NAME

perlfaq2 - Obtaining and Learning about Perl ($Revision: 1.39 $, $Date: 2006/01/08 14:27:07 $)

DESCRIPTION

This section of the FAQ answers questions about where to find source and documentation for Perl, support, and related matters.

What machines support perl? Where do I get it?

The standard release of perl (the one maintained by the perl development team) is distributed only in source code form. You can find this at http://www.cpan.org/src/latest.tar.gz , which is in a standard Internet format (a gzipped archive in POSIX tar format).

Perl builds and runs on a bewildering number of platforms. Virtually all known and current Unix derivatives are supported (perl's native platform), as are other systems like VMS, DOS, OS/2, Windows, QNX, BeOS, OS X, MPE/iX and the Amiga.

Binary distributions for some proprietary platforms, including Apple systems, can be found http://www.cpan.org/ports/ directory. Because these are not part of the standard distribution, they may and in fact do differ from the base perl port in a variety of ways. You'll have to check their respective release notes to see just what the differences are. These differences can be either positive (e.g. extensions for the features of the particular platform that are not supported in the source release of perl) or negative (e.g. might be based upon a less current source release of perl).

How can I get a binary version of perl?

If you don't have a C compiler because your vendor for whatever reasons did not include one with your system, the best thing to do is grab a binary version of gcc from the net and use that to compile perl with. CPAN only has binaries for systems that are terribly hard to get free compilers for, not for Unix systems.

Some URLs that might help you are:

```
http://www.cpan.org/ports/
http://www.perl.com/pub/language/info/software.html
```

Someone looking for a perl for Win16 might look to Laszlo Molnar's djgpp port in http://www.cpan.org/ports/#msdos , which comes with clear installation instructions. A simple installation guide for MS-DOS using Ilya Zakharevich's OS/2 port is available at http://www.cs.ruu.nl/%7Epiet/perl5dos.html and similarly for Windows 3.1 at http://www.cs.ruu.nl/%7Epiet/perlwin3.html .

I don't have a C compiler. How can I build my own Perl interpreter?

Since you don't have a C compiler, you're doomed and your vendor should be sacrificed to the Sun gods. But that doesn't help you.

What you need to do is get a binary version of gcc for your system first. Consult the Usenet FAQs for your operating system for information on where to get such a binary version.

I copied the perl binary from one machine to another, but scripts don't work.

That's probably because you forgot libraries, or library paths differ. You really should build the whole distribution on the machine it will eventually live on, and then type `make install`. Most other approaches are doomed to failure.

One simple way to check that things are in the right place is to print out the hard-coded @INC that perl looks through for libraries:

```
% perl -le 'print for @INC'
```

If this command lists any paths that don't exist on your system, then you may need to move the appropriate libraries to these locations, or create symbolic links, aliases, or shortcuts appropriately. @INC is also printed as part of the output of

```
% perl -V
```

You might also want to check out *"How do I keep my own module/library directory?" in perlfaq8*.

I grabbed the sources and tried to compile but gdbm/dynamic loading/malloc/linking/... failed. How do I make it work?

Read the *INSTALL* file, which is part of the source distribution. It describes in detail how to cope with most idiosyncrasies that the Configure script can't work around for any given system or architecture.

What modules and extensions are available for Perl? What is CPAN? What does CPAN/src/... mean?

CPAN stands for Comprehensive Perl Archive Network, a ~1.2Gb archive replicated on nearly 200 machines all over the world. CPAN contains source code, non-native ports, documentation, scripts, and many third-party modules and extensions, designed for everything from commercial database interfaces to keyboard/screen control to web walking and CGI scripts. The master web site for CPAN is http://www.cpan.org/ and there is the CPAN Multiplexer at http://www.cpan.org/CPAN.html which will choose a mirror near you via DNS. See http://www.perl.com/CPAN (without a slash at the end) for how this process works. Also, http://mirror.cpan.org/ has a nice interface to the http://www.cpan.org/MIRRORED.BY mirror directory.

