

## NAME

perlplan9 - Plan 9-specific documentation for Perl

## DESCRIPTION

These are a few notes describing features peculiar to Plan 9 Perl. As such, it is not intended to be a replacement for the rest of the Perl 5 documentation (which is both copious and excellent). If you have any questions to which you can't find answers in these man pages, contact Luther Huffman at [lutherh@stratcom.com](mailto:lutherh@stratcom.com) and we'll try to answer them.

## Invoking Perl

Perl is invoked from the command line as described in *perl*. Most perl scripts, however, do have a first line such as `#!/usr/local/bin/perl`. This is known as a shebang (shell-bang) statement and tells the OS shell where to find the perl interpreter. In Plan 9 Perl this statement should be `#!/bin/perl` if you wish to be able to directly invoke the script by its name. Alternatively, you may invoke perl with the command "Perl" instead of "perl". This will produce Acme-friendly error messages of the form "filename:18".

Some scripts, usually identified with a \*.PL extension, are self-configuring and are able to correctly create their own shebang path from config information located in Plan 9 Perl. These you won't need to be worried about.

## What's in Plan 9 Perl

Although Plan 9 Perl currently only provides static loading, it is built with a number of useful extensions. These include Opcode, FileHandle, Fcntl, and POSIX. Expect to see others (and DynaLoading!) in the future.

## What's not in Plan 9 Perl

As mentioned previously, dynamic loading isn't currently available nor is MakeMaker. Both are high-priority items.

## Perl5 Functions not currently supported in Plan 9 Perl

Some, such as `chown` and `umask` aren't provided because the concept does not exist within Plan 9. Others, such as some of the socket-related functions, simply haven't been written yet. Many in the latter category may be supported in the future.

The functions not currently implemented include:

```
chown, chroot, dbmclose, dbmopen, getsockopt,  
setsockopt, recvmsg, sendmsg, getnetbyname,  
getnetbyaddr, getnetent, getprotoent, getservent,  
sethostent, setnetent, setprotoent, setservent,  
endservent, endnetent, endprotoent, umask
```

There may be several other functions that have undefined behavior so this list shouldn't be considered complete.

## Signals in Plan 9 Perl

For compatibility with perl scripts written for the Unix environment, Plan 9 Perl uses the POSIX signal emulation provided in Plan 9's ANSI POSIX Environment (APE). Signal stacking isn't supported. The signals provided are:

```
SIGHUP, SIGINT, SIGQUIT, SIGILL, SIGABRT,  
SIGFPE, SIGKILL, SIGSEGV, SIGPIPE, SIGALRM,  
SIGTERM, SIGUSR1, SIGUSR2, SIGCHLD, SIGCONT,  
SIGSTOP, SIGTSTP, SIGTTIN, SIGTTOU
```

## COMPILING AND INSTALLING PERL ON PLAN 9

WELCOME to Plan 9 Perl, brave soul!

This is a preliminary alpha version of Plan 9 Perl. Still to be implemented are MakeMaker and DynaLoader. Many perl commands are missing or currently behave in an inscrutable manner. These gaps will, with perseverance and a modicum of luck, be remedied in the near future. To install this software:

1. Create the source directories and libraries for perl by running the plan9/setup.rc command (i.e., located in the plan9 subdirectory). Note: the setup routine assumes that you haven't dearchived these files into /sys/src/cmd/perl. After running setup.rc you may delete the copy of the source you originally dearchived, as source code has now been installed in /sys/src/cmd/perl. If you plan on installing perl binaries for all architectures, run "setup.rc -a".

2. After making sure that you have adequate privileges to build system software, from /sys/src/cmd/perl/5.00301 (adjust version appropriately) run:

```
mk install
```

If you wish to install perl versions for all architectures (68020, mips, sparc and 386) run:

```
mk installall
```

3. Wait. The build process will take a \*long\* time because perl bootstraps itself. A 75MHz Pentium, 16MB RAM machine takes roughly 30 minutes to build the distribution from scratch.

### Installing Perl Documentation on Plan 9

This perl distribution comes with a tremendous amount of documentation. To add these to the built-in manuals that come with Plan 9, from /sys/src/cmd/perl/5.00301 (adjust version appropriately) run:

```
mk man
```

To begin your reading, start with:

```
man perl
```

This is a good introduction and will direct you towards other man pages that may interest you.

(Note: "mk man" may produce some extraneous noise. Fear not.)

### BUGS

"As many as there are grains of sand on all the beaches of the world . . ." - Carl Sagan

### Revision date

This document was revised 09-October-1996 for Perl 5.003\_7.

### AUTHOR

Direct questions, comments, and the unlikely bug report (ahem) direct comments toward:

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