Contents

1 Introduction........................................................................................................................................... 2
2 Supported Host Operating Systems ................................................................................................. 2
3 Supported Target Operating Systems ............................................................................................... 3
4 Supported Target Hardware Platforms ............................................................................................. 3
5 Space Requirement by Component .................................................................................................... 4
6 Prerequisites by Component .............................................................................................................. 4
   Intel® System Studio 2018 Update 2 .................................................................................................... 4
   Java* based application workflow ...................................................................................................... 4
   Intel® C/C++ Compiler ........................................................................................................................ 4
   Docker* based application workflow .................................................................................................. 5
   Wind River* Linux* Application Development ................................................................................. 5
   Intel® VTune™ Amplifier .................................................................................................................... 5
   Intel® System Debugger ...................................................................................................................... 5
   Eclipse* IDE .................................................................................................................................... 6
   Microsoft Visual Studio* integration .................................................................................................. 6
7 Component System Requirements ...................................................................................................... 7
8 Disclaimer and Legal Information ....................................................................................................... 7
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, Z3xx, 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

<table>
<thead>
<tr>
<th>Component</th>
<th>Minimum RAM</th>
<th>Recommended RAM</th>
<th>Disk Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® C/C++ Compiler</td>
<td>Host 1 GB</td>
<td>Host 2 GB</td>
<td>Host 4 GB for all features Target – 13 MB(IA-32)/15 MB(IA-64)</td>
</tr>
<tr>
<td>GNU* GDB</td>
<td>1 GB</td>
<td>2 GB</td>
<td>200 MB</td>
</tr>
<tr>
<td>Intel® Inspector</td>
<td>2 GB</td>
<td>4 GB</td>
<td>350 MB</td>
</tr>
<tr>
<td>Intel® Integrated Performance Primitives (Intel® IPP)</td>
<td>1 GB</td>
<td>4 GB</td>
<td>2-4 GB</td>
</tr>
<tr>
<td>Intel® Math Kernel Library (Intel® MKL)</td>
<td>1GB</td>
<td>4 GB</td>
<td>2.3 GB</td>
</tr>
<tr>
<td>Intel® System Debugger</td>
<td>1 GB</td>
<td>2 GB</td>
<td>1.4 GB</td>
</tr>
<tr>
<td>Intel® VTune™ Amplifier</td>
<td>2 GB</td>
<td>4 GB</td>
<td>650 MB</td>
</tr>
<tr>
<td>Docker* build workflow</td>
<td>4 GB</td>
<td></td>
<td>20GB for Docker images and containers</td>
</tr>
</tbody>
</table>

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

Intel® VTune™ Amplifier
• Linux® target
  o Linux® Kernel version has to be 2.6.32 or higher for Intel® VTune™ Amplifier 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
  o Windows® host -
    o Microsoft .NET Framework 4 (dotNetFx40_Full_x86_x64.exe) Microsoft .NET Framework 3.5 SP1 runtime (pre-installed by default on Microsoft® Windows® 7)
      ▪ 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 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

<table>
<thead>
<tr>
<th>Component</th>
<th>System Requirement</th>
</tr>
</thead>
</table>
| 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  |

## 9 Disclaimer and Legal Information

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