

# Getting Started with the Intel(R) Fortran 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® Math Kernel Library, and where to find additional user and reference documentation.

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#### 1 Overview

The Intel® Fortran Compiler 11.1 compiles Fortran source files on Mac OS\* X operating systems. The compiler is supported on IA-32 and Intel® 64 architectures.

You can use the Intel Fortran 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 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.
- 4. Double-click the target you want to change in the **Target** group under the **Groups & Files** list.
- 5. Click **Rules** in the **Target Info** window.
- 6. Click the + button at the bottom, left-hand corner of the **Target Info** window, to add a new rule.
- 7. From the new **Rule** section, choose FORTRAN source files using **Intel(R) Fortran 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, ifortvars.sh (or ifortvars.csh):

#### source <install-dir>/bin/ifortvars.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 Fortran source file (for example, my\_source\_file.f90), use the following command:

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ifort my\_source\_file.f90

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

## 4 Using Intel® Performance Libraries

The Intel(R) Fortran 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) Math Kernel Library	Intel(R) Math Kernel Library User's Guide included with the Intel(R) Math Kernel Library documentation.

### 5 User and Reference Documentation

This guide focuses on basic Intel® Fortran 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.

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

- Intel® Fortran Compiler.
- Intel® Math Kernel Library.
- Intel® Debugger.
- · Release Notes.

**NOTE:** The Release Notes contain information about installing the Intel® Fortran Compiler.

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