

NAME

llvm-config - Print LLVM compilation options

SYNOPSIS

llvm-config *option* [*components...*]

DESCRIPTION

llvm-config makes it easier to build applications that use LLVM. It can print the compiler flags, linker flags and object libraries needed to link against LLVM.

EXAMPLES

To link against the JIT:

```
g++ 'llvm-config --cxxflags' -o HowToUseJIT.o -c HowToUseJIT.cpp
g++ 'llvm-config --ldflags' -o HowToUseJIT HowToUseJIT.o \
    'llvm-config --libs engine bcreader scalaropts'
```

OPTIONS**--assertion-mode**

Print the assertion mode used when LLVM was built (ON or OFF).

--bindir

Print the installation directory for LLVM binaries.

--build-mode

Print the build mode used when LLVM was built (e.g. Debug or Release).

--build-system

Print the build system used to build LLVM (e.g. *cmake* or *gn*).

--cflags

Print the C compiler flags needed to use LLVM headers.

--cmakedir

Print the installation directory for LLVM CMake modules.

--components

Print all valid component names.

--cppflags

Print the C preprocessor flags needed to use LLVM headers.

--cxxflags

Print the C++ compiler flags needed to use LLVM headers.

--has-rtti

Print whether or not LLVM was built with rtti (YES or NO).

--help

Print a summary of **llvm-config** arguments.

--host-target

Print the target triple used to configure LLVM.

--ignore-libllvm

Ignore libLLVM and link component libraries instead.

--includedir

Print the installation directory for LLVM headers.

--ldflags

Print the flags needed to link against LLVM libraries.

--libdir

Print the installation directory for LLVM libraries.

--libfiles

Similar to **--libs**, but print the full path to each library file. This is useful when creating makefile dependencies, to ensure that a tool is relinked if any library it uses changes.

--libnames

Similar to **--libs**, but prints the bare filenames of the libraries without **-l** or pathnames. Useful for linking against a not-yet-installed copy of LLVM.

--libs

Print all the libraries needed to link against the specified LLVM *components*, including any dependencies.

--link-shared

Link the components as shared libraries.

--link-static

Link the component libraries statically.

--obj-root

Print the object root used to build LLVM.

--prefix

Print the installation prefix for LLVM.

--shared-mode

Print how the provided components can be collectively linked (*shared* or *static*).

--src-root

Print the source root from which LLVM was built.

--system-libs

Print all the system libraries needed to link against the specified LLVM *components*, including any dependencies.

--targets-built

Print the component names for all targets supported by this copy of LLVM.

--version

Print the version number of LLVM.

COMPONENTS

To print a list of all available components, run **llvm-config --components**. In most cases, components correspond directly to LLVM libraries. Useful "virtual" components include:

all

Includes all LLVM libraries. The default if no components are specified.

backend

Includes either a native backend or the C backend.

engine

Includes either a native JIT or the bitcode interpreter.

EXIT STATUS

If **llvm-config** succeeds, it will exit with 0. Otherwise, if an error occurs, it will exit with a non-zero

value.

AUTHOR

Maintained by the LLVM Team (<https://llvm.org/>).

COPYRIGHT

2003-2023, LLVM Project