

## Manual

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### 1. Prerequisites

As for any software package, there are some other software which is required to be installed in to the system in order our software can run in it. Versions stated in parenthesis here are the currently tested and are supposed to be supported while "patch" level upgrades are done to them.

A web server, Apache 2 is used while Tsuka has been developed.

A database to store all information related to the web site. Any of those which are supported by PHP's Pear class MBD2, are supported in Tsuka as well. Note that the scripts to create the required database tables are available in the "documentation" folder.

PHP (4.3.x and 5.x) with Pear class MDB2 (2.2.x) with proper database driver for your database. To install the Pear classes with the database driver, here an example where driver for MySQLi is installed: `pear install --alldeps mbd2_driver_mysqli` (For those who wish to use the feed capabilities of Tsuka, also class XML\_Query2XML is needed. Installation done in the same manner as shown above.)

Perl is used for the file uploads, thus is also have some modules that are needed:

File::Temp (0.17)

Bundle::DBI (1.52)

PHP::Include (0.2) testing in progress...

To install, in case you don't have them yet, substitute "File::Temp" with module in question:

```
perl -MCPAN -e 'install File::Temp'
```

If you wish to change the font that is used for the spoiler in the thumbnails, use the GDFontGenerator software from <http://www.philipb.de/>.

Tests have been proven that Tsuka runs also with Apache 1.3.x, PHP 4.3.x, PostgreSQL 8, SQLite 2...

Please note that the minimum PHP version you should have is 4.3.2. Each script has its minimum version defined in the header.

## 2. Installation

Download package from Sourceforge and unpack it to your www folder.  
Rename config.php.dist to config.php and follow the next chapter.

## 3. Configuration

Configuration is designed to be made only in config.php, except that upload.cgi requires some database access related and directory path settings.

In the future this will "hopefully" become obsolete.

Array called "cf" holds all the variables, here all introduced.

| Array key      | Example value     | Explanation                                  |
|----------------|-------------------|--|
| db_addr        | localhost         | The address of your database server          |
| db_user        | myname            | Username for the database                    |
| db_pass        | mypassword        | Password to accompany the username           |
| db_data        | tsuka_v1          | Name of the database on the server           |
| db_type        | mysqli            | DB handler type, must be available in PHP    |
| display_errors | 1                 | Shall we display PHP errors?                 |
| save_handler   | files             | PHP session save handler                     |
| error_log      | ./tsuka_php.log   | PHP error log                                |
| save_path      | ./sessions        | PHP session save path                        |
| tmpdir         | ./tmp             | Temporary file folder for uploads etc...     |
| encoder        | ffmpeg            | FLV Encoder: ffmpegsvn, ffmpeg0, mensvn, ... |
| enclocation    | /bin/ffmpeg       | The location of the encoder binary           |
| enclog         | ./encoder.log     | Log of the encoder                           |
| userdir        | /home/tsuka/users | Absolute path of Tsuka users                 |
| basedir        | /home/tsuka/      | Base directory of the Tsuka installation     |

|                |                        |  |
|----------------|------------------------|--|
| flvtool        | ./flvtool2/flvtool2.rb | Location of FLVTool2 Ruby script (if needed)               |
| flvdir         | /home/tsuka/flvfiles   | Where to place the content for Tsuka, Flash videos that is |
| enable_ja      | false                  | Should we enable the Japanese language?                    |
| periscopeflash | true                   | Use embedded upload progress bar                           |
| tsuka_addr     | www.tsukasama.org      | URI of Tsuka   |
| providefeed    | true                   | Provide links for different feed types                     |

In php.ini you may change the following settings:

```
safe_mode          on
session.save_handler files
```

In case you don't have access to system wide php.ini and you are using Apache, settings can be affected by using a simple .htaccess file, which is placed in the same directory as the index.php of Tsuka. Example:

```
php_flag    safe_mode          1
php_value   session.save_handler files
```

The first one, safe\_mode is not required, but it can be used with Tsuka as it provides increased security for the system.

## 4. Usage

First user which is registered, becomes the administrator. Usually this is done during the installation.

Accesslevels:

- 0 Normal viewer, not logged in
- 1 Normal user, logged in, can upload and download videos
- 2 Administrator, has total control.

