Making My Own CPAN

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Frozen Perl

February 16, 2008

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Goals

- Make my own version of CPAN (MyCPAN)
- Freeze MyCPAN
- Make a CPAN for something else

PAUSE

- http://pause.perl.org
- Perl Authors Upload SErver (PAUSE)
- Gateway for adding modules to CPAN
- CPAN Master mirror PAUSE
  - modules/
  - authors/

PAUSE index files

- PAUSE indexes modules
- Creates index files for CPAN tool chain
  - modules/02packages.details.txt.gz
  - modules/03modlist.data.gz
  - modules/06perms.txt.gz

Tool chain

- "Third Party" projects
- CPAN Search
- CPAN.pm
- CPANPLUS
- AnnoCPAN

CPAN.pm

- Uses index files to find distro
- Looks for path on mirror
  - http://mirror/...
  - .../authors/
  - .../B/BD/BDFOY/Foo-1.23.tar.gz

Installing a module

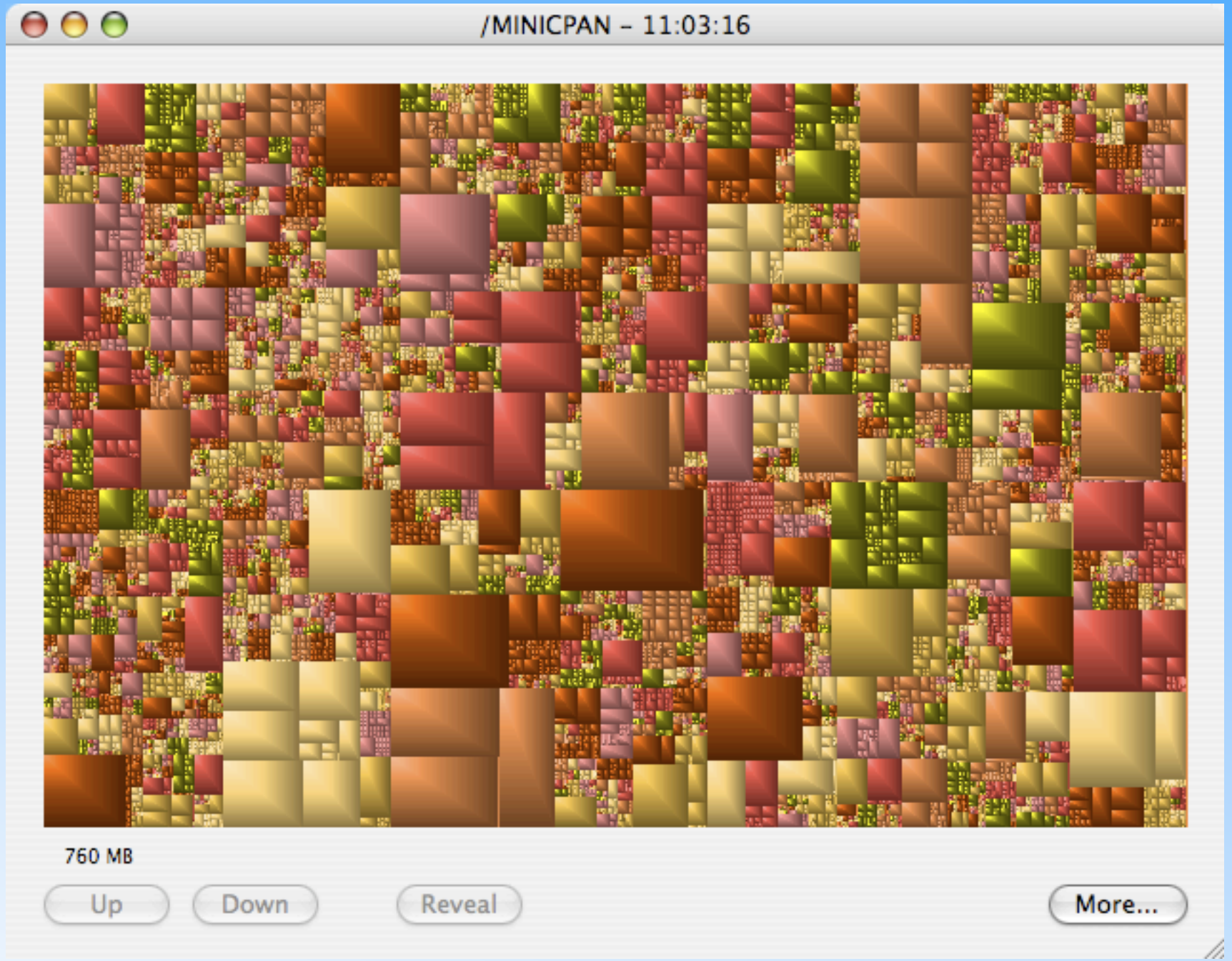
- Get from first mirror that has it
- Check checksum
- Unpack, run Makefile.PL or Build.PL
- Discover dependencies
- Find, get, install dependencies

MiniCPAN

- A local CPAN mirror
- Only has latest versions, indices
- Point CPAN.pm at local mirror
- Update from network
- Install without network

CPAN::Mini

- The module behind minicpan
- by Ricardo SIGNES
- Configurable
- Programmable



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MicroCPAN

```
  CPAN::Mini->update_mirror(
...,
path_filters   => [
 sub { !( $_[0] =~ /BDFOY/ ) }
 ],
module_filters   => [
 qr/Test/,
 ],
);
```

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MyCPAN

- Only the modules I want
- Only the versions I want
- Extra, private modules
- Public modules with local patches
- Internal server or removable media

CPAN::Mini::Inject

- Creates a parallel archive
- Update MiniCPAN first
- Inject parallel archive into MiniCPAN
- Update PAUSE index files locally
- Update CHECKSUMS

Replacing public distros

- Sometimes I want local patches
  - absent author
  - truculent author
- Don’t want the latest distro

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BackPAN

- http://backpan.cpan.org
- All modules ever uploaded to PAUSE
- Not integrated with CPAN tool chain
- Which distro has module version?

Finding old distros

- It's all on BackPAN
- Brute force, right now
- Unpack a distro and check
- Repeat until you find it

MyCPAN on a CD

- I have all the bits to carry around MyCPAN
  - MiniCPAN
  - Private modules
  - Configure CPAN.pm
- Need to discover MyCPAN location