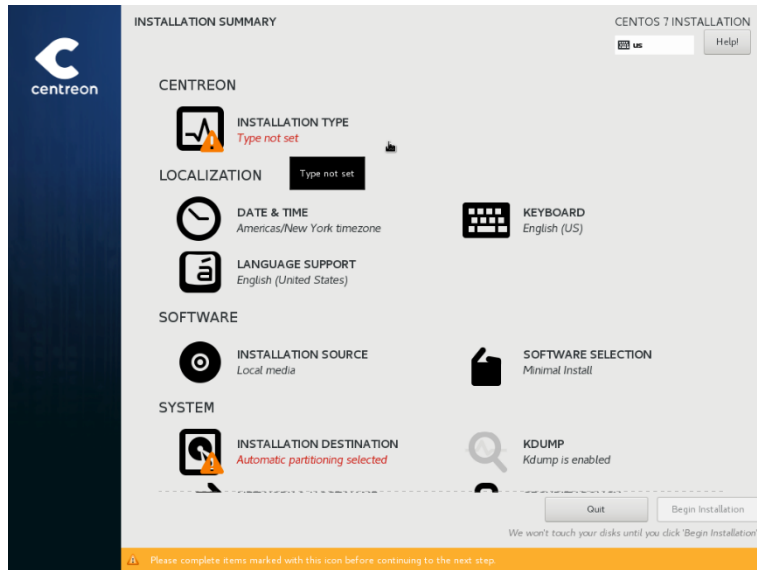
Charger l'iso Centreon



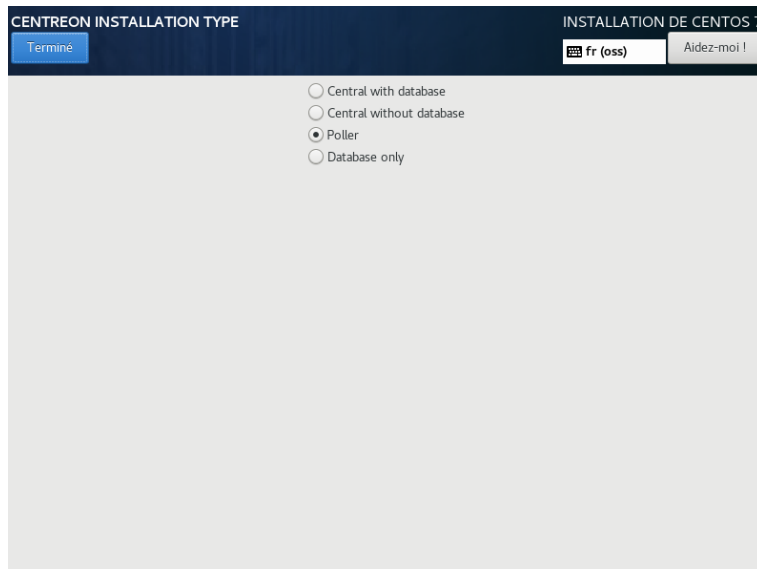
Renseigner la langue



Cliquer sur « Installation Type »



Choisir « Poller »



Reprendre l'installation du Central à partir de l'étape suivante

Une fois le reboot effectué, il est nécessaire de lier le collecteur au Central via SSH

