

## 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 automatically; 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.