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# Unicode Rewriter User Manual

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	July 2004
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Source code is recompiled with JDK 1.7. New IzPack is used. User interface (hidden menu) bug fix.

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## 1. Introduction

I had many MP3 files which were ripped under Traditional Chinese version of Windows. The ID3 tags were encoding using Big5. As I was also a Mac OS X user, I used iTunes to listen to the MP3 files. Unfortunately, iTunes is unable to understand Big5 encoding. It only accepts Unicode. After a little research in the Internet, I found that Chinese Rewriter can solve my problem. Chinese Rewriter can convert ID3 tags of every MP3 file from Big5 to Unicode. Only one at a time. There is no way to convert a batch of MP3 files with a few mouse clicks. As I do not have much knowledge in ID3 tags, I looked for other software to solve my problem. Incidentally, I found ID3iconv which works fine for me. Since ID3iconv is a command line tool, it would make my life easier if there is a graphical user interface (GUI) for it. Unicode Rewriter is thus born.

## 2. Features

Unicode Rewriter inherits features from ID3iconv. Below is adapted from the descriptions of ID3iconv.

Unicode Rewrite is a Java tool to convert ID3 tags in MP3 files from whatever machine encoding you have (GB2312/GBK for Chinese, etc) to Unicode. It converts both ID3v1 tags and ID3v2 tags to Unicode-encoded ID3v2 (v2.3 or v2.4). This is sometimes useful because,

- ID3v1 or v2 don't really supports multi-byte encoding such as GBK or Big5. Most existing files falsely pretend they are ISO-8859-1 encoded. This means the software handles them in all kinds of weird ways.
- Even if the user can force the encoding in some players, it is then impossible to display tags of several international languages at the same time if files are so encoded.

### Caution

The tool updates MP3 files in place. So backup the files if you don't want to lose your precious music...

Unicode Rewriter takes all text fields of ID3 tags and assumes they are in a certain encoding. It then converts them to their Unicode equivalence as supported by ID3 v2.3. If originally the file has only v1 tag, a v2 tag will be added to the beginning of the file. If original the file has a non-Unicode v2 tag, it will be converted to Unicode format. The output encoding is Unicode little endian, which seems to be the most compatible.

Whatever the encoding is supported by the Java virtual machine, the encoding is supported. Please see appendix for the list of supported encoding.

After the conversion, the MP3 files can be handled by:

- Rhythmbox 0.6.5. Gnome's default music player.
- iTunes for Mac OS and Windows.
- Windows explorer's file property dialog for MP3 files.

## 3. Installation

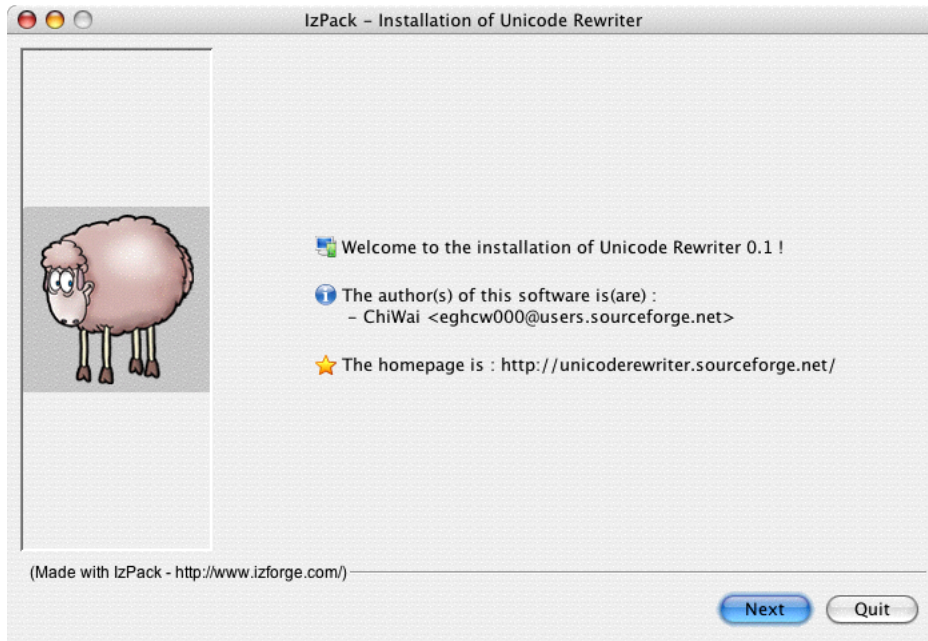
This software should work on any platforms which has a windowing system and Sun's Java 2 Runtime Environment Standard Edition, v. 1.4 or Java 2 Software Development Kit Standard Edition, v. 1.4. It may work with other Java environment besides Sun. You are welcome to report the version of the Java environment which works for you.