Saisir les instructions suivantes depuis le Central

```
[~]$ su - centreon

[~]$ ssh-keygen

-----+
Résultat      |
-----+

Generating public/private rsa key pair.

Enter file in which to save the key (/var/spool/centreon/.ssh/id_rsa):

Created directory '/var/spool/centreon/.ssh'.

Enter passphrase (empty for no passphrase):

Enter same passphrase again:

Your identification has been saved in /var/spool/centreon/.ssh/id_rsa.
Your public key has been saved in /var/spool/centreon/.ssh/id_rsa.pub.
The key fingerprint is:

4f:55:12:9a:c2:93:bc:8d:d1:ce:a3:7e:01:f7:fd:3f
centreon@Central.localdomain

The key's randomart image is:

+--[ RSA 2048 ]-----+
|           o..  |
|        o o o o  |
|       B + .    |
|      .X..      |
|     So*. .     |
|     +... .     |
|     . . . .    |
|     . .      E.|
|     ..       +|
+-----+

[~]$ su - centreon
```

```
[~]$ ssh-copy-id centreon@%IP_POLLER%

-----+
Résultat      |
-----+

/bin/ssh-copy-id: INFO: Source of key(s) to be installed:
"/var/spool/centreon/.ssh/id_rsa.pub"

The authenticity of host '%IP_POLLER% (%IP_POLLER%)' can't be established.

ECDSA key fingerprint is
SHA256:jWu0XhoMQ/doj57yARsEC93S/7aYPvheYRI3eVv6gdk.

ECDSA key fingerprint is
MD5:9a:24:97:76:0d:dd:46:82:a6:8f:db:22:23:10:d8:71.

Are you sure you want to continue connecting (yes/no)? yes

/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter
out any that are already installed

/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are
prompted now it is to install the new keys

centreon@%IP_POLLER%'s password:

Number of key(s) added: 1

Now try logging into the machine, with:  "ssh 'centreon@%IP_POLLER% '"
and check to make sure that only the key(s) you wanted were added.
```

Pour vérifier la connexion, saisir :

```
[~]$ ssh centreon@%IP_POLLER%
```

Saisir `exit` pour terminer cette connexion

Installer les plugins sur le collecteur :

```
[~]$ yum -y update

[~]$ yum -y install git

[~]$ cd /usr/tmp

[~]$ git clone https://github.com/centreon/centreon-plugins.git

[~]$ cd centreon-plugins

[~]$ chmod +x centreon_plugins.pl
```

```
[~]$ cp -R * /usr/lib/centreon/plugins/
```

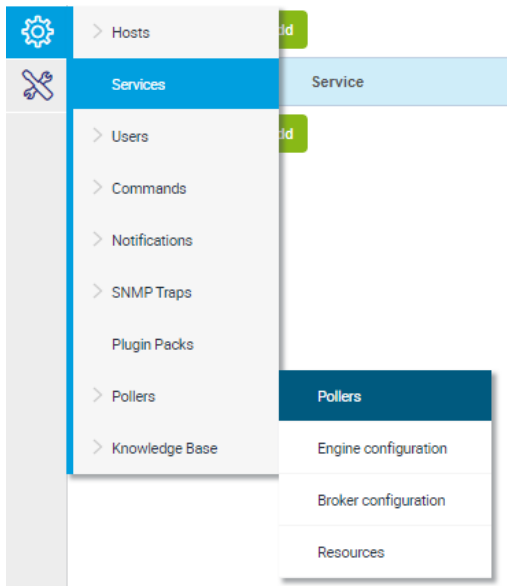
Activer le service de monitoring

```
[~]$ systemctl enable centengine
```

