

Installation for the Linux driver

Eagle USB 2.0.0 driver for Linux distributions works with **Kernel 2.4.x** and **2.6.x** on x86 and AMD64 bits platforms. The Eagle USB 2.0.0 driver support **Eagle III** chipset ONLY.

A. Requirements and Pre-installation

- A **12MB** free disk space is needed for the installation.
- The system should have Kernel source being installed. To verify this, use the command “**uname -r**”, which will show the kernel version. A symbolic link should be present with the same kernel version in “**usr/src/linux**”.
- The gcc must be the same version with the gcc that is used to compile the kernel. To verify this use the command “**gcc -v**” and compare the result with the version given in the version file (run the command “**cat /proc/version**”).

B. Installation and establishing the connection

1. Copy the driver package under the **Linux folder** on the Installation CD to the system **root** directory.
2. Decompress the package by using the command “**tar -jxvf eagle-usb-2.0.0.tar.bz2**”.

```
[root@localhost root]# tar -jxvf eagle-usb-2.0.0.tar.bz2
```

3. Change the directory to “**eagle-usb-2.0.0**”.

```
[root@localhost root]# cd eagle-usb-2.0.0
```

4. Use the CMV files for the configuration by using the command “**./configure -enable-cmv**”.

```
[root@localhost eagle-usb-2.0.0]# ./configure -enable-cmv
.....
.....
.....
```

5. To install the driver, run these commands one by one:

- ***make uninstall***
- ***make clean***
- ***make***
- ***make install***

```
[root@localhost eagle-usb-2.0.0]# make uninstall
...
....
....
[root@localhost eagle-usb-2.0.0]# make clean
..
...
.....
[root@localhost eagle-usb-2.0.0]# make
...
.....
.....
root@localhost eagle-usb-2.0.0]# make install
...
.....
```

6. After the “***Installation has finished***” message is shown, ***plug in*** the USB modem.
Type the command “***eagleconfig***” to configure the connection setting.

```
[root@localhost eagle-usb-2.0.0]# eagleconfig
.....
NL04 : Netherlands Versatel 00 20 03 Routed IP LLC
PL01 : Polska Telekomunikacja Polska 00 23 06 PPPoA VC
PL02 : Polska Netia neostrada 08 23 01 PPPoE LLC
PT01 : Portugal PT 00 23 01 PPPoE LLC
SE01 : Sweden Telia 08 23 01 PPPoE LLC
SG01 : Singapoure FASTADSL 00 23 05 PPPoA LLC
SG02 : Singapoure FASTADSL 00 21 01 PPPoE LLC
SI01 : Sloviana SiOL 01 20 01 PPPoE LLC
CH01 : Switzerland ???? 08 35 03 Routed IP LLC
CH02 : Switzerland BlueWin (Swisscom) 08 23 05 PPPoA LLC
TH01 : Thailand Asianet 00 64 01 PPPoE LLC
UK01 : UK BT, Tiscali uk 00 26 06 PPPoA VC
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?
Enter your login for connecting to the ISP (given by your ISP):
username@isp
Enter your password (given by your ISP):*****
Does your ISP support password encryption? [y]/n n
Do you want the connection to automatically be started at boot? y/[n] n
Loading module... [ OK ]
Loading DSP & options... [ OK ]
Waiting for Modem To be Operational .... [ OK ]
Configuration successful.
```

7. Answer the above questions to set the connection as according to the ISP instructions.

Do note that the *VPI/VCI* values are in *Hexadecimal* format. For example, if it is to configure PPPoE LLC 8/35, then PL02 can be used. PL02 has the settings PPPoE LLC and VPI/VCI 08/23 which when converted is 8/35.

8. When the “*Configuration successful*” is shown, the connection with the ISP can be established by running the command “*startadsf*”.

```
[root@localhost eagle-usb-2.0.0]# startadsf
```

C. Monitoring the connection

1. To verify if it is connected to the ISP, use the command “*ifconfig*”. If *ppp0* is shown, then the connection is established.
At any time, the connection can be stopped by using the command “*stopadsf*”.

```
[root@localhost eagle-usb-2.0.0]# ifconfig
eth2  Link encap:Ethernet HWaddr 00:E0:22:04:00:01
       inet6 addr: fe80::2e0:22ff:fe04:1/64 Scope:Link
       UP BROADCAST RUNNING MULTICAST MTU:65531 Metric:1
       RX packets:18 errors:0 dropped:0 overruns:0 frame:0
       TX packets:17 errors:0 dropped:0 overruns:0 carrier:0
       collisions:0 txqueuelen:1000
       RX bytes:318 (318.0 b) TX bytes:794 (794.0 b)

lo    Link encap:Local Loopback
       inet addr:127.0.0.1 Mask:255.0.0.0
       inet6 addr: ::1/128 Scope:Host
       UP LOOPBACK RUNNING MTU:16436 Metric:1
       RX packets:14234 errors:0 dropped:0 overruns:0 frame:0
       TX packets:14234 errors:0 dropped:0 overruns:0 carrier:0
       collisions:0 txqueuelen:0
       RX bytes:2333062 (2.2 Mb) TX bytes:2333062 (2.2 Mb)

ppp0  Link encap:Point-to-Point Protocol
       inet addr:192.168.50.41 P-t-P:192.168.50.1 Mask:255.255.255.255
       UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1492 Metric:1
       RX packets:5 errors:0 dropped:0 overruns:0 frame:0
       TX packets:4 errors:0 dropped:0 overruns:0 carrier:0
       collisions:0 txqueuelen:3
       RX bytes:74 (74.0 b) TX bytes:52 (52.0 b)
[root@localhost eagle-usb-2.0.0]#
```

2. To monitor the link/connection status, use the command “*eaglestat*”.

```
[root@localhost eagle-usb-2.0.0]# eaglestat
eagle-usb status display
-----
Driver version 2 Chipset: Eagle3
Vendor ID : 0x1110 Product ID : 0x9031 Rev: 0x200b
USB Bus : 001 USB Device : 003 Dbg mask: 0x0
Ethernet Interface : eth2
MAC: 00:e0:22:04:00:01
Tx Rate 832 Rx Rate 6016
FEC 0 Margin 33 Atten 0 dB
VID-CPE 28 VID-CO 28 HEC 0
VPI 0 VCI 35 Delin GOOD
Cells Tx 23 Cells Rx 19
Pkts Tx 18 Pkts Rx 19
OAM 0 Bad VPI 4 Bad CRC 0
Oversiz. 0
Modem is operational
```

Note:

In some cases when running the “*eagleconfig*” to set up the connection it might get the “*Waiting for Modem to be operational... [Error]*” message. Also, when checking the modem status using “*eaglestat*”, it might show “*Modem is booting*”.

If these happen, try to issue the command “*eaglectrl -d*” to load the DSP code. If the problem still persists, unplug and re-plug the modem and try “*eagleconfig*” again. Reboot and try again if still encounter the problem.

D. Uninstallation

1. To uninstall the modem, use the command “*make uninstall*”. Then issue “*make clean*” to clean up the files.

```
[root@localhost eagle-usb-2.0.0]# make uninstall
...
....
....
[root@localhost eagle-usb-2.0.0]# make clean
..
...
.....
```

2. Next, *unplug* the modem. This ends the uninstallation procedure.