

GestióIP IPAM

v3.5

IP address management software

Installation Guide

v1.1

www.gestioip.net

Table of Contents

1 Introduction.....	3
2 Requirements.....	3
3 System preparation.....	3
3.1 Debian/Ubuntu.....	3
3.2 Suse.....	5
3.3 Fedora/Redhat/Centos.....	6
4 Installation.....	8
4.1 Script based installation.....	8
4.2 Web based database configuration.....	10

1 Introduction

GestióIP comes with a script based installation assistant which resolves GestióIP's dependencies and installs the GestióIP software.

The installation consists of two parts. The script based part to install the required Perl modules and to configure the Apache web server and a web-based part to create and configure the Mysql database.

The setup will install the required modules automatically with the Linux distribution specific packet managers (yum, zypper, apt-get). Modules which are not available as packages will be automatically download and installed from the official Perl archive CPAN. (<https://cpan.metacpan.org/>). That requires “wget” and “make” to be installed during the installation. This packages are not required to run GestióIP and can be removed after the installation.

2 Requirements

SO: Linux, Unix-like. Setup supports the following actual Linux distributions: Debian, Ubuntu, Fedora, Redhat, CentOS, SuSE

Software: Apache2 with mod_perl, Mysql or MariaDB, Perl, some Perl modules, SNMP standard MIBs

Hardware (min): DualCore CPU 2GHz, RAM: 2GB (recommended: 4GB)

3 System preparation

See the distribution specific information.

3.1 Debian/Ubuntu

The installation on Debian/Ubuntu consists in the following steps:

- 1) Enable repositories (Debian only).
- 2) Execute “setup_gestioip.sh” (see 4.1).
- 3) Configure the MySQL database.
- 4) Execute the web base installation part (see 4.2).

Enable the required repositories (Debian only)

This is only required for Debian. For Ubuntu, the required repositories “universe” and “multiverse”

will be enabled automatically by the setup during the installation by executing the commands “add-apt-repository universe”, “add-apt-repository multiverse” and ”apt-get update”.

Enable the “non-free” repository for Debian before executing setup_gestioip.sh:

Open the file /etc/apt/sources.list with an editor and add “contrib non-free” at the end of the lines starting with “deb”.

Debian 9:

```
deb http://http.debian.net/debian/ stretch main contrib non-free
```

Debian 10:

```
deb http://http.debian.net/debian/ buster main contrib non-free
```

Debian 11:

```
deb http://http.debian.net/debian/ bullseye main contrib non-free
```

Then execute the command

```
sudo apt-get update
```

to take the changes affect.

Configure MySQL/MariaDB after running setup_gestioip.sh

Execute the following steps before continuing with the web based installation part of GestióIP

Access from a terminal of the GestióIP server to the MySQL database:

```
$ sudo mysql -u root
```

And execute the following statements:

```
mysql> use mysql;
mysql> select Host, User, plugin from user where user="root";
+-----+-----+-----+
| Host      | User | plugin                |
+-----+-----+-----+
| localhost | root | mysql_native_password |
+-----+-----+-----+
```

If root’s plugin is set to something other than “mysql_native_password” change it with the following mysql statement:

Mysql

```
mysql> ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password BY
'password';
mysql> FLUSH PRIVILEGES;
```

MariaDB

```
MariaDB [mysql]> ALTER USER 'root'@'localhost' IDENTIFIED WITH  
mysql_native_password;  
MariaDB [mysql]> ALTER USER 'root'@'localhost' IDENTIFIED BY 'password';  
MariaDB [mysql]> FLUSH PRIVILEGES;
```

Then apply some basic security setting to the database by executing the script “mysql_secure_installation”:

```
$ sudo mysql_secure_installation
```

You can answer all following questions with "Y".

Try to access to the database to check if the changes where successful:

```
$ mysql -u root -p
```

3.2 Suse

The installation on Suse Linux consists in the following steps:

- 1) Execute “setup_gestioip.sh” (see 4.1)
- 2) Enable the required Apache modules.
- 2) Create a MariaDB root password
- 4) Execute the web base installation part (see 4.2)

Enable the required Apache modules

The setup will install the Apache webserver on the server. After the script based part of the installation with the script setup_gestioip.sh, it is necessary to enable the required Apache modules manually.

