

VisPlain

OWNERS

HANDBOOK

INSTALLATION &

MAINTENANCE

OF VISPLAIN

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# INSTALLATION

## Client side

As VisPlain is fully browser based it does not require an installation on the user's device. The VisPlain web frontend requires an actual browser; this is checked on startup.

## Server side

The VisPlain server component can be installed in Microsoft Windows and (i86) Linux environments.

In any case the following steps will be performed:

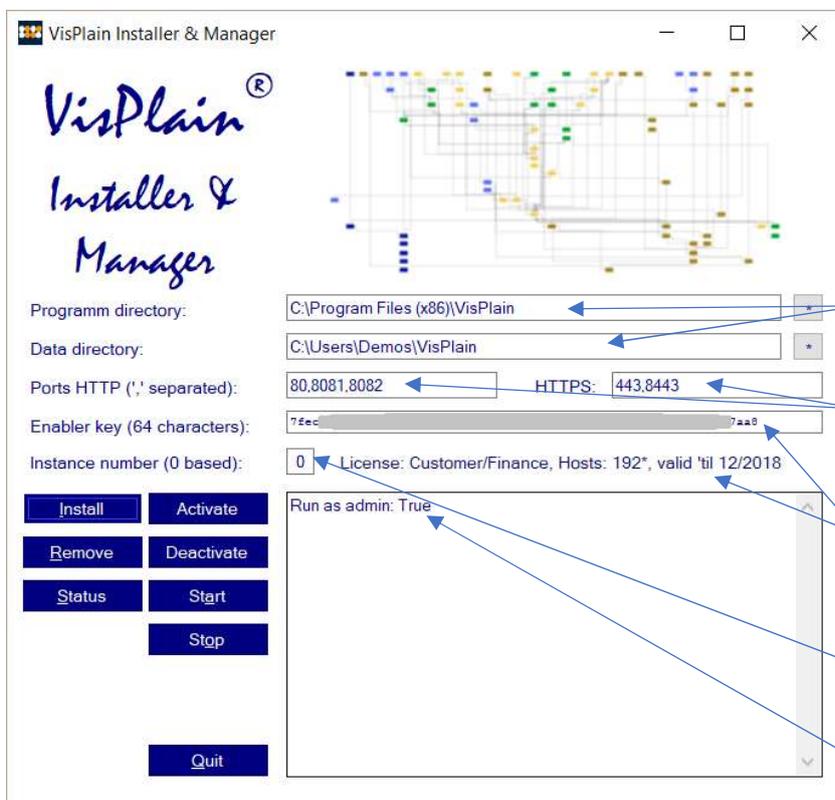
- Create an appropriate application directory and copying the VisPlain binary files into it.
- Register the VisPlain engine as a service / daemon.
- Start the VisPlain engine in the background (as a service or daemon).

# INSTALLATION

## MS Windows

If you have been provided with the zipped version of the installer (VisPlainInstaller.zip), unpack the included file(s).

In the properties (right-mouse-click on of VisPlainInstaller.exe) select 'Run as Administrator), then execute the VisPlain Installer :



Program and data directories, auto filled with proposal .

Comma separated lists of HTTP and HTTPS web server ports (may be empty).

A 64 character hex representation of the license key and the related license info.

The identification of a certain instance (use 0 for single-instance configurations).

Must show 'True' for every action except 'Status'.

Program and base project/data directories and network parameters are already filled with rational values but may be adjusted.

1. Install VisPlain by using the 'Install' button.
2. Activate and Start the VisPlain engine by using the 'Activate' and 'Start' buttons.
3. Use the 'Status' button to verify correct installation and operation.

Any step will leave messages in the log frame; check for 'Error:' messages.

# INSTALLATION

## LINUX (x86)

Using a command shell execute the VisPlain Installer (`visplaininst`). You may provide values overriding the defaults:

<code>-i</code>	Install/Update
<code>-u</code>	Un-Install binaries (data remains)
<code>-d &lt;application directory&gt;</code>	Application binaries directory
<code>-p &lt;data directory&gt;</code>	Base data/projects directory
<code>-t &lt;network port(s)&gt;</code>	Web server port(s) for HTTP; default 8080
<code>-s &lt;network port(s)&gt;</code>	Web server port(s) for HTTPS; default 8443
<code>-k &lt;key&gt;</code>	Enabler key (provided by MATHESIS)
<code>-c &lt;client&gt;</code>	Instance id (numeric, 0 based); default 0
<code>-a</code>	Activate service and start daemon
<code>-e</code>	Stop daemon and deactivate service
<code>-r</code>	Output status of service / daemon

### Examples:

```
> visplaininst -i -k 1234 -s 443
> visplaininst -i -d /usr/bin/visplain -p /home/visplain
```

The installer will create several processing messages; check for 'Error:' indicators.

