

How to install MCUTILITY



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This document contains all necessary information for
installation of MCUTILITY.

RELAX SOLUTIONS

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Prerequisites

1. FFMPEG
2. X264
3. FAAC
4. LIBMP3LAME

5. MP4BOX
6. MP3WRAP

How to install Prerequisites

Edit the **/etc/ld.so.conf** file and add the following lines

```
/usr/local/lib  
  
/usr/lib
```

then run : ldconfig

Installing libraries

add rpmforge or dag repos for yum:

RHEL5 / CentOS-5

for i386:

```
wget http://packages.sw.be/rpmforge-release/rpmforge-release-0.5.1-1.el5.rf.i386.rpm
```

```
rpm -ivh rpmforge-release-0.5.1-1.el5.rf.i386.rpm
```

for x86_64:

```
wget http://packages.sw.be/rpmforge-release/rpmforge-release-0.5.1-1.el5.rf.x86_64.rpm
```

```
rpm -ivh rpmforge-release-0.5.1-1.el5.rf.x86_64.rpm
```

for PPC:

```
wget http://packages.sw.be/rpmforge-release/rpmforge-release-0.5.1-1.el5.rf.ppc.rpm
```

```
rpm -ivh rpmforge-release-0.5.1-1.el5.rf.ppc.rpm
```

RHEL4 / CentOS-4

for i386:

```
wget http://packages.sw.be/rpmforge-release/rpmforge-release-0.5.1-1.el4.rf.i386.rpm
```

```
rpm -ivh rpmforge-release-0.5.1-1.el4.rf.i386.rpm
```

for x86_64:

```
wget http://packages.sw.be/rpmforge-release/rpmforge-release-0.5.1-1.el4.rf.x86_64.rpm
```

```
rpm -ivh rpmforge-release-0.5.1-1.el4.rf.x86_64.rpm
```

for PPC :

```
wget http://packages.sw.be/rpmforge-release/rpmforge-release-0.5.1-1.el4.rf.ppc.rpm
```

```
rpm -ivh rpmforge-release-0.5.1-1.el4.rf.ppc.rpm
```

Install required libraries using yum

```
yum install gcc gmake make libcpp libgcc libstdc++ gcc4 gcc4-c++ gcc4-gfortran gcc-c++ mesa-libGL-devel mesa-libGLU-devel libXi-devel libXmu-devel freeglut-devel freeglut libtool ncurses-devel libgccgd gd-devel gettext freetype-devel ImageMagick ImageMagick-devel libjpeg* libjpeg-devel* libpng* libpng-devel* libstdc++* libstdc++-devel* libtiff* libtiff-devel* libtool* libungif* libungif-devel* libxml* libxml2* libxml2-devel* zlib* zlib-devel* automake* autoconf* ncurses patch apr-util -y
```

install yasm 0.8.0

```
cd /usr/local/src
```

```
wget http://www.tortall.net/projects/yasm/releases/yasm-0.8.0.tar.gz
```

```
tar zxvf yasm-0.8.0.tar.gz
```

```
cd yasm-0.8.0
```

```
./configure && make && make install
```

Installing opencore-amr

```
cd /usr/local/src
```

```
wget http://sourceforge.net/projects/opencore-amr/files/opencore-amr/0.1.2/opencore-amr-0.1.2.tar.gz/download
```

```
tar zxvf opencore-amr-0.1.2.tar.gz
```

```
cd opencore-amr-0.1.2
```

```
./configure && make && make install
```

Installing libraw1394

```
cd /usr/local/src
```

```
wget http://www.kernel.org/pub/linux/libs/ieee1394/libraw1394-1.3.0.tar.gz
```

```
tar zxvf libraw1394-1.3.0.tar.gz
```

```
cd libraw1394-1.3.0

./configure

make dev && make && make install
```

Installing libdc1394

This project requires libraw1394, you must build it first.

```
cd /usr/local/src

wget http://sourceforge.net/projects/libdc1394/files/libdc1394/1.2.2/libdc1394-1.2.2.tar.gz/download

wget http://sourceforge.net/projects/libdc1394/files/libdc1394-2/2.1.2/libdc1394-2.1.2.tar.gz/download

tar zxvf libdc1394-1.2.2.tar.gz

tar zxvf libdc1394-2.1.2.tar.gz

cd libdc1394-1.2.2

./configure

make && make install

cd ../libdc1394-2.1.2

./configure

make && make install
```