Open the file /etc/sysconfig/apache2 with an editor and search the line beginning with

```
APACHE_MODULES="some_modules..."
```

add the required modules to the line:

```
APACHE_MODULES="some_modules... request rewrite session session_crypto session_cookie  
auth_form"
```

Save and close the file and restart the Apache web server.

```
$ sudo service apache2 restart
```

Create a MariaDB root password

If you did not already set a MariaDB root password execute the following steps before continuing with the web based installation part of GestióIP:

```
$ sudo service mariabd start  
$ sudo mysql_secure_installation
```

Set a root password and answer all following questions with "Y".

3.3 Fedora/Redhat/Centos

The installation requires that the epel-release (Extra Packages for Enterprise Linux repository) is enabled. The epel-release will be automatically enabled during the setup during the installation by executing the commands “yum install epel-release” and “yum update”.

- 1) Enable optional and extra RPM repositories (Redhat <=7 only)
- 2) Execute “setup_gestioip.sh” (see 4.1).
- 3) Enable the required Apache modules.
- 4) Create a MariaDB root password.
- 6) Execute the web base installation part (see 4.2).

Enable the required Apache modules

The setup will install the Apache webserver on the server. After the script based part of the installation with the script setup_gestioip.sh, it is necessary to enable the required Apache modules manually.

Open the following two files 00-base.conf and 01-session.conf with an editor:

```
/etc/httpd/conf.modules.d/00-base.conf
```

Make sure that the following line is uncommented.

```
LoadModule request_module modules/mod_request.so
```

```
/etc/httpd/conf.modules.d/01-session.conf
```

Make sure that the following two lines are uncommented.

```
LoadModule auth_form_module modules/mod_auth_form.so
LoadModule session_crypto_module module/mod_session_crypto.so
```

Restart the Apache web server after editing the files:

```
$ sudo service httpd restart
```

Create a MariaDB root password

If you did not already set a MariaDB root password execute the following steps before continuing with the web based installation part of GestióIP

```
$ sudo service mariabd start
$ sudo mysql_secure_installation
```

Set a root password and answer all following questions with "Y".

Enable “optional” and “extra” RPM repository for Redhat <=7

Some required packages are part of the “optional” and “extra” channels. Activate this two channels before you start the installation.

Redhat 6

Check if the optional channel is activated:

```
$ sudo yum repolist all
  repo id                repo name                status
  rhel-6-server          Red Hat Enterprise Linux 6Server - enabled
  rhel-6-server-beta     Red Hat Enterprise Linux 6Server Be enabled
  rhel-6-server-optional-rpms Red Hat Enterprise Linux 6Server Op disabled
  rhel-6-server-supplementary Red Hat Enterprise Linux 6Server Su disabled
```

```
$ sudo subscription-manager repos --enable=rhel-6-server-optional-rpms
$ sudo yum install -y yum-utils
$ sudo yum-config-manager --enable rhel-6-server-optional-rpms
$ sudo yum update
```

Redhat 7

```
$ sudo subscription-manager repos --enable rhel-7-server-extras-rpms
$ sudo subscription-manager repos --enable rhel-7-server-optional-rpms
$ sudo yum update
```

Redhat 8

No action required. All packages should be available in the base or EPEL repository.

4 Installation

The installation of GestióIP consists in a script based installation assistant to install the software and a web based part to configure the Mysql database.

4.1 Script based installation

Download GestióIP

* Download GestióIP 3.5 IPAM from www.gestioip.net

Install GestióIP

* Open a shell and untar file `gestioip_3.5.tar.gz`:

```
$ tar vzxvf gestioip_3.5.tar.gz
```

* Change to the new directory `gestioip_3.5`

```
$ cd gestioip_3.5
```

* Execute the script based installation assistant like root

```
$ sudo ./setup_gestioip.sh
```

and follow the instructions.

The setup will install GestióIP with the default values, which should be good if you do not have special requirement. Nevertheless you have the possibility to run the script with the “-i” option to use the interactive mode (`sudo ./setup_gestioip.sh -i`).

If you wish to run the script without any interactivity check the configuration file `./conf/setup.conf`

You can stop the script at any point of time by typing CTRL C and execute it later again again.

Setup will write a log file called `date_setup.log` which is stored in the same folder as the script itself.

