ViMP 4.0

Installation Guide

Author:
ViMP GmbH

Table of Contents

About this document

Thank you for choosing ViMP.

This document will guide you through the installation process and answers common questions about the installation.

To install ViMP, you need to be comfortable with installing and configuring packages via SSH on your server. Also, you should have previously worked with Linux, Apache2, MySQL and PHP (commonly referred to as LAMP).

To simplify this process, we'll assume you are trying to install ViMP for a video website called "*MyPortal*" with the domain http://*www.myportal.com*. **In the following replace these examples with the actual name and domain of your video website.**

This guide assumes you have **shell access with super user (root) permissions** to your server. You'll need those permissions to install additional packages and configure Apache2, PHP and MySQL.

If you don't have root access or only FTP access, you will not be able to install all required parts. Please contact your hosting provider for help.

If you don't want to install ViMP by yourself – no problem, we gladly help you. Visit our website and find out more about our installation service at **https://shop.vimp.com/en/details/product/installationsservice.html**.

Requirements

To install ViMP, you need a dedicated server running any Linux operating system (Debian 8 Jessie recommended), a web server (Apache2), PHP and a MySQL database.

We recommend the following minimum hardware configuration:

- Quad-Core processor or better
- 8 GB RAM or more
- 500 GB Disk space (SATA-II or SAS) or more. For additional data security, we recommend using a RAID controller.

The following software is required to run ViMP:

- Apache2:
  - Version 2.2 recommended
  - mod_rewrite must be enabled
- PHP:
  - Version 5.5, 5.6, 7.0
  - GD library, Mcrypt, cURL, MySQL, mbstring, MySQLi, PDO, pdo_mysql and XSL extensions must be installed
  - PHP CLI (Command Line Interface) must be installed
- MySQL:
  - At least version 5.0 required
  - InnoDB storage engine is required
- Transcoding:
  - FFmpeg (inkl. ffprobe)
  - exiftool

If your server already meets the listed requirements, you can skip directly to the "Configuration" section of this document.

The following sections explain the installation and configuration on a Debian Jessie system. If you are using a different distribution, please check your operating system's manual to see how to install the required packages. We also provide tutorials for further distributions in our online FAQ at **https://support.vimp.com/en/faq/installation.html**.

For further information and other distributions please also take a look at our **Getting Started Install Guide** at **https://support.vimp.com/en/getting-started.html**.

Preparing the server

Before installing ViMP or the required packages, make sure your Linux installation is up-to-date. Therefore, enter the following commands at your command line:

```
apt-get update
apt-get upgrade
apt-get dist-upgrade
```

You might have to restart your server if the kernel was updated. Please do so before continuing.

Apache2

To install Apache2, simply run:

```
apt-get install apache2
```

The Apache2 web server will be installed and a basic configuration will be created.

Now, enable `mod_rewrite`:

```
a2enmod rewrite
/etc/init.d/apache2 restart
```

PHP

To install PHP5, run:

```
apt-get install libapache2-mod-php5
```

This will install PHP5 as a module for Apache2.

Then, install the additional packages:

```
apt-get install php5 php5-gd php5-mysql php5-cli php5-mcrypt php5-xsl php5-curl php5-
ldap
```

MySQL

To install the MySQL database server, run the following commands:

```
apt-get install mysql-server
```

Follow the instructions on the screen. When prompted for a root password, please enter a strong password (at least 8 characters, mixed case, including numbers). Make sure to remember the password or write it down in a safe place, you'll need this password later.

Transcoding

This section helps you with the installation of all the required tools to encode videos on your server. Please take your time and read the instructions carefully.

Transcoding of videos takes a lot of time and requires a lot CPU power. For small video websites this is no problem, but if upload numbers increase, the server won't be able to handle the load at a certain point. The cloud-based ViMP Transcoding Service takes this load from your system. Find more information on our website at **https://shop.vimp.com/en/details/product/transcoding-service.html**.

First, add the additional multimedia packages to the package source list of the operating system.

Therefore, create a configuration file in `/etc/apt/sources.list.d`:

```
touch /etc/apt/sources.list.d/deb-multimedia.org.list
```

Once the file is created, open it with an editor and add the following lines:

```
# Debian Multimedia Repository
deb     http://www.deb-multimedia.org jessie main non-free
deb     ftp://ftp.deb-multimedia.org jessie main non-free
```

Next, the keyring of deb-multimedia.org has to be installed:

```
apt-get update
apt-get install deb-multimedia-keyring
```

Now install the packets of the transcoding software:

```
apt-get install ffmpeg libimage-exiftool-perl
```

That's it – all transcoding tools have been installed.

