

## Bash Script to rip CD/DVD ISO image on OS X

Apple's OS X has an easy way to rip a CD/DVD image using Disk Utility program. However, you'll end up with a file in that is not in ISO format, thus utterly useless if you want to re-use the file for virtualization purposes or on another operating system unable to handle those .cdr files.

For a one-shot option, OS X provides everything to convert the .cdr to .iso files, which is outlined at <http://imacify.com/2013/06/how-to-create-iso-disc-image-from-cddvd-in-mac-os-x/>.

If you do however plan to rip a lot (and I mean, a lot!) of CDs/DVDs to ISO files on OS X, here's a little bash script I came up with.

This script essentially does the following:

- It waits for a disc to be inserted

It scans the disk label and writes an ISO file to your ~/Desktop/rips directory using the dd command

- go back to 1 ;-)

So essentially, it's made to do mass ripping. I needed it for myself as I finally wanted to rip my gazillion of physical data CDs/DVDs onto my file server. And since I'm a lazy guy, the script shall do as much as possible by itself without bugging me too much ;-)

So if you think, that could be of use to you as well, here's a one-liner so you can call it up directly into your shell:

```
wget -qO- http://phunsites.net/scripts/ripiso.sh.gz | gunzip | bash
```

Calling the script like this, will assume non-interactive mode, i.e. the script will run endlessly and no questions will be asked.

Press CTRL-C to terminate the script.

You could also run it interactively, the script will then ask some Y/N questions. To do so, download the script and run it with the -i (interactive) argument like this:

```
wget -qO- http://phunsites.net/scripts/ripiso.sh.gz | gunzip > ripiso.sh  
./ripiso -i
```

Here's also a direct download link: <http://phunsites.net/scripts/ripiso.sh.gz>, in case you want to inspect the script first.

The script tries to be somewhat informative, here's an example output of the non-interactive mode:

```
$ wget -qO- http://phunsites.net/scripts/ripiso.sh.gz | gunzip | bash  
Waiting for CD/DVD to be inserted ...  
Waiting for CD/DVD to be inserted ...  
Waiting for CD/DVD to be inserted ...  
Waiting for CD/DVD to be inserted ...  
Waiting for CD/DVD to be inserted ...  
Found CD/DVD disk=/dev/disk1, volume=SOL_10_305_SPARC on /Volumes/SOL_10_305_SPARC from /dev/disk1s0  
  
Unmounting disk from /Volumes/SOL_10_305_SPARC ...  
Volume SOL_10_305_SPARC on disk1s0 unmounted
```

```
Ripping CD/DVD to /Users/Gianpaolo/Desktop/rips/SOL_10_305_SPARC.iso ...
0+0 records in
0+0 records out
0 bytes transferred in 0.043732 secs (0 bytes/sec)
14364+0 records in
14364+0 records out
7354368 bytes transferred in 5.015581 secs (1466304 bytes/sec)
33065+0 records in
33065+0 records out
[ ... some output omitted ... ]
1567823+0 records in
1567823+0 records out
802725376 bytes transferred in 420.424699 secs (1909320 bytes/sec)
Ejecting CD/DVD ...
Disk /dev/disk1 ejected
CD/DVD rip completed after 425 seconds.
Waiting for CD/DVD to be inserted ...
Waiting for CD/DVD to be inserted ...
Waiting for CD/DVD to be inserted ...
Waiting for CD/DVD to be inserted ...
```

And here's also the source code of it for your convenience:

```
#!/bin/bash
#
# ripiso.sh
# a helper script to easily rip inserted DVD/CD to an ISO file
#
# Copyright (c) 2014 Gianpaolo Del Matto, http://phunsites.net. All rights reserved.
# Redistribution and use in source and binary forms, with or without modification,
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# 1) Redistributions of source code must retain the above copyright notice,
#    this list of conditions and the following disclaimer.
#
# 2) Redistributions in binary form must reproduce the above copyright notice,
#    this list of conditions and the following disclaimer in the documentation
#    and/or other materials provided with the distribution.
#
# history:
#
# r0.1 2014/08/03 Gianpaolo Del Matto, http://phunsites.net
#
#
# info:
#
# most current version is always available through:
#
```

```
# wget -qO- http://phunsites.net/scripts/ripiso.sh.gz | gunzip | bash
#

# local vars
#
force_non_interactive=1

# sanity checks: create the output directory if missing
#
[ ! -d "~/Desktop/rips/" ] && mkdir -p "~/Desktop/rips/"

# parse cli args
#
[ ! -z "$1" -a "$1" = "-i" ] && force_non_interactive=0

# rip_iso will try to rip an ISO from any currently
# inserted / mounted CD/DVD
#
function rip_iso {
    start=`date +%s`

    # get disk info from inserted disk, bail out if none found
    #
    mountinfo=`mount | grep cd9660`
    [ "$?" != "0" ] && { echo "error: no CD/DVD found"; return 1; }

    devid=`echo ${mountinfo} | awk '{ print $1 }'`
    mountpoint=`echo ${mountinfo} | awk '{ print $3 }'`
    label=`basename ${mountpoint}`
    blockdev=`echo ${devid} | sed 's/s[0-9]$/g'`

    printf "Found CD/DVD disk=%s, volume=%s on %s from %snn" ${blockdev} ${label} ${mountpoint} ${devid}

    while [ : ]; do
        # skip this if we're running non-interactive
        # assume the user wants it be done :-)
        #
        [ "${force_non_interactive}" = "1" ] && break

        printf "Continue? [Y|n] "
        read _answer < /dev/tty
        echo ${_answer} | grep -E -i -e 'y$' > /dev/null 2>&1
        [ "$?" = "0" ] && break || return 1
    done
```

```
printf "Unmounting disk from %s ...n" ${mountpoint}
diskutil unmount ${mountpoint}

printf "Ripping CD/DVD to %s ...n" ~/Desktop/rips/${label}.iso
dd if=${blockdev} of=~/Desktop/rips/${label}.iso &

while [ : ]; do
clear
killall -SIGINFO dd > /dev/null 2>&1
[ "$?" != "0" ] && break

sleep 5
done

printf "Ejecting CD/DVD ...n"
diskutil eject ${blockdev}

end=`date +%s`
time_elapsed=`expr ${end} - ${start}`
printf "CD/DVD rip completed after %s seconds.n" ${time_elapsed}

return 0
}

# main
# #####

while [ : ]; do
# detect if mounted disk is seen
#
while [ : ]; do
clear
printf "Waiting for CD/DVD to be inserted ...n"
mount | grep cd9660 >/dev/null 2>&1
[ "$?" = "0" ] && break
sleep 1
done

# good, run the image ripper
#
rip_iso

# skip this if we're running non-interactive
# assume the user wants it be done :-)
#
if [ "${force_non_interactive}" = "0" ]; then
```

```
# if we're running interactive, ask if
# user wants to rip another disc
#
printf "Rip another disc? [Y|n] "
read _answer < /dev/tty
echo ${_answer} | grep -E -i -e 'y$' > /dev/null 2>&1
[ "$?" != "0" ] && break
fi
done

# END #
```