

Chapter 67

perlXStut

Tutorial for writing XSUBs

67.1 DESCRIPTION

This tutorial will educate the reader on the steps involved in creating a Perl extension. The reader is assumed to have access to *perlguts*, *perlapi* and *perlxs*.

This tutorial starts with very simple examples and becomes more complex, with each new example adding new features. Certain concepts may not be completely explained until later in the tutorial in order to slowly ease the reader into building extensions.

This tutorial was written from a Unix point of view. Where I know them to be otherwise different for other platforms (e.g. Win32), I will list them. If you find something that was missed, please let me know.

67.2 SPECIAL NOTES

67.2.1 make

This tutorial assumes that the make program that Perl is configured to use is called **make**. Instead of running "make" in the examples that follow, you may have to substitute whatever make program Perl has been configured to use. Running **perl -V:make** should tell you what it is.

67.2.2 Version caveat

When writing a Perl extension for general consumption, one should expect that the extension will be used with versions of Perl different from the version available on your machine. Since you are reading this document, the version of Perl on your machine is probably 5.005 or later, but the users of your extension may have more ancient versions.

To understand what kinds of incompatibilities one may expect, and in the rare case that the version of Perl on your machine is older than this document, see the section on "Troubleshooting these Examples" for more information.

If your extension uses some features of Perl which are not available on older releases of Perl, your users would appreciate an early meaningful warning. You would probably put this information into the *README* file, but nowadays installation of extensions may be performed automatically, guided by *CPAN.pm* module or other tools.

In MakeMaker-based installations, *Makefile.PL* provides the earliest opportunity to perform version checks. One can put something like this in *Makefile.PL* for this purpose:

```
eval { require 5.007 }
    or die <<EOD;
#####
### This module uses frobnication framework which is not available before
### version 5.007 of Perl. Upgrade your Perl before installing Kara::Mba.
#####
EOD
```