

開
放
的
열린
مفتوح
libre
मुक्त
ಮುಕ್ತ
livre
libero
ముక్త
开放的
açık
open
nyílt
:::
πικρ
オープン
livre
ανοικτό
offen
otevřený
öppen
открытый
வெளிப்படை

open



USE



IMPROVE



EVANGELIZE

Report: Solaris Installation on ASUS Eee PC

Masafumi Ohta

OpenNSUG / OpenSolaris User Group



Agenda

- Introduction
- ASUS Eee PC specifications
- Prepare for installation
- Solaris installation
- And drivers
 - ath driver
 - oss drivers
 - Huawei D02HW modem driver
- Problems (doesn't work yet..)
- Demo
- Wrap up



Introduction

- I tried to install the Solaris nevada b86 and OpenSolaris 2008.5 to my Eee PC.
 - It was difficult to install.....
- And, I succeeded with installation !! 😊
- I share several tips about installation.
- Followings are the record of installation that OpenSolaris and Solaris nevada to Eee PC.
- It is my pleasure that you will try it and you will be able to enjoy of Solaris Life.

How much are they?

Eee PC 4G-X	\49,800
DDR2-667 2GB memory	\6,980
SDHC memory card (16GB)	\9,980
External USB keyboard	\4,980
External USB CD-ROM drive	\4,980

Lots of things

Uncountable

Your support

Priceless.

ASUS Eee PC specifications

- Intel mobile Celeron ULV 353 900MHz (but it works 630MHz actually)
- DDR2-667MHz Memory (up to 2GB)
- Intel UMA G910ML Graphic Chip
- Atheros 5007EG Wifi
- Realtek ALC6626 HD Audio
- Attansic L2 built-in Ethernet



Prepare for installation

- Need to prepare several items for the installation.
- External USB CD-ROM drive unit.
 - Most of CD-ROM drive unit works well on Eee PC.
- External USB keyboard
 - Keyboard of Eee PC doesn't work while installation.
- SDHC Card
 - If you choose OpenSolaris, you can install it to SSD in Eee PC.
 - Have to choose SDHC vendor.
 - . Evergreen's SDHC card works fine.
 - Format SDHC as "FAT32" using format tool on the Windows OS.
- Off course, OpenSolaris or nevada CD-ROM



Prepare for installation(*cont'd)

- Need to update the BIOS.
 - I now use the BIOS rev.901
 - You can get the latest BIOS from <http://update.eeepc.asus.com/bios/>



Solaris Installation

- Boot from CD. After that, it is same procedure of Solaris installation.
 - In some case, installation is stop due to Disk error.
 - All you can do is use other vendor's SDHC card.
- WIFI, built-in ethernet and sound didn't work.
- The long? way to work fine.
 - I searched the install log in google.
 - I found rob's blog and posted the comment for asking.
 - He kindly replied and helped me. And...
 - Judy and Tim helped me so kindly.



Solaris Installation(*installation time)

- It took about 6 hours to install nevada b86
 - using GUI installation mode.
 - 6 hours.... ;-(
- It took about 1 and half hours to install OpenSolaris 2008.5
 - Using the GUI installation mode.



Install ath driver

- Thanks, Judy!
 - Robs introduced Judy for me.
 - She sent me updated ath driver for Eee PC.
- Now you can get ath driver for EeePC from the OpenSolaris.org site.
 - <http://opensolaris.org/os/community/laptop/wireless/ath/>
 - Before you install the ath driver for Eee PC, you have to remove the SUNWatheros and reboot the system.
 - pkgrm or pkg uninstall (in case of OpenSolaris)
 - After reboot, you can install SUNWatheros by pkgadd.
 - If ath doesn't work after the installation, you should reboot the system so that ath would work well.



Install OSS driver

- Get from <http://www.opensound.com/>
- I tried to install oss driver but it failed to attach.
 - I wrote the oss forum to ask for the installation.
 - I also asked Tim, he gave some advice to me.
- For installing oss drivers successfully
 - Have to remove “SUNWaudiohd” driver. After that, reboot for complete remove of audiohd driver.
 - After reboot, you install oss driver (and attach).
- Use 'pkg uninstall' command if you use OpenSolaris.



Install HUAWEI modem driver

- My friend 'manbo'-san gave me the package file.
 - XXXemobile.pkg which can use on EM-ONE.
- You have to un-plumb the ath driver before you use ppp
 - If it remain, you can not dial-up to eMobile network.