For Mac OS X and Windows users, double click "UnicodeRewriter-Installer.jar" will launch the installer. For Unix, this command will be useful:

```
java -jar UnicodeRewriter-Install.jar
```

Follow the instruction in the installer will lead to a successful installation of Unicode Rewriter.

**Figure 1. Installation Screen**



## 4. Using Unicode Rewriter

There are a few methods to run this software. For Mac OS X and Windows users, simply double click the icon of UnicodeRewriter.jar to run the application. If this method does not work, you can edit UnicodeRewriter.sh (for Unix) or UnicodeRewriter.bat (for Windows) and run the scripts.

Unicode Rewrite can run in 2 modes. The first is command line mode which behaves similarly to ID3iconv. The second is graphical mode.

### 4.1. Command Line Mode

If a parameter is passed to the application, Unicode Rewriter will run in command line mode. The syntax is:

```
UnicodeRewriter [-options] mp3-files
```

Options can be the following:

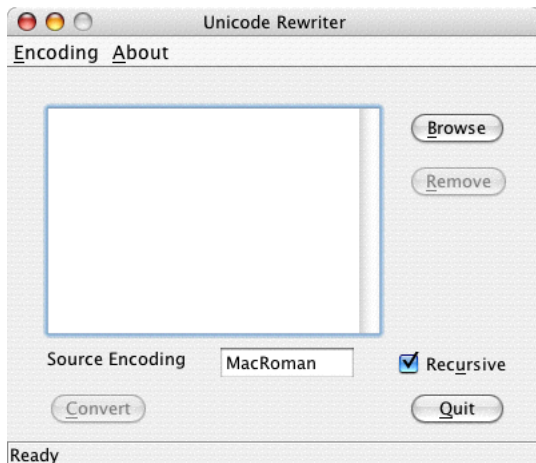
-e <encoding>	Specify original tag encoding. If not specified, system default encoding will be used.
-p	Dry-run. Do not actually modify files
-v1	Force using v1 tag as source, even if v2 tag exists. Default is using v2 tag.
-removev1	Remove v1 tag after processing the file
-q	Quiet mode
-d	Output debug info to stderr
-h	Show this help information
-l	Show the license information

Whatever the encoding is supported by the Java virtual machine, the encoding is supported. Please see appendix for the list of supported encoding.

MP3 files can be 1 or more MP3 files.

### 4.2. Graphical Mode

If there is no parameter is passed to the application, Unicode Rewriter will run in graphical mode. Please note that some information is shown at the console.

**Figure 2. Graphical Mode**

User must specify the MP3 files to convert. By pressing "Browse" button, user can choose MP3 files and add to the list. On the other hand, files can be dragged and dropped to the list. List can be removed by pressing "Remove" button. There is an option that folders can be handled recursively. By pressing "Convert" button, ID3 tags of MP3 files in the list are read using the encoding specified by the field "Source Encoding" and then converted to Unicode. When Unicode Rewriter is started, the system default encoding is used. However, additional encoding can be selected from "Encoding" menu. If the desired encoding cannot be found, user can type the encoding directly. Please see appendix for the list of supported encoding.

## 5. Known Bugs

Currently there is no known bug. Please let me know if you have found any bug.

## 6. Development Environment

The software was written with OpenJDK Software Development Kit, 1.7.0\_101. Netbeans 3.5.1 was used for layout generation. Ant 1.9.6 is used for the automation of source code processing. IzPack 5.0.9 is used for the preparation of the installer.

This document is prepared using Docbook XML V4.5. XMLmind XML Editor Personal Edition 7.0 was used to prepare this document. HTML and PDF conversion is processed using this editor.

## 7. Credit

Unicode Rewriter is not entirely written from scratch. The core of the ID3 tag handling is through the help of ID3iconv 0.2.1. Unicode Rewriter is a GUI interface to ID3iconv.

The drag and drop feature is provided by FileDrop 1.1.

Icons are provided by VladZ.

## 8. Help Wanted

No software is perfect. If you find any bugs, you are welcome to send me a bug report. If you are willing to contribute, you may join the software development. If you have ideas, you can give comments or suggestions.

## A. Supported Encoding

### 1. Supported Encoding

Supported encoding depends on the version of the Java runtime environment. As Unicode Rewriter runs under Java Standard Edition (Jave SE) 7, all encoding supported by Java SE 7 is supported by Unicode Rewriter.

Please see the link below for the complete list of the supported encoding.

1. J2SE 7

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