



Getting Started with the Intel(R) C++ Compiler Professional Edition 11.1 for Mac OS* X

This guide will show you how to use the Intel® C++ Compiler in the Xcode* development environment and from the command line, use Intel® Performance Libraries, and where to find additional user and reference documentation.

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1 Overview

The Intel(R) C++ Compiler 11.1 compiles C and C++ source files on Mac OS* X operating systems. The compiler is supported on IA-32 and Intel(R) 64 architectures.

You can use the Intel C++ Compiler in the Xcode* integrated development environment or from the command line.

2 Using the Compiler in Xcode*

You must first create or choose an existing C or C++ Xcode* project. These instructions assume you are creating a new project.



1. Launch Xcode in the **Developer > Applications** folder.
2. Choose **New Project** from the File menu.
When the **New Project Assistant** window appears, select a project under **Command Line Utility**, for example, Standard Tool. Click **Next**, then name your project (hello_world, for example) and specify an alternate directory if necessary.
3. From within the project, highlight the target you want to change in the **Groups & Files** list under the **Target** group.
4. Choose **Get Info** from the File menu or click the **Info** button in the toolbar.
5. Click **Rules** in the **Target Info** window.
6. Click the + button at the bottom, left-hand corner of the **Target Info** window.
7. From the **Process** pull-down menu choose C source files.
8. From the **using** pull-down menu, select **Intel® C++ Compiler**.

See the **Building Applications with Xcode*** section in the compiler documentation for more information about using the compiler with the Xcode integrated development environment.

3 Starting the Compiler from the Command Line

Start using the compiler by performing the following steps:

1. Open a command prompt.
2. Set the environment variables for the compiler.
3. Invoke the compiler.

One way to set the environment variables prior to invoking the compiler is to "source" the compiler environment script, `iccvars.sh` (or `iccvars.csh`):

```
source <install-dir>/bin/iccvars.sh <arg>
```

where `<install-dir>` is the directory structure containing the compiler `/bin` directory, and `<arg>` is the architecture argument listed below.

The environment script takes an argument based on architecture; valid arguments are as follows:

- `ia32`: Compilers and libraries for IA-32 architectures only.
- `intel64`: Compilers and libraries for Intel(R) 64 architectures only.



To compile a C++ language source file (for example, `my_source_file.cpp`), use the following command:

```
icpc my_source_file.cpp
```

Following successful compilation, an executable named `a.out` is created in the current directory.

4 Using Intel® Performance Libraries

The Intel(R) C++ Compiler includes the following performance libraries. Refer to the appropriate sections of the documentation listed for information about using these libraries.

Performance Libraries	See the...
Intel(R) Threading Building Blocks	<i>Intel(R) Threading Building Blocks Getting Started Guide</i> included with the Intel(R) Threading Building Blocks documentation.
Intel(R) Integrated Performance Primitives	<i>Installation Guide</i> included with the Intel(R) Integrated Performance Primitives documentation.
Intel(R) Math Kernel Library	<i>Intel(R) Math Kernel Library User's Guide</i> included with the Intel(R) Math Kernel Library documentation.

5 User and Reference Documentation

This guide focuses on basic Intel® C++ Compiler Professional features. To explore more features, check the following resources.

Locate the Documentation

The documentation is located in the sub-directories under the `/opt/intel/Compiler/11.1/xxx/Documentation/en_US/` directory.

If you installed all of the appropriate components, you can find documentation on the following:

- Intel(R) C++ Compiler.
- Intel(R) Threading Building Blocks.



- Intel(R) Integrated Performance Primitives.
- Intel(R) Math Kernel Library.
- Intel(R) Debugger.
- Release Notes.

NOTE: The Release Notes contain information about installing the Intel® C++ Compiler.

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