

Ubuntu installation without VGA

For Ubuntu 22.04 version

1. Please download Ubuntu 22.04 Server from following link, and using RUFUS to make Ubuntu 22.04 server ISO ad bootable USB
Ubuntu 22.04 Server : <https://ubuntu.com/download/server>
2. please insert bootable USB(Ubuntu 22.04 server) and choose this USB as boot device,user can look Ubuntu 22.04 server grub from console terminal utility, and please press “E” to modify grub file.

```
GNU GRUB version 2.06
*****
*Try or Install Ubuntu Server*
* Ubuntu Server with the HWE kernel*
* Test memory*
*
*
*
*
*
*
*
*
*
*
*
*
*
*
*****

Use the * and * keys to select which entry is highlighted.
Press enter to boot the selected OS, `e' to edit the commands
before booting or `c' for a command-line.
```

3. please add “console=ttyS0,115200” in “linux” command line, and please press “ctrl-X” to boot in Ubuntu 22.04 server

```
GNU GRUB version 2.06
*****
*setparams 'Try or Install Ubuntu Server'*
*
*   set gfxpayload=keep*
*   linux /casper/vmlinuz --- console=ttyS0,115200*
*   initrd /casper/initrd*
*
*
*
*
*
*
*
*
*
*
*
*****

Minimum Emacs-like screen editing is supported. TAB lists
completions. Press Ctrl-x or F10 to boot, Ctrl-c or F2 for
a command-line or ESC to discard edits and return to the GRUB menu.
```

4. user can look Ubuntu 22.04 server boot message from console terminal, and please choose “Continue in basic mode >” and follow Ubuntu 22.04 server installation steps to install Ubuntu 22.04 server i

For Ubuntu 16.04 or 21.04 version

New Ubuntu installation UI seems to support graphic mode, it needs modifying “/isolinux/isolinux.cfg” to disable UI function, we suggest using a utility (ex: rufus) to flash ISO to USB flash, and please look following segment to modify /isolinux/isolinux.cfg

```
# D-I config version 2.0
# search path for the c32 support libraries (libcom32, libutil etc.)
path
include menu.cfg
default vesamenu.c32
prompt 0
timeout 0
#ui gfxboot bootlogo
```

Rufus webpage : <https://rufus.akeo.ie/?locale=e>

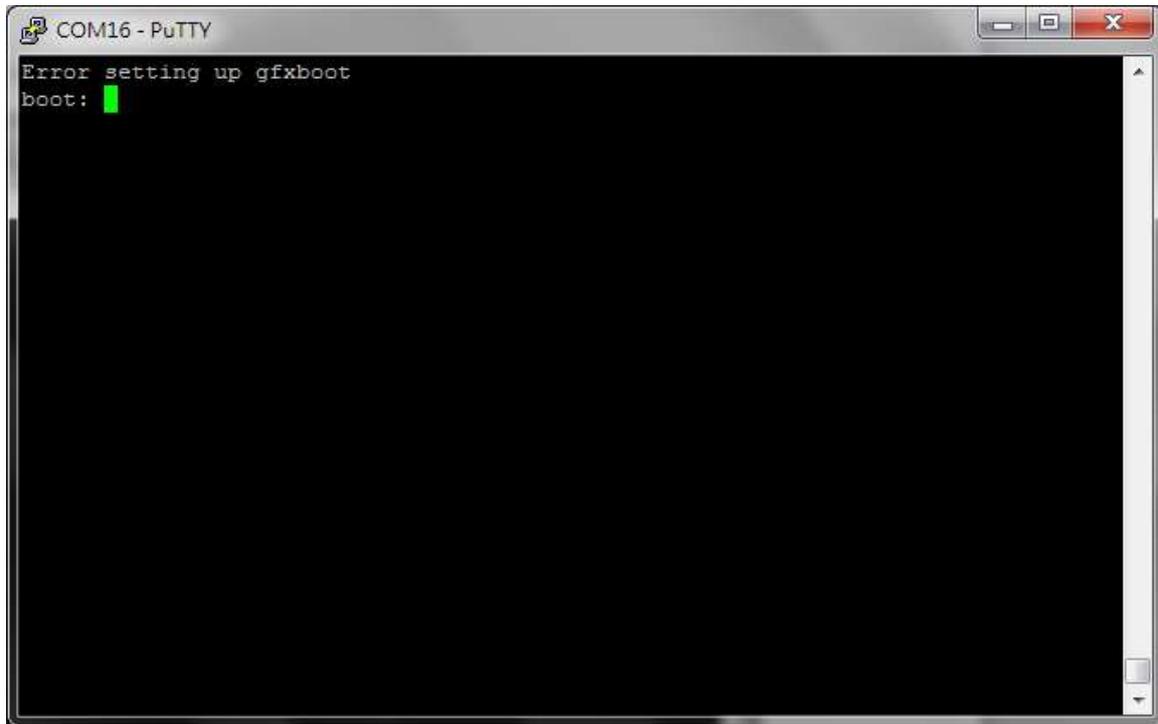
When system boots up by modified USB flash, please choose “Install Ubuntu Server” item and press “TAB” key, and then key-in “console=ttyS0,115200” in grub command line,