Configuration

Once all packages are installed, some configuration settings need to be adjusted.

Apache2

If you are planning to install your video website in a sub-directory (e.g. http://*www.myportal.com/vimp*) skip this section and follow the instructions in appendix section **Installing ViMP into a sub-directory**.

We recommend creating a new virtual host in a separate directory for this installation. Therefore, we will first create the directories:

```
mkdir -p /var/www/myportal/data
mkdir -p /var/www/myportal/logs
chown -R www-data:www-data /var/www/myportal
```

The user and group names of the `chown` command correspond to the default Apache2 values of Debian. Other distributions may use different user and group names. Please check your documentation and change them accordingly.

Now create the configuration file for this virtual host:

```
cd /etc/apache2/sites-available
touch myportal.conf
```

Once you have created the file, open it in your favorite editor and create the `VirtualHost` entry:

```
<VirtualHost *:80>
    DocumentRoot "/var/www/myportal/data/web"
    ServerName myportal.com
    ServerAlias www.myportal.com

    <Directory "/var/www/myportal/data/web">
           AllowOverride All
           RewriteEngine On
           Options -Indexes +FollowSymLinks
    </Directory>

    ErrorLog /var/www/myportal/logs/error.log
    CustomLog /var/www/myportal/logs/access.log combined
    LogLevel error
</VirtualHost>
```

Save the file and close the editor. We will now enable the virtual host:

```
a2ensite myportal
/etc/init.d/apache2 reload
```

If you didn't disabled the default Apache2 virtual host yet, please do so before reloading Apache2:

```
a2dissite default
```

Apache2 configuration is now complete. Try pointing your browser to http://*www.myportal.com* to see, if the domain can be reached. Don't worry, if all you see is an Apache2 error page – this will be fixed later automatically.

PHP

If you use one of our ViMP Corporate editions or ViMP Light, please implicitly read the appendix section **Installation of the SourceGuardian PHP extension**!

To run ViMP, the PHP memory limit should be set to 512 MB at least. Also, you should increase the maximum sizes for uploaded files to be able to upload large video files.

First, adjust the values for the PHP Apache2 module. Open `/etc/php5/apache2/php.ini` in your favorite editor. Then locate the following entries and change their values to the indicated values:

- `upload_max_filesize: 1024M`
- `post_max_size: 1024M`
- `memory_limit: 512M`

Once you are done, save and close the file. Then change the settings for PHP CLI by opening `/etc/php5/cli/php.ini` and change the values as indicated above. All of those 3 configurations define the maximum possible upload limit. In our example it would be 512MB. Up to PHP <= 5.5.x values with a maximum of 2047M are allowed. With PHP >= 5.6 you can also enter greater values.

PHP module „opcache“ is troublesome as ViMP has its own caching. Thus we remove it:

```
php5dismod opcache
```

When you are done, restart Apache2 to load the new configuration:

```
/etc/init.d/apache2 restart
```

MySQL

First, let's create a database for ViMP:

```
mysqladmin -p create myportal
```

When prompted for a password, enter the root password you have chosen while installing MySQL.

Next, we'll create a designated user for this database. Therefore, enter the MySQL console:

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

Enter your password once again. When this is done, your prompt should look like this:

```
mysql >
```

Next, enter the following SQL queries. Please note that all queries must be terminated with a semicolon:

```
CREATE USER myportal@localhost IDENTIFIED BY '<password>';
GRANT ALL PRIVILEGES ON myportal.* TO myportal;
```

```
FLUSH PRIVILEGES;
quit
```

Please replace `<password>` by a strong password and remember it. It will be needed later during the installation.

Your MySQL server is now configured to install ViMP. Please note that the MySQL server is only accessible from the server itself for security purposes.

MySQL comes with a basic configuration that provides good configuration values for an averagely frequented website. However, especially on large servers (for example with more than 4 GB RAM) the configuration can be adjusted to increase the performance of the MySQL server. If you want to have your server configured according to your needs, contact us at **info@vimp.com** for a quote.

Installation

Now you're ready to install ViMP. The download package has to be on the server therefore.

Change into the directory where you copied the file to and make the file executable, if not already done:

```
chmod +x vimp.framework-<version>-<edition>-installer.bin
```

Replace `<version>` by the according version number and `<edition>` by the name of the edition.

