

Installation - EN

Sommaire

- Context
- Installing Shinken Enterprise
 - Prerequisites
 - CPU requirements
 - Package extraction and installation
 - Verification of correct operation
 - Checking web interfaces
 - Configuration UI (User Interface)
 - Visualization UI (User Interface)
 - Presence of the user guide in the package
- Installation (Advanced mode)
 - Choisir les démons activés pendant le processus d'installation
 - Setting up the encryption
 - Setting up a server without an internet connection
 - Setting up a server with internal repositories (not public)
- Shinken Enterprise License Key
- Troubleshooting installation issues
 - Specific case of updating a Mongo cluster

Context

This guide will help you install Shinken Enterprise on a Linux server.

Once you've followed the installation guide, you'll have quick access to the Shinken Configuration and Visualization interface in a default architecture, i. e. on a single server, on which all daemons will be enabled.

If your server is part of a distributed architecture, you will have to go to the configuration phase of your daemons

- server names and IPs,
- kingdom,
- spare,
- Pollers Tag,
- data retention...

As for the update procedure, the "update" script will allow you to update your Shinken server completely, even if only a few daemons are activated. The configuration of your Shinken server will not be changed.



Important

Important

When installing Shinken Enterprise, the document-oriented database management system **MongoDB** is implemented with the **v3.0.15**. This database system will allow the proper functioning of the Configuration and Visualization interface. Used with a MongoDB database, **Graphite** is a tool to store the metrics of your sensors.

So as not to create a malfunction, **we ask you not to update MongoDB / Graphite.** Just leave the versions provided by our services in place.



To prevent any risk, Shinken Enterprise daemons will refuse to start if the installed version of **MongoDB** is not the one recommended.



If a different version of **MongoDB** is already present on the server, the installation will be interrupted



If you upgrade Shinken Enterprise from a version prior to 2.6.1 and the **MongoDB** installed is not 2.6.9, the update will be interrupted

Installing Shinken Enterprise

Prerequisites

Required environment: **RHEL/Centos 6.6, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8 and 7.9 [64bits]**

Shinken Company has chosen distributions produced by Red Hat: **Red Hat Enterprise Linux (RHEL) and CentOS (Community enterprise Operating System)**.

These distributions Linux, mainly intended for servers, are stable, powerful and compatible with the vast majority of professional environments. The CentOS distribution is also very powerful (*based on a commercial distribution RHEL quality*).



Warning - Redhat Registration

When installing a Redhat Enterprise Linux (commercial) distribution, you must attach your Redhat subscription to your system.

Here are the commands to use from the server:

1/ `subscription-manager register`
(-> User name / Password)

and it must also be attached to the current OS:

2/ `subscription-manager attach`

Yum will then be able to be used correctly because the subscription will be valid (*and therefore Shinken can be installed*)

CPU requirements

The python programming language does not currently have the ability to use multiple processes (*multithreading*), so each daemon uses one or more :

- Synchronizer
 - 1 for the configuration UI
 - 1 for the daemon
- Broker
 - 1 / Web UI
 - 1 for the daemon
- Arbiter
- Receiver
- Reactionner
- Scheduler
- Bollard

Package extraction and installation

Automatic installation :

- You must be logged in as root,

```
$id
uid=0(root) gid=0(root)
```

- And that the umask of the root account is 0022

```
$umask 0022
```

- "Untar" the package that was sent to you:
 - `tar zxvf shinken-enterprise_V02.08.XX-LANGUAGE.tar.gz`
 - This will create a directory **shinken-enterprise** containing the installation script and the dependencies needed for the installation.
- Enter the directory **shinken-enterprise** (`cd shinken-enterprise_V02.08.XX-LANGUAGE`) and run the script :

```
./install.sh
```

- It will automatically install Shinken Company and its components.
 - The VMWare SDK for checks is now installed automatically (*was requiring manual installation in previous versions*).
 - To get more information about daemon consumption and to improve the performance of Shinken when installed on a VMWare virtual machine, the "open-vm-tools" package must be installed manually:

```
yum install open-vm-tools
```

Verification of correct operation

- **Vérification:**

- Pour vérifier que Shinken Entreprise est bien installé, configuré et fonctionnel, lancez la commande :

```
shinken-healthcheck
```

- Your Shinken Enterprise license is not installed, this is normal, go to the [licence key](#) below on this page to install your key.



The complete installation will be done on the same server:

- Installation of the Shinken Enterprise engine, modules and dependencies.
- activation of **all** les démons (*Synchronizer, Arbiter, Scheduler, Poller, Reactionner, Broker, Receiver*).

