

Intel® System Studio 2018 Update 2

System Requirements

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1 Introduction

This document provides the information on the **system requirements** for the **Intel® System Studio 2018 Update 2** 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 links to evaluation licenses (30-days), 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

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

Linux* Host:

- Red Hat Enterprise* Linux* 7
- Wind River Linux LTS* 17
- Ubuntu* 16.04 LTS
- Wind River* Linux* 9
- Fedora* 26
- CentOS* 7.1
- Red Hat Enterprise* Linux* 6
- SUSE LINUX Enterprise Server* 12
- Ubuntu* 14.04 LTS

Windows* Host:

- Microsoft Windows* 7, 8.x, 10

macOS* Host:

- macOS* 10.12, 10.13

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* 1.7, 2.0, 2.2 based environment
- FreeBSD 10.2, 11.1 (Intel® VTune™ Amplifier only)
- Ubuntu* 16.04, 14.04 LTS(not supported as Docker target)
- Wind River* VxWorks* 7 based environment (Intel® System Debugger only)
- Wind River* Linux* 9 based environment
- CentOS* 7.1
- Red Hat Enterprise* Linux* 6 and 7
- SUSE LINUX Enterprise Server* 11, 12

Windows target:

- Microsoft Windows* 7,8.x,10 (PC & Embedded)

Android target :

- Android* M, N

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
- Development platform based on a 2nd, 3rd, 4th, 5th, 6th, 7th or 8th generation Intel® Core™ processor
- Intel® Xeon® processors based on 2nd, 3rd 4th, 5th or 6th 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(IA-64)
GNU* GDB	1 GB	2 GB	200 MB
Intel® Inspector	2 GB	4 GB	350 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	1.4 GB
Intel® VTune™ Amplifier	2 GB	4 GB	650 MB
Docker* build workflow	4 GB		20GB for Docker images and containers

6 Prerequisites by Component

Intel® System Studio 2018 Update 2 might also require installation of webkitgtk for using Eclipse*:

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

Java* based application workflow

- All hosts for Linux target -
 - Install Java Development Kit (JDK) 8+
 - After the JDK is installed, it must be added to the list of installed JREs in Intel System Studio Preferences > Java > Installed JREs. The easiest way to do this is to open the preference page, click "Search" and browse to the root of the JDK install directory.

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](#).

Wind River* Linux* Application Development

- Linux* host -
 - The Wind River Linux Application Development feature is only available on a Linux Host.

Intel® VTune™ Amplifier

- Linux* target
 - Linux* Kernel version has to be 2.6.32 or higher for Intel® VTune™ Amplifier 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 2018. Check out the [What's new](#) page 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 2017* Professional Edition (or higher edition) with 'Desktop development with C++' component installed
- Microsoft Visual Studio 2015* Professional Edition (or higher edition) with 'Common Tools for Visual C++ 2015' component installed
- Microsoft Visual Studio Community 2015* with 'Common Tools for Visual C++ 2015' component installed
- Microsoft Visual Studio 2013* Professional Edition (or higher edition) with C++ component installed
- Microsoft Visual Studio Community 2013* with C++ component installed

To use command-line tools only to build IA-32 architecture applications, one of:

- Microsoft Visual C++ Express 2015 for Windows Desktop*
- Microsoft Visual C++ Express 2013 for Windows Desktop*

To use command-line tools only to build Intel® 64 architecture applications, one of:

- Microsoft Visual C++ Express 2015 for Windows Desktop*
- Microsoft Visual C++ Express 2013 for Windows Desktop*

8 Component System Requirements

Component	System Requirement
GNU* GDB	Windows host Linux host
Intel® C/C++ Compiler	Windows host Linux host Windows target
Intel® Data Analytics Acceleration Library (Intel® DAAL)	All hosts
Intel® Integrated Performance Primitives (Intel® IPP)	All hosts
Intel® Math Kernel Library (Intel® MKL)	All hosts
Intel® Threading Building Blocks (Intel® TBB)	All hosts
Intel® Inspector	All hosts
Intel® SoC Watch (Energy Analysis)	Windows target Linux target Android target
Intel® VTune™ Amplifier & Performance Snapshots	All hosts(hardware requirements) All hosts(software requirements)
Intel® Debug Extensions for WinDbg*	All hosts
Intel® System Debugger (System Debug)	Windows host Linux host
Intel® System Debugger (System Trace)	Windows host Linux host
MRAA IO Communication Layer	MRAA
UPM Sensor and Actuator Library	UPM

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