





Good, so let's reinitialize the CF card with a new DOS-compatible partition table and an appropriate disk label.  
Note that GPT should not be used.

```
fdisk -B -I /dev/da0  
bsdlablel -B -w /dev/da0s1
```

The above will write a standard label, with just one single partition. Since my CF card is only 1 GiB in size, I'm not going for swap or separate partitions besides a root filesystem.  
So just make a new filesystem on the **a** partition:

```
newfs /dev/da0s1a
```

Good, so next is to mount the partition and populate FreeBSD to it. You should have either an ISO image or an install CD ready, or go for online sources, which is what I did.

```
mount /dev/da0s1a /mnt  
fetch ftp://ftp.freebsd.org/pub/FreeBSD/releases/i386/i386/10.2-RELEASE/kernel.txz -o- | tar -xzpvf- -C /mnt  
fetch ftp://ftp.freebsd.org/pub/FreeBSD/releases/i386/i386/10.2-RELEASE/base.txz -o- | tar -xzpvf- -C /mnt
```

And now some final configuration steps, otherwise the install won't boot properly (perform all steps from within a chroot):

- Configure a root password.

create another user for SSH login, which is member of **wheel**

- disable virtual terminals to prevent errors
- enable getty on serial console instead
- enable serial console for the kernel as well

```
chroot /mnt
```

```
passwd root
adduser
echo '/dev/md0s1a / ufs rw 1 1' > /etc/fstab
sed -i.bak -E -e 's/(ttyv.*xterm.*)on/1off/g' /etc/ttys
echo 'ttyu0 "/usr/libexec/getty std.9600" vt100 on secure' >> /etc/ttys
echo 'console="comconsole"' >> /boot/loader.conf
exit
```

Some additional configuration is needed in **/etc/rc.conf**.

I choose to place /tmp on a MFS device (memory file system, aka RAM disk), despite it takes away some RAM.

Also, automatic file system checks are enforced if unclean file systems are encountered.

Yet, DHCP is enabled on all interfaces.

```
sshd_enable="YES"
tmpmfs="YES"
tmpsize="20m"
fsck_y_enable="YES"
hostname="alix.localdomain"
ifconfig_DEFAULT="DHCP"
```

That's it, umount the CF card, stick it into the Alix and have fun.

Mission accomplished in record time, box is up and running :-)