

Centreon NagVis Documentation

Release 1.0

Merethis

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This Centreon module allows display of NagVis maps into Centreon.

This documentation describes first how to install and configure the NagVis backend, then the additionnal Centreon module.

Contents:

Presentation

1.1 Nagvis backend and Centreon module

NagVis and Centreon integration is possible thanks to a NagVis backend (<https://github.com/centreon/centreon-nagvis-backend>) that allows Centreon objects (hosts, services...) to be exposed in NagVis. With this backend, it is possible to create NagVis maps embedding these Centreon objects with the usual NagVis administration interface.

Then an additional Centreon module called “centreon-nagvis” (<https://github.com/centreon/centreon-nagvis>) provides the necessary integration to display existing NagVis maps inside Centreon.

Note: that map edition is only possible through the usual NagVis UI, there is not map edition in Centreon.

Prerequisites

Softwares	Compatible Versions
Centreon	2.5.x
Centreon-Nagvis	1.0.x
Nagvis	1.7.10
SQLite	3.x

Note: NagVis must be installed on the Centreon server as the web interface is reading NagVis maps (stored as *.cfg files).

Graphviz may also be needed depending on the maps. Please refer to the NagVis installation for more information.

Installation guide

3.1 NagVis backend installation

Download NagVis 1.7.x archive and extract it in `/usr/local/nagvis`

Configure vhosts so that `/nagvis` URL are available.

You can use the template provided by NagVis, on CES, it is stored in `/etc/httpd/conf.d/11-nagvis.conf`, close to `10-centreon.conf` (comments have been removed in the file below):

```
Alias /nagvis "/usr/local/nagvis/share"

<Directory "/usr/local/nagvis/share">
    Options FollowSymLinks
    AllowOverride None
    Order allow,deny
    Allow from all

    <IfModule mod_rewrite.c>
        RewriteEngine On
        RewriteBase /nagvis

        RewriteCond %{REQUEST_URI} ^/nagvis/frontend/(wui|nagvis-js)
        RewriteCond %{QUERY_STRING} map=(.*)
        RewriteRule ^(.*)$ /nagvis/frontend/nagvis-js/index.php?mod=Map&act=view&show=%1 [R=301,L]

        RewriteCond %{REQUEST_URI} ^/nagvis/frontend(/wui)?/(index.php)?$
        RewriteRule ^(.*)$ /nagvis/frontend/nagvis-js/index.php [R=301,L]

        RewriteCond %{REQUEST_URI} ^/nagvis/frontend/nagvis-js
        RewriteCond %{QUERY_STRING} !mod
        RewriteCond %{QUERY_STRING} rotation=(.*)
        RewriteRule ^(.*)$ /nagvis/frontend/nagvis-js/index.php?mod=Rotation&act=view&show=%1 [R=301,L]
    </IfModule>
</Directory>
```

Clone the Broker backend provided by this forge:

```
# cd /tmp
# git clone http://<login>:git.centreon.com/centreon-nagvis-backend.git
[...]
# cd centreon-nagvis-backend
# cp GlobalBackendcentreonbroker.php /usr/local/nagvis/share/server/core/classes/
```

Create some directories needed by NagVis:

```
# mkdir etc/profiles
# mkdir -p /var/tmp/cache/
# mkdir -p /var/tmp/compile/
# chown -R apache.apache /usr/local/nagvis
```

Note: At this stage, you should be able to connect to NagVis using http://ip_of_centreon_server/nagvis, and admin/admin account in order to modify NagVis configuration. We will describe textual configuration in this documentation.