Installing FAAD2

```
cd /usr/local/src

wget http://downloads.sourceforge.net/faac/faad2-2.6.1.tar.gz

tar zxf faad2-2.6.1.tar.gz

cd faad2

autoreconf -vif

./configure

make && make install
```

Installing FAAC

```
cd /usr/local/src  
  
wget http://downloads.sourceforge.net/faac/faac-1.26.tar.gz  
  
tar zxvf faac-1.26.tar.gz  
  
cd faac  
  
./bootstrap  
  
./configure  
  
make && make install
```

Installing libmp3lame

```
cd /usr/local/src  
  
wget http://sourceforge.net/projects/lame/files/lame/3.98.4/lame-3.98.4.tar.gz/download  
  
tar zxvf lame-3.98.4.tar.gz  
  
cd lame-3.98.4  
  
./configure  
  
make && make install
```

Installing OpenJPEG

```
cd /usr/local/src  
  
wget http://openjpeg.googlecode.com/files/openjpeg_v1_3.tar.gz  
  
tar zxvf openjpeg_v1_3.tar.gz  
  
cd OpenJPEG_v1_3  
  
make && make install
```

Installing libogg

```
cd /usr/local/src  
  
wget http://downloads.xiph.org/releases/ogg/libogg-1.1.4.tar.gz  
  
tar zvxf libogg-1.1.4.tar.gz  
  
cd libogg-1.1.4
```

```
./configure  
  
make && make install
```

Installing libvorbis

```
cd /usr/local/src  
  
wget http://downloads.xiph.org/releases/vorbis/libvorbis-1.2.3.tar.gz  
  
tar zxvf libvorbis-1.2.3.tar.gz  
  
cd libvorbis-1.2.3  
  
./configure  
  
make && make install
```

Installing vorbistool

```
cd /usr/local/src  
  
wget http://downloads.xiph.org/releases/vorbis/vorbis-tools-1.2.0.tar.gz  
  
tar zxvf vorbis-tools-1.2.0.tar.gz  
  
cd vorbis-tools-1.2.0  
  
./configure  
  
make && make install
```

Installing libtheora

```
cd /usr/local/src  
  
wget http://downloads.xiph.org/releases/theora/libtheora-1.1.1.tar.bz2  
  
tar jvxf libtheora-1.1.1.tar.bz2  
  
cd libtheora-1.1.1  
  
./configure  
  
make && make install
```


Installing Xvid

```
cd /usr/local/src  
  
wget http://downloads.xvid.org/downloads/xvidcore-1.2.2.tar.gz  
  
tar zxvf xvidcore-1.2.2.tar.gz  
  
cd xvidcore/build/generic  
  
./configure  
  
make && make install
```

Installing gpac and MP4Box

```
cd /usr/local/src  
  
wget http://downloads.sourceforge.net/gpac/gpac-0.4.5.tar.gz  
  
wget http://downloads.sourceforge.net/gpac/gpac_extra_libs-0.4.5.tar.gz  
  
tar zxvf gpac-0.4.5.tar.gz  
  
tar zxvf gpac_extra_libs-0.4.5.tar.gz  
  
cd gpac  
  
cp -r ../gpac_extra_libs/* extra_lib/  
  
chmod +x configure  
  
./configure  
  
make lib  
  
make apps  
  
make install-lib  
  
make install  
  
cp bin/gcc/libgpac.so /usr/lib
```

Installing latest x264

Make sure you installed yasm 0.7.0 or higher

```
cd /usr/local/src  
  
git clone git://git.videolan.org/x264.git
```

```
cd x264

./configure --enable-pthread --enable-mp4-output --enable-shared

make

make install
```

install yamdi:

```
yum install yamdi
```

or

```
cd /usr/local/src

wget http://sourceforge.net/projects/yamdi/files/yamdi/1.5/yamdi-1.5.tar.gz/download

tar -zxvf yamdi-1.5.tar.gz

cd yamdi-1.5

gcc yamdi.c -o yamdi -O2 -Wall

mv yamdi /usr/bin/
```

Installing FFMPEG

after library installed please run : **ldconfig -v**

```
cd /usr/local/src

svn checkout svn://svn.mplayerhq.hu/ffmpeg/trunk ffmpeg

cd ffmpeg

mkdir /usr/local/src/tmp

chmod 777 /usr/local/src/tmp

export TMPDIR=/usr/local/src/tmp

./configure --enable-shared --enable-gpl --enable-version3 --enable-nonfree --enable-pthreads --enable-x11grab --enable-libopencore-amrnb --enable-libopencore-amrwb --enable-libdc1394 --enable-libfaac --enable-libmp3lame --enable-libopenjpeg --enable-libtheora --enable-libvorbis --enable-libx264 --enable-libxvid --enable-zlib

make && make install
```

```
ldconfig -v
```