Then start the installation as follows:

```
./vimp.framework-<version>-<edition>-installer.bin
```

First, you're asked about the path where ViMP is supposed to be installed. Default value is the current directory.

```
Install path [/root]:
```

If the entered folder doesn't exist, ViMP offers you to create it.

If the folder exists and isn't empty, you have to confirm to use it anyway.

Installation can only be continued, if a valid folder has been entered.

Next, the system requirements will be checked. The result should look like follows:

```
>> OK        PHP version is at least 5.2.7 (5.3.21-1~dotdeb.0)
>> OK        PHP version is not 5.2.9
>> OK        DOM extension is installed
>> OK        XML extension is installed
>> OK        XSL extension is installed
>> OK        Tokenizer extension is installed
>> OK        Multibyte String extension is installed
>> OK        iconv extension is installed
>> OK        Posix extension is installed
>> OK        GD extension is installed
>> OK        cUrl extension is installed
>> OK        mysql extension is installed
>> OK        mcrypt extension is installed
>> OK        PDO is installed
>> OK        PDO mysql driver is installed
>> INFO      PDO has some drivers installed: mysql
>> INFO      No database information set
>> OK        SourceGuardian extension is installed
>> OK        php.ini has short_open_tag set to off
>> OK        php.ini has magic_quotes_gpc set to off
>> OK        php.ini has register_globals set to off
>> OK        php.ini has safe_mode set to off
>> OK        php.ini has session.auto_start set to off
>> OK        php.ini has file_uploads set to on
>> OK        php.ini has allow_url_fopen set to on
>> OK        php.ini has register_argc_argv set to on
>> OK        php.ini has set memory_limit not equal to -1
>> OK        php.ini has set memory_limit greather or equal than 512M
```

```
>> OK        php.ini has set memory_limit lesser than 2G
>> OK        php.ini has set post_max_size greather or equal than 100M
>> OK        php.ini has set post_max_size lesser than 2G
>> OK        php.ini has set upload_max_filesize greather or equal than 100M
>> OK        php.ini has set upload_max_filesize lesser than 2G
>> OK        ffmpeg is installed
>> OK        ffprobe is installed
>> OK        exiftool is installed
>> INFO      Version: X.Y.Z (rXXXXX)
>> INFO      Edition: ULTIMATE
>> INFO      OS: Linux 2.6.32-5-amd64 #1 SMP Sun Sep 23 10:07:46 UTC 2012
>> INFO      Memory: 4GB
 Continue? [Y/n]:
```

You can ignore the transcoding tool checks, if you don't plan to use local transcoding. You can also install the transcoding tools later, if you like.

After the checks have finished successfully, enter 'Y' to proceed.

Now all ViMP files will be copied to the installation folder and following you are asked to enter the correct server user and server group (both are needed for folder permissions):

```
>> config    Server configuration
 Server user [www-data]:
 Server group [www-data]:
```

Next, the database connection will be configured:

```
>> config    Database configuration
 Database host [localhost]:
 Database port [3306]:
 Database name []:
 Database user []:
 Database password []:
```

If ViMP cannot establish a database connection with the entered credentials, a notice with the DSN string will be displayed and you're asked to correct the data.

Installation will continue only with valid database connection data.

In the next step, you are asked to enter the default language, default country and upload limit:

```
>> config    Defaults
 Default language [de]:
 Default country [Germany]:
 Maximum upload filesize [12MB]:
```

Possible values for the default language are the codes and names according to ISO 639-1 (http://en.wikipedia.org/wiki/List_of_ISO_639-1_codes, English) of the installed languages (see languages.yml). Default: English (EN), German (DE).

Possible values for the default country are the codes and names according to ISO 3166-1 Alpha2 (http://en.wikipedia.org/wiki/ISO_3166-1, English).

Possible values for the upload limit are numbers in byte, kilobyte (KB), megabyte (MB), gigabyte (GB).

Next, you're asked if the transcoding tools shall be detected automatically. You can also enter the paths manually instead.

```
>> config    Transcoding tools paths
 Detect transcoding tools automatically? [Y/n]:
 ffmpeg path [/usr/bin/ffmpeg]:
 ffprobe path [/usr/bin/ffprobe]:
 exiftool path [/usr/bin/exiftool]:
```

Depending on the automatic detection the values will be preset or not. In our example, they have been detected and you can confirm them by hitting the enter key.

