Release Notes for CrossCore Embedded Studio 2.3.0 on Linux

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1 Introduction

This document describes the changes for CrossCore Embedded Studio (CCES) 2.3.0 on Linux hosts.

CrossCore Embedded Studio 2.3.0 for Linux supports Linux application development on the ARM Cortex-A5 cores of the ADSP-SC5xx family of Digital Signal Processors from Analog Devices. General bare-metal application development is not recommended nor is there support for architectures other than ARM in this release (e.g. SHARC, SHARC+ or Blackfin).

1.1 Supported Linux Distributions

This release of CCES is supported on the following Linux distributions:

- Ubuntu 14.04 32-bit

1.2 System Requirements

Verify that your PC has these minimum requirements for the CCES installation:

- 2 GHz single core processor; 3.3GHz dual core or better recommended
- 1 GB RAM; 4GB or more recommended
- 2 GB available disk space
- One open USB port

1.3 Obtaining Technical Support

You can reach Analog Devices software and tools technical support in the following ways:

- Post your questions in the software and development tools support community at EngineerZone®
- E-mail your questions about software and development tools directly from CrossCore Embedded Studio by choosing Help > Email Support or directly to processor.tools.support@analog.com
- E-mail your questions about processors and processor applications to processor.support@analog.com

- Submit your questions to technical support directly via http://www.analog.com/support
- Contact your Analog Devices sales office or authorized distributor

2 Using CrossCore Embedded Studio on Linux (Ubuntu 14.04 32-bit)

2.1 Installation

> **Caution**
>
> It is strongly recommended to use the command prompt to install CrossCore Embedded Studio. Post-install configuration may fail when installing via Ubuntu Software Center.

2.1.1 Installing CrossCore Embedded Studio on 32-bit operating system

Install CrossCore Embedded Studio by running the following command from the command prompt:

```
sudo dpkg -i adi-CrossCoreEmbeddedStudio-linux-x86-2.3.0.deb
```

2.1.2 Uninstalling CrossCore Embedded Studio

Uninstall CrossCore Embedded Studio by running the following commands from the command prompt:

```
sudo dpkg -r adi-cces-2.3.0
sudo dpkg -P adi-cces-2.3.0
sudo rm -rf /opt/analog/cces/2.3.0 (to clean up any leftover files)
```

2.2 Licenses

2.2.1 Different users sharing the same CCES license (license.dat file)

Many users can share a single valid license.dat file on a system by creating a symbol link to the valid license.dat in their own home directory (~/.analog/cces).
The user who installed license should ensure that the appropriate directory and file permissions are set-up to allow other users to access the valid license.dat.

2.2.2 Run dos2unix after copying your license.dat from Windows to Linux

If you copy your license.dat file from your Windows machine, then you should ensure that the newly copied license.dat file has Unix line-endings.Running `dos2unix` on the file will ensure that it has the correct line-endings for Linux.

2.2.3 Permissions that should be set on your license.dat if you are using an existing license.dat

If you copy your license.dat file from your Windows machine or from a different user's directory, then you should ensure that it has rw-rw-r-- (664) permissions set on the license.dat file. You can set this with the following command:

```
chmod 664 ./license.dat
```

2.3 Supported Features

This release of CrossCore Embedded Studio for Linux has been provided exclusively to support the Linux Add-In for CrossCore Embedded Studio.
The following features are available and supported:

- Compilation using the GNU toolchain for the ADSP-SC58x ARM core.
- Debugging ADSP-SC58x via and IDE OpenOCD/GDB session
- Development and debugging of Applications running under Linux on the ADSP-SC58x ARM core

The following features are only supported via the Windows version of CrossCore Embedded Studio:

- Development, simulation and debug of Blackfin processors
- Development, simulation and debug of SHARC processors (excluding ADSP-SC58x ARM core)
- Use of CrossCore Embedded Studio Add-Ins other than the Linux Add-In
- Debugging using the IDE TPSDK

2.4 Known Issues

2.4.1 OpenOCD needs to be run as sudo on Linux

In order to debug an Application with GDB and OpenOCD (Emulator) on Linux, OpenOCD needs to have permission to access your USB device. You can set-up the necessary permission when installing CCES on Linux or afterwards by running `sudo sh /opt/analog/cces/2.3.0/Setup/setup_openocd_permissions.sh`.

If you debug an Application with GDB and OpenOCD (Emulator) using the IDE and OpenOCD fails, because it cannot access your USB device, a dialog will appear with a message telling you that you can run the `setup_openocd_permissions.sh` script.

If you start CCES with sudo permission, then there should be no problems with OpenOCD accessing your USB device.

2.4.2 Other Known Issues

For the latest anomalies please consult our Software and Tools Anomalies Search page.