Restart the Apache webserver when the setup script has finished:

```
$ sudo systemctl restart apache2 (Debian/Ubuntu)
```


Installation Guide GestióIP IPAM v3.5

```
$ sudo service httpd restart (Fedora/Redhat/CentOS)
```

```
$ sudo service apache2 restart (Suse)
```

And access to the web-based database configuration by pointing your browser to <http://server/gestioip/install>.

4.2 Web based database configuration

Open a browser and access to “http://server/gestioip/install”. Replace “server” with the IP address or the DNS name of the server with the GestióIP installation. Access with the user and the password which you created during the setup (default user: gipadmin):



Fig. 1: Accessing to web based database configuration

After confirming the credentials by clicking “OK”, GestióIP's installation “Welcome” site will be displayed. Click “next” to proceed with database configuration.



Fig. 2: Installation “Welcome” site

Introduce the database configuration parameters and click “send”.

Note that if you running GestióIP and it's Mysql database on the same host, introduce “127.0.0.1” for both, “Web server address” and “Mysql server address”.

The screenshot shows the 'Database creation' configuration screen in the GestióIP installation wizard. The page has a dark blue header with 'GestióIP' and 'Installation'. On the left, there is a vertical navigation menu with 'Welcome', 'Database creation', 'Database configuration', and 'Completion of installation'. The main content area is titled 'Database creation' and contains several input fields with labels and help text:

- Web server address:** Input field with '127.0.0.1'. Help text: "If the Web and the Mysql server are running on the same host enter here the loopback address (127.0.0.1). If no, enter here the IP or the DNS name of the Web server".
- Mysql server address:** Input field with '127.0.0.1'. Help text: "If the Web- and the Mysql server are running on the same host enter here the loopback address (127.0.0.1). If no, enter here the IP or the DNS name of the Mysql server".
- Mysql port:** Input field with '3306'.
- Mysql super user:** Input field with 'root'.
- Mysql super user password:** Password field with 8 dots. Help text: "Mysql super user" and "Mysql super user Password" are only used during the installation and will not be stored".
- SID:** Input field with 'gestioip'.
- Mysql user:** Input field with 'gestioip'.
- Mysql user password:** Password field with 8 dots.
- retry Mysql user password:** Password field with 8 dots.

A 'send' button is located at the bottom left of the form area.

Fig. 3: Database parameter configuration

Next page shows if the database was successfully created. Click “next page” to proceed.

The screenshot shows the 'Database creation' confirmation screen in the GestióIP installation wizard. The page has the same dark blue header and left navigation menu as Figure 3. The main content area is titled 'Database creation' and displays a list of status messages:

- connecting to the database...**OK**
- creating the new database gestioip...**OK**
- GRANT ALL ON gestioip.* to gestioip@127.0.0.1 IDENTIFIED BY *****...**OK**
- creating tables in the new database...**OK**

Below the messages, it says "The Mysql database was successfully created". At the bottom, there is a "next page" button.

Fig. 4: Database creation confirmation screen

Configure Sites and Categories. If your IT-Infrastructur is distributed over various locations introduce the locations into the text box “Sites”. This can be e.g. various campuses, data centers or buildings. You need to introduce at least one site. The network categories are thought to classify the networks. GestióIP proposes here some categories like “prod” for the production environment, “pre” for pre-production or “dev” for networks of the development environment. Modify the

network categories to adapt them to your requirements. Host category are intended to classify hosts. Add as many additional host categories as you need.

Note: You can change all this values later easily via frontend web.

