

NAME

`h2ph` – convert `.h` C header files to `.ph` Perl header files

SYNOPSIS

`h2ph [-d destination directory] [-r | -a] [-l] [-h] [-e] [-D] [-Q] [headerfiles]`

DESCRIPTION

`h2ph` converts any C header files specified to the corresponding Perl header file format. It is most easily run while in `/usr/include`:

```
cd /usr/include; h2ph * sys/*
```

or

```
cd /usr/include; h2ph * sys/* arpa/* netinet/*
```

or

```
cd /usr/include; h2ph -r -l .
```

The output files are placed in the hierarchy rooted at Perl's architecture dependent library directory. You can specify a different hierarchy with a `-d` switch.

If run with no arguments, filters standard input to standard output.

OPTIONS

`-d destination_dir`

Put the resulting `.ph` files beneath **destination_dir**, instead of beneath the default Perl library location (`$Config{'installsitearch'}`).

`-r` Run recursively; if any of **headerfiles** are directories, then run `h2ph` on all files in those directories (and their subdirectories, etc.). `-r` and `-a` are mutually exclusive.

`-a` Run automagically; convert **headerfiles**, as well as any `.h` files which they include. This option will search for `.h` files in all directories which your C compiler ordinarily uses. `-a` and `-r` are mutually exclusive.

`-l` Symbolic links will be replicated in the destination directory. If `-l` is not specified, then links are skipped over.

`-h` Put 'hints' in the `.ph` files which will help in locating problems with `h2ph`. In those cases when you **require** a `.ph` file containing syntax errors, instead of the cryptic

```
[ some error condition ] at (eval mmm) line nnn
```

you will see the slightly more helpful

```
[ some error condition ] at filename.ph line nnn
```

However, the `.ph` files almost double in size when built using `-h`.

`-e` If an error is encountered during conversion, output file will be removed and a warning emitted instead of terminating the conversion immediately.

`-D` Include the code from the `.h` file as a comment in the `.ph` file. This is primarily used for debugging `h2ph`.

`-Q` 'Quiet' mode; don't print out the names of the files being converted.

ENVIRONMENT

No environment variables are used.

FILES

```
/usr/include/*.h
```

```
/usr/include/sys/*.h
```

etc.

AUTHOR

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SEE ALSO

perl(1)

DIAGNOSTICS

The usual warnings if it can't read or write the files involved.

BUGS

Doesn't construct the `%sizeof` array for you.

It doesn't handle all C constructs, but it does attempt to isolate definitions inside evals so that you can get at the definitions that it can translate.

It's only intended as a rough tool. You may need to dicker with the files produced.

You have to run this program by hand; it's not run as part of the Perl installation.

Doesn't handle complicated expressions built piecemeal, a la:

```
enum {
    FIRST_VALUE,
    SECOND_VALUE,
#ifdef ABC
    THIRD_VALUE
#endif
};
```

Doesn't necessarily locate all of your C compiler's internally-defined symbols.