1 Apache::Symbol - Things for symbol things
1.1 Synopsis

use Apache::Symbol ();

@ISA = qw(Apache::Symbol);

1.2 Description

Apache::Symbol helps mod_perl users avoid Perl warnings related with redefined constant functions.

perlsub/Constant Functions says:

If you redefine a subroutine which was eligible for inlining you’ll get a mandatory warning. (You can use this warning to tell whether or not a particular subroutine is considered constant.) The warning is considered severe enough not to be optional because previously compiled invocations of the function will still be using the old value of the function.

mandatory warning means there is no way to avoid this warning no matter what tricks you pull in Perl. This is bogus for us mod_perl users when restarting the server with PerlFreshRestart on or when Apache::StatINC pulls in a module that has changed on disk.

You can, however, pull some tricks with XS to avoid this warning, Apache::Symbol::undef_functions does just that.

1.3 Arguments

undef_functions takes two arguments: skip and only_undef_exports.

skip is a regular expression indicating the function names to skip.

Use the only_undef_exports flag to undef only those functions which are listed in @EXPORT, @EXPORT_OK, %EXPORT_TAGS, or @EXPORT_EXTRAS. @EXPORT_EXTRAS is not used by the Exporter, it is only exists to communicate with undef_functions.

As a special case, if none of the EXPORT variables are defined ignore only_undef_exports. This takes care of trivial modules that don’t use the Exporter.

1.4 Players

This module and the undefining of functions is optional, if you wish to have this functionality enabled, there are one or more switches you need to know about.

- PerlRestartHandler
Apache::Symbol defines a PerlRestartHandler which can be useful in conjunction with PerlFreshRestart On as it will avoid subroutine redefinition messages. Configure like so:

```
PerlRestartHandler Apache::Symbol
```

- **Apache::Registry**

  By placing the SYNOPSIS bit in your script, Apache::Registry will undefine subroutines in your script before it is re-compiled to avoid "subroutine re-defined" warnings.

- **Apache::StatINC**

  See Apache::StatINC's docs.

- **APACHE_SYMBOL_UNIVERSAL**

  If this environment variable is true when Symbol.pm is compiled, it will define UNIVERSAL::undef_functions, which means all classes will inherit Apache::Symbol::undef_functions.

- **Others**

  Modules such as HTML::Embperl and Apache::ePerl which compile and script cache scripts ala Apache::Registry style can use undef_functions with this bit of code:

  ```perl
  if($package->can('undef_functions')) {
      $package->undef_functions;
  }
  ```

  Where $package is the name of the package in which the script is being re-compiled.

### 1.5 See Also

perlsub, Devel::Symdump

### 1.6 Maintainers

Maintainer is the person(s) you should contact with updates, corrections and patches.

- The documentation mailing list

### 1.7 Authors

- Doug MacEachern

Only the major authors are listed above. For contributors see the Changes file.
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