Edit */usr/local/nagvis/nagvis.ini.php* (comments have been removed in the file below):

```
[global]
authmodule="CoreAuthModSQLite"
authorisationmodule="CoreAuthorisationModSQLite"
dateformat="Y-m-d H:i:s"
file_group="apache"
file_mode="660"
language_detection="user,session,browser,config"
language="en_US"
refreshtime=60
sesscookiedomain="auto-detect"
sesscookiepath="/"
sesscookieduration="86400"
startmodule="Overview"
startaction="view"

[paths]
base="/usr/local/nagvis/"
htmlbase="/nagvis"
htmlcgi="centreon/main.php"

[defaults]
backend="centreonbroker"
backgroundcolor="#ffffff"
contextmenu=1
contexttemplate="default"
event_on_load=0
event_repeat_interval=0
event_repeat_duration=-1
eventbackground=0
eventhighlight=1
eventhighlightduration=30000
eventhighlightinterval=500
eventlog=0
eventloghidden="1"
eventscroll=1
headermenu="1"
headertemplate="default"
headerfade=1
hovermenu=1
hvertemplate="default"
hoverdelay=0
hoverchildsshow=1
hoverchildslimit="10"
hoverchildsort="asc"
hoverchildssort="s"
```

```

icons="std_medium"
onlyhardstates=0
recognizeservices=1
showinlists=1
showinmultisite=1
urltarget="_parent"
hosturl="[htmlcgi]/main.php?p=20201&o=svc&host_search=[host_name]&search=&poller=&hostgroup=&output_"
hostgroupurl=
serviceurl="[htmlcgi]/main.php?p=20201&o=svcd&host_name=[host_name]&service_description=[service_des"
servicegroupurl=
mapurl="[htmlcgi]/main.php?p=403&map=[map_name]"
view_template="default"
label_show=1

[index]
backgroundcolor=#ffffff
cellsprow=4
headermenu="1"
headertemplate="default"
showmaps=1
showgeomap=0
showrotations=1
showmapthumbs=0

[automap]

[wui]
maplocktime=5
grid_show=0
grid_color="#D5DCEF"
grid_steps=32

[worker]
interval=10
requestmaxparams=0
requestmaxlength=1900
updateobjectstates=30

[backend_centreonbroker]
backendtype="centreonbroker"
statushost=""
dbhost="localhost"
dbport=3306
dbname="centreon_storage"
dbuser="centreon"
dbpass="centreon"
dbinstancename="default"
htmlcgi="/centreon"

[states]

```

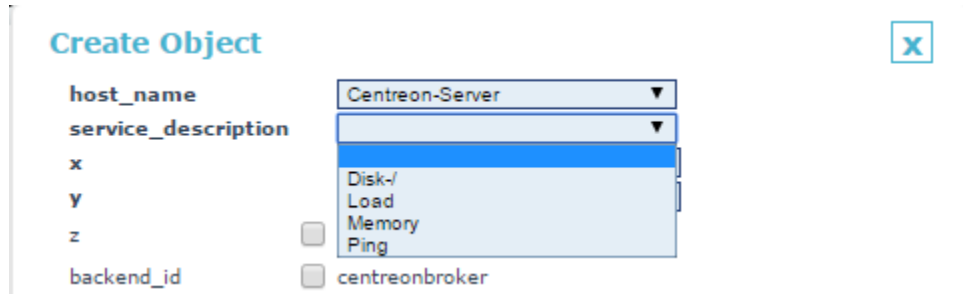
The important directives here are:

- Broker backend definition
- associated credentials to access centreon_storage
- Centreon URL so that a user consulting hosts and services in NagVis can be redirected to the associated object in Centreon ; please note that it is currently NOT possible to redirect a user to a view of a host group or service

