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PTPW 2012, BRAGA

What is it?

Dist::Zilla is a program to make it easier to write, package, manage, and release free software.

dzil.org

Disclaimer

Ricardo Signes kindly authorized me to steal stuff from his own slides. Go check the real thing at

Dist::Zilla - Maximum Overkill for CPAN
Distributions

http://goo.gl/OPX1z

• Writing code is fun \bigcirc **Perl**

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- Sharing code is fun \heartsuit **CPAN**

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- Writing shareable code is boring

- Writing code is fun Perl
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- Writing shareable code is boring, and hard, and tedious

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 - license
 - version numbers
 - author(s)
 - dependencies

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- Writing shareable code is **boring**, and **hard**, and **tedious**, and **confusing**, and **boring**
 - documentation
 - license
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 - dependencies
 - ...
 - keep consistency across a distribution!

- ./Changes ./LICENSE
- ./MANIFEST.SKIP
- ./Makefile.PL
- ./README
- ./lib/DragonBall.pm
- ./lib/DragonBall/Vegeta.pm
- ./lib/DragonBall/SonGoku.pm
- ./lib/DragonBall/SonGoku/SuperSaiyan.pm
- ./lib/...
- ./t/unit-tests.t
- ./t/pod-coverage.t
- ./t/pod.t



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```

./t/pod.t

Makefile Pl

ExtUtils::MakeMaker

```
WriteMakefile(
  NAME
               => 'DragonBall',
               => 'You <mail>'.
  AUTHOR
  VERSION FROM => 'lib/DragonBall.pm',
  ABSTRACT FROM => 'lib/DragonBall.pm',
  LICENSE
               => 'perl'.
  PREREQ PM
    'Lingua::EN::Inflect' => 1.86,
    'Sub::Override'
                   => 0.07.
    'Test::More'
                         => 0.
    eval
     ExtUtils::MakeMaker->VERSION(6.46) }
     (META MERGE => {
        resources => {
         Repository => '...' }
      }) : ()),
);
```

ExtUtils::MakeMaker



Ruild.Pl

- ExtUtils::MakeMaker
- Module::Build

```
use warnings;
use strict:
use Module::Build;
my $build = Module::Build->new(
 module name => "DragonBall",
 license => 'perl',
 dist author => q{You <mail>},
  requires
    'Lingua::EN::Inflect' => 1.86,
    'Sub::Override' => 0.07,
    'Test::More'
                       => 0.
 meta merge => {
   resources => {
       repository => '...'.
 },
$build->create build script();
```

Makefile.Pl

```
    ExtUtils::MakeMaker
```

- Module::Build
- Module::Install

```
use inc::Module::Install;
all_from('lib/DragonBall.pm');
requires('Lingua::EN::Inflect' => 1.86);
requires('Sub::Override' => 0.07);
requires('Test::More' => 0 );
repository(...);
WriteAll():
```

```
    ExtUtils::MakeMaker
```

- Module::Build
- Module::Install
- Module::Starter

```
./Changes
./LICENSE
```

- ./MANIFEST.SKIP
- ./Makefile.PL
- ./README
- ./lib/DragonBall.pm
- ./lib/DragonBall/Vegeta.pm
- ./lib/DragonBall/SonGoku.pm
- ./lib/DragonBall/SonGoku/SuperSaiyan
- ../lib/...
- ./t/unit-tests.t
- ./t/pod-coverage.t
- ./t/pod.t

```
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./LICENSE
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Got Git?

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```
./dist.ini
./lib/DragonBall.pm
./lib/DragonBall/Vegeta.pm
./lib/DragonBall/SonGoku.pm
./lib/DragonBall/SonGoku/SuperSaiyan.pm
./lib/...
./t/unit-tests.t
```

What **can** it do?

- adding copyright and license notices
- determining prerequisites
- building Makefile.PL or Build.PL install tools
- tagging releases in your source code control
- uploading to the CPAN
- adding stock tests for compilation, documentation, and style
- simplifying the documentation process
- managing version numbers
- ...

What can't it do?

- Dist::Zilla only handles make dist
- it doesn't handle make install
- about 200 prereqs
- but only authors need to install them
- users don't even see Dist::Zilla
- they just see EU::MM or M::B

```
name = DragonBall
license = Perl 5
copyright holder = Your Name
[GatherDir]
include dotfiles = 1
[PruneCruft]
[MetaYAML]
[MakeMaker]
[TestRelease]
[ConfirmRelease]
[@Git]
```

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name = DragonBall
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Dist::Zilla main commands

```
dzil new
dzil build
dzil test
dzil listdeps
dzil authordeps
dzil release
dzil clean
```

dzil build: the inside scoop

```
sub build {
    my (self) = 0;
    my @files = $self->gather files;
    $self->munge files( @files );
    $self->collect metadata;
    $self->write out( @files );
}
```

dzil build: the inside scoop

```
my @mungers =
   grep { $_->does('FileMunger') }
   $self->plugins;

for my $plugin (@mungers) {
   $plugin->munge_files( @files );
}
```



Plugins

Currently:

- 200+ Dist::Zilla::Plugin::*
- 50+ Dist::Zilla::PluginBundle::*
- how to choose?