Pressing Enter key can start Ubuntu OS installation, the installation steps are the same Ubuntu 14.04

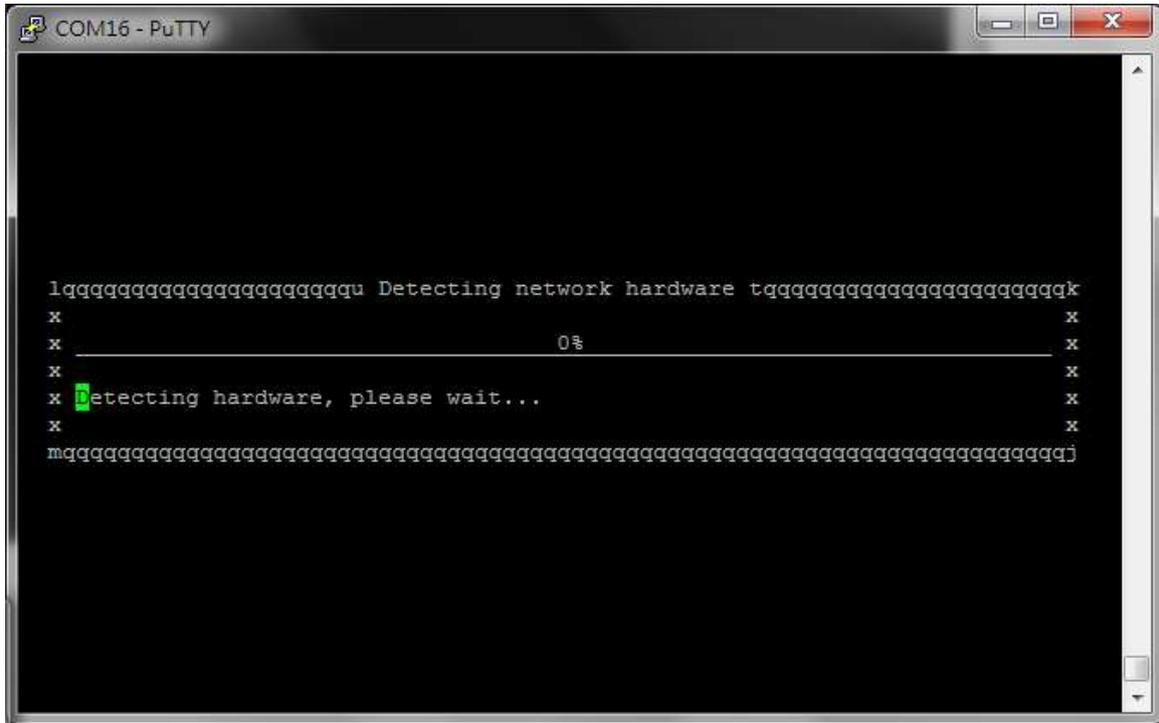
For Ubuntu 14.04

When user needs to install Linux OS in non-VGA system, Please direct set Boots device as CD-ROM, The console-terminal shows following message,

