

## Re: Installation from USB pen

---

*Source:* <http://unix.derkeiler.com/Mailing-Lists/FreeBSD/hackers/2006-03/msg00218.html>

---

- *From:* Brooks Davis <[brooks@xxxxxxxxxxxxxxxxxxxxxx](mailto:brooks@xxxxxxxxxxxxxxxxxxxxxx)>
  - *Date:* Wed, 22 Mar 2006 08:54:45 -0800
- 

On Wed, Mar 22, 2006 at 02:58:46AM +0100, Dario Freni wrote:

Hi everybody,  
attached a tiny script to convert a FreeBSD install iso image to a binary ufs image ready to be flashed e.g. on an USB pendrive.

The size of the ufs image is calculated from the iso one. The usage for the script is quite simple:

```
./fbsd-install-iso2img.sh iso-path img-path
```

Once you're done, you can dd the img directly to an USB pen. If you also want to make a serial-console install image just set the serial variable on top of the script to 1.

This script is derived from another similar one that I made for the pfSense project. It was requested for those kind of systems which have an usb port booting-capable and a serial console.

I hope you'll find it useful. Bye,

Way cool! We've to tons of boxes that are a complete pain in the ass to install on via CD, this will save tons of time. Obviously, it would be better if we made one of these as part of the release build and put it on the ftp site, but this is a huge step in the right direction.

One minor nit, you might want to put a check that the user is root at the top of the script since that is a requirement.

P.S.: beer-ware license

Are you going to be at BSDCan. :)

— Brooks

Re: Installation from USB pen

—  
Dario Freni (saturnero@xxxxxxxxxxxxxx)  
FreeSBIE developer (<http://www.freesbie.org>)  
GPG Public key at <http://www.saturnero.net/saturnero.asc>

```
#!/bin/sh

# You can set some variables here. Edit them to fit your needs.

# Set serial variable to 0 if you don't want serial console at all,
# 1 if you want comconsole and 2 if you want comconsole and vidconsole
serial=0

set -u

if [ $# -lt 2 ]; then
echo "Usage: $0 source-iso-path output-img-path"
exit 1
fi

isoimage=$1; shift
imgoutfile=$1; shift

export tmpdir=$(mktemp -d -t fbsdmount)
# Temp file and directory to be used later
export tmpfile=$(mktemp -t bsdmount)

export isodev=$(mdconfig -a -t vnode -f ${isoimage})

echo "#### Building bootable UFS image ####"

ISOSIZE=$(du -k ${isoimage} | awk '{print $1}')
SECTS=$((($ISOSIZE + ($ISOSIZE/5))*2))

# Root partition size

echo "Initializing image..."
dd if=/dev/zero of=${imgoutfile} count=${SECTS}
ls -l ${imgoutfile}
export imgdev=$(mdconfig -a -t vnode -f ${imgoutfile})

bsdlabel -w -B ${imgdev}
newfs -O1 /dev/${imgdev}a

mkdir -p ${tmpdir}/iso ${tmpdir}/img

mount -t cd9660 /dev/${isodev} ${tmpdir}/iso
mount /dev/${imgdev}a ${tmpdir}/img
```

Re: Installation from USB pen

```
echo "Copying files to the image..."
( cd ${tmpdir}/iso && find . -print -depth | cpio -dump ${tmpdir}/img )
#bzcata ${tmpdir}/iso/dist/root.dist.bz2 | mtree -PUr -p ${tmpdir}/img 2>&1 > /dev/null

#echo "/dev/ufs/${UFS_LABEL} / ufs ro 1 1" > ${tmpdir}/img/etc/fstab

if [ ${serial} -eq 2 ]; then
echo "-D" > ${tmpdir}/img/boot.config
echo 'console="comconsole, vidconsole"' >> ${tmpdir}/img/boot/loader.conf
elif [ ${serial} -eq 1 ]; then
echo "-h" > ${tmpdir}/img/boot.config
echo 'console="comconsole"' >> ${tmpdir}/img/boot/loader.conf
fi

cleanup() {
umount ${tmpdir}/iso
mdconfig -d -u ${isodev}
umount ${tmpdir}/img
mdconfig -d -u ${imgdev}
rm -rf ${tmpdir} ${tmpfile}
}

cleanup

ls -lh ${imgoutfile}
```

--

Any statement of the form "X is the one, true Y" is FALSE.

PGP fingerprint 655D 519C 26A7 82E7 2529 9BF0 5D8E 8BE9 F238 1AD4

***Attachment: pgpEz474Db0s6.pgp***

*Description: PGP signature*