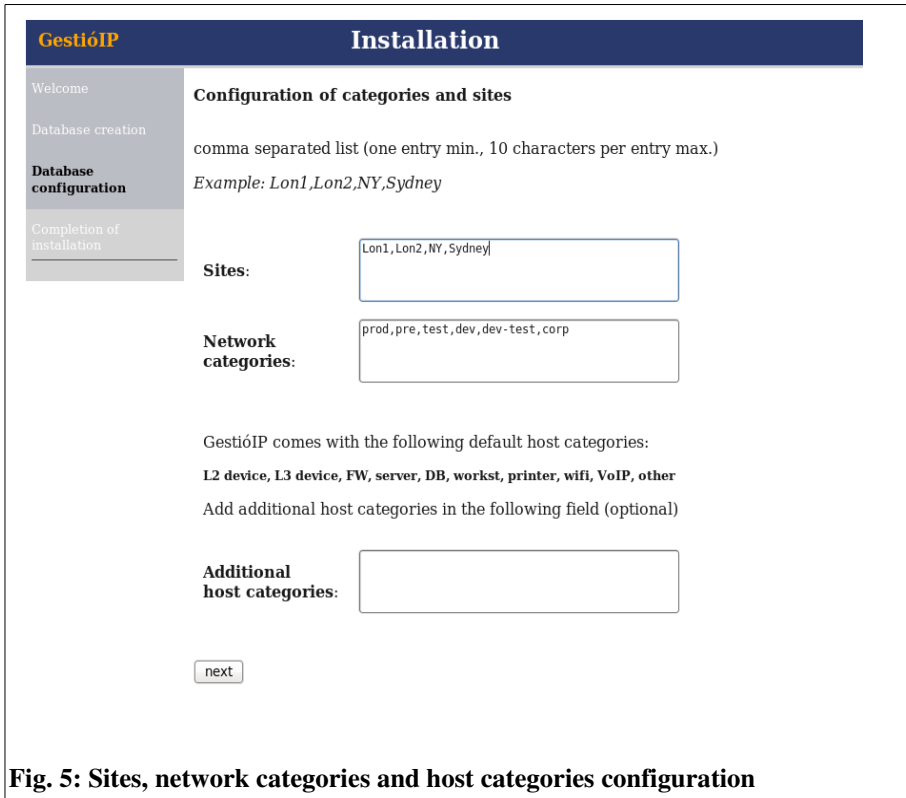


Fig. 5: Sites, network categories and host categories configuration

Next page shows if the sites and categories where successfully created. Click “next page” to proceed.

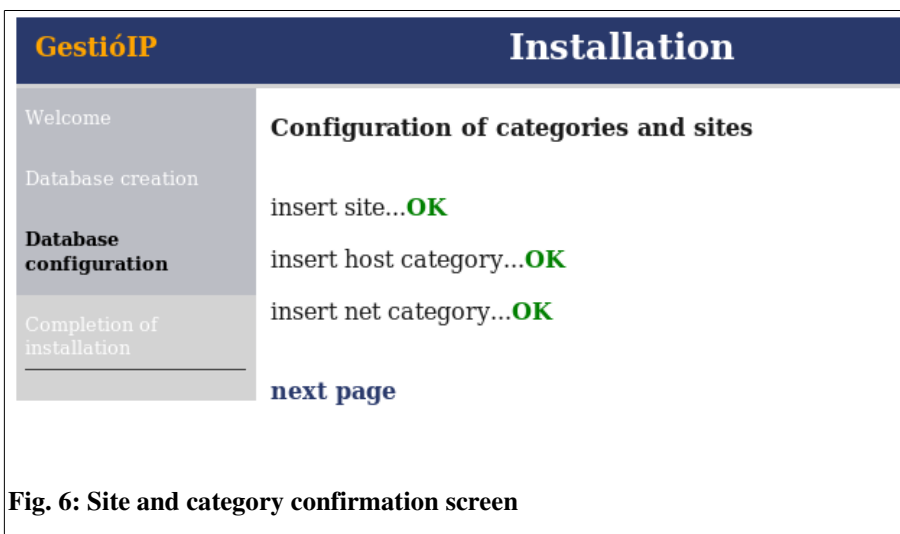


Fig. 6: Site and category confirmation screen

The following page informs if the installation has completed successfully.