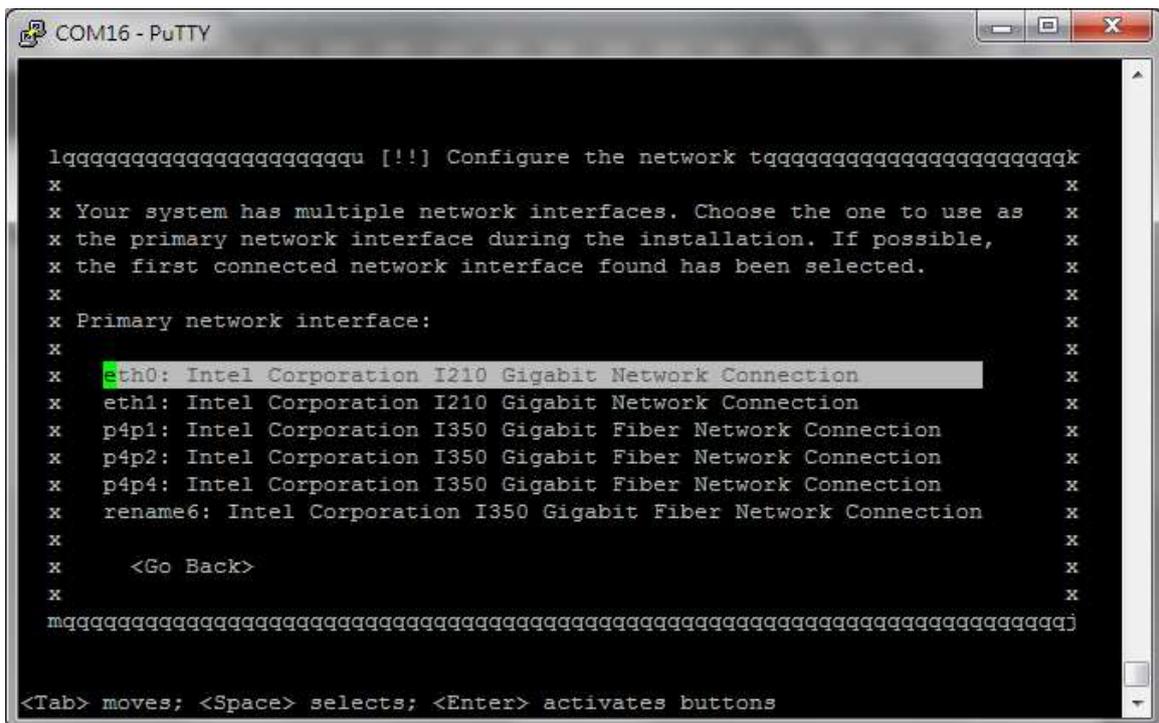


The default console port of Advantech ENPD product is COM1 (3F8/IRQ4), user needs key in "install console=ttyS0,115200n8" and press Enter key

```
Error setting up gfxboot
boot: install console=ttyS0,115200n8
```

The step is "Configure the network", please choose "Primary network interface", and detect/assign IP from DHCP server or set IP by user.



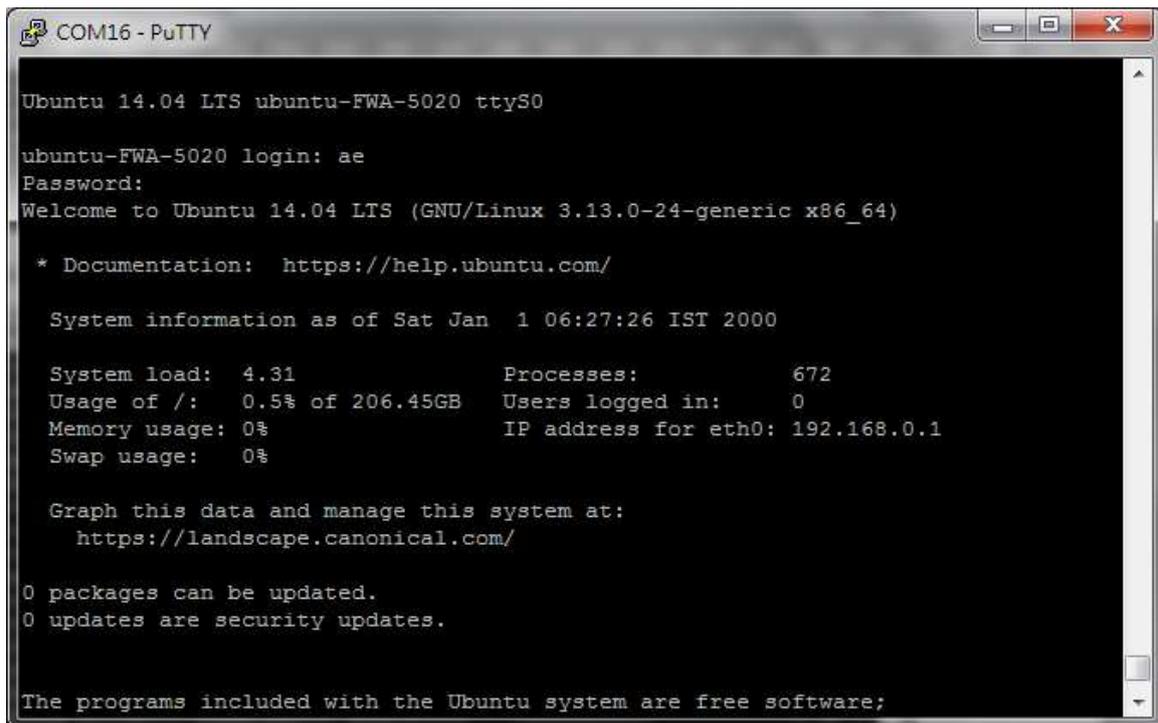
When installation is success, it will shows GRUB boot loader



```
COM16 - PuTTY
GNU GRUB  version 2.02~beta2-9
-----
*Ubuntu
  Advanced options for Ubuntu
  Memory test (memtest86+)
  Memory test (memtest86+, serial console 115200)
-----

Use the ^ and v keys to select which entry is highlighted.
Press enter to boot the selected OS, `e' to edit the commands
before booting or `c' for a command-line.
```

And user may key in user name & password to login in Ubuntu 14.04 LTS server



```
COM16 - PuTTY
Ubuntu 14.04 LTS ubuntu-FWA-5020 ttyS0
ubuntu-FWA-5020 login: ae
Password:
Welcome to Ubuntu 14.04 LTS (GNU/Linux 3.13.0-24-generic x86_64)

* Documentation:  https://help.ubuntu.com/

System information as of Sat Jan  1 06:27:26 IST 2000

System load:  4.31                Processes:            672
Usage of /:   0.5% of 206.45GB    Users logged in:     0
Memory usage: 0%                 IP address for eth0: 192.168.0.1
Swap usage:   0%

Graph this data and manage this system at:
  https://landscape.canonical.com/

0 packages can be updated.
0 updates are security updates.

The programs included with the Ubuntu system are free software;
```