@Basic

GatherDir PruneCruft ManifestSkip MetaYAML License Readme **ExtraTests** ExecDir ShareDir MakeMaker Manifest **TestRelease ConfirmRelease** UploadToCPAN

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MANIFEST Makefile.PL LICENSE README META.yml

Other plugins: my pick

PkgVersion add a \$VERSION to your packages

AutoPrereqs automatically extract prereqs from your

modules

PodWeaver weave together a Pod document from an outline

Other plugins: my pick

@Git Git::Check, Git::Commit,

Git::Tag, Git::Push

Git::NextVersion provide a version number by

bumping the last git

release tag

ChangelogFromGit write a Changes file from a

project's git log

MetaResourcesFromGit metadata resource URLs from Git configuration

Other plugins: my pick

PodSyntaxTests a release test for Pod

syntax

PodCoverageTests a release test for Pod

coverage

Test::Perl::Critic tests to check your code

against best practices

CheckChangesHasContent ensure Changes has content

before releasing

PerlTidy PerlTidy in Dist::Zilla

```
package DragonBall;
=head1 NAME
DragonBall - friendship, struggle, and victory
=head1 VERSION
version 1.001
=cut
our $VERSION = 0.001:
=head1 DESCRIPTION
The Legend of Goku
=head1 MFTHODS
=head2 this method
This method does stuff
=cut
method this method { ... }
=head2 that method
Also stuff.
=cut
method that method { ... }
=head1 AUTHOR
You <mail>
=head1 LICENSE
Copyright 2012 You.
This program is free software: you can redistribute it and/or modify it under the terms of either:
the GNU General Public License as published by the Free Software Foundation; or the Artistic License.
See http://dev.perl.org/licenses/ for more information.
=cut
1;
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=head1 DESCRIPTION
The Legend of Goku
=method this_method
This method does stuff.

```
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```
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=cut
1;
```

```
package DragonBall;
# ABSTRACT: friendship, struggle, and victory
```

=head1 DESCRIPTION
The Legend of Goku
=method this method

```
This method does stuff.

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=cut
1;
```

```
=headl DESCRIPTION
The Legend of Goku
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This method does stuff.
=cut
```

ABSTRACT: friendship, struggle, and victory

package DragonBall;

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method that method { ... }
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```



Plugin roles

BeforeBuild FileGatherer FilePruner FileMunger PrereqSource MetaProvider AfterBuild

BeforeArchive BeforeRelease Releaser AfterRelease

. . .

Plugin roles

BeforeBuild FileGatherer FilePruner FileMunger PrereqSource MetaProvider AfterBuild

BeforeArchive BeforeRelease Releaser AfterRelease

```
package Dist::Zilla::Plugin::Foo
use Moose;
with 'Dist::Zilla::Role::Bar';
```

. . .

Build your own plugin!



Dist::Zilla::Plugin::AddFortune

```
package Dist::Zilla::Plugin::AddFortune;
use Moose:
with 'Dist::Zilla::Role::FileMunger';
sub munge file {
    my ($self, $file) = @ ;
    next unless $file->name =~ /\.pl|\.pm$/;
    my $fortune = "\n\n". qx{fortune};
    fortune =  s/^/\# /qm;
    my $content = $file->content;
                   . $fortune;
}
$file->content( $content );
```

Minting

- create config.ini (in ~/.dzil)
- configure or install a profile
- run dzil new

Minting

```
$ find Dist-Zilla-MintingProfile-Author-Andrefs/ -type f
./dist.ini
./lib/Dist/Zilla/MintingProfile/Author/Andrefs.pm
./share/profiles/default/plugins.ini
./share/profiles/default/profile.ini
./share/profiles/default/skel/weaver.ini
./share/profiles/default/Module
```

Minting: profile.ini

```
[TemplateModule/:DefaultModuleMaker]
template = Module
[DistINI]
append file = plugins.ini
[Git::Init]
[GatherDir::Template]
root = skel
[GenerateFile / Generate-Changes ]
filename = Changes
is template = 0
content = Revision history for {{$dist->name}}
content =
content = \{\{\$NEXT\}\}
[GenerateFile / Generate-GitIgnore ]
filename = .gitignore
is template = 1
content = .build
content = {{ $dist->name }}-*
```

Minting: plugins.ini

```
first version = 0.0101
[MetaResourcesFromGit]
homepage = https://github.com/%a/%r
bugtracker.web = https://github.com/%a/%r/issues
[ChangelogFromGit::CPAN::Changes]
file name = Changes
tag regexp = vd+(\.d+)?(?: d+)
:[@Git]
[@Filter / Git]
-bundle = @Git
-remove = Git::Commit
:changelog = Changes
allow dirty = dist.ini
:allow dirty = Changes
commit msq = v%v%n%n%c
tag format = v%v
push to = origin
:[Test::CheckChanges]
:[NextRelease]
[PodSvntaxTests]
[PodCoverageTests]
[Test::Perl::Critic]
[CheckChangesHasContent]
[PkgVersion]
[PodWeaver]
[AutoPrereas]
```

Minting: weaver.ini

```
[@Default]
[-Transformer]
transformer = List
[-Encoding]
encoding = utf-8
[Changes]
```

Minting: Module

```
use strict;
use warnings;
package {{$name}};

# ABSTRACT: Doesn't matter what it does, it is awesome anyway!
# (TODO: change this -- ups!)
1;
```

Minting

dzil.org/tutorial/minting-profile.html

Getting in touch

- irc.perl.org #distzilla
- dzil.org
- github.com/rjbs/dist-zilla

Questions?



Thank you!

