



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

This guide shows you how to start the Compiler from the command line and IDE, how to use Intel® Performance Libraries, and where to find additional user and reference information.

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1 Overview

The Intel® C++ Compiler 11.1 compiles C and C++ source files on Linux* operating systems. The compiler is supported on IA-32, Intel® 64, and IA-64 architectures.

You can run the Intel C++ Compiler from the command line or within the Eclipse* integrated development environment (see the Release Notes for information on installing and configuring Eclipse).

The Intel® C++ Compiler Professional Edition 11.1 for Linux* OS includes the following components:

- Intel® C++ Compiler.
- Intel® Threading Building Blocks.
- Intel® Integrated Performance Primitives.



- Intel® Math Kernel Library.
- Intel® Debugger.

NOTE: You can use Intel® Debugger from within the Eclipse* IDE on IA-32 and Intel® 64 architectures only.

2 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>
```

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® 64 architectures only.
- `ia64`: Compilers and libraries for IA-64 architectures only.

To compile C++ source files, use this command:

```
icpc my_source_file.cpp
```

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

3 Starting the Compiler from the IDE

You must install Eclipse* on your system, and configure Eclipse to use the Intel(R) C++ Compiler.



See the **Building Applications** section in the compiler documentation for current information about compiling applications with Eclipse*. The *Building Applications with Eclipse** section provides detailed information about configuring and using Eclipse with the Intel(R) C++ Compiler.

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 subdirectories under the `/opt/intel/Compiler/11.1/xxx/Documentation/en_US/` directory where `xxx` is the three digit update. 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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- Links to each product, where you will find technical information such as white papers and articles.
- Links to user forums.
- Links to news and events.

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