



ViMP 2.0

Installation Guide

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About this document

Thank you for using ViMP.

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

To install ViMP, you need to be comfortable 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 community called ShowVid under the domain <http://www.showvid.com>. When installing your community, replace these names and domains with your name and domain.

This guide assumes you have shell access with super user (root) permissions to your server. You'll need these to install packages or 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 solutions.

If you don't want to install ViMP yourself, that's no problem. Simply contact us at support@vimp.com to buy our installation service package, and we'll install all prerequisites and ViMP for you.

Prerequisites

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

For a typical community, we recommend the following hardware:

- Dual-Core processor or better with at least 2.5 GHz
- At least 4 GB RAM
- At least 250 GB Disk space (SATA-II or SAS), 500 GB are recommended. 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:
 - At least version 5.2.6
 - GD library, 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:
 - mencoder / MPlayer 1.0RC2 or newer
 - ffmpeg
 - Additional codec packages
 - Ruby and flvtool2

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

The following sections show the installation of the prerequisites using a Debian installation. If you are using a different distribution, please check your operating system's manual to see how to install the required packages.

Preparing the server

Before installing ViMP or the required packages, make sure your Linux installation is up-to-date. To do so, issue the following commands in 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 (PHP CLI, GD library and mysql)

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

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 tools required to encode videos on your server. Please take your time and read the instructions carefully.

Transcoding videos takes a lot of time and uses up lots of CPU power. For small communities this is no problem, but for larger communities the server will not be able to handle the load. In these cases, the ViMP Transcoding Service converts the video in a cloud-based system, thus cutting encoding times and reducing the load on your server. Contact us at info@vimp.com for more information.

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

To do so, create a configuration file in `/etc/apt/sources.list.d`:

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

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

```
# Debian Multimedia Repository
deb http://www.debian-multimedia.org stable main non-free
deb-src http://www.debian-multimedia.org stable main non-free

deb ftp://ftp.debian-multimedia.org stable main non-free
deb-src ftp://ftp.debian-multimedia.org stable main non-free
```

After that, the keyring of `debian-multimedia.org` will be installed:

```
wget http://www.debian-multimedia.org/pool/main/d/debian-multimedia-keyring/debian-
multimedia-keyring_2008.10.16_all.deb
dpkg -i debian-multimedia-keyring_2008.10.16_all.deb
```

Then, update the package cache:

```
apt-get update
```

Now the packets of the transcoding software will be installed:

```
apt-get install mplayer mencoder ffmpeg flvtool2
```

We'll also install the essential codec package for `mencoder`. This package provides basic binary codecs for video decoding and encoding. Please check what kind of architecture (32 Bit or 64 Bit) your system has and only install the package for your architecture.

Installation on 32-Bit systems:

```
apt-get install w32codecs
```

Installation on 64-Bit systems:

```
apt-get install w64codecs
```

This was the last step – all transcoding tools are now installed.

Configuration

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

Apache2

If you are planning to install your community in a sub-directory (e.g. <http://www.showvid.com/community>) skip this section and follow the instructions in the Appendix section "Installing in a sub-directory".

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

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

The user and group names are for the default Apache2 installation for 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 showvid
```

Once you have created the file, open it in your favourite editor and create the virtual host entry:

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

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

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

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

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

If you have not yet disabled the default Apache2 virtual host, please do so before reloading Apache2:

```
a2dissite default
```

Apache2 configuration is now complete. Try pointing your browser to <http://www.showvid.com> to see if the domain can be reached. Don't worry if you see an Apache2 error page – this is normal at this stage.

PHP

If you use the Community or Professional version of ViMP, please read the section **Installation of SourceGuardian PHP extension** in the Appendix necessarily.

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

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

- `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 replacing the same values as indicated above.

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

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

MySQL

First, let's create a database for the community:

```
mysqladmin -p create showvid
```

When prompted for the password, enter the root password you have entered while installing MySQL. Next we'll create a designated user for this database. To do so, enter the MySQL console:

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

Again, enter your password. 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 showvid@localhost IDENTIFIED BY '<password>';  
GRANT ALL PRIVILEGES ON showvid.* TO showvid;  
FLUSH PRIVILEGES;  
exit
```

Please replace `<password>` with 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 a normal community. 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 to get a quote.

Installation

Now that all programs are configured, we can install ViMP. To do so, the download package needs to be on the server. Copy the archive containing ViMP into the directory we have created before (`/var/www/showvid/data`). Then, extract the archive:

```
cd /var/www/showvid/data
tar xvzf vimp.framework-<version>.tar.gz
```

Note that you need to replace "`<version>`" with the version you have downloaded.

This will extract all files into the current directory. Once you are done, delete the archive:

```
rm vimp.framework-<version>.tar.gz
```

If you have modified ViMP, simply copy all files to the `/var/www/showvid/data` directory.

Then, make the symfony file executable:

```
chmod +x symfony
```

The installation task creates all files necessary for ViMP to run, sets up the database, inserts basic data and fixes the directory permissions. To do this, you need to provide your DSN (Database Source Name).

The DSN has the form

```
mysql://<username>:<password>@<host>/<database>
```

In our case, that would make it

```
mysql://showvid:<password>@localhost/showvid
```

Remember to replace "`<password>`" with the password you have assigned to the showvid user while configuring MySQL.

The `framework:init` task sets owner and group for all files to `www-data` and `www-data`, which is default for Apache2 and Debian. If you are installing ViMP under a different Linux distribution, please check the "Changing username and password" section in the Appendix.

Then, run the `framework:init` task, passing it the above DSN:

```
./symfony framework:init mysql://showvid:<password>@localhost/showvid
```

Now you need to set up the cronjob which converts uploaded videos to the right format. To do this, edit the crontab:

```
crontab -e
```

Then, add the following line at the bottom:

```
*/1 * * * * /var/www/showvid/data/scripts/sync_new_uploads.sh > /dev/null 2>&1
```

This will cause the sync script to be triggered once per minute. If no new media files are found, the script simply terminates.