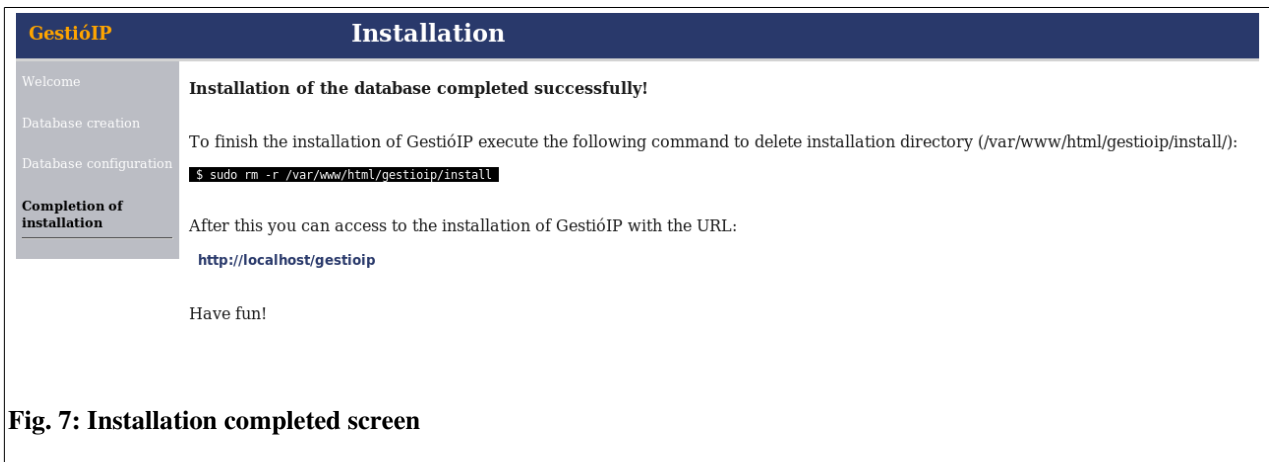


Fig. 7: Installation completed screen

Delete the directory “install” ([DocumentRoot]/gestioip/install) manually and access to GestióIP by clicking the link <http://servername/gestioip>.

When you access first time to GestióIP, there will be a page displayed, with gives some hints how to initialize the database with your organizations networks, hosts and VLANs.

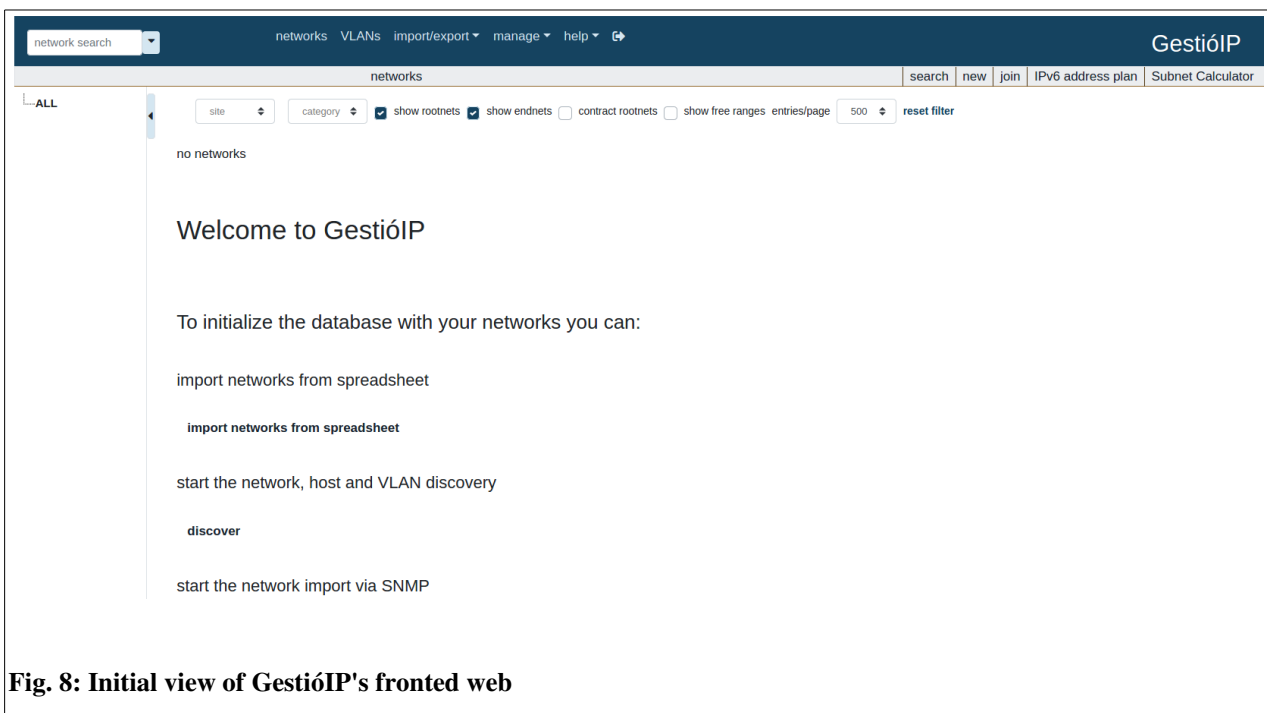


Fig. 8: Initial view of GestióIP's fronted web