See the CPAN FAQ at http://www.cpan.org/misc/cpan-faq.html for answers to the most frequently asked questions about CPAN including how to become a mirror.

CPAN/path/... is a naming convention for files available on CPAN sites. CPAN indicates the base directory of a CPAN mirror, and the rest of the path is the path from that directory to the file. For instance, if you're using ftp://ftp.funet.fi/pub/languages/perl/CPAN as your CPAN site, the file CPAN/misc/japh is downloadable as ftp://ftp.funet.fi/pub/languages/perl/CPAN/misc/japh .

Considering that there are close to two thousand existing modules in the archive, one probably exists to do nearly anything you can think of. Current categories under CPAN/modules/by-category/ include Perl core modules; development support; operating system interfaces; networking, devices, and interprocess communication; data type utilities; database interfaces; user interfaces; interfaces to other languages; filenames, file systems, and file locking; internationalization and locale; world wide web support; server and daemon utilities; archiving and compression; image manipulation; mail and news; control flow utilities; filehandle and I/O; Microsoft Windows modules; and miscellaneous modules.

See http://www.cpan.org/modules/00modlist.long.html or http://search.cpan.org/ for a more complete list of modules by category.

CPAN is not affiliated with O'Reilly Media.

Is there an ISO or ANSI certified version of Perl?

Certainly not. Larry expects that he'll be certified before Perl is.

Where can I get information on Perl?

The complete Perl documentation is available with the Perl distribution. If you have Perl installed locally, you probably have the documentation installed as well: type `man perl` if you're on a system resembling Unix. This will lead you to other important man pages, including how to set your $MANPATH. If you're not on a Unix system, access to the documentation will be different; for example, documentation might only be in HTML format. All proper perl installations have fully-accessible documentation.

You might also try `perldoc perl` in case your system doesn't have a proper man command, or it's

been misinstalled. If that doesn't work, try looking in /usr/local/lib/perl5/pod for documentation.

If all else fails, consult http://perldoc.perl.org/ which has the complete documentation in HTML and PDF format.

Many good books have been written about Perl--see the section below for more details.

Tutorial documents are included in current or upcoming Perl releases include *perltoot* for objects or *perlboot* for a beginner's approach to objects, *perlopentut* for file opening semantics, *perlreftut* for managing references, *perlretut* for regular expressions, *perlthrtut* for threads, *perldebtut* for debugging, and *perlxstut* for linking C and Perl together. There may be more by the time you read this. These URLs might also be useful:

```
http://perldoc.perl.org/
http://bookmarks.cpan.org/search.cgi?cat=Training%2FTutorials
```

What are the Perl newsgroups on Usenet? Where do I post questions?

Several groups devoted to the Perl language are on Usenet:

```
comp.lang.perl.announce    Moderated announcement group
comp.lang.perl.misc        High traffic general Perl discussion
comp.lang.perl.moderated      Moderated discussion group
comp.lang.perl.modules     Use and development of Perl modules
comp.lang.perl.tk             Using Tk (and X) from Perl

comp.infosystems.www.authoring.cgi  Writing CGI scripts for the Web.
```

Some years ago, comp.lang.perl was divided into those groups, and comp.lang.perl itself officially removed. While that group may still be found on some news servers, it is unwise to use it, because postings there will not appear on news servers which honour the official list of group names. Use comp.lang.perl.misc for topics which do not have a more-appropriate specific group.

There is also a Usenet gateway to Perl mailing lists sponsored by perl.org at nntp://nntp.perl.org , a web interface to the same lists at http://nntp.perl.org/group/ and these lists are also available under the `perl.*` hierarchy at http://groups.google.com . Other groups are listed at http://lists.perl.org/ (also known as http://lists.cpan.org/).

A nice place to ask questions is the PerlMonks site, http://www.perlmonks.org/ , or the Perl Beginners mailing list http://lists.perl.org/showlist.cgi?name=beginners .

