MuntsOS Embedded Linux

Application Note #1: Development Environment Setup for Debian GNU/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 64-bit Debian GNU/Linux or equivalent (*e.g.* Ubuntu) `apt` based operating system. This procedure (including the Easy Setup Script below) even works with Debian GNU/Linux on Windows and Ubuntu on Windows using Windows Subsystem for Linux on Windows 10. It is also known to work on certain x86-64 Chromebooks in the Crostini Linux virtual machaine environment.

Installation Procedure

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

```
sudo apt-get install openssh-client build-essential git gprbuild
```

Step 2: Add `repo.munts.com` as a Debian package repository for your computer, with the following commands:

```
wget http://repo.munts.com/debian10/PublicKey.txt
sudo apt-key add PublicKey.txt
rm PublicKey.txt

wget http://repo.munts.com/debian10/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-linaro-aarch64
sudo apt-get install muntsos-linaro-beaglebone
sudo apt-get install muntsos-linaro-raspberrypi1
sudo apt-get install muntsos-linaro-raspberrypi2
```

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

```
sudo apt-get install muntsos-linaro
```

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

Step 4: Clone the **MuntsOS Embedded Linux** source code tree with `git`:

```
git clone https://github.com/pmunts/muntsos.git
```

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
```