STM32MP1 Workshop

Linux Host Setup

for Linux native PCs or Virtual boxes

Important prerequisites

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Getting started Summary

Linux native PC Setup Summary for workshop

Mandatory steps if not using VMWare image prebuilt for the workshop

1. Linux Host Setup for Ubuntu 16.04 LTS or 18.04 LTS

2. Developer Package SDK Installation

3. Tool Installation
   - 3.1. Install STM32CubeMx
   - 3.2. Install STM32 SystemWorkbench

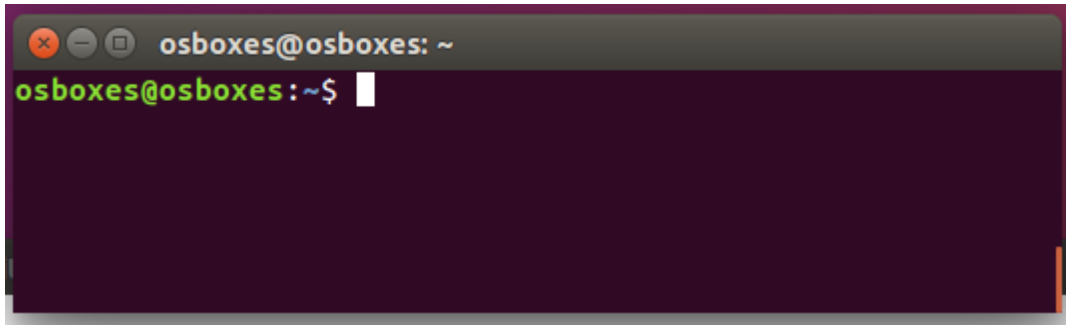
1. Linux host setup

Getting started Ubuntu 16.04

Ubuntu 16.04 PC Prerequisites : follow wiki user guide

https://wiki.st.com/stm32mpu/wiki/PC_prerequisites

Open a Terminal



First install and ensure these libraries are installed:

```
sudo apt update
sudo apt-get install git repo
sudo apt-get install meld minicom p7zip-full
```

Getting started Ubuntu 16.04

Ubuntu 16.04 PC Prerequisites : follow wiki user guide

https://wiki.st.com/stm32mpu/wiki/PC_prerequisites

Then Follow in this wiki article section 3 Linux PC

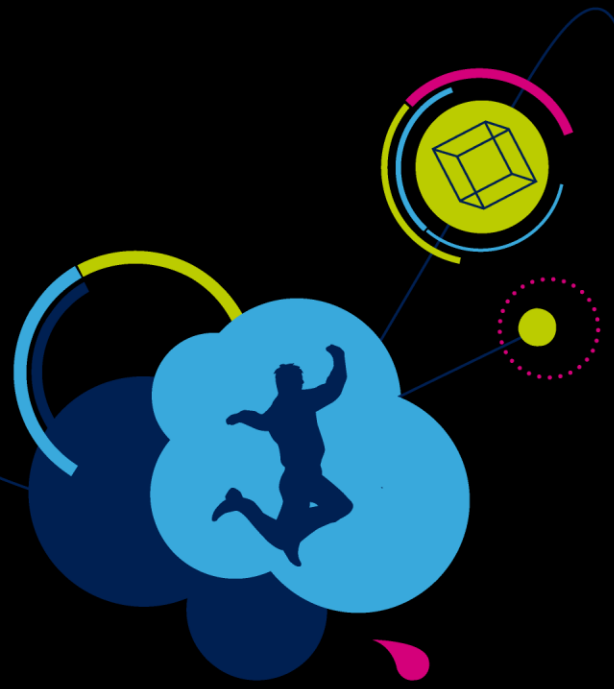
Section3.1
To check http Proxy config is ok use command wget google
Check the proxy is opened
To check git proxy config is ok use command git ls-remote
Section 3.2 to install extra package
Section 3.3 additional configuration
Section 3.4 for git config and check

