

## NAME

ExtUtils::MM\_Win32 - methods to override UN\*X behaviour in ExtUtils::MakeMaker

## SYNOPSIS

```
use ExtUtils::MM_Win32; # Done internally by ExtUtils::MakeMaker if needed
```

## DESCRIPTION

See ExtUtils::MM\_Unix for a documentation of the methods provided there. This package overrides the implementation of these methods, not the semantics.

### Overridden methods

#### **dlsyms**

xs\_dlsyms\_ext

On Win32, is .def.

replace\_manpage\_separator

Changes the path separator with .

#### **maybe\_command**

Since Windows has nothing as simple as an executable bit, we check the file extension.

The PATHEXT env variable will be used to get a list of extensions that might indicate a command, otherwise .com, .exe, .bat and .cmd will be used by default.

#### **init\_DIRFILESEP**

Using \ for Windows, except for "gmake" where it is /.

init\_tools

Override some of the slower, portable commands with Windows specific ones.

init\_others

Override the default link and compile tools.

LDLOADLIBS's default is changed to \$Config{libs}.

Adjustments are made for Borland's quirks needing -L to come first.

init\_platform

Add MM\_Win32\_VERSION.

platform\_constants

specify\_shell

Set SHELL to \$ENV{COMSPEC} only if make is type 'gmake'.

constants

Add MAXLINELENGTH for dmake before all the constants are output.

special\_targets

Add .USESHELL target for dmake.

static\_lib\_pure\_cmd

Defines how to run the archive utility

dynamic\_lib

Methods are overridden here: not dynamic\_lib itself, but the utility ones that do the OS-specific work.

**extra\_clean\_files**

Clean out some extra dll.{base,exp} files which might be generated by gcc. Otherwise, take out all \*.pdb files.

**init\_linker****perl\_script**

Checks for the perl program under several common perl extensions.

**quote\_dep****xs\_obj\_opt**

Override to fixup -o flags for MSVC.

**pasthru**

All we send is -nologo to nmake to prevent it from printing its damned banner.

**arch\_check (override)**

Normalize all arguments for consistency of comparison.

**oneliner**

These are based on what command.com does on Win98. They may be wrong for other Windows shells, I don't know.

**cd**

dmake can handle Unix style cd'ing but nmake (at least 1.5) cannot. It wants:

```
cd dir1\dir2
command
another_command
cd ..\..\
```

**max\_exec\_len**

nmake 1.50 limits command length to 2048 characters.

**os\_flavor**

Windows is Win32.

**cflags**

Defines the PERLDLL symbol if we are configured for static building since all code destined for the perl5xx.dll must be compiled with the PERLDLL symbol defined.

**make\_type**

Returns a suitable string describing the type of makefile being written.