For a distributed installation, see the [Distributed architecture](#)

Checking web interfaces

Configuration UI (User Interface)

Once Shinken Enterprise is installed, to access the configuration UI, you must point your web browser to the address displayed during installation.

- By default, the configuration interface is accessible on the dedicated port **7766** (*via the HTTP protocol*). For example : <http://192.168.0.1:7766>



The IP address (*or FQDN if your DNS resolution is operational*) corresponds to your server hosting the daemon **Synchronizer**.

View page [Configuration - Configuration UI](#) for more information.

Visualization UI (User Interface)

Once Shinken Enterprise is installed, to access the View UI, you must point your web browser to the address displayed during installation.

- By default, the configuration interface is accessible on the dedicated port **7767** (*via the HTTP protocol*). For example: <http://192.168.0.1:7767>



The IP address (or FQDN if your DNS resolution is operational) corresponds to your server hosting the daemon **Broker**.

View page [Configuration - Visualization UI](#) for more information.

Presence of the user guide in the package

The user guide (*in French*) is now integrated in the installation package.

You can find it inside the shinken-enterprise_V02.08.XX-**LANGUAGE**.tar.gz in the folder /tools/documentation/ui-visualisation/

All you need is for a user to open the "index.html" file via their web browser in order to be able to browse the user guide, containing the documentation related to the visualization UI.

Installation (Advanced mode)

Choisir les démons activés pendant le processus d'installation

- You must be logged in as root,

```
$id
uid=0(root) gid=0(root)
```

- And that the umask of the root account is 0022

```
$umask 0022
```

- "Untar" the package that was sent to you:
 - `tar zxvf shinken-enterprise_V02.08.XX-LANGUAGE.tar.gz`
 - This will create a **shinken-company** containing the installation script and the dependencies needed for the installation.
- Move to the (`cd shinken-enterprise_V02.08.XX-LANGUAGE`) and then execute the command `./install.sh` but with options based on the daemons you want to activate:
 - `--pollernode` : activates the Poller daemon (*dedicated to launching checks*)
 - `--reactionnernode` : Activate the Reactionner daemon (*dedicated to launching notifications*)
 - `--schedulerndnode` : Activate the Scheduler daemon (*planificateur des checks*)
 - `--arbiternode` : Activates the Arbiter daemon (*central distribution role*)
 - `--receivernode` : Activate the Receiver daemon (*receive passive checks*)
 - `--synchronizernode` : Activate the Synchronizer daemon (*manage the configuration*)
 - `--brokernode` : Activate the Broker daemon (*data export for visualization interfaces*)



Example

Example

For example, you can install Shinken Enterprise and directly activate the Scheduler and Poller at the same time by typing the command

```
./install.sh --schedulerndnode --pollernode
```

- To verify that the selected Shinken Enterprise daemons are updated, configured and functional, run :

```
shinken-healthcheck
```

Shinken-healthcheck will then verify that Shinken Enterprise is properly configured and running (only for installed daemons)

- **After the initial installation, if you want to enable/disable daemons**, use the activation command detailed in the chapter [List/activate /deactivate daemons](#).
- **During an update, the update.sh script takes into account the daemons that are activated or not.**

The various addons are automatically activated during installation:

- **nagvis-shinken-architecture**: Enabled when an Arbiter is installed (*more details in the dedicated documentation page: [Activation and configuration of the functionality](#)*)
- **nagvis**: Enabled when a Broker is installed (*more details in the dedicated documentation page: [NagVis \(Addon \) - EN](#)*)

Setting up the encryption

You can set up the [Encryption of sensitive data](#) automatically at the time of installation.



If you have never activated the encryption sensitive data, we advise you to proceed à installation without activer encryption and discover the functionality by reading the chapter [Encryption of sensitive data](#).

An encryption key will then be generated during the installation process and the Synchronizer database will be encrypted.

To do this, run the following command:

```
./install.sh --activate-encryption <nom de clé> --disable-important-notices-user-input
```

- The parameter `--activate-encryption` allows you to activate the encryption. The name of the key is optional, but you will be asked for it when the installation program is run if you do not specify it.
- The parameter `--disable-important-notices-user-input` allows you to disable prompts asking you for confirmation before continuing the process.



However, you are strongly advised to read the information provided during installation.



The automatic implementation of the encryption requires in all cases to export and save the key generated during the process. Please consult [shinken-protected-fields-keyfile-export - EN](#) for more information.

Shinken-healthcheck will allow you to check the correct configuration of daemons and encryption.

