## 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.