

MuntsOS Embedded Linux

Application Note #1: Development Environment Setup for Debian Linux

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Introduction

This application note describes how to install the application software development environment for **MuntsOS Embedded Linux** onto a computer running x86-64 or ARM64 Debian Linux `apt` based operating system.

Debian packages containing the **MuntsOS** cross-toolchains are available at:

<https://repo.munts.com/debian13> Debian package repository
<https://repo.munts.com/muntsos/toolchain-debs> Debian package files

Each package contains cross-compilers for the Ada, C, C++, Fortran, Free Pascal, Go, and Modula-2 programming languages. The program files within the cross-toolchain packages are statically linked, so they should work on any variant or version of x86-64 or ARM64 Debian Linux (e.g. Ubuntu), including:

- Debian Linux on Windows using [Windows Subsystem for Linux](#).
- 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/Debian12/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, depending on which boards you need to target:

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

Each **MuntsOS** cross-toolchain package installs cross-compilers for the Ada, C, C++, Fortran, Free Pascal, Go, and Modula-2 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 <https://repo.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
```