

NAME

Glib::MakeHelper – Makefile.PL utilities for Glib-based extensions

SYNOPSIS

```
eval "use Glib::MakeHelper; 1"
    or complain_that_glib_is_too_old_and_die();

%xs_pod_files = Glib::MakeHelper->do_pod_files (@xs_files);

package MY;
sub postamble {
    return Glib::MakeHelper->postamble_clean ()
        . Glib::MakeHelper->postamble_docs (@main::xs_files)
        . Glib::MakeHelper->postamble_rpms (
            MYLIB      => $build_reqs{MyLib},
        );
}
```

DESCRIPTION

The Makefile.PL for your typical Glib-based module is huge and hairy, thanks to all the crazy hoops you have to jump through to get things right. This module wraps up some of the more intense and error-prone bits to reduce the amount of copied code and potential for errors.

METHODS

`HASH = Glib::MakeHelper->do_pod_files (@xs_files)`

Scan the `@xs_files` and return a hash describing the pod files that will be created. This is in the format wanted by **WriteMakefile()**. If `@ARGV` contains the string `disable-apidoc` an empty list will be returned and thus no apidoc pod will be generated speeding up the build process.

`LIST = Glib::MakeHelper->select_files_by_version ($stem, $major, $minor)`

Returns a list of all files that match “`$stem-\d+\.\d+`” and for which the first number is bigger than `$major` and the second number is bigger than `$minor`. If `$minor` is odd, it will be incremented by one so that the version number of an upcoming stable release can be used during development as well.

`LIST = Glib::MakeHelper->read_source_list_file ($filename)`

Reads `$filename`, removes all comments (starting with “`#`”) and leading and trailing whitespace, and returns a list of all lines that survived the treatment.

`string = Glib::MakeHelper->get_configure_requires_yaml (%module_to_version)`

Generates YAML code that lists every module found in `%module_to_version` under the `configure_requires` key. This can be used with ExtUtils::MakeMaker’s `EXTRA_META` parameter to specify which modules are needed at *Makefile.PL* time.

This function is **deprecated** since ExtUtils::MakeMaker 6.46 removed support for `EXTRA_META` in favor of the new keys `META_MERGE` and `META_ADD`.

`string = Glib::MakeHelper->postamble_clean (@files)`

Create and return the text of a realclean rule that cleans up after much of the autogeneration performed by Glib-based modules. Everything in `@files` will be deleted, too (it may be empty).

The reasoning behind using this instead of just having you use the ‘clean’ or ‘realclean’ keys is that this avoids you having to remember to put Glib’s stuff in your Makefile.PL’s `WriteMakefile` arguments.

`string = Glib::MakeHelper->postamble_docs (@xs_files)`

NOTE: this is The Old Way. see `postamble_docs_full` for The New Way.

Create and return the text of Makefile rules to build documentation from the XS files with `Glib::ParseXSDoc` and `Glib::GenPod`.

Use this in your `MY::postamble` to enable autogeneration of POD.

This updates dependencies with the list of pod names generated by an earlier run of `do_pod_files`.

There is a special Makefile variable `POD_DEPENDS` that should be set to the list of files that need to be created before the `doc.pl` step is run, include files.

There is also a variable `BLIB_DONE` which should be used as a dependency anywhere a rule needs to be sure that a loadable and working module resides in the `blib` directory before running.

`string = Glib::MakeHelper->postamble_docs_full (...)`

Create and return the text of Makefile rules to build documentation from the XS files with `Glib::ParseXSDoc` and `Glib::GenPod`.

Use this in your `MY::postamble` to enable autogeneration of POD.

This updates dependencies with the list of pod names generated by an earlier run of `do_pod_files`.

There is a special Makefile variable `POD_DEPENDS` that should be set to the list of files that need to be created before the `doc.pl` step is run, include files.

There is also a variable `BLIB_DONE` which should be used as a dependency anywhere a rule needs to be sure that a loadable and working module resides in the `blib` directory before running.

The parameters are a list of `key=>value` pairs. You must specify at minimum either `DEPENDS` or `XS_FILES`.

`DEPENDS => ExtUtils::Depends object`

Most `gtk2-perl` modules use `ExtUtils::Depends` to find headers, typemaps, and other data from parent modules and to install this data for child modules. We can find from this object the list of XS files to scan for documentation, doctype mappings for parent modules, and other goodies.

`XS_FILES => \@xs_file_names`

A list of xs files to scan for documentation. Ignored if `DEPENDS` is used.

`DOCTYPES => \@doctypes_file_names`

List of filenames to pass to `Glib::GenPod::add_types`. May be omitted.

`COPYRIGHT => string`

POD text to be inserted in the 'COPYRIGHT' section of each generated page. May be omitted.

`COPYRIGHT_FROM => file name`

The name of a file containing the POD to be inserted in the 'COPYRIGHT' section of each generated page. May be omitted.

`NAME => extension name`

The name of the extension, used to set the main mod for `Glib::GenPod` (used in the generated see-also listings). May be omitted in favor of the name held inside the `ExtUtils::Depends` object. If `DEPENDS` is also specified, `NAME` wins.

`string = Glib::MakeHelper->postamble_rpms (HASH)`

Create and return the text of Makefile rules to manage building RPMs. You'd put this in your Makefile.PL's `MY::postamble`.

HASH is a set of search and replace keys for the spec file. All occurrences of *@key@* in the spec file template `perl-$(DISTNAME).spec.in` will be replaced with *value*. 'VERSION' and 'SOURCE' are supplied for you. For example:

```
Glib::MakeHelper->postamble_rpms (
    MYLIB      => 2.0.0, # we can work with anything from this up
    MYLIB_RUN  => 2.3.1, # we are actually compiled against this one
    PERL_GLIB  => 1.01,  # you must have this version of Glib
);
```

will replace `@MYLIB@`, `@MYLIB_RUN@`, and `@PERL_GLIB@` in spec file. See the build setups for `Glib` and `Gtk2` for examples.

Note: This function just returns an empty string on Win32.

```
string = Glib::MakeHelper->postamble_precompiled_headers (@headers)
```

Create and return the text of Makefile rules for a 'precompiled-headers' target that precompiles *@headers*. If you call this before you call `postamble_clean`, all temporary files will be removed by the 'realclean' target.

NOTICE

The MakeMaker distributed with perl 5.8.x generates makefiles with a bug that causes object files to be created in the wrong directory. There is an override inserted by this module under the name `MY::const_cccmd` to fix this issue.

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hacked up and documented by muppet.

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