Intel® System Studio 2020 Update 1 System Requirements

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1 Introduction

This document provides the information on the **system requirements** for the **Intel® System Studio 2020 Update 1** product and provides pointers to where you can find the system requirements specific to individual tool products.

Intel® System Studio supports development for Android*, Embedded Linux*, Yocto Project* and Wind River* Linux* deployment targets from Linux*, Windows* or macOS* host.

For full product information for the previous release, as well as the free commercial license, please refer to Intel® System Studio product webpage https://software.intel.com/intel-system-studio.

Individual Intel® System Studio components may have a broader range of supported features/targets than the suite level support covers. See the <u>system requirements</u> of the individual components for detailed information

2 Supported Host Operating Systems

Intel® VTune™ Profiler, Intel® Advisor, and Intel® Inspector graphical user interfaces may require newer versions of host operating systems. See the individual components' release notes for details.

Below is the list of distributions supported by most components. Intel System Studio supports Intel® 64 Host architectures only.

Linux* Host:

- Ubuntu* 18.04 LTS
- Fedora* 31
- Red Hat* Enterprise Linux* 8
- Red Hat* Enterprise Linux* 7
- SUSE* Linux* Enterprise Server 15
- SUSE* Linux* Enterprise Server 12
- CentOS* 8, 7

Windows* Host:

- Microsoft Windows* 10
- Microsoft Windows Server* 2016, 2019

macOS* Host:

macOS* 10.15

In most cases, Intel® System Studio will install and work on a standard Linux* OS distribution based on current Linux* kernel versions without problems, even if they are not listed below. You will, however, receive a warning during installation for Linux* OS distributions that are not listed.

3 Supported Target Operating Systems

Linux target:

- Wind River* Linux* LTS 19
- SUSE* Linux* Enterprise Server 15.x and 12.x
- Yocto Project* 2.x, 3.x based environment
- Ubuntu* 18.04 LTS
- Red Hat Enterprise* Linux* 7.x and 8.x
- CentOS* 8.x and 7.x

Windows target:

- Microsoft Windows* 10 (PC & Embedded)
- Microsoft Windows Server* 2019

4 Supported Target Hardware Platforms

- Development platform based on the Intel Atom® processor Z5xx, N4xx, N5xx, D5xx, E6xx, N2xxx, D2xxx, E3xxx, Z2xxx, Z3xxx, C2xxx, or Intel Atom® processor CE4xxx, CE53xx and the Intel® Puma™ 6 Media Gateway
- Intel Atom® Processors X Series Cxxx, Exxx, Zxxx
- Intel® Core™ processors based on a 2nd, 3rd, 4th, 5th, 6th, 7th, 8th or 10th generation
- Intel® Xeon® processors based on 2nd, 3rd 4th, 5th, 6th or 7th generation
- Intel® Xeon® Scalable processors series

5 Space Requirement by Component

| Component | Minimum RAM | Recommended RAM | Disk Space |
|---|----------------|--------------------|---|
| Intel® C/C++ Compiler | Host 1 GB | Host 2 GB | Host 4 GB for all features Target – 13 MB (IA-32)/15 MB (Intel® 64) |
| GNU* GDB | 1 GB | 2 GB | 350 MB |
| Intel® Inspector | 2 GB | 4 GB | 350 MB |
| Intel® Advisor | 2 GB | 4 GB | 650 MB |
| Intel® Integrated Performance Primitives (Intel® IPP) | 1 GB | 4 GB | 2-4 GB |
| Intel® Math Kernel Library (Intel® MKL) | 1GB | 4 GB | 2.3 GB |
| Intel® System Debugger | 1 GB | 2 GB | 105 MB |
| Intel® VTune™ Profiler | 2 GB | 4 GB | 1.1 GB |
| OpenCL™ Tools | 1 GB | 2 GB | 1 GB |
| Docker* build workflow | 4 GB | | 20 GB for Docker images and containers |

6 Prerequisites by Component

Intel® System Studio 2020 Update 1 might also require installation of webkitgtk for using Eclipse*:

- Linux* host
 - o Red Hat/Fedora: dnf install webkitgtk
 - o Ubuntu/Debian*: apt-get install libwebkitgtk-3.0.0

Intel® C/C++ Compiler

- Linux* target
 - o Linux Developer tools component installed, including gcc, g++ and related tools
 - gcc versions 4.3 6.3 supported
 - binutils versions 2.20-2.26 supported

 Development for a 32-bit target on a 64-bit host may require optional library components (ia32-libs, lib32gcc1, lib32stdc++6, libc6-dev-i386, gcc-multilib, g++-multilib) to be installed from your Linux distribution.

