

Intel® System Studio 2020 Initial Release

System Requirements

27th January 2020

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1 Introduction

This document provides the information on the **system requirements** for the **Intel® System Studio 2020 Initial Release** 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 [system requirements](#) 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* 19.04 LTS
- Ubuntu* 18.04 LTS
- Ubuntu* 16.04 LTS
- Fedora* 30
- Fedora* 29
- Fedora* 28
- Red Hat* Enterprise Linux* 8
- Red Hat* Enterprise Linux* 7
- Red Hat* Enterprise Linux* 6
- Wind River* Linux* LTS 18
- Wind River* Linux* LTS 17

- SUSE* Linux* Enterprise Server 15 (Intel® Inspector and Intel® Advisor)
- CentOS* 8, 7.6
- SUSE* Linux* Enterprise Server 12

Windows* Host:

- Microsoft Windows* 7, 10

macOS* Host:

- macOS* 10.14, 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 17
- Yocto Project* 2.5 based environment
- Yocto Project* 2.6 and above
- Ubuntu* 16.04, 18.04 LTS
- Wind River* VxWorks* 7 based environment
- Wind River* Linux* 9 based environment
- Red Hat Enterprise* Linux* 7.x and 8.x (Intel® VTune™ Amplifier only)
- CentOS* 8, 7.6
- Wind River* Titanium Server
- OpenWrt* Project
- Clear Linux* OS

Windows target:

- Microsoft Windows* 7, 10 (PC & Embedded)

Android target:

- Android* P, O, N

Other target Operating Systems:

- QNX* Neutrino* RTOS

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 Initial release might also require installation of webkitgtk for using Eclipse*:

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

Intel® C/C++ Compiler

- Linux* target -
 - 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.

Wind River* Linux* LTS 17	Wind River* Linux* LTS 18	Yocto Project 2.6
<ul style="list-style-type: none">○ Red Hat Enterprise Linux* Workstation 7.2○ Red Hat Enterprise Linux* Workstation 7.3○ CentOS 7.2○ Fedora 25○ Fedora 26○ openSUSE Leap* 42.3	<ul style="list-style-type: none">○ SUSE Linux Enterprise Desktop* 15○ Fedora 27○ Fedora 28○ CentOS 7.5○ Red Hat Enterprise Linux* 7.5○ OpenSUSE* 42.3	See Supported Linux Distributions for Yocto

<ul style="list-style-type: none"> ○ Novell SUSE Linux* Enterprise Desktop 12 SP3 ○ Ubuntu* Desktop 16.04 LTS 	<ul style="list-style-type: none"> ○ OpenSUSE* Leap 15 ○ Ubuntu 16.04 ○ Ubuntu 18.04 	
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- 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.
 - [Kernel Configuration](#)

Intel® System Debugger

- Linux* host -
 - Install fxload package for all types of target communication
 - Ubuntu*: sudo apt-get install fxload
 - Fedora*: sudo yum install fxload
- 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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