# Intel® Parallel Studio XE 2020

## Installation Guide for macOS*

30 March 2020

## Contents

# 1 Introduction

This document explains how to install Intel® Parallel Studio XE on a macOS* system. You can install the product using the graphical user interface (GUI). Depending on the license you have, the installer performs the installation of one of the following product editions:

- Intel® Parallel Studio XE Composer Edition for C++
- Intel® Parallel Studio XE Composer Edition for Fortran

For differences in contents of each edition, see the Release Notes.

You have two ways to install Intel® Parallel Studio XE on macOS*:

- **Offline Installer** — a package that contains all the components of the product;
- **Online Installer** — a small installation file that downloads and installs only specified components of the product. The installer downloads the components prior to the installation, so you can install the product in the offline mode and/or on another machine.

The Intel® Parallel Studio XE installer automatically makes the appropriate selection of binaries, scripts, and text files from its installation archive based on the Intel® architecture of the host system where the installation process is initiated. You do not have to worry about selecting the correct software component names for the given Intel® architecture.

# 2 Licensing Information

Starting with the 2016 release, the named-user license provisions in the Intel® Software Development Products EULA (available as `EULA.txt` at `<install_dir>/documentation_2020/en/ps2020`) changed to allow the software to be installed on up to three systems, tracked by the system host ID. To install the product on another system after you have reached this limit, you will need to release an old system host ID from the registration system.

As an additional consequence to this change as well as some changes to the license design, you will need an updated license to use Intel Parallel Studio XE. Additional information is provided here. If you have further questions or concerns, please contact Technical Support.

If you have any questions on licensing, visit the Licensing FAQ page.

# 3 Prerequisites

Before you start the installation, you are recommended to complete the following prerequisite steps:

1. Go to Intel® Software Development Products Registration Center and register the product by providing your e-mail and serial number. You can find the serial number (for example, C11112345678) within the e-mail receipt of your product purchase. Once the admission has been granted into the registration center, you will be able to manage your licenses and access the Intel® Premier Support web page for software support.

2. As one of the product activation methods, you can choose activation with a license file. To obtain a license file from the Intel® Software Development Products Registration Center, you need to provide the host name and host ID information for the host computer that you install the associated license file on. For instructions on how to do this, see the related articles for [named-user](#) and [node-locked and floating](#) licenses.

3. You will be asked to select installation mode. The option Install as Administrator is recommended. Click **Next** and enter the password. The install wizard will proceed automatically.

4. On the system where the Intel® Parallel Studio XE components are to be installed, mount a disk image with the installer. You can do it by double-clicking on it or using the command:

   `hdiutil attach <path_to_dmg>`

   The disk image mounts under /Volumes folder.

   The Intel® Parallel Studio XE installation package has the following naming conventions:

   `m_[c|f]compxe[_online]_2020[_beta][_update<#>].dmg`

After completing all prerequisite steps, you are ready to install Intel® Parallel Studio XE.

# 4 Installation

## 4.1 Using the Online Installer

The Online Installer is a small installation package that downloads and installs only those components of the product that you select during the installation. This process requires an active internet connection. If you are behind a proxy, make sure to set the appropriate proxy settings.

To start the installation, mount the appropriate online installer disk image and run the installation file. It is named the same way as the DMG file, as described at the end of the previous section.

Follow the installation wizard instructions to install the product.

When using the Online Installer, you can also download an installation package with only selected components and install the product offline or on another machine.

Complete the following steps to do this:

1. Run the `m_[c|f]compxe[_online]_2020.x.xxx`.app

2. Select the second radio button and specify the location where the installation content will be downloaded.

   Follow the installation wizard instructions, selecting the components to download.

   Once you have completed these steps, the installer downloads the customized installation package to the download location.

3. Go to the download location and run the installer file to start the installation. Installation through the graphical user interface and silent installation are described in detail further in the document.

3

You can also use this package to install the product on another machine. If you are activating the product with a license file, no internet connection is required.

## 4.2 Using the GUI Installer

To install the product using the GUI, complete the steps described below:

1. Run the `m_[c|f]compxe[_online]_2020.x.xxx.app` file located at the top level of your mounted disk folder. The left-side panel of the installation window provides a progress report showing the current stage of the installation process.
2. Read and accept the terms of the End User License Agreement (EULA) by selecting the corresponding radio button. Click **Save** to save the text of the license agreement to your system. Click **Next** to continue.
3. Choose whether you want to participate in the [Intel® Software Improvement Program](#). If you opt in, Intel may automatically receive anonymous information about how you use your current and future Intel® Software Development Products. You can stop participating at any time by removing the `~/intel/isip` file.
4. Review the **Prerequisites** dialog box to see whether your system is properly configured for the Intel Parallel Studio XE installation. You can proceed with the installation if you are missing optional prerequisites. However, if you are missing any critical prerequisites, you need to fix the issue before you can continue. When you are done, click **Next**.
5. Choose one of the activation options by selecting the corresponding radio button:

     - **Use existing license.** Choose this option if you have a valid license file.