Note that none of the above are supposed to write your code for you: asking questions about particular problems or general advice is fine, but asking someone to write your code for free is not very cool.

Where should I post source code?

You should post source code to whichever group is most appropriate, but feel free to cross-post to comp.lang.perl.misc. If you want to cross-post to alt.sources, please make sure it follows their posting standards, including setting the Followup-To header line to NOT include alt.sources; see their FAQ (http://www.faqs.org/faqs/alt-sources-intro/) for details.

If you're just looking for software, first use Google (http://www.google.com), Google's usenet search interface (http://groups.google.com), and CPAN Search (http://search.cpan.org). This is faster and more productive than just posting a request.

Perl Books

A number of books on Perl and/or CGI programming are available. A few of these are good, some are OK, but many aren't worth your money. There is a list of these books, some with extensive reviews, at http://books.perl.org/ . If you don't see your book listed here, you can write to

perlfaq-workers@perl.org .

The incontestably definitive reference book on Perl, written by the creator of Perl, is Programming Perl:

```
Programming Perl (the "Camel Book"):
 by Larry Wall, Tom Christiansen, and Jon Orwant
  ISBN 0-596-00027-8  [3rd edition July 2000]
 http://www.oreilly.com/catalog/pperl3/
 (English, translations to several languages are also available)
```

The companion volume to the Camel containing thousands of real-world examples, mini-tutorials, and complete programs is:

```
The Perl Cookbook (the "Ram Book"):
 by Tom Christiansen and Nathan Torkington,
     with Foreword by Larry Wall
 ISBN 0-596-00313-7 [2nd Edition August 2003]
 http://www.oreilly.com/catalog/perlckbk2/
```

If you're already a seasoned programmer, then the Camel Book might suffice for you to learn Perl. If you're not, check out the Llama book:

```
Learning Perl
 by Randal L. Schwartz, Tom Phoenix, and brian d foy
 ISBN 0-596-10105-8 [4th edition July 2005]
 http://www.oreilly.com/catalog/learnperl4/
```

And for more advanced information on writing larger programs, presented in the same style as the Llama book, continue your education with the Alpaca book:

```
Learning Perl Objects, References, and Modules (the "Alpaca Book")
 by Randal L. Schwartz, with Tom Phoenix (foreword by Damian Conway)
 ISBN 0-596-00478-8 [1st edition June 2003]
 http://www.oreilly.com/catalog/lrnperlorm/
```

If you're not an accidental programmer, but a more serious and possibly even degreed computer scientist who doesn't need as much hand-holding as we try to provide in the Llama, please check out the delightful book

```
Perl: The Programmer's Companion
 by Nigel Chapman
 ISBN 0-471-97563-X [1997, 3rd printing Spring 1998]
 http://www.wiley.com/compbooks/catalog/97563-X.htm
 http://www.wiley.com/compbooks/chapman/perl/perltpc.html (errata etc)
```

If you are more at home in Windows the following is available (though unfortunately rather dated).

```
Learning Perl on Win32 Systems (the "Gecko Book")
 by Randal L. Schwartz, Erik Olson, and Tom Christiansen,
     with foreword by Larry Wall
 ISBN 1-56592-324-3 [1st edition August 1997]
 http://www.oreilly.com/catalog/lperlwin/
```

Addison-Wesley (http://www.awlonline.com/) and Manning (http://www.manning.com/) are also publishers of some fine Perl books such as *Object Oriented Programming with Perl* by Damian

Conway and *Network Programming with Perl* by Lincoln Stein.

An excellent technical book discounter is Bookpool at http://www.bookpool.com/ where a 30% discount or more is not unusual.

What follows is a list of the books that the FAQ authors found personally useful. Your mileage may (but, we hope, probably won't) vary.

Recommended books on (or mostly on) Perl follow.

