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Rocky Enterprise Linux 9.2 Manual Pages on command 'perlirix.1'

\$ man perlirix.1

PERLIRIX(1) Perl Programmers Reference Guide PERLIRIX(1)

NAME

perlirix - Perl version 5 on Irix systems

DESCRIPTION

This document describes various features of Irix that will affect how Perl version 5 (hereafter just Perl) is compiled and/or runs.

Building 32-bit Perl in Irix

Use

```
sh Configure -Dcc='cc -n32'
```

to compile Perl 32-bit. Don't bother with -n32 unless you have 7.1 or later compilers (use cc -version to check).

(Building 'cc -n32' is the default.)

Building 64-bit Perl in Irix

Use

```
sh Configure -Dcc='cc -64' -Duse64bitint
```

This requires require a 64-bit MIPS CPU (R8000, R10000, ...)

You can also use

```
sh Configure -Dcc='cc -64' -Duse64bitall
```

but that makes no difference compared with the -Duse64bitint because of the "cc -64".

You can also do

```
sh Configure -Dcc='cc -n32' -Duse64bitint
```

to use long longs for the 64-bit integer type, in case you don't have a 64-bit CPU.

If you are using gcc, just

sh Configure -Dcc=gcc -Duse64bitint

should be enough, the Configure should automatically probe for the correct 64-bit settings.

About Compiler Versions of Irix

Some Irix cc versions, e.g. 7.3.1.1m (try `cc -version`) have been known to have issues (coredumps) when compiling `perl.c`. If you've used `-OPT:fast_io=ON` and this happens, try removing it. If that fails, or you didn't use that, then try adjusting other optimization options (`-LNO`, `-INLINE`, `-O3` to `-O2`, et cetera). The compiler bug has been reported to SGI. (Allen Smith <easmith@beatrice.rutgers.edu>)

Linker Problems in Irix

If you get complaints about `so_locations` then search in the file `hints/irix_6.sh` for "lddflags" and do the suggested adjustments. (David Billinghamurst <David.Billinghurst@riotinto.com.au>)

Malloc in Irix

Do not try to use Perl's `malloc`, this will lead into very mysterious errors (especially with `-Duse64bitall`).

Building with threads in Irix

Run Configure with `-Duseithreads` which will configure Perl with the Perl 5.8.0 "interpreter threads", see `threads`.

For Irix 6.2 with perl threads, you have to have the following patches installed:

- 1404 Irix 6.2 Posix 1003.1b man pages
- 1645 Irix 6.2 & 6.3 POSIX header file updates
- 2000 Irix 6.2 Posix 1003.1b support modules
- 2254 Pthread library fixes
- 2401 6.2 all platform kernel rollup

IMPORTANT: Without patch 2401, a kernel bug in Irix 6.2 will cause your machine to panic and crash when running threaded perl. Irix 6.3 and later are okay.

Thanks to Hannu Napari <Hannu.Napari@hut.fi> for the IRIX pthreads patches information.

Irix 5.3

While running Configure and when building, you are likely to get quite a few of these warnings:

ld:

The shared object /usr/lib/libm.so did not resolve any symbols.

You may want to remove it from your link line.

Ignore them: in IRIX 5.3 there is no way to quieten ld about this.

During compilation you will see this warning from toke.c:

```
uopt: Warning: Perl_yylex: this procedure not optimized because it
exceeds size threshold; to optimize this procedure, use -Olimit
option with value >= 4252.
```

Ignore the warning.

In IRIX 5.3 and with Perl 5.8.1 (Perl 5.8.0 didn't compile in IRIX 5.3) the following failures are known.

| Failed Test | Stat | Wstat | Total | Fail | Failed | List of Failed |
|-------------|------|-------|-------|------|--------|----------------|
|-------------|------|-------|-------|------|--------|----------------|

```
-----
../ext/List/Util/t/shuffle.t  0 139  ??  ??  % ??
../lib/Math/Trig.t           255 65280  29 12 41.38% 24-29
../lib/sort.t                 0 138 119 72 60.50% 48-119
```

56 tests and 474 subtests skipped.

Failed 3/811 test scripts, 99.63% okay. 78/75813 subtests failed,
99.90% okay.

They are suspected to be compiler errors (at least the shuffle.t failure is known from some IRIX 6 setups) and math library errors (the Trig.t failure), but since IRIX 5 is long since end-of-lifed, further fixes for the IRIX are unlikely. If you can get gcc for 5.3, you could try that, too, since gcc in IRIX 6 is a known workaround for at least the shuffle.t and sort.t failures.

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Please report any errors, updates, or suggestions to
<<https://github.com/Perl/perl5/issues>>.

perl v5.34.0

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