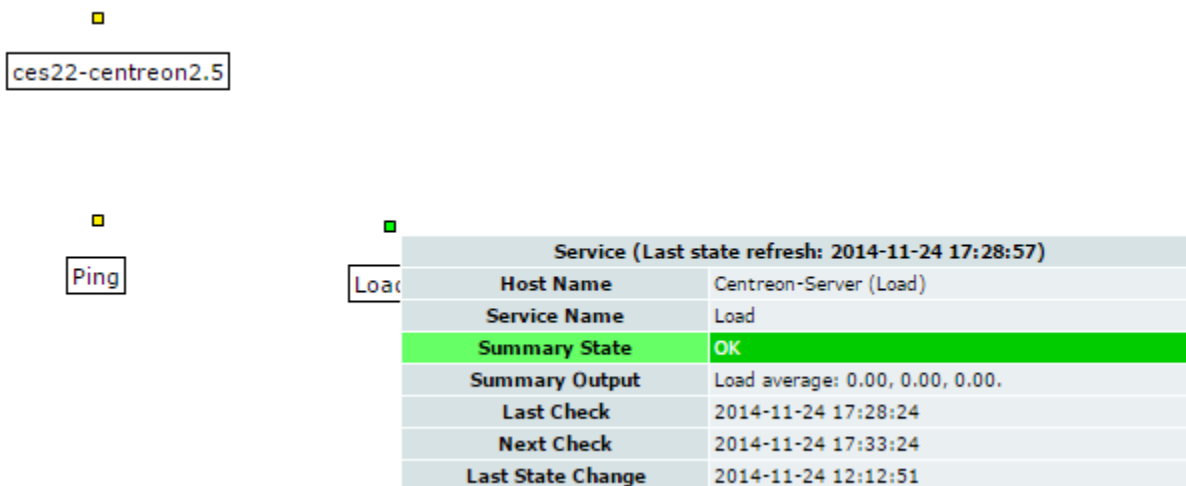
group as Centreon do not have a dedicated URL at the moment

Now, you should be able to create new maps in NagVis, and use drag and drop to add hosts and services available in Centreon.

Centreon objects should appear in NagVis

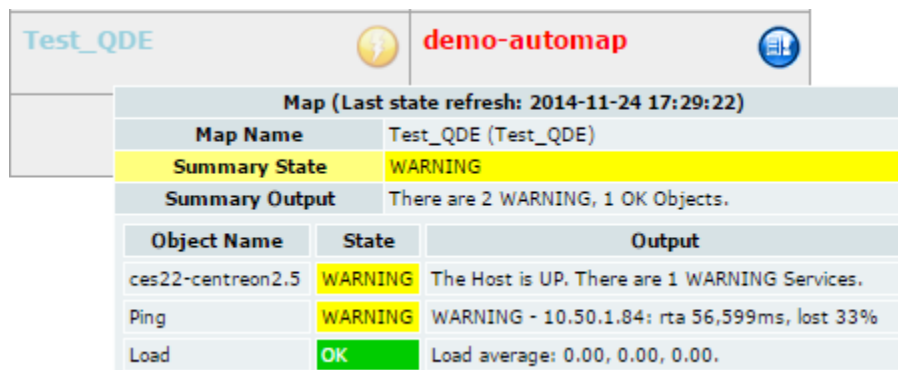


When displaying maps, you should get this kind of status popup (here on a service):



Service (Last state refresh: 2014-11-24 17:28:57)	
Host Name	Centreon-Server (Load)
Service Name	Load
Summary State	OK
Summary Output	Load average: 0.00, 0.00, 0.00.
Last Check	2014-11-24 17:28:24
Next Check	2014-11-24 17:33:24
Last State Change	2014-11-24 12:12:51

you get the same kind of popup on a map:



Map (Last state refresh: 2014-11-24 17:29:22)		
Map Name	Test_QDE (Test_QDE)	
Summary State	WARNING	
Summary Output	There are 2 WARNING, 1 OK Objects.	
Object Name	State	Output
ces22-centreon2.5	WARNING	The Host is UP. There are 1 WARNING Services.
Ping	WARNING	WARNING - 10.50.1.84: rta 56,599ms, lost 33%
Load	OK	Load average: 0.00, 0.00, 0.00.

3.2 Centreon NagVis module

This module will:

- add a menu item in *View > Nagvis* displaying a page listing available maps (located in */usr/local/nagvis/etc/maps*) in a select form
- handle authentication in a simple way, so that users can see the maps, without having to log in Centreon and in NagVis again

Install the module either by getting the source on the forge or using RPM through the YUM repository of CES.

Warning: Follow the procedures under «root» privileges.

3.2.1 Install for Centreon Enterprise Server

If your platform is based on “Centreon Enterprise Server”, you just have to install the Centreon-Nagvis Package :

```
# yum install centreon-nagvis
```

3.2.2 Package install

Packages are provided by MERETHIS and are available on the download Web platform.