Now you're almost done. Enter portal address (needed for the transcoding e-mails), portal e-mail address and portal name (will be used as e-mail sender name as well).

```
>> config    Portal configuration
 Web address [http://vimp.com]:
 Portal e-mail address [info@vimp.com]:
 Portal name [ViMP]:
```

Last but not least, enter the portal title, portal description and portal keywords.

```
>> config    Portal description
 Portal title [ViMP]:
 Portal description [ViMP]:
 Portal keywords [ViMP]:
```

Now, ViMP will be initialized and it can be used immediately after.

Add Cronjob

Finally, setup the cronjob for the conversion of uploaded files and the ViMP dashboard. Therefore, open the crontab as "root":

```
crontab -e
```

Add the following line and save your changes afterwards:

```
*/1 * * * * /var/www/myportal/data/scripts/sync_new_uploads.sh > /dev/null 2>&1
0 2 * * * php -f /var/www/myportal/symfony -- dashboard-sync >>
/var/www/myportal/log/dashboard-sync.log 2>&1
```

Basic usage

The installation is complete now. Point your browser to http://*www.myportal.com* to see your video website in action.

The init task automatically creates three users representing the three access roles:

- `admin` (password: `admin`) as administrative user
- `moderator` (password: `moderator`) as moderator user
- `user` (password: `user`) as basic user

Change all passwords as soon as possible. If you don't need the users, you can delete them in the admin area. **But don't delete the admin user unless you have created a different one – this would irreversibly lock you out of your portal!**

Appendix

Installation of the SourceGuardian PHP extension

ViMP Corporate Enterprise, ViMP Corporate Campus and ViMP Light only

The sources of the ViMP Light edition and parts of the ViMP Corporate sources are encrypted by the SourceGuardian PHP Encoder (http://www.sourceguardian.com). In order to function properly, a PHP extension has to be installed on your system additionally. This extension decodes the files and passes the executable code to PHP.

This section briefly explains how to set up the PHP extension on your system. We assume that you have access to according the files and directories. If this is not possible, please contact your hosting provider to install the PHP extension.

With the ViMP package we provide the most current version of the PHP extension. SourceGuardian periodically updates the PHP Extension and the latest versions are always available at: http://www.sourceguardian.com/loaders/.

We assume that a virtual host has been set up and points to the directory `/var/www/myportal/data`.

Load and extract the PHP extension to a temporary directory:

```
mkdir /tmp/loader
cd /tmp/loader
wget http://www.sourceguardian.com/loaders/download/loaders.linux-x86_64.tar.gz
tar xfz loaders.linux-x86_64.tar.gz
```

Now the PHP extension is located in this directory, including different files for different PHP versions. Select the operating system and PHP version that fits for your server and copy the file into the lib directory of PHP:

```
cp ixed.5.6.lin /usr/lib/php5/20131226/
```

Next you need to tell PHP, that it must load the extension. Therefore, create a configuration file in `/etc/php5/mods-available`:

```
cd /etc/php5/mods-available/
touch sourceguardian.ini
```

Once the file is created, open it with an editor and add the following lines:

```
[sourceguardian]
zend_extension=/usr/lib/php5/20131226/ixed.5.6.lin
```

Save the file and close the editor. Then activate the module and restart Apache2:

```
php5enmod sourceguardian
service apache2 restart
```

The extension is now activated and ViMP will be decrypted.

If you have problems installing the extension, find detailed instructions at **http://www.sourceguardian.com/ixeds/how_to_install_ixed.html** or book our installation service at **https://shop.vimp.com/en/details/product/installationsservice.html**.

Installing ViMP into a sub-directory

This section explains how to install ViMP into a sub-directory. We assume that ViMP shall be accessible via http://*www.myportal.com/vimp*. We will also assume that the virtual host configuration for Apache2 is already done and that the virtual host points to `/var/www/myportal/data`.

Normally you'd tend to install ViMP at `/var/www/myportal/data/vimp` to make it available under the above URL. But this will not work as http://*www.myportal.com/vimp* would point to `/var/www/myportal/data/vimp` instead of `/var/www/myportal/data/vimp/web`.

So, let's first create the directory for the installation:

```
mkdir /var/www/myportal/vimp
```

ViMP will be installed into a directory that is not accessible by Apache2 directly. You may now continue installing ViMP accordingly to the "Installation" section. We need to change a few more settings after the installation task has completed.