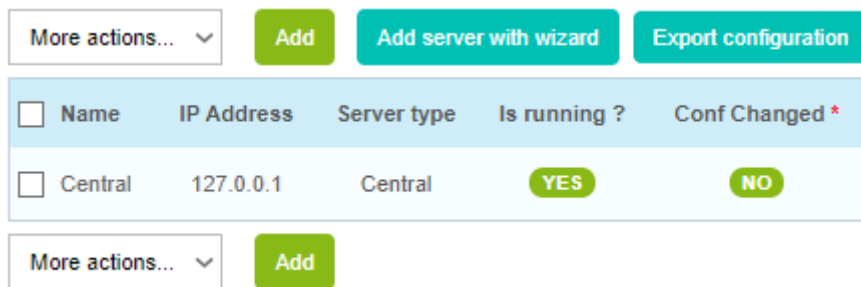
```
[~]$ systemctl start centengine
```


AJOUT DU COLLECTEUR A L'INTERFACE GRAPHIQUE

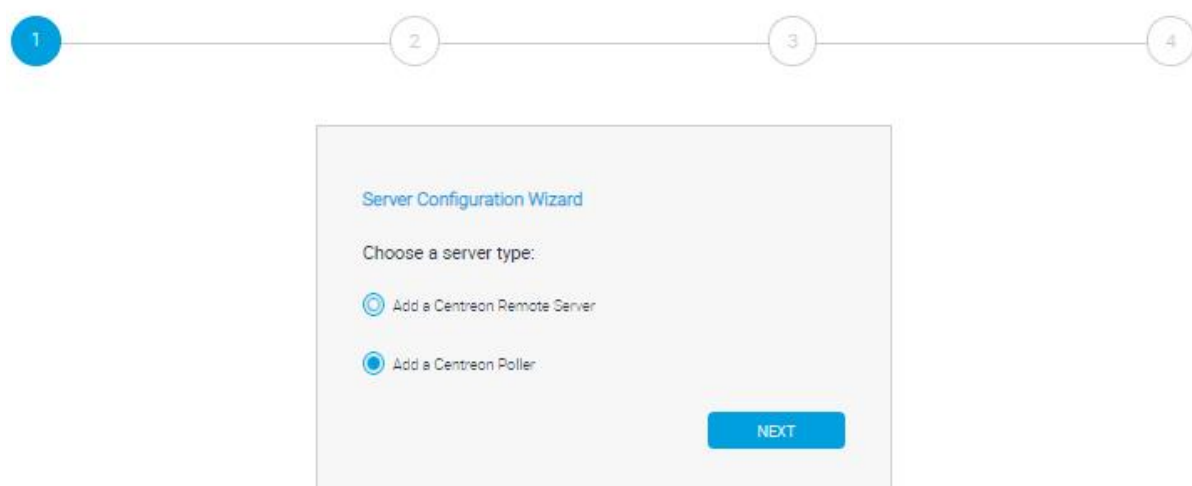
Rendez-vous dans Paramètres > Pollers > Pollers



Cliquer sur « Add server with wizard »



Cliquer sur “Add a centreon poller » puis, sur « next »



Renseigner les informations suivantes puis, cliquer sur « next »



Server Configuration

Server Name:

Server IP address:

Centreon Central IP address, as seen by this server:

Cliquer sur « Apply »



Attach poller to a server

☒ Advanced: reverse Centreon Broker communication flow

Le collecteur a été ajouté

Sélectionner le Central et le collecteur puis, cliquer sur « Export configuration »

Renseigner les paramètres comme ci-dessous puis cliquer sur « Export »

| Configuration Files Export

Polling instances

? Pollers *

x Central
x S-TCOM-CP01

Actions

? ☒ Generate Configuration Files

? ☒ Run monitoring engine debug (-v)

? ☒ Move Export Files

? ☒ Restart Monitoring Engine

Method Restart

? ☐ Post generation command

Export

Résultat :

More actions...
Add
Add server with wizard

Export configuration

<input type="checkbox"/>	Name	IP Address	Server type	Is running ?	Conf Changed *	
<input type="checkbox"/>	Central	127.0.0.1	Central	YES	NO	4
<input type="checkbox"/>	S-TCOM-CP01	192.168.31.6	Distant Poller	YES	NO	7

More actions...
Add

AJOUT DES NOTES

Veillez à ce que le service SNMP soit installé sur le serveur

SOUS DEBIAN :

```
[~]$ apt-get install snmpd snmp
```

```
[~]$ systemctl start snmpd
```

Editer le fichier /etc/snmp/snmpd.conf

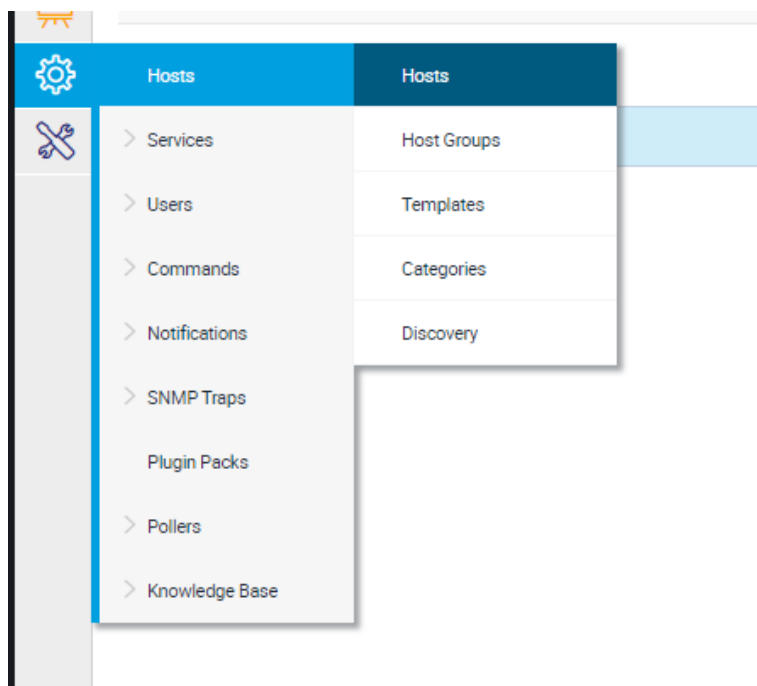
Modifier la ligne 52 par

```
rocommunity public default -V systemonly
```