You have to extract the archives on you centreon module directory.

```
# tar xzf centreon-nagvis-1.0.3.tar.gz
```

3.2.3 Web install

The next step of the installation of the module is to be done through the Web user interface of Centreon. Navigate to the module management page :

Administration > Modules

Click on the installation icon of the « centreon-nagvis » module :

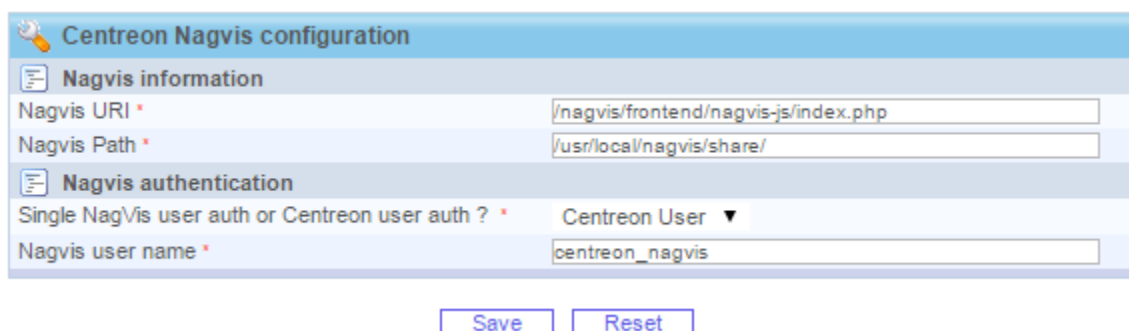


Module Information	
Real name	Centreon NagVis
Release	1.0.3
Author	Merethis Team
Additional Information	NagVis module for Centreon
Install Module Back	

★ Module Information	
Real name	Centreon NagVis
Release	1.0.3
Author	Merethis Team
Additional Information	NagVis module for Centreon
	Module installed and registered SQL file included
	Back

4.1 Options

Check default NagVis options in *Administration > Nagvis (/usr/local/nagvis/share)*.



Option description:

- *Nagvis URI*: NagVis path to the NagVis frontend scripts, loaded from the browser to display maps
- *Nagvis Path*: NagVis path on the Centreon server, code in loaded in the backend
- *Single NagVis user auth or Centreon user auth*: NagVis authentication mode used by Centreon to get maps (see below)
- *Nagvis user name*: NagVis path on the Centreon server, code in loaded in the backend

4.2 NagVis authentication

Centreon needs to authenticate on NagVis to get the list of maps that is displayed when you go in *View > Nagvis*

There are 2 ways Centreon can authenticate on NagVis, as defined with *Single NagVis user auth or Centreon user auth* option:

- *single user*: in this mode, Centreon will use the same NagVis account for all Centreon users connected, this is the simplest mode, every Centreon users will get the same list of maps ; Centreon will use the NagVis account specified with *Nagvis user name* ("centreon_nagvis" by default)
- *Centreon user*: in this mode, Centreon will use the login of the connected user in Centreon to authenticate in NagVis ; this requires that a Centreon user have a NagVis account with the same name

When listing maps, Centreon will properly handle permissions on maps. So with *Centreon user* authentication, it is possible to assign individual permissions on maps, so that each user only sees its maps.

With *Centreon user*, there is no need to create in NagVis the user specified in *Nagvis user name* whereas it is mandatory with *single user*

4.3 User management in NagVis

First you need to add either a single user (“centreon_nagvis” by default) or Centreon users in NagVis through the administration forms (this will populate */usr/local/nagvis/etc/auth.db* accordingly, which is the SQLite DB used by NagVis).

To create a user, fill in the first field set then click on “Create User”.

Manage Users

X

Create User

Username:

Password:

Password Confirm:

Create User

Modify User

Select User

centreon_nagvis

Modify Roles

Available Roles

Administrators
Guests
Managers

>

<

Selected Roles

Users (read-only)

Modify User

Delete User

Username:

Delete User

Reset Password

Select User

Password:

Password Confirm:

Reset Password

If you are using a single user for all Centreon users, the easiest setup is to grant him the “Users (read only)” role so that this user has access to all maps.

