

Intel® Parallel Studio XE 2015 Professional Edition for Linux* Installation Guide and Release Notes

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1 Introduction

This document describes system requirements and how to install Intel® Parallel Studio XE 2015 Professional Edition for Linux*. Additional release notes for each component, with details of changes and additional technical information, can be found after installation, in the respective components' `Documentation` folder.

The default top-level installation folder is `/opt/intel`

First-time users should view the Getting Started page that is displayed at the end of product installation.

1.1 What's New

This section highlights important changes from the previous product version and changes in product updates. For information on what is new in each component, please read the individual component release notes.

Update 2 – February 2015

- Component products updated to current versions
- Support for Fedora* 21 added.

Update 1 – November 2014

- Component products updated to current versions

1.1.1 Changes since Intel® Parallel Studio XE 2013 SP1.

- Components updated to current versions
- Red Hat Enterprise Linux* 7 now supported
- Support for Ubuntu* 14.04 LTS, Fedora* 20 added.
- Support for the following Linux distributions has been dropped:
 - Fedora 18, 19*
 - Ubuntu 13.04*
 - SuSe Linux Enterprise Server 10*
- Support for Static Analysis is deprecated and will be removed in a future release. If you have concerns or feedback, [please comment](#).

1.2 Product Contents

Intel® Parallel Studio XE 2015 Professional Edition for Linux Update 2* includes the following components:

- Intel® Parallel Studio XE 2015 Composer Edition Update 2 - includes Intel® Fortran Compiler, Intel® C++ Compiler, Intel® Integrated Performance Primitives (Intel® IPP), Intel® Threading Building Blocks (Intel® TBB), Intel® Math Kernel Library (Intel® MKL), GNU* Project Debugger (GDB*) 7.8 IA-32/Intel® 64 debugger and GNU* Project Debugger (GDB*) 7.7 Intel® Xeon Phi™ coprocessor debugger
- Intel® Advisor XE 2015 Update 1
- Intel® Inspector XE 2015 Update 1
- Intel® VTune™ Amplifier XE 2015 Update 2

1.3 System Requirements

For an explanation of architecture names, see [Intel® Architecture Platform Terminology](#)

- A PC based on an IA-32 or Intel® 64 architecture processor supporting the Intel® Streaming SIMD Extensions 2 (Intel® SSE2) instructions (Intel® Pentium® 4 processor or later, or compatible non-Intel processor)
 - Development of 64-bit applications, and those that offload work to an Intel® Many Integrated Core architecture (Intel® MIC architecture) coprocessor, is supported on a 64-bit version of the OS only. Development of 32-bit applications is supported on either 32-bit or 64-bit versions of the OS.

- Development for a 32-bit 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.
- For the best experience, a multi-core or multi-processor system is recommended
- 2GB of RAM (4GB recommended)
- 8GB free disk space for all features
- For Intel® Xeon Phi™ coprocessor development/testing:
 - Intel® Manycore Platform Software Stack (Intel® MPSS)
- For development of IA-32 or Intel® 64 architecture applications, one of the following Linux distributions (this is the list of distributions tested by Intel; other distributions may or may not work and are not recommended - please refer to [Technical Support](#) if you have questions):
 - Debian* 6.0, 7.0
 - Fedora* 20, 21
 - Red Hat Enterprise Linux* 5, 6, 7
 - SUSE LINUX Enterprise Server* 11
 - Ubuntu* 12.04 LTS (64-bit only), 13.10 [\[1\]](#), 14.04 LTS
 - Individual components may support additional Linux distributions – please see the component release notes for more information
- Linux Developer tools component installed, including gcc, g++ and related tools. (this is the list of component versions tested by Intel; other versions may or may not work and are not recommended - please refer to [Technical Support](#) if you have questions)
 - gcc 4.1-4.8
 - binutils 2.17-2.24
- Library `libunwind.so` is required in order to use the `-traceback` option. Some Linux distributions may require that it be obtained and installed separately.

Notes

1. Ubuntu 13.10 is supported by Intel® C++ and Fortran Compilers, Intel® MKL, Intel® TBB, and Intel® IPP components only.
2. The Intel® compilers are tested with a number of different Linux distributions, with different versions of gcc. Some Linux distributions may contain header files different from those we have tested, which may cause problems. The version of glibc you use must be consistent with the version of gcc in use. For best results, use only the gcc versions as supplied with distributions listed above.
3. The default for the Intel® compilers is to build IA-32 architecture applications that require a processor supporting the Intel® SSE2 instructions - for example, the Intel® Pentium® 4 processor. A compiler option is available to generate code that will run on any IA-32 architecture processor. However, if your application uses Intel® Integrated Performance Primitives or Intel® Threading Building Blocks, executing the application will require a processor supporting the Intel® SSE2 instructions.

4. Compiling very large source files (several thousands of lines) using advanced optimizations such as -O3, -ipo and -openmp, may require substantially larger amounts of RAM.
5. Some optimization options have restrictions regarding the processor type on which the application is run. Please see the documentation of these options for more information.
6. OpenMP* applications to be analyzed by Intel® Inspector XE or Intel® VTune™ Amplifier XE must be linked with the “compatibility” OpenMP library as supplied by an Intel® compiler.
7. Deprecated features may be removed in future versions.

1.4 Documentation

Product documentation for each component of Intel® Parallel Studio XE 2015 Professional Edition for Linux* can be found in the component’s folder.

1.5 Technical Support

If you did not register your product during installation, please do so at the [Intel® Software Development Products Registration Center](#). Registration entitles you to free technical support, product updates and upgrades for the duration of the support term.

For information about how to find Technical Support, Product Updates, User Forums, FAQs, tips and tricks, and other support information, please visit <http://www.intel.com/software/products/support>

Note: If your distributor provides technical support for this product, please contact them for support rather than Intel.

2 Installation

The installation of the product requires a valid license file or serial number.

After downloading the product, first unpack the downloaded file into a writeable directory of your choice using the command:

```
tar -xzvf name-of-downloaded-file
```

Then change the directory (`cd`) to the directory containing the unpacked files and begin the installation using the commands:

```
./install.sh  
./install_GUI.sh
```

Follow the prompts to complete installation.

You do not need to uninstall previous versions before installing a newer version – the new version will coexist with the older versions. However, it should be noted that when installing

updates to a major release Intel Parallel Studio XE common files as well as the product components Intel Advisor XE, Intel Inspector XE, and Intel VTune Amplifier XE belonging to that major release will be updated.

2.1 Online Installer

The default electronic installation package now consists of a smaller installation package that dynamically downloads and then installs packages selected to be installed. This requires a working internet connection and potentially a proxy setting if you are behind an internet proxy. Full packages are provided alongside where you download this online install package if a working internet connection is not available.

2.2 Using a License Server

If you have purchased a “floating” license, see Licensing: [Setting Up the Client for a Floating License](#). This article also provides a source for the Intel® License Manager for FLEXlm* product that can be installed on any of a wide variety of systems.

3 Disclaimers, Notices and Legal Information

Optimization Notice

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