

## NAME

**mbconfig** – provides command line access to the MB-System version and to the locations of the levitus database and the OTPS tidal correction software.

## VERSION

Version 5.0

## SYNOPSIS

```
mbconfig [  
  --verbose --help  
  --prefix --cflags --libs  
  --version --version-id --version-major --version-minor --version-archive  
  --levitus --otps  
]
```

## DESCRIPTION

**MBconfig** provides command line access to the MB-System installation location the compile and libs flags needed to compile and link programs using MB-System libraries, and the locations of the levitus database and the OTPS tidal correction software. When commands such as **--version** are given, the desired output will be written to stdout. Each desired value is printed on a separate line. If **--verbose** is specified, each value is output in two lines, the first consisting of a descriptive identifier and the second the value itself. The options include various forms of the installed **MB-System** version, the location of the Levitus water sound speed model database accessed by the program **mblevitus**, and the location of the installed OTPS tidal prediction software.

## MB-SYSTEM AUTHORSHIP

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## OPTIONS

**--help** This option causes **mbconfig** to print out its usage options and exit.

**--verbose**

By default **mbconfig** outputs the desired values with no description or explanation. When **--verbose** is specified the values are preceded on a separate line by a descriptive identifier.

**--prefix**

This option causes **mbconfig** to output the **MB-System** install location. The locations of the executable programs, the linkable libraries, and the header files are in directories named bin, lib, and include in the install locations. For instance, if the install location is "/usr/local", then executable programs will be in "/usr/local/bin", libraries in "/usr/local/lib", and header files in "/usr/local/include".

**--cflags** This option causes **mbconfig** to output the compiler flags needed to compile C programs or libraries that make use of functions available in **MB-System** linkable libraries. These flags consist of specifying the location of the **MB-System** header files.

- libs** This option causes **mbconfig** to output the linker flags needed to link a C program with **MB-System** libraries. These flags consist of specifying the location of the **MB-System** dynamic libraries and the list of libraries available for linking.
- version**  
This option causes **mbconfig** to output the version string of the installed **MB-System**.
- version-id**  
This option causes **mbconfig** to output an integer version of the installed **MB-System** version. This value is constructed as follows:  

$$\text{version\_id} = 10000000 * \text{version\_major} + 100000 * \text{version\_minor} + \text{version\_archive}$$
so that:  
5.5.2304 => 050502304  
These version id numbers are guaranteed to increase with newer versions.
- version-major**  
This option causes **mbconfig** to output the major version number of the installed **MB-System**. This is the first of three values in an **MB-System** version string, and is incremented only rarely in conjunction with major changes to **MB-System** function and interfaces.
- version-minor**  
This option causes **mbconfig** to output the minor version number of the installed **MB-System**. This is the second of three values in an **MB-System** version string, and is incremented infrequently in conjunction with significant changes to **MB-System** function.
- version-archive**  
This option causes **mbconfig** to output the archive version number of the installed **MB-System**. This is the third of three values in an **MB-System** version string, and corresponds to the revision number in the **MB-System** source code archive. This number is incremented with every commitment of one or more changes to the source code archive. Typically the revision number increments several times between **MB-System** releases.
- levitus**  
This option causes **mbconfig** to output the path to the Levitus water sound speed model database accessed by the program **mblevitus**.
- otps** This option causes **mbconfig** to output the location of the OTPS tidal prediction software accessed by program **mbotps**.

## EXAMPLES

Consider an **MB-System** installation of release 5.5.2304 on an Apple MacBook Pro in /usr/local with the OTPS software installed under /usr/local/src/OTPS2. In this case, use of **mbconfig** with various arguments has the following results:

```
% mbconfig --prefix
/usr/local/mbsystem

% mbconfig --cflags
-I/usr/local/include

% mbconfig --libs
-L/usr/local/libs -lmbaux.la -lmbapi.la -lmbbsio.la -lmbview.la -lmbgsf.la -lmbxgr.la -lmbio.la

% mbconfig --version
5.5.2304

% mbconfig --version-id
050502304
```

```
% mbconfig --version-major
5

% mbconfig --version-minor
5

% mbconfig --version-archive
2304

% mbconfig --levitus
/usr/local/share/mbsystem/LevitusAnnual82.dat

% mbconfig --otps
/usr/local/src/OTPS2

% mbconfig --version --version-id \
    --prefix --cflags --libs \
    --version-major --version-minor --version-archive \
    --levitus --otps --verbose

# Program mbconfig
# MB-system Version 5.5.2304

# MB-System install prefix:
/usr/local

# MB-System compile flags:
-I/usr/local/include

# MB-System link flags:
-L/usr/local/libs -lmbaux.la -lmbapi.la -lmbbsio.la -lmbview.la -lmbgsf.la -lmbxgr.la -lmbio.la

# MB-System version:
5.5.2304

# MB-System version id:
50502304

# MB-System major version:
5

# MB-System minor version:
5

# MB-System archive version:
2304

# MB-System Levitus database location:
/usr/local/share/mbsystem/LevitusAnnual82.dat

# OTPS tide modeling package location:
/usr/local/src/OTPS2
```

**SEE ALSO**

**mbsystem(1)**

**BUGS**

This program is not significant enough to deserve bugs.