Docker* based application workflow

- Using Intel® System Studio to target Ubuntu Desktop with the free "Community Edition" (CE) version of Docker* requires Docker version 1.13.0 (Jan 2017 release) or later. We recommend that you install the latest version of Docker on your development system to ensure expected functionality.
- For details see the Intel® System Studio Docker Install.

Yocto Project* Compatible Application and Platform Development

• The table below provides a list of supported hosts on which Wind River Linux LTS or Yocto Project can be installed.

| Wi | ind River* Linux* LTS 17 | Wi | nd River* Linux* LTS 18 | Yocto Project 2.6 |
|----|--|----|--------------------------------------|---|
| 0 | Red Hat Enterprise Linux* Workstation 7.2 | 0 | SUSE Linux Enterprise Desktop* 15 | See <u>Supported Linux</u> <u>Distributions for</u> |
| 0 | Red Hat Enterprise Linux* Workstation 7.3 | 0 | Fedora 27 Fedora 28 | <u>Yocto</u> |
| 0 | CentOS 7.2 | 0 | CentOS 7.5 | |
| 0 | Fedora 25 | 0 | Red Hat Enterprise | |
| 0 | Fedora 26 | | Linux* 7.5 | |
| 0 | openSUSE Leap* 42.3 | 0 | OpenSUSE* 42.3 | |
| 0 | Novell SUSE Linux* | 0 | OpenSUSE* Leap 15 | |
| | Enterprise Desktop 12 SP3 | 0 | Ubuntu 16.04 Ubuntu 18.04 | |
| 0 | Ubuntu* Desktop 16.04 LTS | | | |

 Note: Ubuntu Desktop 18.04 LTS is not supported by Wind River Linux LTS 17 at this time, as it was released after Wind River Linux LTS 17. Please contact Wind River Support to see if this host will be supported prior to Wind River Linux LTS 18 via an RCPL update.

Intel® VTune™ Profiler

- Linux* target
 - Linux* Kernel version has to be 2.6.32 or higher for Intel® VTune™ Profiler power and performance analysis.

o Kernel Configuration

Intel® System Debugger

- Linux* host
 - o Install fxload package for all types of target communication
 - Ubuntu*: sudo apt-get install fxload
 - Fedora*: sudo yum install fxload
 - Install libcanberra-gtk-module for run-time execution of Intel® System
 Debugger Target Indicator
 - Ubuntu*: sudo apt-get install libcanberra-gtk-module
 - Fedora*: sudo yum install libcanberra-gtk2
- Windows* host -
 - Microsoft .NET Framework 4 (dotNetFx40_Full_x86_x64.exe) Microsoft .NET
 Framework 3.5 SP1 runtime (pre-installed by default on Microsoft* Windows* 7)
 - Download Microsoft .NET Framework 4 web installer from Microsoft.com.
 - Run dotNetFx40_Full_x86_x64.exe

7 Development environments supported

Eclipse* IDE

An Intel flavor of the Eclipse* IDE is available for Intel® System Studio 2020 Initial Version. Check out the What's new tab of Intel System Studio 2020 Initial version for more details

Microsoft Visual Studio* integration

To use the Microsoft Visual Studio development environment or command-line tools to build IA-32 or Intel® 64 architecture applications, one of:

- Microsoft Visual Studio* 2019 Professional Edition (or higher edition) with 'Desktop development with C++' component installed
- Microsoft Visual Studio* 2017 Professional Edition (or higher edition) with 'Desktop development with C++' component installed

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