Basic usage

Once the task has finished, the installation is complete. Point your browser to <http://www.showvid.com> to see your community in action.

The init task 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

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

Appendix

Installation of SourceGuardian PHP extension

ViMP Community und ViMP Professional only

The sources of the Community and Professional versions of ViMP have been encrypted by a PHP Encoder called SourceGuardian (<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 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 loaders are always freely available at: <http://www.sourceguardian.com/ixeds/>.

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

Extract the PHP extension to a temporary directory:

```
mkdir /tmp/loader
cd /tmp/loader
tar xfz /var/www/showvid/data/data/loader.tar.gz
```

After that, the PHP extension is located in this directory separately for different operating systems. Select your operating system and PHP version with the suitable extension and copy the file into the lib directory of PHP:

```
cp Linux_x86-32/ixed.5.2.lin /usr/lib/php5/20060613+1fs/
```

Now you need to tell PHP, that it must load the extension. To do this, create a configuration file in `/etc/php5/conf.d`:

```
cd /etc/php5/conf.d/
touch sourceguardian.ini
```

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

```
[sourceguardian]
zend_extension=/usr/lib/php5/20060613+1fs/ixed.5.2.lin
```

Save the file and close the editor. At last restart Apache:

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

The extension is now active and ViMP is decrypted.

If you have problems installing the extension, you will find detailed instructions at http://www.sourceguardian.com/ixeds/how_to_install_ixed.html or contact us at support@vimp.com to take advantage of the installation package.

Installing in a sub-directory

This section explains how you can install ViMP into a sub-directory. We've assumed to install the community for <http://www.showvid.com>. In this section we'll assume we're installing ViMP for <http://www.showvid.com/community>. We will also assume that the virtual host configuration for Apache2 is already done and that this virtual host points to `/var/www/showvid/data`.

Normally you'd install ViMP into `/var/www/showvid/data/community` to make it available under the above domain. This will not work as <http://www.showvid.com/community> would point to `/var/www/showvid/data/community` instead of `/var/www/showvid/data/community/web` as it should.

So, first create the directory for the installation:

```
mkdir /var/www/showvid/community
```

We'll install ViMP into a directory where it's not directly accessible for Apache2. You may now continue installing ViMP according to the "Installation" section. We need to change a few more settings after the installation task has completed.

Once ViMP is installed, we'll make it accessible for Apache2. To do this, create a symlink that links the community folder to the web folder of ViMP:

```
cd /var/www/showvid/data
mklink -s /var/www/showvid/community/web community
```

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

- `/var/www/showvid/community/apps/frontend/config/settings.yml`
- `/var/www/showvid/community/apps/backend/config/settings.yml`
- `/var/www/showvid/community/apps/webtv/config/settings.yml`

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

```
relative_url_root: ''
```

Simply add your sub-directory so the line looks like this:

```
relative_url_root: '/community'
```

By a limitation in Internet Explorer, you need to edit the following additional files:

- `/var/www/showvid/community/templates/default/css/black/frontend.ie.css`
- `/var/www/showvid/community/templates/default/css/black/frontend.ie.css`
- `/var/www/showvid/community/templates/default/css/black/frontend.ie.css`

In each file, the path to the transparency image for the AlphaImageLoader filter of Internet Explorer must be changed. You'll see a line like this:

```
filter:
progid:DXImageTransform.Microsoft.AlphaImageLoader(src=/css/hiefix.png,sizingMethod=crop);
```

Simply add your sub-directory so the line looks like this:

```
filter:
progid:DXImageTransform.Microsoft.AlphaImageLoader(src=/community/css/hiefix.png,sizingMethod=crop);
```

Once this step is completed, the virtual host configuration for Apache2 needs to be changed. If your virtual host configuration looks like this:

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

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

Change it to look like this:

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

  <Directory "/var/www/showvid/data/community">
    AllowOverride All
    RewriteEngine On
  </Directory>

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

Last but not least, reload the Apache2 configuration:

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

Now your community is ready to be used. Try it out by pointing your browser to <http://www.showvid.com/community>. Then, continue with the "Basic Usage" section.

Changing user and group names

This guide shows the installation using Apache2 under Debian. This means that Apache2 runs with the user `www-data`, which again belongs to the group `www-data`. So, to make all files writable to Apache2 but not to everyone, all file ownerships and groups are changed to `www-data:www-data`. Different distributions set different values though, so you need to change these. This section explains how to change the values for the `framework:permissions` task (which is again called by `framework:init`).

To do this, open `/var/www/showvid/data/config/defaults.yml`. Then, look for the `server_user` and `server_group` settings and change their values accordingly:

```
server_user:
  type:          string
  value:         www-data
  name:          'Server Benutzer'
  description:  ''
  editable:     false
  system:       false
  nullable:     false
server_group:
  type:          string
  value:         www-data
  name:          'Server Gruppe'
  description:  ''
  editable:     false
  system:       false
  nullable:     false
```

Simply change the highlighted "`www-data`" values to the values valid for your distribution.

Installing on Windows

ViMP is designed to run under Linux. An installation under Windows is possible, but more complicated. Especially the transcoding tools are not easy to install. We do not provide installation instructions for Windows, so if you want to install ViMP on Windows, you'll have to do it yourself.

You can also contact us at support@vimp.com to get a quote for an installation on a Windows server.

Frequently Asked Questions

Can I secure my community with a .htaccess file?

No, this is not possible due to a bug in Flash Player. You can secure the site using .htaccess, but uploading 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 community 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 all the information you need.