References

```
Programming Perl
by Larry Wall, Tom Christiansen, and Jon Orwant
ISBN 0-596-00027-8 [3rd edition July 2000]
http://www.oreilly.com/catalog/pperl3/

Perl 5 Pocket Reference
by Johan Vromans
ISBN 0-596-00032-4 [3rd edition May 2000]
http://www.oreilly.com/catalog/perlpr3/
```

Tutorials

```
Beginning Perl
by James Lee
ISBN 1-59059-391-X [2nd edition August 2004]
http://apress.com/book/bookDisplay.html?bID=344

Elements of Programming with Perl
by Andrew L. Johnson
ISBN 1-884777-80-5 [1st edition October 1999]
http://www.manning.com/Johnson/

Learning Perl
by Randal L. Schwartz, Tom Phoenix, and brian d foy
ISBN 0-596-10105-8 [4th edition July 2005]
http://www.oreilly.com/catalog/learnperl4/

Learning Perl Objects, References, and Modules
by Randal L. Schwartz, with Tom Phoenix (foreword by Damian Conway)
ISBN 0-596-00478-8 [1st edition June 2003]
http://www.oreilly.com/catalog/lrnperlorm/
```

Task-Oriented

```
Writing Perl Modules for CPAN
by Sam Tregar
ISBN 1-59059-018-X [1st edition Aug 2002]
http://apress.com/book/bookDisplay.html?bID=14

The Perl Cookbook
by Tom Christiansen and Nathan Torkington
    with foreword by Larry Wall
ISBN 1-56592-243-3 [1st edition August 1998]
http://www.oreilly.com/catalog/cookbook/

Effective Perl Programming
by Joseph Hall
```

```
ISBN 0-201-41975-0 [1st edition 1998]
http://www.awl.com/


Real World SQL Server Administration with Perl
by Linchi Shea
ISBN 1-59059-097-X [1st edition July 2003]
http://apress.com/book/bookDisplay.html?bID=171
```

Special Topics

```
Perl Best Practices
by Damian Conway
ISBN: 0-596-00173-8 [1st edition July 2005]
http://www.oreilly.com/catalog/perlbp/


Higher Order Perl
by Mark-Jason Dominus
ISBN: 1558607013 [1st edition March 2005]
http://hop.perl.plover.com/


Perl 6 Now: The Core Ideas Illustrated with Perl 5
by Scott Walters
ISBN 1-59059-395-2 [1st edition December 2004]
http://apress.com/book/bookDisplay.html?bID=355


Mastering Regular Expressions
by Jeffrey E. F. Friedl
ISBN 0-596-00289-0 [2nd edition July 2002]
http://www.oreilly.com/catalog/regex2/


Network Programming with Perl
by Lincoln Stein
ISBN 0-201-61571-1 [1st edition 2001]
http://www.awlonline.com/


Object Oriented Perl
Damian Conway
    with foreword by Randal L. Schwartz
ISBN 1-884777-79-1 [1st edition August 1999]
http://www.manning.com/Conway/


Data Munging with Perl
Dave Cross
ISBN 1-930110-00-6 [1st edition 2001]
http://www.manning.com/cross


Mastering Perl/Tk
by Steve Lidie and Nancy Walsh
ISBN 1-56592-716-8 [1st edition January 2002]
http://www.oreilly.com/catalog/mastperltk/


Extending and Embedding Perl
by Tim Jenness and Simon Cozens
ISBN 1-930110-82-0 [1st edition August 2002]
http://www.manning.com/jenness
```

```
Perl Debugger Pocket Reference
by Richard Foley
ISBN 0-596-00503-2 [1st edition January 2004]
http://www.oreilly.com/catalog/perldebugpr/
```

Which magazines have Perl content?

