GestióIP IPAM

v3.5

IP address management software

Installation Guide

v1.8

www.gestioip.net

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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. First the script based part to install the software on the server and to configure the Apache web server and second a web-based part to create and configure the Mysql database.

Please be aware that there is also a docker-compose deployment available which, specially for testing purposes, may be an alternative to the installation on a server. See https://github.com/muebel/gestioip-docker-compose for more information.

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)

During the installation the server must be connected to the Internet to download the required packages with the distribution specific packet manager (apt, yum, zypper).

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 were 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 web server 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 headers”

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

```
$ sudo service apache2 restart
```

Check also the local firewall settings of the server. You may need to allow http traffic with a command like:

```
$ sudo firewall-cmd --zone=public --add-port=80/tcp
```

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
```
or
```
$ sudo service mysql 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) Create a MariaDB root password.

4) Execute the web base installation part (see 4.2).

Check also the local firewall settings of the server. You may need to allow http traffic with a command like:

```
$ sudo firewall-cmd --zone=public --add-port=80/tcp
```

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 systemctl start mariadb.service
$ 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 of 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

* Execute the the following command from a terminal of the GestióIP server to download the GestióIP installation package:

```
$ wget http://sourceforge.net/projects/gestioip/files/gestioip_3.5.tar.gz
```

