

FreeBSD Administration - Support #563

Install OPNsense on an APU1D4

02/15/2015 11:49 AM - Daniel Curtis

Status:	Closed	Start date:	02/15/2015
Priority:	Normal	Due date:	
Assignee:	Daniel Curtis	% Done:	100%
Category:	Firewall/Router	Estimated time:	1.50 hour
Target version:	OPNsense	Spent time:	1.50 hour

Description

I recently acquired an APU1D4 online and decided to try out OPNsense on it. This is a simple guide for installing OPNsense15.1.5 on an PC Engines APU1D4 using a USB drive, over a serial connection from an Ubuntu-based system.

Prepare the media

This phase is done on the Ubuntu-based workstation.

- Download the serial amd64 [OPNsense](#) image and extract it:

```
cd ~/Downloads
wget http://downloads.sourceforge.net/project/opnsense/15.1.5/OPNsense-15.1.5-memstick-serial-amd64.img.bz2
tar xjf OPNsense-15.1.5-memstick-serial-amd64.img.bz2
```

- Write the OPNsense image to a spare USB drive:

```
sudo dd if=OPNsense-15.1.5-memstick-serial-amd64.img
sudo sync
```

- Install screen

```
sudo apt-get install screen
```

- Now connect a NULL modem serial cable from COM1 on the Ubuntu-based workstation to COM1 on the APU1D4.
- Unplug the USB drive from the Ubuntu-based workstation and plug it into APU1D4.
- Open a terminal and run screen on COM1:

```
sudo screen /dev/ttyS0 115200
```

Boot The APU1D4

- Plug the power to the APU1D4
- Quickly press **[F10]**
 - Select **1. USB MSC Drive**
- Press **2 Boot to Single-User mode**

Securely Erase Drive

The APU1D4 I bought came with an 80GB SSD. Just to be on the safe side I zero the hard drives of all new devices entering into my

production environment.

- Erase SSD:

```
dd if=/dev/zero of=/dev/ada0
```

WARNING: Make sure that ada0 is the correct drive. Drive information in dmesg:

```
dmesg | grep 'ada'
```

- Reboot the APU1D4

```
reboot
```

Install OPNsense

- Quickly press **[F10]**
 - Select **1. USB MSC Drive**
- Then select **Accept Settings**
- And select **Quick/Easy Install** then **OK**
- When the installation finishes select **Reboot**
- Remove the USB drive

History

#1 - 02/16/2015 10:43 AM - Daniel Curtis

- Description updated
- Status changed from New to In Progress
- % Done changed from 0 to 50
- Estimated time set to 1.50 h

#2 - 02/16/2015 10:43 AM - Daniel Curtis

- Description updated

#3 - 02/18/2015 04:21 PM - Daniel Curtis

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

#4 - 02/22/2015 05:24 PM - Daniel Curtis

- Subject changed from Installing OPNsense on an APU1D4 to Install OPNsense on an APU1D4
- Status changed from Resolved to Closed