EVOLVINS Software with Moose

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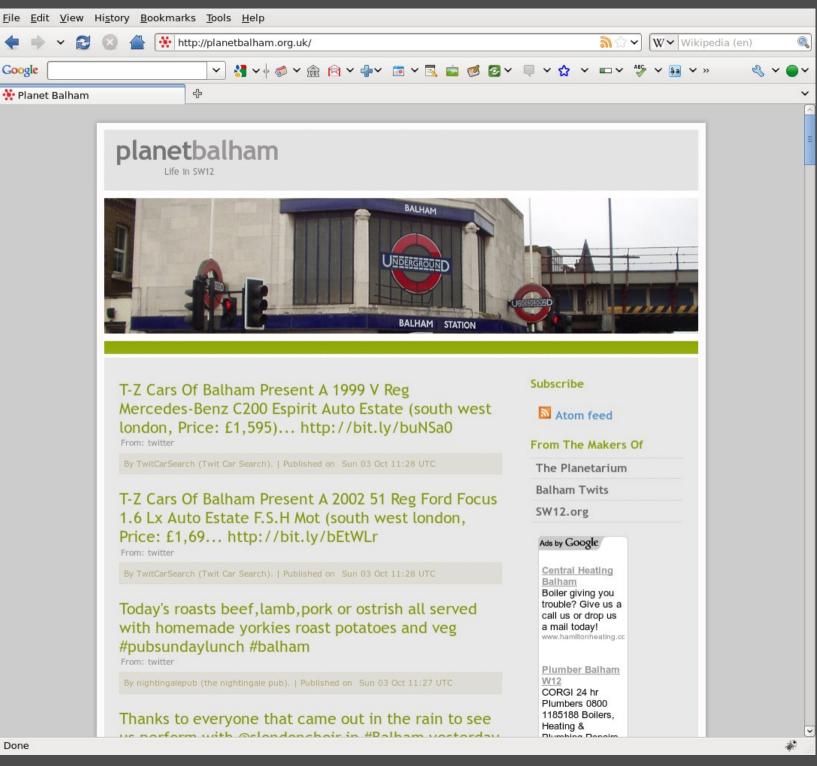
Perlanet