Install GestióIP

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

```
$ tar vzxf 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 requirements. 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.

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

Restart the Apache web server when the setup script has finished (for Suse remember to enable the required Apache modules before):

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

`$ 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.

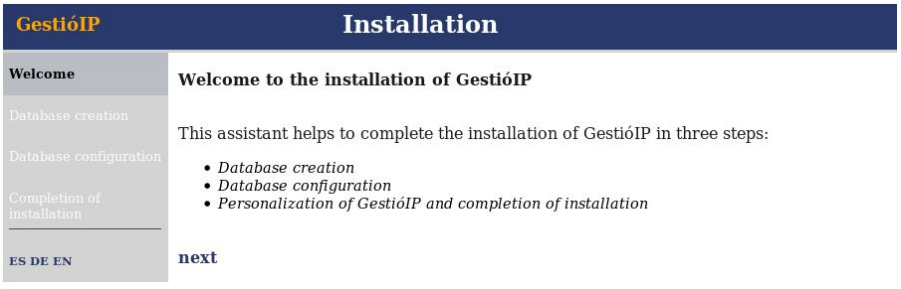

Fig. 2: Installation “Welcome” site

Introduce the database configuration parameters and click “send”.

Note that if you are 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”.

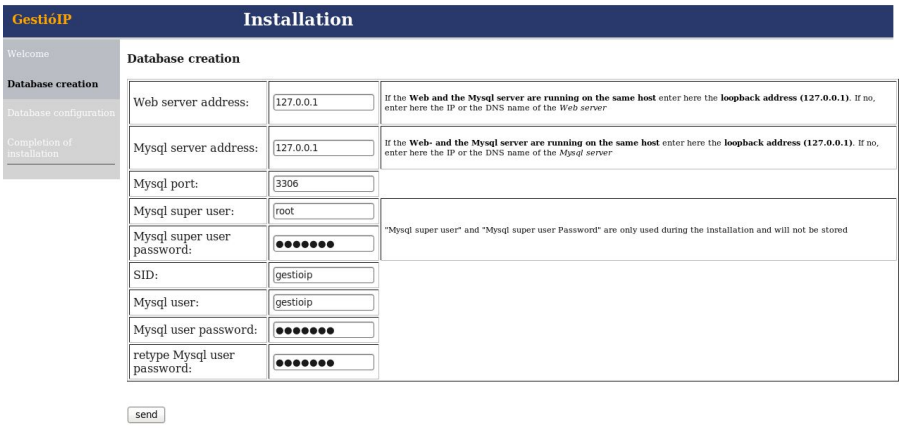

Fig. 3: Database parameter configuration

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

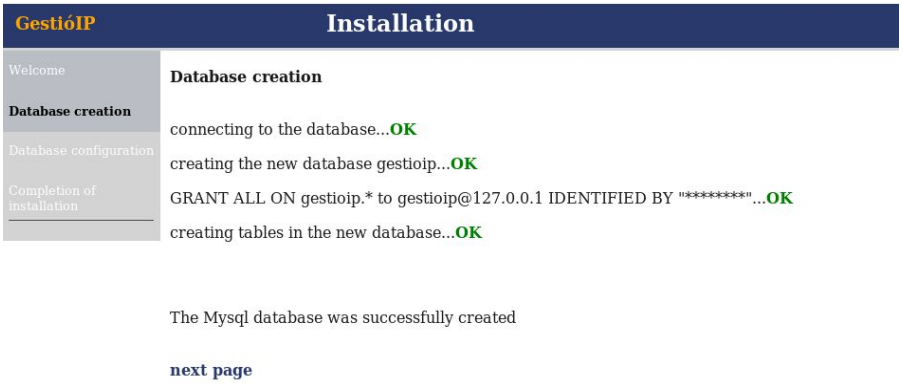

Fig. 4: Database creation confirmation screen

Configure Sites and Categories. If your IT-Infrastructure is distributed over various locations introduce the locations into the textbox “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 categories are intended to classify hosts. Add as many additional host categories as you need.

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

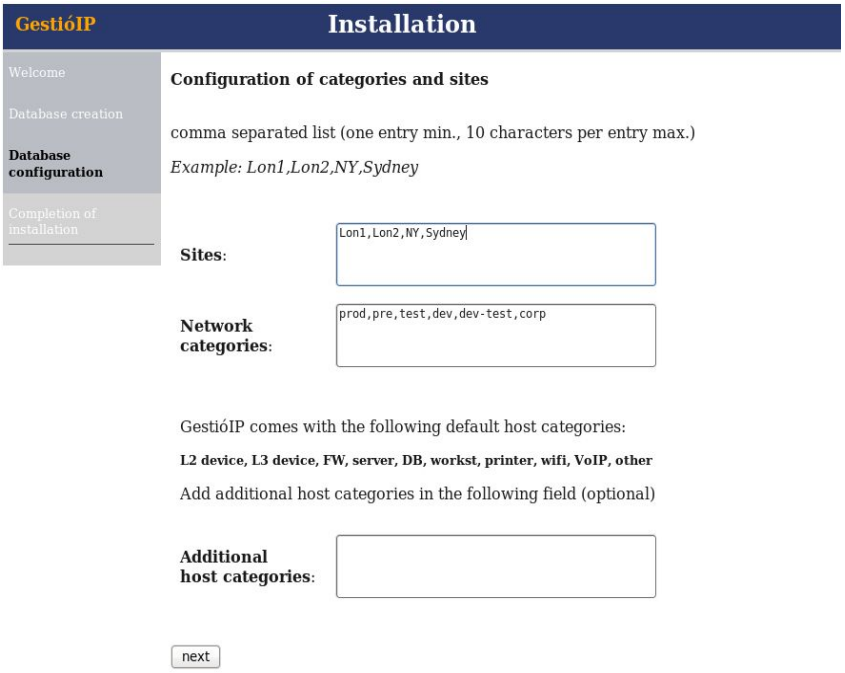

Fig. 5: Sites, network categories and host categories configuration

The next page shows if the sites and categories were 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 GestióIP for the 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.

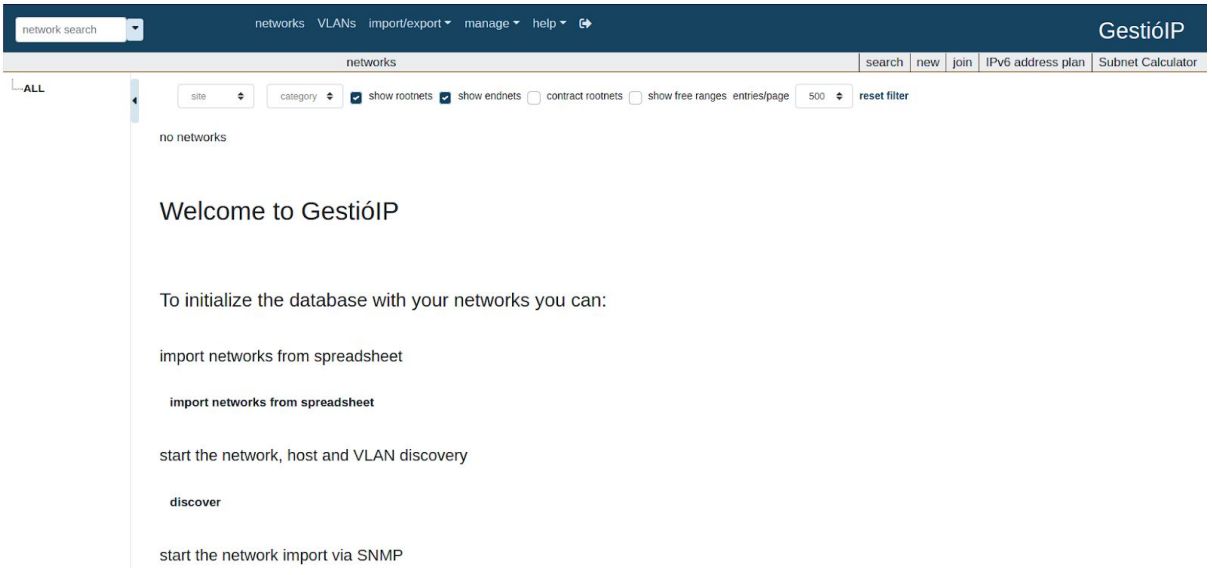

Fig. 8: Initial view of GestióIP's fronted web