But you can configure users to only have access to some maps by defining a new role, like “Role1” in the example below.

Manage Roles



Create Role

Role Name:

Create Role

Modify Role

Select Role

Role 1

Set Permissions

Module	Action	Object	Permitted
*	*	*	<input type="checkbox"/>
Auth	logout	*	<input checked="" type="checkbox"/>
ChangePassword	change	*	<input checked="" type="checkbox"/>
General	*	*	<input checked="" type="checkbox"/>
MainCfg	edit	*	<input type="checkbox"/>
ManageBackgrounds	manage	*	<input type="checkbox"/>
ManageShapes	manage	*	<input type="checkbox"/>
Map	add	*	<input type="checkbox"/>
Map	delete	*	<input type="checkbox"/>
Map	edit	*	<input type="checkbox"/>
Map	manage	*	<input type="checkbox"/>
Map	view	*	<input type="checkbox"/>
Map	delete	00	<input type="checkbox"/>
Map	edit	00	<input type="checkbox"/>
Map	view	00	<input type="checkbox"/>
Map	delete	Map_for_role1	<input type="checkbox"/>
Map	edit	Map_for_role1	<input type="checkbox"/>
Map	view	Map_for_role1	<input type="checkbox"/>
Map	delete	Map_for_role2	<input type="checkbox"/>
Map	edit	Map_for_role2	<input type="checkbox"/>
Map	view	Map_for_role2	<input type="checkbox"/>
Map	delete	Map_for_user1	<input type="checkbox"/>
Map	edit	Map_for_user1	<input type="checkbox"/>
Map	view	Map_for_user1	<input checked="" type="checkbox"/>
[...]		[...]	
Multisite	getMaps	*	<input checked="" type="checkbox"/>
Overview	view	*	<input checked="" type="checkbox"/>
RoleMgmt	manage	*	<input type="checkbox"/>
Rotation	view	*	<input checked="" type="checkbox"/>
Rotation	view	demo	<input type="checkbox"/>
Search	view	*	<input checked="" type="checkbox"/>
User	manage	*	<input checked="" type="checkbox"/>
UserMgmt	manage	*	<input type="checkbox"/>

Then you can grant this role to a user like “user1”

Manage Users X

Create User
Username:
Password:
Password Confirm:

Modify User
Select User
user1 ▼
Modify Roles

Available Roles
Administrators
Guests
Managers
Role 2
Users (read-only)

>
<

Selected Roles
Role 1

Delete User
Username:

Reset Password
Select User
 ▼
Password:
Password Confirm:

Make sure permissions are properly setup in NagVis. You must first be able to log in as this new user in NagVis and see the maps in NagVis. As long as this does not work, Centreon will never be able to display maps correctly.

4.4 Authentication setup between Centreon and NagVis

Edit `/usr/local/nagvis/share/server/core/defines/global.php`:

```
# Default value  
# define('SESSION_NAME', 'nagvis_session');
```

```
define('SESSION_NAME', 'PHPSESSID');
```

This is needed to “share” cookie with Centreon.

You should now be able to display NagVis maps in Centreon.

Warning: Once configured, this acts as a kind of light SSO between Centreon and NagVis.

