

FreeBSD Administration - Support #766

Install FreeBSD With UFS Root The Hard Way

03/03/2016 10:02 AM - Daniel Curtis

Status:	Closed	Start date:	03/03/2016
Priority:	Normal	Due date:	
Assignee:	Daniel Curtis	% Done:	100%
Category:	Installation	Estimated time:	1.00 hour
Target version:	FreeBSD 9	Spent time:	1.00 hour

Description

This is a guide on how I manually setup FreeBSD with a UFS root, without the help of a GUI or bsdinstall. This guide is intended to install FreeBSD using the installation DVD and will work offline.

- When the FreeBSD Installer Welcome message appears, choose **Shell**.

- Create the slices:

```
gpart create -s gpt ada0
gpart add -b 40 -s 512K -l gpboot -t freebsd-boot ada0
gpart add -s 4G -t freebsd-swap -a 1M -l swap0 ada0
gpart add -t freebsd-ufs -a 1M -l disk0 ada0
```

- Create a new file system on the new UFS partition:

```
newfs -U /dev/ada0p3
```

- Mount the UFS partition to the temporary mount directory:

```
mkdir /tmp/mnt
mount /dev/ada0p3 /tmp/mnt
```

- Extract the base.txz and kernel.txz to the ufs root to install the base system:

```
cat /usr/freebsd-dist/base.txz | tar --unlink -xpJf - -C /tmp/mnt
cat /usr/freebsd-dist/kernel.txz | tar --unlink -xpJf - -C /tmp/mnt
```

- Add the initial system configuration:

```
echo 'if_em_load="YES"' >> /tmp/mnt/boot/loader.conf
echo 'sshd_enable="YES"' >> /tmp/mnt/etc/rc.conf
echo 'ifconfig_em0="inet 192.168.10.70 netmask 255.255.255.0 broadcast 198.100.10.255"' >> /tmp/mnt/etc/rc.conf
echo 'defaultrouter="192.168.10.1"' >> /tmp/mnt/etc/rc.conf
echo 'hostname="freebsd.example.com"' >> /tmp/mnt/etc/rc.conf
echo 'nameserver 192.168.10.1' >> /tmp/mnt/etc/resolv.conf
```

- Install the bootcode:

```
gpart bootcode -b /tmp/mnt/boot/pmbr -p /tmp/mnt/boot/gptboot -i 1 ada0
```

- Create an /etc/fstab file:

```
vi /tmp/mnt/etc/fstab
```

- And add the following:

```
/dev/ada0p2  none    swap    sw      0      0
/dev/ada0p3  /        ufs     rw      2      2
```

- Reboot the system and eject the FreeBSD install disc:

```
reboot
```

Resources

- <https://forums.freebsd.org/threads/42773/>
- <http://www.wonkity.com/~wblock/docs/html/disksetup.html>

History

#1 - 03/03/2016 10:02 AM - Daniel Curtis

- Description updated
- Status changed from New to Resolved
- % Done changed from 0 to 100

#2 - 03/12/2016 02:16 PM - Daniel Curtis

- Category set to Installation
- Status changed from Resolved to Closed