     - **Use serial number to activate and install product.** Choose this option if you have a serial number. This option requires an internet connection.

     - **Choose alternative activation.** Choose this option if you want to do one of the following:

         o Activate offline (using a license file)

         o Use a license manager

    When done, click **Next** to continue.

6. The Intel Parallel Studio XE product package contains components for integration into Xcode*. You can select the integration to Xcode on the Optional IDE Integration dialog box by choosing the **Both command line and Xcode integration environment** option and specifying the actual path to the Xcode location. After making your selection, click **Next** to continue.
7. Review the **Installation Summary** to see whether the selected installation options meet your needs. To change the selection, click **Customize installation** and change the following options:

     - Choose an alternative installation directory.

     - Select the components to install.

     - Configure advanced options of the product components.

    To proceed with the installation, click **Install**.

8. Click **Next** to start the installation. When all the selected components are installed, the **Complete** window displays.

## 4.3 Silent Installation

You can install Intel Parallel Studio XE using the silent installation mode that does not require human interaction. You can find detailed instructions in the article available with the link below:
https://software.intel.com/file/820685/downloadMoG8R0QF

## 5 Installation Folders

Following a successful installation, the files associated with Intel Parallel Studio XE appear on your host system. The table below indicates the default installation folder structure.

The default installation folder is: `/opt/intel`

| Folder | Description |
|---|---|
| `bin` | Subdirectory containing symbolic links to compilers and libraries binary files |
| `compilers_and_libraries` | Symbolic link to the latest version of the compilers and libraries products |
| `compilers_and_libraries _2020` | Subdirectory containing symbolic links to Intel Parallel Studio XE 2020 compilers and libraries products |
| `compilers_and_libraries _2020.x.xxx` | Subdirectory for each update of the Intel Parallel Studio XE 2020 compilers and libraries products |
| `conda_channel` | Subdirectory containing installed Conda* packages for compilers and libraries products |
| `daal` | Symbolic link to the Intel® Data Analytics Acceleration Library subdirectory |
| `debugger_2020` | Subdirectory containing thedebugger |
| `documentation_2020` | Subdirectory for documentation |
| `include` | Symbolic link to the compilers and libraries include subdirectory |
| `ipp` | Symbolic link to the Intel® Integrated Performance Primitives subdirectory |
| `lib` | Symbolic link to the compilers and libraries subdirectory |

| | |
|---|---|
| `man` | Symbolic link to the manuals subdirectory |
| `mkl` | Symbolic link to the Intel® Math Kernel Library subdirectory |
| `parallel_studio_xe_2020` | Symbolic link to the latest version of the Intel® Parallel Studio XE 2020 |
| `parallel_studio_xe_2020 .x.xxx`<br><br>• `licensing`<br>• `<component links>` | Subdirectory for Intel® Parallel Studio XE 2020 with the uninstall scripts and symbolic links to the installed components<br><br>Location of the licensing files |
| `pstl` | Subdirectory for Parallel STL |
| `tbb` | Symbolic link to the Intel® Threading Building Blocks subdirectory |

## 6 After Installation

After the installation is complete, you will see the Getting Started page, with information about the components installed and instructions on how to get started with the product.

The document is located at:

`<install_dir>/documentation_2020/en/ps2020/getstart_*.htm`

## 7 Uninstalling the Product

To uninstall the product, use the `uninstall.app` located at:

`<install_dir>/parallel_studio_xe_2020.x.xxx`
After invoking this application, follow the prompts for the uninstall process.

# 8 Notices and Disclaimers

No license (express or implied, by estoppel or otherwise) to any intellectual property rights is granted by this document. Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration. No product or component can be absolutely secure. Check with your system manufacturer or retailer or learn more at www.intel.com.

Intel disclaims all express and implied warranties, including without limitation, the implied warranties of merchantability, fitness for a particular purpose, and non-infringement, as well as any warranty arising from course of performance, course of dealing, or usage in trade.

This document contains information on products, services and/or processes in development. All information provided here is subject to change without notice. Contact your Intel representative to obtain the latest forecast, schedule, specifications and roadmaps.

The products and services described may contain defects or errors known as errata which may cause deviations from published specifications. Current characterized errata are available on request.

Intel, VTune, and the Intel logo are trademarks of Intel Corporation in the U.S. and/or other countries.

* Other names and brands may be claimed as the property of others.

® Intel Corporation.

This software and the related documents are Intel copyrighted materials, and your use of them is governed by the express license under which they were provided to you (**License**). Unless the License provides otherwise, you may not use, modify, copy, publish, distribute, disclose or transmit this software or the related documents without Intel's prior written permission.

This software and the related documents are provided as is, with no express or implied warranties, other than those that are expressly stated in the License.