Centreon Nagvis configuration

Nagvis information

Nagvis URI *

Nagvis Path *

Nagvis authentication

Single Nagvis user auth or Centreon user auth ? *

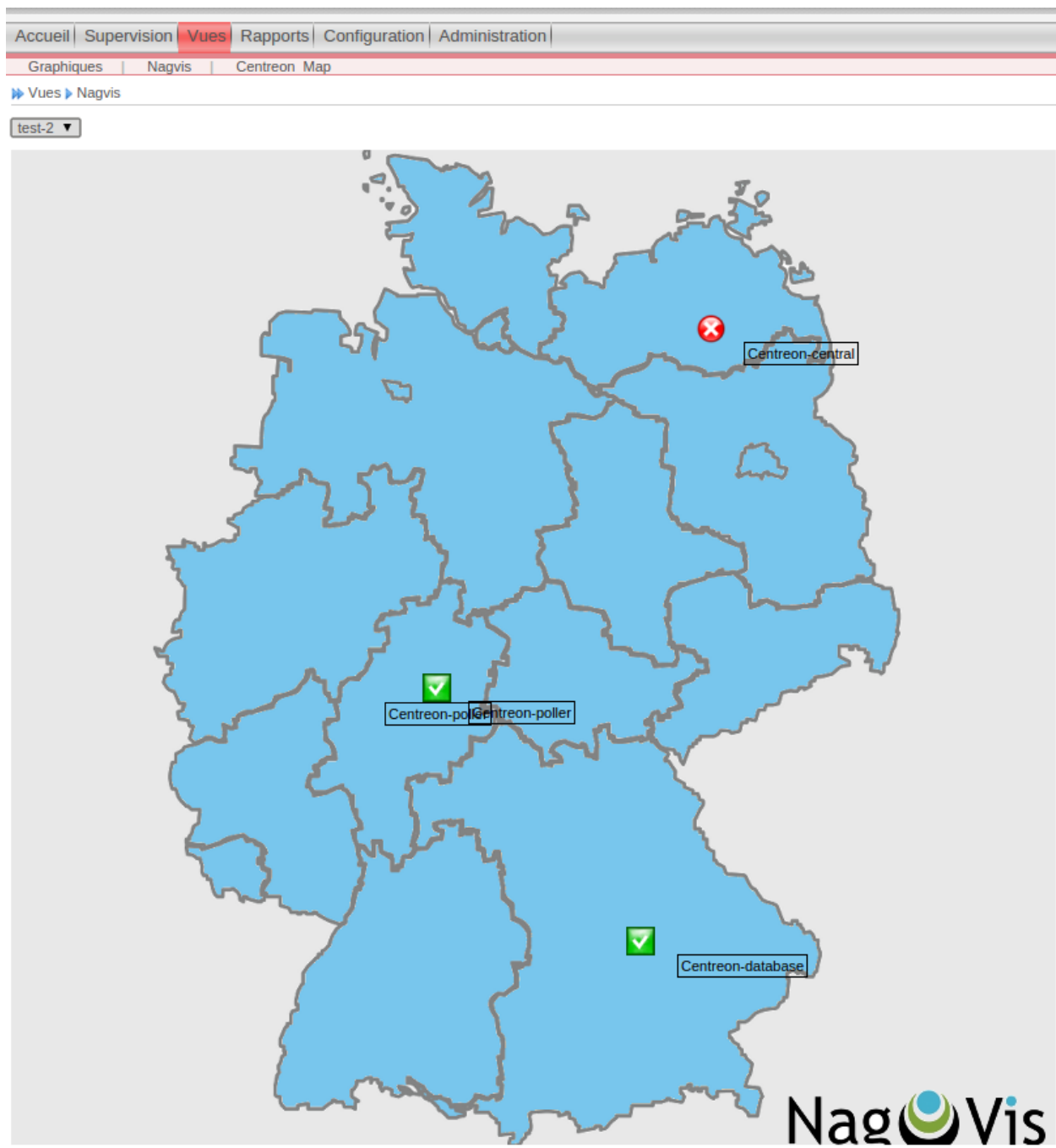
Nagvis user name *

If you want to edit maps:

- Access directly on http://ip_of_centreon_server/nagvis
- Log out as the current user and switch to admin user to edit/create maps.

Note: Make sure you click on *Edit Map* > *Lock/Unlock all* to switch in edit mode, and ensure you do the same once map are finished to leave editing mode.

This will ensure you do NOT see maps in edit mode in Centreon (popup do not appear on mouse over).



Release Notes

5.1 1.1

Add new feature allowing Centreon to use connected user to authenticate on NagVis, only maps of the NagVis users will get listed in this mode

5.2 1.0.x

Initial release to the community