How to edit /etc/ppp/peers/emobile

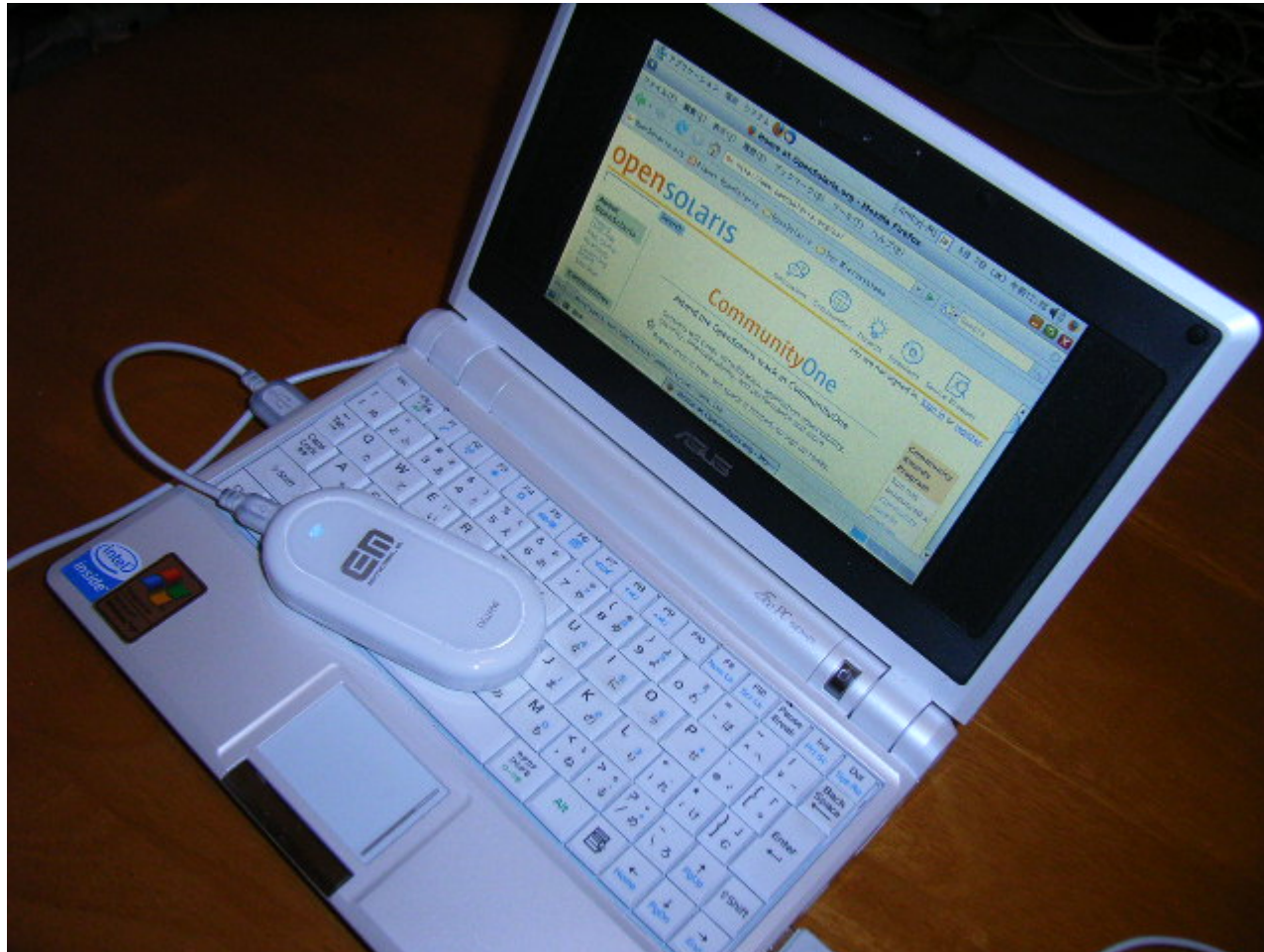
- /dev/cua/?
 - '?' is a first number of the result of 'ls /dev/cua/'.
- Don't need to edit the other lines.

```
root# ls /dev/cua/  
3 5 6 7  
root#
```

/etc/ppp/peers/emobile :

```
...  
updetach  
/dev/cua/3  
230400  
...
```

Install HUAWEI modem(*photo)





Install HUAWEI modem(*caution)

- The modem doesn't work stably.
 - You have to check the /dev/cua directory if you encounter this issue.
 - The result of 'ls /dev/cua', you can see a several number.
 - If you can see 3 numbers, the modem work fine.
 - If you can see only 1 number, it doesn't work fine.
- How to solve this problem.
 - Reboot the system.



Problems (*doesn't work yet..)

- Built-in ethernet doesn't work yet.
 - See the bugs report; RFE for NIC support (6677682)
- Volume can't work fine.
 - If you use the 'volume control', you can not listen sound from a speaker of left side.
 - To reboot, you can listen a sound from both side of speaker.
 - It's also BUG.
- Sometimes sound has some noises.
- Sometimes keyboard doesn't work
 - 'devfsadm -i kb8042'(in case of japanese keyboard), and reboot the system.
 - Avoid this issue, you should add a start-up script



Solaris DEMO'S on ASUS Eee PC



Wrap up

- Prepare many things before installation
- You need to pay attention to choose SDHC card.
 - Evergreen's SDHC card works fine.
 - If you can install Solaris to the other SDHC vendor's card, please let me know.
- After you remove the 'old' driver, you have to 'reboot' to remove the driver completely.
- it is not stable to use D02HW on Solaris.
 - You always have to check directory '/dev/term'.
- 'Asking' is good for 'Knowing well'
 - OpenSolaris community is so kindly. 😊



And...

- Thank you for your support!
 - Rob@Sun
 - Judy Chen@Sun
 - Timf@Sun
 - manbo@OpenNSUG
 - akapin@OpenNSUG
 - OpenNSUG members
 - OpenSolaris User Group
- Thanks to your help, I can install OpenSolaris and nevada to my Eee PC.

開
放
的
열린
مفتوح
libre
मुक्त
ಮುಕ್ತ
livre
libero
ముక్త
开放的
açık
open
nyílt
ᄀᄀᄀᄀ
οιᄀᄀ
オープン
livre
ανοικτό
offen
otevřený
öppen
открытый
வெளிப்படை

open



USE



IMPROVE



EVANGELIZE

Thank you!

Masafumi Ohta

OpenNSUG / OpenSolaris User Group

masafumi.ohta@gmail.com

http://mixi.jp/show_friend.pl?id=11208055

(You need to join mixi to look my homepage)

“open” artwork and icons by chandan:

<http://blogs.sun.com/chandan>