Getting started Ubuntu 18.04

Ubuntu 18.04 PC Prerequisites

Same as previous slides for Ubuntu 16.04, but in Section 3.2 install extra package, replace all commands by following install commands

```
sudo apt-get update
sudo apt-get install gawk wget git-core diffstat unzip texinfo gcc-multilib
build-essential chrpath socat cpio python python3 python3-pip python3-
pexpect xz-utils debianutils iputils-ping libsdl1.2-dev xterm make xsltproc
docbook-utils fop dblatex xmlto python-git   libxml2-utils language-pack-en
live-build rsync
```



2. Developer Package SDK Install

Getting started: Developer Package SDK

Install Developer Package SDK

Edit $HOME/.bashrc and add

```
export SDK_ROOT=/local/STM32MP15-Ecosystem-v1.0.0/Developer-Package
```

Download en.SDK-x86_64-stm32mp1-openstlinux-4.19-thud-mp1-19-02-20.tar.xz

https://wiki.st.com/stm32mpu/index.php/STM32MP1_Developer_Package

Go to Archive STM32MP15-Ecosystem-v1.0.0 release

https://wiki.st.com/stm32mpu/index.php/STM32MP1_Developer_Package_-_SDK#Archives

Copy download to directory structure

/local/STM32MP15-Ecosystem-v1.0.0/Developer-Package

cd /local/STM32MP15-Ecosystem-v1.0.0/Developer-Package

(https://wiki.st.com/stm32mpu/wiki/Example_of_directory_structure_for_Packages)

```
tar xvf en.SDK-x86_64-stm32mp1-openstlinux-4.19-thud-mp1-19-02-20.tar.xz
```

Getting started: Developer Package SDK

Install Developer Package SDK

Open a **new** terminal window to get SDK_ROOT initialized

```
chmod +x stm32mp1-openstlinux-4.19-thud-mp1-19-02-20/sdk/st-image-weston-openstlinux-weston-stm32mp1-x86_64-toolchain-2.6-openstlinux-4.19-thud-mp1-19-02-20.sh

./stm32mp1-openstlinux-4.19-thud-mp1-19-02-20/sdk/st-image-weston-openstlinux-weston-stm32mp1-x86_64-toolchain-2.6-openstlinux-4.19-thud-mp1-19-02-20.sh -d $SDK_ROOT/SDK
```

3. Tool Install

3.1. Tool Install STM32CubeMx

Install Tools : CubeMx

https://wiki.st.com/stm32mpu/index.php/STM32CubeMX

1. Get CubeMx zip from https://www.st.com/en/development-tools/stm32cubemx.html and move into Linux Host in $HOME/Desktop
2. On linux Host Terminal

```
cd $HOME/Desktop
Unzip SetupSTM32CubeMX-xxx.zip -d STM32MPU
Tools/SetupSTM32CubeMX-xxx
sudo apt-get install default-jre
./SetupSTM32CubeMX-xxx.linux
```

3. Launch CubeMx

```
$HOME/STM32MPU-Tools/STM32CubeMX &
```

3.2. Tool Install System Workbench

Getting started: Tools System Workbench

Install Tools System Workbench

Installation of Eclipse Neon SystemWorkbench 2.9.0 IDE + STM32-CoPro-MPUMicroprocessor + *st-link USB driver* + *openOCD*

https://wiki.st.com/stm32mpu/index.php/STM32-CoPro-MPU_plugin_release_note

Getting started: Tools System Workbench

Install Tools System Workbench

1. Download SystemWorkbench 2.9 installer for Linux 64 bits

   Register and login www.openstm23.org
   From page
   www.openstm32.org/Downloading%2Bthe%2BSystem%2BWorkbench%2Bfor%2BSTM32%2Binstaller

2. copy install_sw4stm32_linux_64bits-v2.9.run on Linux host ~/Desktop/

Getting started: Tools System Workbench

Install Tools System Workbench

1. Open Terminal
   cd $HOME/Desktop
   ./install_sw4stm32_linux_64bits-v2.9.run (in manual mode, answer yes to all)
2. Run click on "SystemWorkbench for STM32" icon on Desktop
   or /Ac6/SystemWorkbench/eclipse&