The status of the installation may be checked at any time using `visplaininst` without any parameters:

```
> visplaininst
VisPlain installed in /opt/visplain
Project data base directory is /home/visplain
Engine running and listening on port 8443 using HTTPS
```

## HTTPS / SSL

For security reasons the web browser connects to the VisPlain server via HTTPS. As HTTPS relies on the SSL protocol, a certificate is required on the server side. Certificates are assigned to the computer on which the VisPlain server is running and therefore cannot be delivered by us to the customer. 'Correct' certificates refer to a certificate authority which issues them.

It is possible to issue certificates by yourself; however such 'local' certificates will issue a warning message in the user's web browser whenever he uses the service for the first time.

Create a 'local' certificate in a Microsoft Windows environment using open SSL:

```
@echo off
set OPENSSL_CONF=.\openssl.cnf
c:\OpenSSL-Win64\bin\openssl genrsa 2048 > key.pem
c:\OpenSSL-Win64\bin\openssl req -x509 -new -key key.pem > key-cert.pem
```

The above steps create a certificate in files `key.pem` and `key-cert.pem` which have to be copied into the VisPlain server directory.

## Registration

VisPlain is a commercial product; it is not 'free'.

During installation a key which is provided to you by MATHESIS has to be entered to proceed with the installation.

For testing purposes the key 'eval' may be used. Such installations cannot be run in the background and cease operation after 60 minutes (they can be restarted immediately after this timeout).

Keys are related to customers and installations; one is not allowed to forward or publish keys of valid VisPlain installations.

## UPDATES

Once VisPlain is installed updates can be applied by going through the installation procedure again. The installer recognizes an already existing installation and keeps the configuration and data.

# MAINTENANCE

On a running VisPlain installation few maintenance may be required:

- Configuration changes
- Users & Authorizations
- Data Backup
- Removal of obsolete data files

Appropriate actions are described on the following pages.

## MAINTENANCE

### Configuration

A VisPlain installation may consist of several 'projects'. Every project has a unique directory to hold its data files. All the project directories are direct subdirectories of the VisPlain installation's base project directory which was supplied during the installation. The project name is identical to the name of the subdirectory; and this name is also identical to the project part of the URL which the user uses to enter the project via his web browser.

#### Example (in a typical windows installation)

Assume the base project directory was specified as `C:\Users\VisPlain` and this directory has three subdirectories 'Finance', 'CRM\_1' and 'CRM\_2' then you have three projects with the names of those subdirectories.

Further assuming that the base URL was specified as `/VisPlain` and the server running the VisPlain installation has the network name `huge1.com` then the three projects are accessible in the web browser by the following URLs:

```
https://www.huge1.com/VisPlain/Finance
```

```
https://www.huge1.com/VisPlain/CRM_1
```

```
https://www.huge1.com/VisPlain/CRM_2
```

Some notes on project / directory names:

- Any new subdirectory is automatically a VisPlain project; no configuration is required.
- Directories may be renamed. Beware that the associated URLs change also.
- A directory starting with an underscore is ignored by the VisPlain service. This is a convenience to temporary disable projects from being accessed.

## MAINTENANCE

### Users & Authorizations

A VisPlain installation may consist of several 'projects'.

For every project users and related authorizations may be defined individually in the file `VisPlain.json` located in every projects unique file directory (which also hold the projects data files).

# MAINTENANCE

## Backup & Recovery

A VisPlain installation may consist of several 'projects'. Every project has a unique directory to hold its data files. In addition the VisPlain main configuration is stored in file `VisPlain.json` in the installation directory.

### Backup of Configuration

Regularly make a copy of file `VisPlain.json` from the VisPlain installation directory into a safe place.

### Backup of Projects

Every VisPlain project is located in a specific directory on the server side in which all data is located (there is NO separate database server used).

A rough backup strategy is to regularly make copies of the project directories into a separate save and secure place.

### Recovery

The VisPlain executables can be recovered by reinstalling VisPlain.

The VisPlain configuration and VisPlain project data can be recovered by copying the appropriate files from the backup into their previous locations. The VisPlain service recognizes such files and refreshes immediately.

## SECURITY

As the VisPlain client is pure web browser based there is no data stored on the end user's device.

The VisPlain engine communicates via secure HTTPS/SSL connections with the clients; so even if VisPlain is used via unsecure media e.g. via the internet, it is not possible to trace the data.

The VisPlain engine stores all data and configuration in the base data directory on the server which is specified during the installation.

This data is NOT encrypted and therefore anyone which gains access to the above data directory can read or manipulate the data.

Also backups made of the data directory may (depending on the backup method) allow access to the original information.

# POSTFIX

This document is called: 'Installation and Maintenance Manual'

The name of the file is: InstallationAndMaintenance.pdf

This is the version: 0.50

Check the NLS VisPlain website for availability of newer versions.

## How to reach us:

Phone: +49 6321 9685-40

Email: [visplain@nls.de](mailto:visplain@nls.de)

Web: [www.nls.de/VisPlain](http://www.nls.de/VisPlain)

Location: NLS GmbH  
Hirschhornring 57  
67435 NEUSTADT  
Germany (DE)

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