

NAME

`cpan` – easily interact with CPAN from the command line

SYNOPSIS

```
# with arguments and no switches, installs specified modules
cpan module_name [ module_name ... ]

# with switches, installs modules with extra behavior
cpan [-cfFimtTw] module_name [ module_name ... ]

# use local::lib
cpan -I module_name [ module_name ... ]

# one time mirror override for faster mirrors
cpan -p ...

# with just the dot, install from the distribution in the
# current directory
cpan .

# without arguments, starts CPAN.pm shell
cpan

# without arguments, but some switches
cpan [-ahpruvACDLOPX]
```

DESCRIPTION

This script provides a command interface (not a shell) to CPAN. At the moment it uses `CPAN.pm` to do the work, but it is not a one-shot command runner for `CPAN.pm`.

Options

- `-a` Creates a `CPAN.pm` autobundle with `CPAN::Shell->autobundle`.
- `-A module [module ...]`
Shows the primary maintainers for the specified modules.
- `-c module`
Runs a ‘make clean’ in the specified module’s directories.
- `-C module [module ...]`
Show the *Changes* files for the specified modules
- `-D module [module ...]`
Show the module details. This prints one line for each out-of-date module (meaning, modules locally installed but have newer versions on CPAN). Each line has three columns: module name, local version, and CPAN version.
- `-f` Force the specified action, when it normally would have failed. Use this to install a module even if its tests fail. When you use this option, `-i` is not optional for installing a module when you need to force it:

```
% cpan -f -i Module::Foo
```
- `-F` Turn off `CPAN.pm`’s attempts to lock anything. You should be careful with this since you might end up with multiple scripts trying to muck in the same directory. This isn’t so much of a concern if you’re loading a special config with `-j`, and that config sets up its own work directories.
- `-g module [module ...]`
Downloads to the current directory the latest distribution of the module.

- G module [module ...]
UNIMPLEMENTED
Download to the current directory the latest distribution of the modules, unpack each distribution, and create a git repository for each distribution.
If you want this feature, check out Yanick Champoux's `Git::CPAN::Patch` distribution.
- h Print a help message and exit. When you specify `-h`, it ignores all of the other options and arguments.
- i module [module ...]
Install the specified modules. With no other switches, this switch is implied.
- I Load `local::lib` (think like `-I` for loading lib paths). Too bad `-l` was already taken.
- j Config.pm
Load the file that has the CPAN configuration data. This should have the same format as the standard `CPAN/Config.pm` file, which defines `$CPAN::Config` as an anonymous hash.
- J Dump the configuration in the same format that `CPAN.pm` uses. This is useful for checking the configuration as well as using the dump as a starting point for a new, custom configuration.
- l List all installed modules with their versions
- L author [author ...]
List the modules by the specified authors.
- m Make the specified modules.
- M mirror1,mirror2,...
A comma-separated list of mirrors to use for just this run. The `-P` option can find them for you automatically.
- n Do a dry run, but don't actually install anything. (unimplemented)
- O Show the out-of-date modules.
- p Ping the configured mirrors and print a report
- P Find the best mirrors you could be using and use them for the current session.
- r Recompiles dynamically loaded modules with `CPAN::Shell->recompile`.
- s Drop in the `CPAN.pm` shell. This command does this automatically if you don't specify any arguments.
- t module [module ...]
Run a 'make test' on the specified modules.
- T Do not test modules. Simply install them.
- u Upgrade all installed modules. Blindly doing this can really break things, so keep a backup.
- v Print the script version and `CPAN.pm` version then exit.
- V Print detailed information about the `cpan` client.
- w UNIMPLEMENTED
Turn on `cpan` warnings. This checks various things, like directory permissions, and tells you about problems you might have.
- x module [module ...]
Find close matches to the named modules that you think you might have mistyped. This requires the optional installation of `Text::Levenshtein` or `Text::Levenshtein::Damerau`.
- X Dump all the namespaces to standard output.

Examples

```

# print a help message
cpan -h

# print the version numbers
cpan -v

# create an autobundle
cpan -a

# recompile modules
cpan -r

# upgrade all installed modules
cpan -u

# install modules ( sole -i is optional )
cpan -i Netscape::Bookmarks Business::ISBN

# force install modules ( must use -i )
cpan -fi CGI::Minimal URI

# install modules but without testing them
cpan -Ti CGI::Minimal URI

```

Environment variables

There are several components in CPAN.pm that use environment variables. The build tools, ExtUtils::MakeMaker and Module::Build use some, while others matter to the levels above them. Some of these are specified by the Perl Toolchain Gang:

Lancaster Consensus:
[<https://github.com/Perl-Toolchain-Gang/toolchain-site/blob/master/lancaster-consensus.md>](https://github.com/Perl-Toolchain-Gang/toolchain-site/blob/master/lancaster-consensus.md)

Oslo Consensus:
[<https://github.com/Perl-Toolchain-Gang/toolchain-site/blob/master/oslo-consensus.md>](https://github.com/Perl-Toolchain-Gang/toolchain-site/blob/master/oslo-consensus.md)

NONINTERACTIVE_TESTING

Assume no one is paying attention and skips prompts for distributions that do that correctly. `cpan(1)` sets this to 1 unless it already has a value (even if that value is false).

PERL_MM_USE_DEFAULT

Use the default answer for a prompted questions. `cpan(1)` sets this to 1 unless it already has a value (even if that value is false).

CPAN_OPTS

As with `PERL5OPT`, a string of additional `cpan(1)` options to add to those you specify on the command line.

CPANSCRIPT_LOGLEVEL

The log level to use, with either the embedded, minimal logger or `Log::Log4perl` if it is installed. Possible values are the same as the `Log::Log4perl` levels: `TRACE`, `DEBUG`, `INFO`, `WARN`, `ERROR`, and `FATAL`. The default is `INFO`.

GIT_COMMAND

The path to the `git` binary to use for the Git features. The default is `/usr/local/bin/git`.

EXIT VALUES

The script exits with zero if it thinks that everything worked, or a positive number if it thinks that something failed. Note, however, that in some cases it has to divine a failure by the output of things it does not control. For now, the exit codes are vague:

- 1 An unknown error
- 2 The was an external problem
- 4 There was an internal problem with the script
- 8 A module failed to install

TO DO

- * one shot configuration values from the command line

BUGS

- * none noted

SEE ALSO

Most behaviour, including environment variables and configuration, comes directly from CPAN.pm.

SOURCE AVAILABILITY

This code is in Github in the CPAN.pm repository:

<https://github.com/andk/cpanpm>

The source used to be tracked separately in another GitHub repo, but the canonical source is now in the above repo.

CREDITS

Japheth Cleaver added the bits to allow a forced install (-f).

Jim Brandt suggest and provided the initial implementation for the up-to-date and Changes features.

Adam Kennedy pointed out that **exit()** causes problems on Windows where this script ends up with a .bat extension

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