Sauvegarder le fichier et saisir :

```
[~]$ systemctl restart snmpd
```

Rendez-vous dans Paramètre > Hosts > Hosts.



Cliquer sur « Add »

More actions...	Add	
<input type="checkbox"/> Name	Alias	IP Address
More actions...	Add	

Renseigner les informations comme ci-dessous puis, cliquer sur « Save »

Configuration > Hosts

Host Configuration | Notification | Relations | Data Processing | Host Extended Infos

Save Reset

| Add a Host

Host basic information

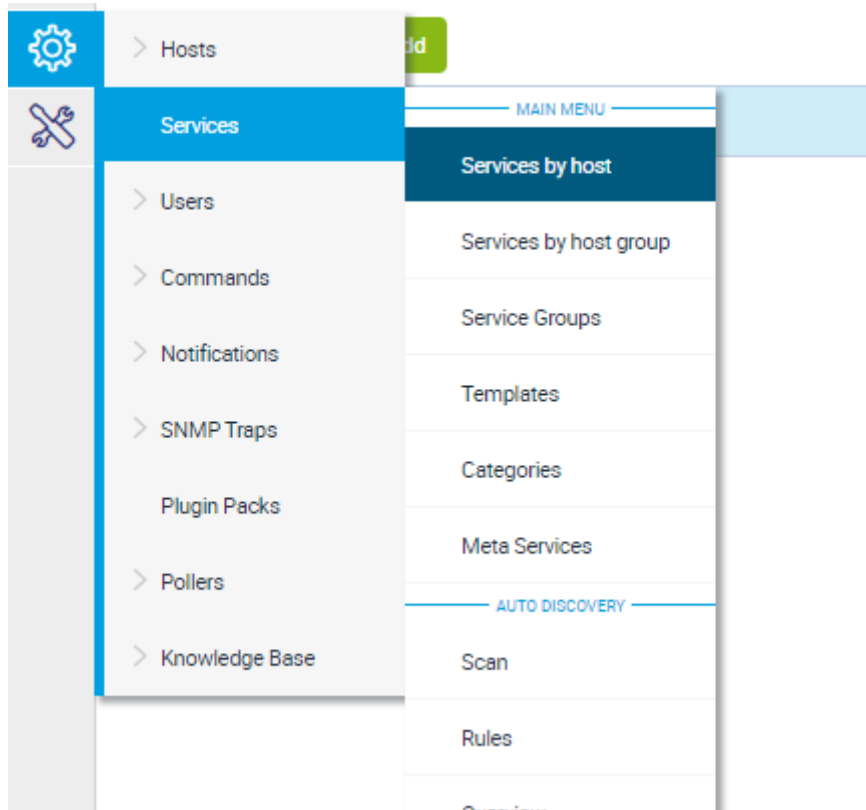
Name *	S-TCOM-SMB01
Alias	S-TCOM-SMB01
IP Address / DNS *	192.168.31.5 Resolve
SNMP Community & Version	public 2c
Monitored from	S-TCOM-CP01
Timezone / Location	Europe/Paris
Templates	+ Add a new entry
A host can have multiple templates, their orders have a significant importance Here is a self-explanatory image.	
OS-Linux-SNMP	
Create Services linked to the Template too	<input checked="" type="radio"/> Yes <input type="radio"/> No

Host check options

Check Command	Check Command
Args	

AJOUT DES SERVICES

Rendez-vous dans Paramètres > Services > Services by host



CPU

Cliquer sur « Add »

More actions...	Add
<input type="checkbox"/> Host	Service
More actions...	Add

Renseigner les données comme suit puis, cliquer sur « Save »

