

FreeBSD Administration - Support #688

Install Crochet on FreeBSD

10/29/2015 04:45 PM - Daniel Curtis

Status:	Closed	Start date:	10/29/2015
Priority:	Normal	Due date:	
Assignee:	Daniel Curtis	% Done:	100%
Category:	Embedded	Estimated time:	5.00 hours
Target version:	FreeBSD 10	Spent time:	4.00 hours

Description

This is a guide on how I set up the crochet build tool to compile an image for the Raspberry Pi 2.

Prepare the Environment

- Make sure the system is up to date:

```
pkg update && pkg upgrade
```

- Install a couple dependencies:

```
pkg install subversion git u-boot-rpi2
```

- Checkout the FreeBSD 11-CURRENT kernel sources:

```
svn co svn://svn0.us-west.freebsd.org/base/head /usr/src
```

Install Crochet

- Clone the latest crochet from GitHub:

```
mkdir /usr/local/src && cd /usr/local/src  
git clone https://github.com/freebsd/crochet.git  
cd crochet
```

- Create config file from the sample config provided:

```
cp config.sh.sample config.sh
```

- Edit the crochet config file:

```
vi config.sh
```

- And modify the script to use the Raspberry Pi 2, and any additional parameters:

```
board_setup RaspberryPi2  
option ImageSize 1950mb  
option Growfs  
option User pi  
option SwapFile 1024mb
```

- Build the image:

```
sh crochet.sh -c config.sh
```

Write the Image

- Write the FreeBSD image to a micro SD card:

```
dd if=/usr/local/src/crochet/work/FreeBSD-armv6-11.0-RPI2-290209.img of=/dev/da0 bs=1m
```

- Now insert the micro SD card into the Raspberry Pi 2, plug in power, and log in using the user created during the image creation; username is pi, password is pi.

Post Install

- Since the Pi does not have an on board clock, ntp must be used to keep the time correct. Start and enable ntpd at boot:

```
echo 'ntpd_enable="YES"' >> /etc/rc.conf  
service ntpd start
```

Resources

- <https://github.com/freebsd/crochet>
- <https://github.com/freebsd/crochet/wiki/How-to-Build-a-Disk-Image>

History

#1 - 10/29/2015 08:14 PM - Daniel Curtis

- Description updated
- Category set to Embedded
- Status changed from New to In Progress
- % Done changed from 0 to 10

#2 - 10/30/2015 03:22 PM - Daniel Curtis

- Description updated

#3 - 11/01/2015 01:05 PM - Daniel Curtis

- Description updated
- % Done changed from 10 to 50

#4 - 11/02/2015 11:19 AM - Daniel Curtis

- Description updated
- Status changed from In Progress to Resolved
- % Done changed from 50 to 100

#5 - 11/27/2015 03:44 PM - Daniel Curtis

- Status changed from Resolved to Closed