Installing MP3WRAP

```
cd /usr/local/src  
wget http://prdownloads.sourceforge.net/mp3wrap/mp3wrap-0.5-src.tar.gz?download  
tar zxvf mp3wrap-0.5-src.tar.gz  
cd mp3wrap-0.5  
./configure  
make && make install
```

to check installed module:

```
ffmpeg MP4Box mp3wrap
```

Configuring MCUTILITY

Place mcutility folder under any folder contains following folders or files

- mcutility_lib
- temp
- littlebirdtale_en_US.properties
- mcutility.jar
- page_default.jpg
- testAudio.flv
- textBG.png
- first.png
- last.png

Change variables if needed in littlebirdtale_en_US.properties. This file has following configure able variables

Full Path of ffmpeg executable

com.lbt.ffmpegpath = [/usr/local/bin/ffmpeg](#)

Full Path of mp3wrap executable

com.lbt.flvbindpath = [/usr/local/bin/mp3wrap](#)

Full Path of MP4Box executable

com.lbt.mp4boxpath = [/usr/local/bin/MP4Box](#)

Full Path of user's directory

com.lbt.userdirectory = [/var/www/vhosts/littlebirdtales.com/httpdocs/users/](#)

Full Path of 5 seconds empty sound file

com.lbt.emptyaudio = [/root/mcsetup/mcutility/testAudio.flv](#)

Full Path of default image file

com.lbt.defaultimagepath = [/root/mcsetup/mcutility/page_default.jpg](#)

Full Path of image file use for background of text area

com.lbt.textbg = [/root/mcsetup/mcutility/textBG.png](#)

Full Path of temp directory

com.lbt.tmpdirectory = [/root/mcsetup/mcutility/temp/](#)

JDBC MYSQL Driver

com.lbt.JDBC_DRIVER = [com.mysql.jdbc.Driver](#)

JDBC MYSQL Connection String

com.lbt.JDBC_URL = [jdbc:mysql://72.10.38.93:3306/little_bird_tales](#)

MYSQL User Name

com.lbt.JDBC_USER = [dbdmvc](#)

MYSQL Password

com.lbt.JDBC_PASSWORD = [71a5!xg06](#)

Full Path of First Image

com.lbt.firstimage = [/root/mcsetup/mcutility/temp/first.png](#)

Full Path of Last Image

com.lbt.lastimage = [/root/mcsetup/mcutility/temp/last.png](#)

How to compile video

Utility accept two parameter first column name(storyid or userid) and second value of column.

Following are the examples

```
/usr/java/bin/java -jar /root/mcsetup/mcutility/mcutility.jar storyid 1
```

```
/usr/java/bin/java -jar /root/mcsetup/mcutility/mcutility.jar userid 1
```

How video compilation process?

Service check database after each 30 sec if it found any record which has following columns with 0 values.

