International ISRC Agency Bulletin 2011/02
Reading ISRC from Compact Discs

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Background

A frequent request received by the International ISRC Agency is for advice on how to read the ISRCs that have been encoded onto a Compact Disc (CD). To date, no long term reliable advice has been possible. The International ISRC Agency did formerly make some software available for the PC platform but it became unusable as the maker of the required driver software changed the specification of the drivers. Similarly, many applications that have supported ISRC in the past are not specified for the current versions of the relevant operating system.

However, the International ISRC Agency now notes that the following procedure should be able to extract ISRCs from a CD. This information is provided "as is", and without warranty of any kind, express or implied. Any use of this procedure is at the user's sole risk.

System Requirements

The procedure works only on the Apple Macintosh OS X platform and has been tested on:

> *OS X Tiger Version 10.4.11 (Power PC Mac Mini Internal DVD recorder drive)*
>
> *OS X Snow Leopard Version 10.6.8 (Intel Mac Mini Internal DVD recorder drive)*
>
> *OS X Snow Leopard Version 10.6.8 (External Apple USB Superdrive)*
>
> *OS X Lion Version 10.7 (Intel Mac Mini Internal DVD recorder drive)*
>
> *OS X Lion Version 10.7 (External Apple USB Superdrive)*

It is expected to work on any Apple Macintosh OS X platform. It has not been tested with any other optical drives.

Limitations

The procedure uses the utility program *drutil* which is provided with Mac OS X. Two issues need to be understood before continuing:

- *drutil* is a command line utility program and requires that users be reasonably comfortable working using the *Terminal* program to interact with the operating system rather than the normal OS X graphical user interface,

- *drutil* scans the entire disc in extracting ISRCs and is therefore rather slow. The internal drive on a recent Mac Mini takes about 5-10 minutes to scan a typical CD.

Basic Procedure

Insert the CD into the optical drive of a Mac. Probably *iTunes* will open and offer to rip the CD. Cancel this and quit *iTunes*.

From a Finder window, navigate to *Applications* and then *Utilities* (a folder under Applications). Double-click *Terminal* and a terminal window will open with a prompt of the user's home folder. Type:

```
drutil subchannel | grep ISRC > isrc.txt
```

Note the character between "subchannel" and "grep" is the vertical bar or pipe character typically found as a shifted backslash character.

After some minutes the process will terminate (and probably *iTunes* will open again as it detects that *drutil* has finished with the optical drive). Navigate in a *Finder* window to the user's home folder (the folder called by the user's name) and there will be a file called "isrc.txt". Double click on this file and it will open in *TextEdit*. It will contain a list of the ISRCs encoded into the CD against the track numbers.

This procedure invokes the *drutil* utility with the *subchannel* verb. This produces a text stream of information about data contained in the subchannels of the CD. This stream is piped to the *grep* utility to select only lines containing the string "ISRC" and these lines are redirected to a file. If desired, any filename can be substituted for "isrc.txt". If the file already exists it will be overwritten.

Automated Procedure

The command line:

```
drutil subchannel | grep ISRC > isrc.txt
```

can be put into a file in the user's home folder called (say) *getisrc*.

If this file is made executable by typing:

```
chmod +x getisrc
```

Then the procedure can be invoked by the simpler command:

```
. getisrc
```

This (dot and the filename) runs the *getisrc* commands within the current *Terminal* window.

Multiple Drives

If the system used has several optical drives, it is necessary to use the

```
drutil list
```

command to identify which is which and then select the appropriate one, e.g.

```
drutil –drive 2 subchannel | grep ISRC > isrc.txt
```

More information is contained in the *drutil* documentation which may be viewed by typing

```
man drutil
```

in a *Terminal* window.

Support

While the International ISRC Agency is not in a position to offer support in the use of this procedure, it would appreciate reports of problems that appear to be related to particular hardware.

The International ISRC Agency would also appreciate

- guidance from Mac experts on how to make the procedure more accessible to naïve users,
- notice of other applications that can be recommended for the extraction of ISRC, particularly on other platforms including Windows and Linux.

Information should be sent to isrc@ifpi.org.