# cmake-generators(7)

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## Introduction

A *CMake Generator* is responsible for writing the input files for a native build system. Exactly one of the CMake Generators must be selected for a build tree to determine what native build system is to be used. Optionally one of the Extra Generators may be selected as a variant of some of the Command-Line Build Tool Generators to produce project files for an auxiliary IDE.

CMake Generators are platform-specific so each may be available only on certain platforms. The <code>cmake(1)</code> command-line tool <code>--help</code> output lists available generators on the current platform. Use its <code>-G</code> option to specify the generator for a new build tree. The <code>cmake-gui(1)</code> offers interactive selection of a generator when creating a new build tree.

## **CMake Generators**

## Command-Line Build Tool Generators

These generators support command-line build tools. In order to use them, one must launch CMake from a command-line prompt whose environment is already configured for the chosen compiler and build tool.

#### Makefile Generators

- Borland Makefiles
- MSYS Makefiles
- MinGW Makefiles
- NMake Makefiles
- NMake Makefiles JOM
- Unix Makefiles
- Watcom WMake

#### Ninja Generator

Ninja

## **IDE Build Tool Generators**

These generators support Integrated Development Environment (IDE) project files. Since the IDEs configure their own environment one may launch CMake from any environment.

#### Visual Studio Generators

- Visual Studio 6
- Visual Studio 7
- Visual Studio 7 .NET 2003
- Visual Studio 8 2005
- Visual Studio 9 2008
- Visual Studio 10 2010
- Visual Studio 11 2012
- Visual Studio 12 2013
- Visual Studio 14 2015

#### Other Generators

- Green Hills MULTI
- Xcode

## Extra Generators

Some of the CMake Generators listed in the <code>cmake(1)</code> command-line tool --help output may have variants that specify an extra generator for an auxiliary IDE tool. Such generator names have the form <code><extra-generator> - <main-generator></code>. The following extra generators are known to CMake.

- CodeBlocks
- CodeLite
- Eclipse CDT4
- KDevelop3
- Kate
- Sublime Text 2