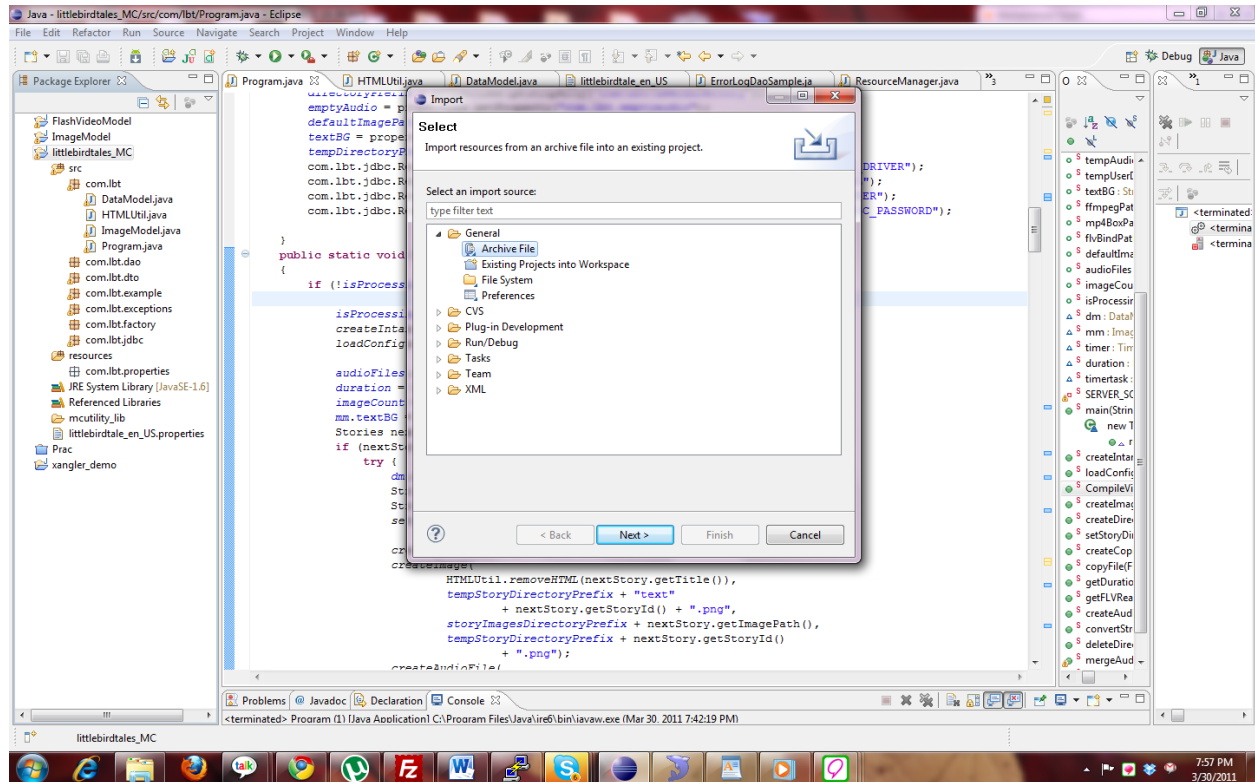
is_processing, is_compiled, is_error

It starts compiling video and mark it as is_processing=1.

Instruction for PHP End, whenever user made change ins story you need to mark is_processing, is_compiled, is_error to 0

How to compile source code

Please import provide zip file in eclipse. Go to import->General->Archive File



Browser source code archive file which we'll provide later and we ready to go you can run it/ debug it and have fun.

Answer of client questions

1. Where is the source code located for this?

We do not located source codes yet, it will be provided after escrow final payments.

2. How can I change parameters for this tool (like how long to display an image if there is no audio)?

Image will stay for 5 seconds in no audio file as per requirement following is reference form communication for this requirement **"If a page has no audio, display page for 5 seconds"**

3. How can I compile this myself?

Please find section above how to compile source code

4. What dependencies are there on other libraries to compile/use this tool?

Please find all dependencies in prerequisite section

5. How do I enter a db entry for this tool? I assume this is manual at this point. If so, can you provide sample sql to do this?

Instruction for PHP End, whenever user made change ins story you need to mark is_processing, is_compiled, is_error to 0. Either this is new story or existing story is being update.

6. Does the tool require any parameters to be passed in when used?

All configuration and parameters mentioned in above document.

7. Does the tool just examine the db table to find which videos to create?

Yes, It is examining stories table continues bases. When it found any record with is_processing=0, is_compiled=0 and is_error=0 it starts processing that.

I do not need to have the tool compile all the stories for all users like it does now. I need to be able to pass in a story_id to the utility and have it compile just a single story. I need to be able to pass in a user_id to the utility and have it compile all movies for that user.

Currently, Utility is processing the entire stories. We do have any requirement in past. For this change we need extra 6 hours. We change this utility to service to executable which you can call from PHP with user id.

I will want to add an intro page and an end page that are static images. I will need to know how I can do that.

This feature is out of scope we need extra 4 hours for this feature

How much extra for these two changes?

20 Hours for new requirements

How do change parameters like the 5 seconds duration to display an image if there is no audio.

Currently this not changeable, for this change we need 10 hours.

Do I need to purchase a license for any software used or is it all open source?

All dependencies are open source

Do I need to purchase a license of the Java Service Wrapper software?

No we use community edit. This is open source and free.

Does it mark stories with no pages as an error or skip over them?

Some errors I see:

/root/mcsetup/mcutility/temp/8/108/Audio/mergeAudio_MP3WRAP.mp3: No such file or directory

[flv @ 0x16a1d510] Could not find codec parameters (Video: [0][0][0][0] / 0x0000)

[flv @ 0x16a1d510] Estimating duration from bitrate, this may be inaccurate

[image2 @ 0x58af510] max_analyze_duration reached

No, It creates video with title page. If any error occurred it store with reference of story id in error_log db table and mark story as error

we noticed that some mp4 files show the pages in the wrong order. They need to follow the order specified by the page_number column in the story_pages table.

Issue Fixed