MuntsOS Embedded Linux

Application Note #1: Development Environment Setup for Debian Linux

Revision 14 30 March 2022

by Philip Munts
President, Munts Technologies
http://tech.munts.com

Introduction

This application note describes how to install the application software development environment for **MuntsOS Embedded Linux** onto a computer running x86-64 Debian Linux or equivalent (e.g. Ubuntu) apt based operating system.

This procedure (including the *Easy Setup Script* below) also works with the following environments:

- <u>Debian Linux on Windows</u> using <u>Windows Subsystem for Linux</u> on Windows 10 or 11.
- Debian Linux on ChromeOS using Linux on Chrome OS.

Installation Procedure

Step 1: Prepare the system for application software development with the following commands:

```
sudo apt -y install build-essential git gprbuild wget
```

Step 2: Add the **Munts Technologies Debian Package Repository** to your system, with the following commands:

```
wget http://repo.munts.com/Debian11/PublicKey.txt
sudo apt-key add PublicKey.txt && rm PublicKey.txt
wget http://repo.munts.com/Debian11/amd64/munts-repo.deb
sudo dpkg -i munts-repo.deb && rm munts-repo.deb
sudo apt-get update
```

Step 3: Install **MuntsOS** cross-toolchain packages, with one or more of the following commands:

```
sudo apt-get install muntsos-dev-aarch64
sudo apt-get install muntsos-dev-beaglebone
sudo apt-get install muntsos-dev-raspberrypi1
sudo apt-get install muntsos-dev-raspberrypi2
```

Each *MuntsOS* cross-toolchain package contains cross-compilers for the Ada, C, C++, Fortran, Free Pascal, and Go programming languages.

You can also install **all** of the **MuntsOS** cross-toolchain packages at one time with a single command:

```
sudo apt-get install muntsos-dev
```

Easy Setup Script

The script available at http://git.munts.com/muntsos/scripts/setup-debian makes the setup procedure even easier:

wget http://git.munts.com/muntsos/scripts/setup-debian
chmod 755 setup-debian && ./setup-debian && rm setup-debian