Using local::lib

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Age old problem

• You need [to install] a new module
• You don’t have root access
• local::lib fixes this!

• (yes, there’s PERL5LIB but it’s not the whole story)
But first, diversions

- @INC
- Perl Install Locations
- %INC
@INC

• Where Perl looks for library files
• Simple set of paths
  • ...or is it? No, this is Perl.
• You can unshift things onto it
• Displayed at the end of perl -V
@INC example

@INC:
/etc/perl
/usr/local/lib/perl/5.10.0
/usr/local/share/perl/5.10.0
/usr/lib/perl5
/usr/share/perl5
/usr/lib/perl/5.10
/usr/share/perl/5.10
/usr/local/lib/site_perl
.
Perl Install Locations

• [http://use.perl.org/~schwern/journal/39246](http://use.perl.org/~schwern/journal/39246)
• Site: what the user installs (CPAN shell)
• Vendor: what your package manager installs
• Core: what ships with Perl itself
• Broken order (core first) until Perl 5.12 😞
  • Fixed in Debian and now also Red Hat
Another @INC

@INC:
/usr/lib/perl5/site_perl/5.8.8/i386-linux-thread-multi
/usr/lib/perl5/site_perl/5.8.8
/usr/lib/perl5/site_perl
/usr/lib/perl5/vendor_perl/5.8.8/i386-linux-thread-multi
/usr/lib/perl5/vendor_perl/5.8.8
/usr/lib/perl5/vendor_perl
/usr/lib/perl5/5.8.8/i386-linux-thread-multi
/usr/lib/perl5/5.8.8
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Import Hooks

• @INC can also contain:
  • subroutine ref, array ref, object (ref)
• See perldoc -f require
• It descends into pretty sick flexibility
  • Essentially, the sub returns the file content
• Popularly used for sniffing module loads
  • See Perl Hacks
%INC

- Used by require to determine whether something is already loaded
- Important, e.g. to prevent [fatal] warnings from re-importing of symbols
Tricking %INC

• Dynamic languages are so much fun to use
• Create packages on the fly
  • (monkeypatching bad, mkay?)
• Let other code know the package is loaded
Back to local::lib

@INC:
/home/oliver/perl5/lib/perl5
/usr/lib/perl5/site_perl/5.8.8/i386-linux-thread-multi
/usr/lib/perl5/site_perl/5.8.8
/usr/lib/perl5/site_perl
/usr/lib/perl5/vendor_perl/5.8.8/i386-linux-thread-multi
/usr/lib/perl5/vendor_perl/5.8.8
/usr/lib/perl5/vendor_perl
/usr/lib/perl5/5.8.8/i386-linux-thread-multi
/usr/lib/perl5/5.8.8
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Things you will forget

- MODULEBUILDRC
- PERL_MM_OPT
- PERL5LIB
- and, appends to PATH
  - why? for script/bin files.
Installation

- RTFM, it’s easy (see: bootstrap...)
- I tend to leave it at that
  - Perhaps flip ~/perl5 on and off
  - Perhaps use a per-project directory
Usage

• Inside the Perl program
  • Load a local::lib at a specified location
• New --self-contained option
  • Installs all non-core dependencies
Key take-away

• Solves a small but annoying problem
• Simple and easy to install/use
Fin

- my little 80s pony by merwing little dear
- ! danger elephants at Knowsley Safari Park? by Adam Foster | Codefor
- a fork stuck in the road by darren131
- Slice of Pizza! by su-lin