As soon as ViMP is installed, we make it accessible for Apache2. Therefore, create a symlink that links the installation folder to the web folder of ViMP:

```
cd /var/www/myportal/data
mklink -s /var/www/myportal/vimp/web vimp
```

Next, make sure that ViMP knows that it is installed in a sub-directory. Therefore, you need to edit the following files:

- `/var/www/myportal/vimp/apps/frontend/config/factories.yml`
- `/var/www/myportal/vimp/apps/webtv/config/factories.yml`
- `/var/www/myportal/vimp/apps/backend/config/factories.yml`

Within each configuration file, look for the `relative_url_root` setting. You'll find a line like this:

```
relative_url_root:      ''
```

Add the name of the sub-directory:

```
relative_url_root:      '/vimp'
```

Once this step is completed, the virtual host configuration of Apache2 needs to be changed.

Assumed your `VirtualHost` entry looks like this:

```
<VirtualHost *>
    DocumentRoot "/var/www/myportal/data"
    ServerName myportal.com
    ServerAlias www.myportal.com
```

```
    ErrorLog /var/www/myportal/logs/error.log
    CustomLog /var/www/myportal/logs/access.log combined
    LogLevel error
</VirtualHost>
```

Change it to look like this. Add the highlighted part:

```
<VirtualHost *>
    DocumentRoot "/var/www/myportal/data"
    ServerName myportal.com
    ServerAlias www.myportal.com

    <Directory "/var/www/myportal/data/vimp">
           AllowOverride All
           RewriteEngine On
    </Directory>

    ErrorLog /var/www/myportal/logs/error.log
    CustomLog /var/www/myportal/logs/access.log combined
    LogLevel error
</VirtualHost>
```

Last but not least, reload the Apache2 configuration:

```
/etc/init.d/apache2 reload
```

And finally empty the symfony cache, if it already contains files:

```
./symfony cc
```

Now your video website is ready to be used. Try it out by pointing your browser to http://*www.myportal.com/vimp*. Then, continue with the "Basic Usage" section.

Manual installation

Extract the archive from the installer:

```
./vimp.framework-<version>-<edition>-installer.bin -x
```

Replace `<version>` by the according version number and `<edition>` by the name of the edition.

The archive will be extracted to sfx_archiv.tar.gz.

Next, create the folder where ViMP is supposed to be installed.

Copy the extracted file to the created directory.

Then change into the directory and unzip the archive:

```
tar xvfz sfx_Archive.tar.gz
```

In a first step, make the symfony file executable:

```
chmod +x symfony
```

Then check, if the requirements of ViMP are met by executing the following command (for a sample output see chapter „Installation “).

```
./symfony framework:check
```

If no errors occurred, start the installation with the following command:

```
./symfony framework:install
```

Proceed as described in chapter “Installation assistant”.

Unattended Installation

The installation can also be carried out unattended by providing a response file in the following format:

```
settings:
  server_user:              www-data
  server_group:             www-data

  default_culture:          german
  default_country:          germany
  upload_max_size:          12M

  transcode_required:       false

  transcoding_opensource_ffmpeg:      /usr/bin/ffmpeg
  transcoding_opensource_ffprobe:     /usr/bin/ffprobe
  transcoding_opensource_exiftool:    /usr/bin/exiftool

  portal_homepage:          http://www.vimp.com
  portal_email_sender:      info@vimp.com
  portal_name:              ViMP
  portal_title:             ViMP
```

```
  portal_keywords:          ViMP

database:
  host:                     localhost
  port:                     3306
  database:                 vimp
  username:                 vimp
  password:                 vimp123
```

Then start the installer with installation path and response file as follows:

```
./vimp.framework-<version>-<edition>-installer.bin -y –f unattended.yml -p
/var/www/myportal/data
```

Replace `<version>` by the according version number and `<edition>` by the name of the edition.

Installing ViMP on Windows

ViMP is designed to run under Linux. An installation under Windows is possible, but more complicated. Especially the transcoding tools can be quite difficult to install.

Therefore, we do not provide installation instructions and support for Windows up to now.

Frequently Asked Questions (FAQ)

Can I secure my ViMP website with an .htaccess file?

No, this is not possible due to a bug in Flash Player. You can secure the site using .htaccess, but the upload of files will no longer work. This is a known issue in flash player and cannot be worked around. If you are interested in a solution to secure your ViMP website during a development or staging phase, please contact us at **info@vimp.com** to get help with this issue.

Can I install ViMP on a server using SSL?

Yes, this is possible. Please contact us at **info@vimp.com** and we'll provide you with the required information.