The first (and for a long time, only) periodical devoted to All Things Perl, *The Perl Journal* contains tutorials, demonstrations, case studies, announcements, contests, and much more. *TPJ* has columns on web development, databases, Win32 Perl, graphical programming, regular expressions, and networking, and sponsors the Obfuscated Perl Contest and the Perl Poetry Contests. Beginning in November 2002, TPJ moved to a reader-supported monthly e-zine format in which subscribers can download issues as PDF documents. For more details on TPJ, see http://www.tpj.com/

Beyond this, magazines that frequently carry quality articles on Perl are *The Perl Review* (http://www.theperlreview.com), *Unix Review* (http://www.unixreview.com/), *Linux Magazine* (http://www.linuxmagazine.com/), and Usenix's newsletter/magazine to its members, *login:* (http://www.usenix.org/)

The Perl columns of Randal L. Schwartz are available on the web at http://www.stonehenge.com/merlyn/WebTechniques/ , http://www.stonehenge.com/merlyn/UnixReview/ , and http://www.stonehenge.com/merlyn/LinuxMag/ .

What mailing lists are there for Perl?

Most of the major modules (Tk, CGI, libwww-perl) have their own mailing lists. Consult the documentation that came with the module for subscription information.

A comprehensive list of Perl related mailing lists can be found at:

```
http://lists.perl.org/
```

Where are the archives for comp.lang.perl.misc?

The Google search engine now carries archived and searchable newsgroup content.

http://groups.google.com/groups?group=comp.lang.perl.misc

If you have a question, you can be sure someone has already asked the same question at some point on c.l.p.m. It requires some time and patience to sift through all the content but often you will find the answer you seek.

Where can I buy a commercial version of perl?

In a real sense, perl already *is* commercial software: it has a license that you can grab and carefully read to your manager. It is distributed in releases and comes in well-defined packages. There is a very large user community and an extensive literature. The comp.lang.perl.* newsgroups and several of the mailing lists provide free answers to your questions in near real-time. Perl has traditionally been supported by Larry, scores of software designers and developers, and myriad programmers, all working for free to create a useful thing to make life better for everyone.

However, these answers may not suffice for managers who require a purchase order from a company whom they can sue should anything go awry. Or maybe they need very serious hand-holding and contractual obligations. Shrink-wrapped CDs with perl on them are available from several sources if that will help. For example, many Perl books include a distribution of perl, as do the O'Reilly Perl Resource Kits (in both the Unix flavor and in the proprietary Microsoft flavor); the free Unix distributions also all come with perl.

Where do I send bug reports?

If you are reporting a bug in the perl interpreter or the modules shipped with Perl, use the *perlbug* program in the Perl distribution or mail your report to perlbug@perl.org or at http://rt.perl.org/perlbug/ .

For Perl modules, you can submit bug reports to the Request Tracker set up at http://rt.cpan.org .

If you are posting a bug with a non-standard port (see the answer to "What platforms is perl available for?"), a binary distribution, or a non-standard module (such as Tk, CGI, etc), then please see the documentation that came with it to determine the correct place to post bugs.

Read the perlbug(1) man page (perl5.004 or later) for more information.

What is perl.com? Perl Mongers? pm.org? perl.org? cpan.org?

Perl.com at http://www.perl.com/ is part of the O'Reilly Network, a subsidiary of O'Reilly Media.

The Perl Foundation is an advocacy organization for the Perl language which maintains the web site http://www.perl.org/ as a general advocacy site for the Perl language. It uses the domain to provide general support services to the Perl community, including the hosting of mailing lists, web sites, and other services. The web site http://www.perl.org/ is a general advocacy site for the Perl language, and there are many other sub-domains for special topics, such as

```
http://learn.perl.org/
http://use.perl.org/
http://jobs.perl.org/
http://lists.perl.org/
```

Perl Mongers uses the pm.org domain for services related to Perl user groups, including the hosting of mailing lists and web sites. See the Perl user group web site at http://www.pm.org/ for more information about joining, starting, or requesting services for a Perl user group.

http://www.cpan.org/ is the Comprehensive Perl Archive Network, a replicated worldwide repository of Perl software, see the *What is CPAN?* question earlier in this document.

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