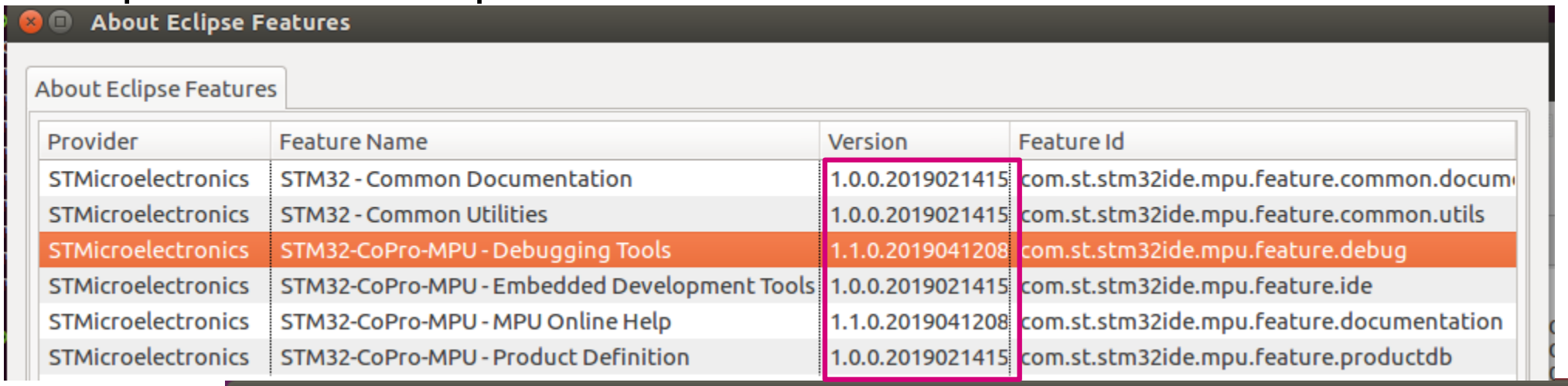
Note:First time Systemworkbench is started, the gcc tool chain is installed.

Getting started: Tools System Workbench

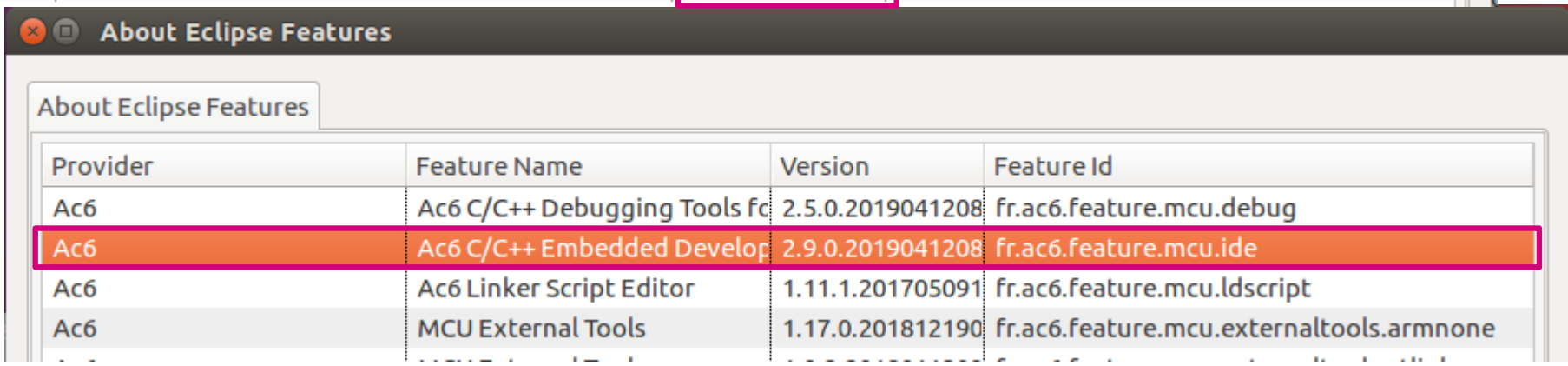
Install Tools System Workbench

To check release install:
eclipse menu “Help” -> “about Eclipse“

Click on



Click on



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See you at the STM32MP1 workshop!

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