Setting up a server without an internet connection

In the case of a server that does not have an internet connection, you must launch the installer with the following parameter:

- **--disable-epel** : allows not to install the epel repository on the server



Access to a yum repository

Note that the server must have access to a valid yum repository (*which also has the packages in epel*) in case of rpm version conflicts between what the installer offers and what is already installed on the server.

Setting up a server with internal repositories (not public)

In the case of a server that only has access to internal repositories that are not necessarily up to date compared to the official centos/redhat repository, you have to run with it:

- **--package-update-only-on-conflict** The following is a list of the packages that have already been installed : allows you not to try to update packages that are already installed and thus tries to avoid installing packages that are too up-to-date compared to the internal repository which is not up-to-date.



Access to a yum repository

It should be noted that the server still needs to have access to a valid repository, and package conflicts may arise in the case of newly installed packages and that in this case only yum requesting the repository can resolve them (*happens in the case of installer packages too up-to-date compared to what is available in the repository*).

Shinken Enterprise License Key

Once Shinken Enterprise is installed, the **shinken-healthcheck** launched from your Arbiter server will display an error message about the license:

The default license installed is a trial license. You will only be able to place a very small number of hosts under supervision.

```
License key
ERROR: The license key is invalid
ERROR: No license key. Trial n
```

The Shinken Enterprise sales department must have sent you a named license to fully use the product.

The license is a file with the following name: **user.key** and this licence is nominative and limited in time.

To install it, nothing could be easier, just :

- Place this file on the server hosting the Arbiter and on the servers hosting the Visualization UI(s), in the following path: **/etc/shinken/user.key**
- Then restart Shinken Enterprise with the command : **service shinken restart**

Then run the command again **shinken-healthcheck** the license error message should be gone and here is an example of valid license information:

```
License key
OK: The license key is valid
OK: The license key (Customer:dev-d.labardin Node limit:2000) is valid (start:2017-11-13 end:2018-11-13 => 257 days remainin
OK: Nodes Used: 4 / Limits: 2000
```

If you don't have a license key or your license key has expired, contact us: contact@shinken-solutions.com

Troubleshooting installation issues

When installing dependencies, if a machine is not connected to the internet or connected to a private repository, the installation or update scripts may fail.

In this case, files are created in the "home" of the user with whom the installation/update is performed. These files contain more details about the errors encountered and can be sent to your Shinken Enterprise support contact for correction.

```
----- Installing NagVis (cartography) -----
NagVis installed:  OK

----- Launching data and configuration checks and fixes -----
fix_double_link           :  executed [Failure]
fix_double_sync_keys      :  executed [OK]
fix_default_item_se_uuid  :  skip (unnecessary)
fix_remove_shinken_core   :  skip (unnecessary)
fix_remove_deprecated_check : skip (unnecessary)
fix_remove_undefined_aix_templates : skip (unnecessary)
fix_custom_data_uppercase : skip (unnecessary)
fix_host_name_inheritance : skip (unnecessary)
fix_flapping_thresholds   : skip (unnecessary)
fix_bp_rule_args          : skip (unnecessary)
fix_uuid_in_sla_info      : skip (unnecessary)
fix_business_impact       : skip (unnecessary)
fix_empty_value_from_synchronizer_data : executed [OK]
fix_update_protected_fields_parameters : skip (unnecessary)
migrate_links_name_into_id : skip (unnecessary)
fix_service_overrides_encryption : skip (unnecessary)
make_index_for_sla_module  : skip (unnecessary)

Some errors occurred while running the fixes.
Please check the log file for more information (~/.sanatize.update.log).
Send this file to your Shinken support if needed.
```

For each installation/upgrade, a folder is created in `~/shinken/versions_and_patch_installations/` and named as follows:

```
YYYY-MM-DD-HHhMMmSS-install-VXX.XX.XX
```

This folder contains the following files:

- Display the installation script (*installation only*): `shinken.enterprise.install.log`
- Package installation details: `shinken.enterprise.install.detail.log`
- Cleaning the configuration: `sanatize.update.log`
- Display the update script (update only): `shinken.enterprise.update.log`
- Configuration and user data backup (*update only*)

In case of problems with package installations via yum, the errors will be present in the files:

- `/tmp/install.txt`
- `/tmp/install_bogus.txt`

Specific case of updating a Mongo cluster

In version V02.07.00, the MongoDB database is updated. When MongoDB has been configured to run as a cluster, the behaviour of the Shinken Enterprise update script has been modified to take into account this particular configuration.

Detailed explanations can be found in the dedicated documentation page: [If Shinken Lower than V02.07.00 - Upgrade to MongoDB 3.0 \(done automatically under conditions\)](#).