

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:

- [Debian Linux on Windows](#) using [Windows Subsystem for Linux](#) 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 tar 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 update
```

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

```
sudo apt -y install muntsos-dev-aarch64
sudo apt -y install muntsos-dev-beaglebone
sudo apt -y install muntsos-dev-raspberrypi1
sudo apt -y 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 -y 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
```