Dossier technique Supervision

Configuration > Services > Services by host

General Information | Notifications | Relations | Data Processing | Extended Info

Save Reset

[Add a Service](#)

Service Basic Information

Description **SMB01-CPU**

Linked with Hosts **S-TCOM-SMB01**

Template **OS-Linux-Cpu-SNMP**

Service Check Options

Check Command **Check Command**

+ Add a new entry

Custom macros

Template inheritance
Command inheritance

Name	Value	Password
WARNING	80	
CRITICAL	90	
EXTRAOPTIONS		

Args

Argument	Value	Example
No argument found for this command		

RAM

Cliquer sur « Add »

More actions...

Add

☐ Host

Service

More actions...

Add

Renseigner les données comme suit puis, cliquer sur « Save »

Configuration > Services > Services by host

General Information Notifications Relations Data Processing Extended Info Save Reset

| Add a Service

Service Basic Information

Description * SMB01-Memory

Linked with Hosts * S-TCOM-SMB01

Template OS-Linux-Memory-SNMP

Service Check Options

Check Command * Check Command

+ Add a new entry

Custom macros

☐ Template inheritance
☐ Command inheritance

Name	WARNING	Value	80	Password	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Name	CRITICAL	Value	90	Password	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Name	EXTRAOPTIONS	Value		Password	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Args

Argument	Value	Example
No argument found for this command		

Service Scheduling Options

ESPACE DISQUE

Cliquer sur « Add »

More actions...

Add

☐ Host

Service

More actions...

Add

Renseigner les données comme suit puis, cliquer sur « Save »

Configuration > Services > Services by host

General Information Notifications Relations Data Processing Extended Info Save Reset

| Add a Service

Service Basic Information

Description * SMB01-DiskSpace

Linked with Hosts * S-TCOM-SMB01

Template OS-Linux-Disk-Global-SNMP

Service Check Options

Check Command * Check Command

+ Add a new entry

Name	FILTER	Value	*	Password	
Name	TRANSFORMSRC	Value		Password	
Name	TRANSFORMDST	Value		Password	
Name	WARNING	Value	80	Password	
Name	CRITICAL	Value	90	Password	

Custom macros

☐ Template inheritance
☐ Command inheritance

TRAFFIC RESEAU

Cliquer sur « Add »

More actions...

Add

☐ Host

Service

More actions...

Add

Renseigner les données comme suit puis, cliquer sur « Save »

Configuration > Services > Services by host

General Information Notifications Relations Data Processing Extended Info Save Reset

| Add a Service

Service Basic Information

Description * SMB01-NetworkIO

Linked with Hosts * S-TCOM-SMB01

Template OS-Linux-Traffic-Global-SNMP

Service Check Options

Check Command * Check Command

+ Add a new entry

Name	FILTER	Value	*	Password	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Name	CRITICALSTATUS	Value		Password	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Name	WARNINGIN	Value	80	Password	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Name	CRITICALIN	Value	90	Password	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Name	WARNINGOUT	Value	80	Password	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Custom macros

☐ Template inheritance
☐ Command inheritance

DNS

Ajouter la commande DNS :

- Rendez-vous dans Paramètres > Commandes > Checks
- Cliquer sur « add »
- Renseigner les paramètres suivants

Configuration > Commands > Checks

La commande est :

```
$CENTREONPLUGINS$/centreon_linux_snmp.pl --
plugin=apps::protocols::dns::plugin --mode=request --search=isec-
telecom.local
```

- Cliquer sur « Save »

Rendez-vous dans Paramètres > Services > Services by host

Cliquer sur « Add »

Renseigner les données comme suit puis, cliquer sur « Save »

DHCP

Ajouter la commande DHCP :

- Rendez-vous dans Paramètres > Commandes > Checks
- Cliquer sur « add »
- Renseigner les paramètres suivants

Configuration > Commands > Checks

La commande est :

```
/usr/lib64/nagios/plugins/check_dhcp --server=192.168.31.5
```

- Cliquer sur « Save »

Rendez-vous dans Paramètres > Services > Services by host

Cliquer sur « Add »

Renseigner les données comme suit puis, cliquer sur « Save »