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

Larry Wall

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.