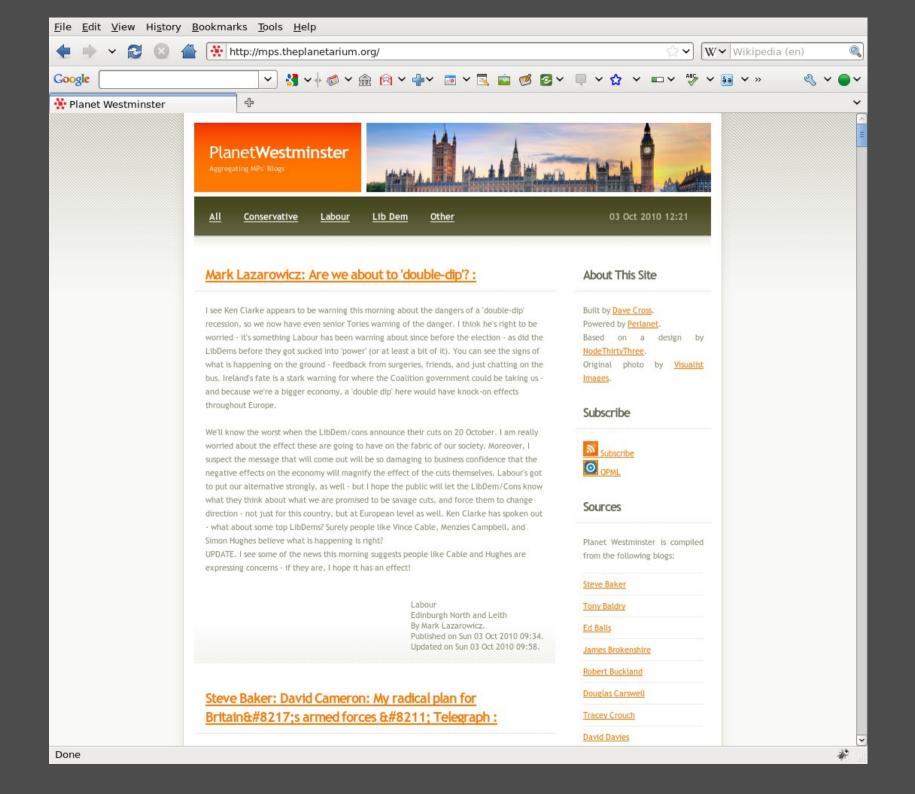
Perl + Planet

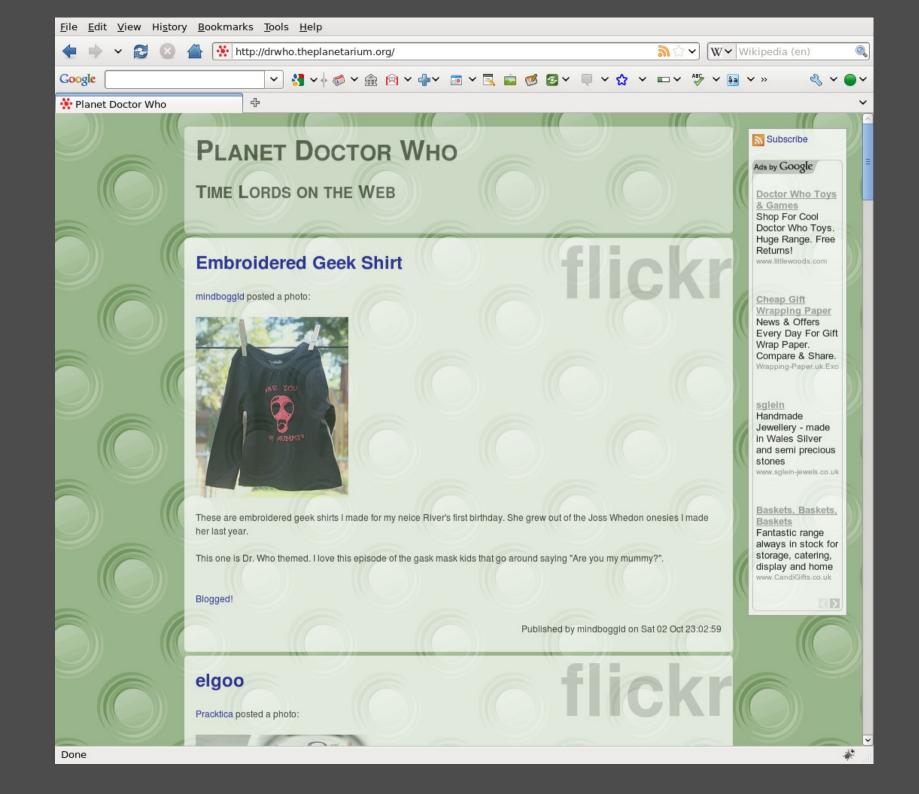
Web Feed Aggregation

Input: Lots of web feeds

Output: Web page + web feed







Scratching an itch

Wrote it for me

CPAN

github

A few bug fixes

A few enhancements

Perl Ironman

Using Plagger

Wanted to use Perlanet

Didn't scale well

YAML config

NWE.pm Hackday

Enter the Moose

Slash and burn

More easily subclassable

Monolithic vs Overridable

HTML::Scrubber

```
# deep in the 'run' subroutine
my %scrub rules = (
 # stuff
);
my %scrub def = (
 # more stuff
my \$scrub = HTML::Scrubber->new;
$scrub->rules(%scrub rules);
$scrub->default(1, \%scrub def);
```

Overriding this is hard

```
has 'scrubber' => (
 is => 'rw',
 lazy build => 1
);
sub build scrubber {
 my \$self = shift;
 # all that previous stuff
 return $scrub;
```

Overriding this is easy

Repeat half a dozen times

YAML config

YAWE config

DB config

Better scaling

Phase 1 complete

Almost

Need better tests

Release early Release often

Phase 2

Traits

Moose has traits and roles

Difference is subtle

Implementation looks similar

I didn't know the difference

Role is like an interface

Defines methods that class MUST implement

```
package ARole;
use Moose::Role;
requires 'do_stuff';
1;
```

```
package AClass;
use Moose;
with 'ARole';
has name => (
 is => 'rw',
 isa = > 'Str',
);
```

```
#!/usr/bin/perl
use strict;
use warnings;
use AClass;
my $obj = Aclass->new({
 name = > \overline{davorg'},
});
```

\$./role_demo
'ARole' requires the method 'do_stuff' to be implemented by 'AClass'
... other scary stuff ...

Need to implement method

```
package AClass;
use Moose;
with 'ARole';
has name => (
 is => 'rw',
 isa = > 'Str',
sub do_stuff {
 my $self = shift;
 print $self->name, "does stuff\n";
1;
```

Roles impose an interface

(We don't use those in Perlanet)

Traits add functionality

Like a mixin

Remember HTML::Scrubber

```
package Perlanet::Trait::Scrubber;
use Moose::Role; # yes really – hold that thought
use HTML::Scrubber;
has scrubber = > (
 is => 'rw',
 lazy build =>1,
sub build scrubber {
 # all that stuff from before
 return $scrub;
```

```
package Perlanet::Trait::Scrubber;
use Moose::Role; # yes really – hold that thought
use HTML::Scrubber;
has scrubber => (
is => 'rw',
lazy build =>1,
sub build scrubber {
 # all that stuff from before
 return $scrub;
```

```
around 'clean_html' => sub {
  my $orig = shift;
  my ($self, $html) = @_;
  $html = $self->orig($html);
  $self->scrubber->scrub($html);
  return $html;
}
```

Perlanet.pm has clean html method

But it does nothing until traits are added

Perlanet is now a hollow shell of amodule

All the fun stuff is in traits

Perlanet::Simple

```
package Perlanet::Simple;
use Moose;
extends 'Perlanet';
with qw(
 Perlanet::Trait::Cache
 Perlanet::Trait::OPML
 Perlanet::Trait::Scrubber
 Perlanet::Trait::Tidy
 Perlanet::Trait::YAMLConfig
 Perlanet::Trait::TemplateToolkit
 Perlanet::Trait::FeedFile
);
```

Moose::Role

Used in both roles and traits

This is Perl

Difference is not clear-cut

Roles and traits are the same thing

Depends where the code is

All based on Moose::Role

Perlanet now trait-based

Easy to add functionality

Perlanet trait ecosystem

And I learned about Moose roles and traits

(And now, so have you)

```
http://search.cpan.org/dist/Perlanet
http://theplanetarium.org/
http://perlanet.mag-sol.com/
```

http://moose.perl.org/