Pages:

```
info      Information of the site
videos    List of the videos available for the user to see, newest first
files     Videofiles owned by the user, in the folder of the user
profile   Personal information of the user.
```

Only info and videos are shown when user is not logged in.

FLV player access keys

```
DOWN - UP      Volume
```

|              |  |
|--------------|--|
| LEFT - RIGHT | Seek back and forward                        |
| SPACE        | Play/pause                                   |
| SHIFT        | While pressed, playlist is visible           |
| CONTROL      | Apply the original aspect ratio              |
| PAGE UP      | Play the next item in the playlist           |
| PAGE DOWN    | Play the previous item in the playlist       |
| HOME         | Rewind video the beginning                   |
| r            | Resize the video to the original size        |
| w            | If the user has webcam, it will be displayed |

Standalone FLV player has also the following functionalities:

- Drag'n'drop a video on the player to start playing it immediately
- Drag and drop several files to add them in the playlist

Feed is provided in several formats, specification used in parenthesis:

- RSS 0.9 (<http://www.purplepages.ie/RSS/netscape/rss0.90.html>)
- RSS 1.0 (<http://web.resource.org/rss/1.0/spec>)
- RSS 2.0 (<http://blogs.law.harvard.edu/tech/rss>)
- Atom 1.0 (<http://www.atomenabled.org/developers/syndication/atom-format-spec.php>)

Feed can be disabled from config.php.

Users can upload video files of any format supported by the encoder in case the encoder is set and enabled.

Files uploaded are located in users own folder and after the user decides to encode them, they are moved to input folder.

The video will be encoded to the output folder defined in config.php and after the encoding is finished, the resulting FLV file is moved to the users folder.

## 5. Other things worth of mentioning

Flash authoring source files (\*.fla) can all be opened with Flash 8 and above versions. For the output, periscope is version 6 while the tsukaplayer is version 7.

In case you wish to create the standalone version of the FLV player, you need Screenweaver 3 installed in your operating system. This might be tricky, as the version 3 is not available anymore.

## 6. Server side video encoding

Currently Tsukas encoder script support two different encoders and their two different versions. These are:

- FFmpeg 0.4.9-pre1
- Mencoder 1.0 RC 1
- FFmpeg SVN revision 8451
- Mencoder SVN revision 22834.

You may choose in your configuration which one to be used, thus which one you have installed in to your system.

SVN version support is to be updated to date when making newer releases of Tsuka, while the two first listed versions will be kept untouched.

Be careful with the version numbers, the API in both encoders changes rapidly, thus making it difficult to keep compatible with them.

## 6.1. *FFmpeg*

The SVN test version of FFmpeg is build with configure lines below:

```
--prefix=/home/local/encoding  
--extra-cflags="-I/home/local/encoding/include"  
--extra-ldflags="-L/home/local/encoding/lib"  
--enable-gpl --enable-pthreads --disable-shared  
--enable-static --enable-pp --enable-libmp3lame  
--enable-swscaler --enable-x264 --enable-liba52  
--enable-libogg --enable-libvorbis --enable-libnut  
--enable-libtheora --enable-amr-nb --enable-amr-wb  
--enable-libfaad --enable-libfaac --enable-libdts  
--enable-libgsm --enable-xvid
```

Additionally SDL, imlib2 and Freetype2 are installed with their "devel" packages, thus found by the configuration script.

## 7. Standalone FLV player

Currently the standalone version of the FLV player is build with Screenweaver 3.

Fortunetly / unfortunetly the version 3 is not anymore developed thus the is no reason to continue developing the standalone FLV player on it.

But there is a new version, Screenweaver HX, available which is currently under development and its future seems promising.

Soon Tsuka standalone FLV player will be build on HX instead of 3.

Here is how to install Screenweaver HX in windows:

Download "haXe + Neko windows Installer" from <http://haxe.org/download>

This will install the latest versions of Haxe (1.12) and Neko (1.5.3) in  
C:\Program Files\Motion-Twin

Now run the following commans on the command line  
haxelib setup

haxelib install swhx

This will install Screenweaver HX (1.0.5.8) and systools (0.0.10).

Run the test application to see if your installation works. Requires Flash 9 plugin.  
haxelib run swhx

For now, I wish all of those who would like to participate on the development of the standalone FLV player, to read through the API documentation at:

<http://haxe.org/api/>