

Ubuntu® GNU / Linux® Quick Start Guide

Introduction

This section provides a guide for the initial setup of a Maple Systems Industrial PC running Ubuntu® GNU/Linux® operating system. The guide covers two versions: Server OS and Desktop OS.

This document is intended for the initial setup of your Maple Systems PC unit and does not provide detailed information about the Linux® Operating System.

Initial Set Up

To complete the setup requires the following:

1. Monitor (For IPC only)
2. USB Keyboard
3. TCP/IP network with a DHCP server (Server OS Only)
4. An external computer on the same subnet of the pc with **SSH** enabled terminal emulator (Server OS Only)

Server OS

It is recommended to create a regular user account with access to the *sudo* command to do administrative tasks. Maple Systems **STRONGLY RECOMMENDS** at minimum changing the password from the default.

Power up and log in:

Connect the monitor, USB Keyboard, Ethernet Cable, and power supply to the PC. Once the login prompt is displayed enter the following credentials:

Username: root
Password: 111111

This will log you in as the root user. The root user has complete access to the system. To change the root user's password enter:

```
# passwd
```

Follow the prompts to complete the password change process.

Add New User:

Use the *adduser* command:

```
# adduser <username>
```

Follow the prompts to give the new user a password and other information. To grant the new user *sudo* privileges enter:

```
# usermod -aG sudo <username>
```

Now logout (*# logout*) and enter the credentials for the new user. Make sure that the new user can execute commands with *sudo*. Try:

```
$ sudo ls -la
```

This should prompt for the password and then print the contents of the new user's home directory.

Access and Password Management for Root User:

For security and better tracking, disabling direct login for the root user is recommended. To do this enter:

```
$ sudo passwd -l root
```

To retain (or re-enable) access to the root login, run:

```
$ sudo passwd
```

Follow the prompts to set a new password for root. You can then logout and login as root using the new password.

Localization:

By default, the system is set to Pacific Time (America/Los_Angeles). To change to a different time zone, enter:

```
$ sudo timedatectl set-timezone <time zone>
```

Where <time zone> is the zone to use. To get a list of available zones use:

```
$ timedatectl list-timezones
```

After updating, the current settings can be printed with:

```
$ timedatectl
```

Setting the PC Hostname:

The hostname is set to *bpc*, to update this run:

```
$ sudo hostnamectl set-hostname <new hostname>
```

To print the updated hostname run:

```
$ hostnamectl
```

You will need to logout and back in to see the new name on the terminal.

Software Update:

To install any software updates, enter:

```
$ sudo apt update && sudo apt upgrade
```

Use: `$ sudo apt install <package name>` to install new software.

SSH Access:

Accessing the server can be done over the network using the preinstalled Open SSH Daemon. You will need to know what IP address has been assigned to the PC to access it. Print the network settings with:

```
$ ip a
```

Note the ipv4 address (*inet*) for the interface you are going to use. You can then log in via *SSH* from any networked computer that has a terminal emulator and *SSH* client. Simply enter:

```
$ ssh <username>@<ip address>
```

Where <username> is for the user created above. The system will ask for the password, display a login message and provide another prompt. Commands can be entered on the networked device as if being run locally on the server.

Desktop OS

Initial Setup:

Connect the monitor, USB Keyboard, and power supply to the Industrial PC. Upon initial power application, the desktop will show. The default username is shown below.

Username: user

DISPLAY CONFIGURATIONS

The Ubuntu® OS automatically configures analog outputs (VGA, DVI-I) as a display, with no additional configuration needed.

If you are connecting a digital display (HDMI, DisplayPort) and the taskbar or favorites bar does not display on the desktop after initial setup, you may need to adjust your display settings. To adjust your display settings:

- Right-click on the desktop and select *Display Settings*.
- Select *Display Mode* in this new window, and select the *Single Display* tab.
- There are two display options on this tab; select the display the PC is physically connected to and ensure the resolution settings match the monitor's optimal settings.
- Click *Apply*, the screen will flicker and adjust to the new settings.

TOUCHSCREEN

To ensure the monitor and touchscreen driver link properly to the PC, plug in the monitor and USB cable to the PC prior to application of power.

- Capacitive touchscreen monitors are supported by Ubuntu® in single-touch configuration.
- Resistive touchscreen monitors may require touch calibration to be performed on system startup.