

Mac OS X

On OS X PROJ can be installed via the Homebrew package manager:

```
brew install proj
```

PROJ is also available from the MacPorts system:

```
sudo ports install proj
```

Compilation and installation from source code

The classical way of installing PROJ is via the source code distribution. The most recent version is available from the [download page](#).

PROJ requires C and C++11 compilers. It also requires SQLite3 (headers, library and executable).

```
sudo apt-get install build-essential
sudo apt-get install sqlite3 libsqlite3-dev
```

You will need that and at least the standard *proj-datumgrid* package for a successful installation.

<http://download.osgeo.org/proj/>

The following guides show how to compile and install the software using the Autotools and CMake build systems.

Autotools

FSF's configuration procedure is used to ease installation of the PROJ system.

Note

The Autotools build system is only available on UNIX-like systems. Follow the CMake installation guide if you are not using a UNIX-like operating system.

The default destination path prefix for installed files is `/usr/local`. Results from the installation script will be placed into subdirectories `bin`, `include`, `lib`, `man/man1` and `man/man3`. If this default path prefix is proper, then execute:

```
./configure
```

If another path prefix is required, then execute:

```
./configure --prefix=/my/path
```

In either case, the directory of the prefix path must exist and be writable by the installer.

Before proceeding with the installation we need to add the datum grids. Unzip the contents of the *proj-datumgrid* package into `data/`:

```
unzip proj-datumgrid-1.7.zip -d proj-5.0.1/data/  
http://download.osgeo.org/proj/
```

The installation will automatically move the grid files to the correct location. Alternatively the grids can be installed manually in the directory pointed to by the `PROJ_LIB` environment variable. The default location is `/usr/local/share/proj`.

With the grid files in place we can now build and install PROJ:

```
make  
make install
```

The install target will create, if necessary, all required sub-directories.

Tests are run with:

```
make check
```

The test suite requires that the proj-datumgrid package is installed in `PROJ_LIB`.

CMake

With the CMake build system you can compile and install PROJ on more or less any platform. After unpacking the source distribution archive step into the source- tree:

```
cd proj-5.0.1
```

Create a build directory and step into it:

```
mkdir build  
cd build
```