



Mingw-w64 is a collection of header files, import libraries, libraries and tools that, when combined with a compiler toolchain, such as GCC or LLVM, provides a complete development environment for building native Windows applications and libraries.

Mingw-w64 是一个由头文件、导入库、库和工具组成的集合，当它们与编译器工具链（如 GCC 或 LLVM）结合时，能够为构建原生 Windows 应用程序和库提供完整的开发环境。

Mingw-w64 is an advancement of the original mingw.org project, which was created to support the GCC compiler on Windows systems. It was forked in 2007 in order to provide 64-bit support and newer APIs. It has since then gained wide use and distribution.

Mingw-w64 是原始 mingw.org 项目的改进版，原计划旨在支持 Windows 系统的 GCC 编译器。它于2007年分叉，以提供64位支持和更新的API。此后，它获得了广泛的使用和传播。

Headers and Libraries: 头部和库:

- More than a million lines of headers are provided, not counting generated ones, and regularly expanded to track new Windows APIs.

提供超过一百万行头部，不包括生成的，并且定期扩展以跟踪新的 Windows API。

- Everything needed for linking and running your code on Windows.

链接和运行 Windows 代码所需的一切。

- Better-conforming and faster math support compared to VisualStudio's.

相比VisualStudio，它更符合且数学支持更快。

Runtime Libraries: 运行时库:

- Winpthreads, a pthreads library for C++11 threading support and simple integration with existing project.

Winpthreads，一个用于支持C++11线程并与现有项目简单集成的pthreads库。

- Winstorecompat, a work-in-progress convenience library that eases conformance with the Windows Store.

Winstorecompat，一个正在开发中的便利库，有助于与 Windows Store 的兼容性。

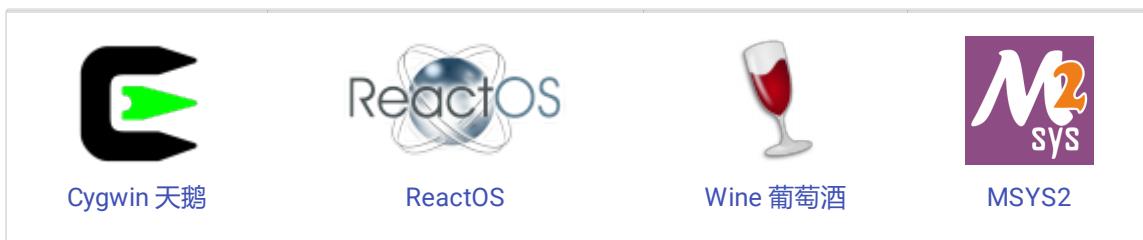
Tools: 工具:

- gendef: generate Visual Studio .def files from .dll files.
gendef: 从.dll文件生成Visual Studio .def文件。
- genidl: generate .idl files from .dll files.
Genidl: 从.dll文件生成 .idl 文件。
- widl: compile .idl files. WIDL: 编译 .idl 文件。

Project Collaborations 项目合作

Mingw-w64 interacts a lot with other projects in order to help everyone move forward.
Contributions have been going to and coming from these projects:

Mingw-w64 与许多项目互动，以帮助大家前进。以下项目的贡献一直流向和流出：



Projects using mingw-w64 使用 mingw-w64 的项目

- Fedora cross-compiler Fedora 交叉编译器
- Npackd
- OpenSUSE
- Win-builds 赢家建设
- Bchart-UDT 巴查特-UDT
- Blender 搅拌机
- Boost 增压
- Botan 牡丹
- Code::Blocks 代码：：方块
- Crown Engine 皇冠发动机
- DAE Tools DAE 工具
- devkitPro
- Disk Based HashTables 基于磁盘的哈希表
- Ecere SDK
- Ekiga 绘画
- Emerge Desktop Emerge桌面
- Enlightenment 启蒙
- Factor 因素
- FFmpeg

- FLTK 《飞船归来》
- Freecell Solver Freecell 求解器
- Freeverb3
- GCC: The GNU Compiler Collection GCC: GNU 编译器集合
- GDB: The GNU Project Debugger GDB: GNU 项目调试器
- GIMP
- GNU Binutils
- GNU SASL
- GnuTLS
- GraphicsMagick 图形魔法
- GTK+
- Hexen II: Hammer of Thryion 女巫II：赛瑞恩之锤
- ImageMagick 图像魔法
- JPen
- Kotlin 科特林
- KDE Software Collection KDE 软件集合
- LibreOffice
- libsndfile
- libvirt 利维尔特
- libvpx
- Libxml2
- MAME (Yes, the arcade emulator!) MAME (没错，就是街机模拟器!)
- ManKai Common Lisp ManKai 通用口齿不清
- mpg123
- MS MPI
- OCaml
- OpenFOAM
- OpenLisp
- OpenSSL
- OpenTURNS 开放回合
- Perl (5.12.0 and later) Perl (5.12.0及更高版本)
- PostgreSQL
- pthreads 螺纹
- PToolsWin 普鲁尔斯赢
- QEMU 奎穆
- Qt
- QuakeSpasm 地震痉挛
- ReMooD 重写
- Smart Image Denoiser 智能图像去噪器
- smartmontools

- Strawberry Perl (bundles C toolchains)

Strawberry Perl (捆绑C工具链)

- strongSwan 强天鹅

- The R Project for Statistical Computing

统计计算R项目

- VideoLAN VLC 视频局域网VLC

- VSXu

- Woo 哇

- wxWidgets wx小部件

- YafaRay 亚法雷

- zlib

Feel free to add your project to this list!

欢迎将你的项目加入这个列表!