2011-09-18 @ drupalcity.de

features+

„A Presentation about monsters, features and the plus“

whoami

Florian Latzel

- @fl3a
- http://is-loesungen.de
- http://netzaffe.de

whoami: f – l – 3 – what?!

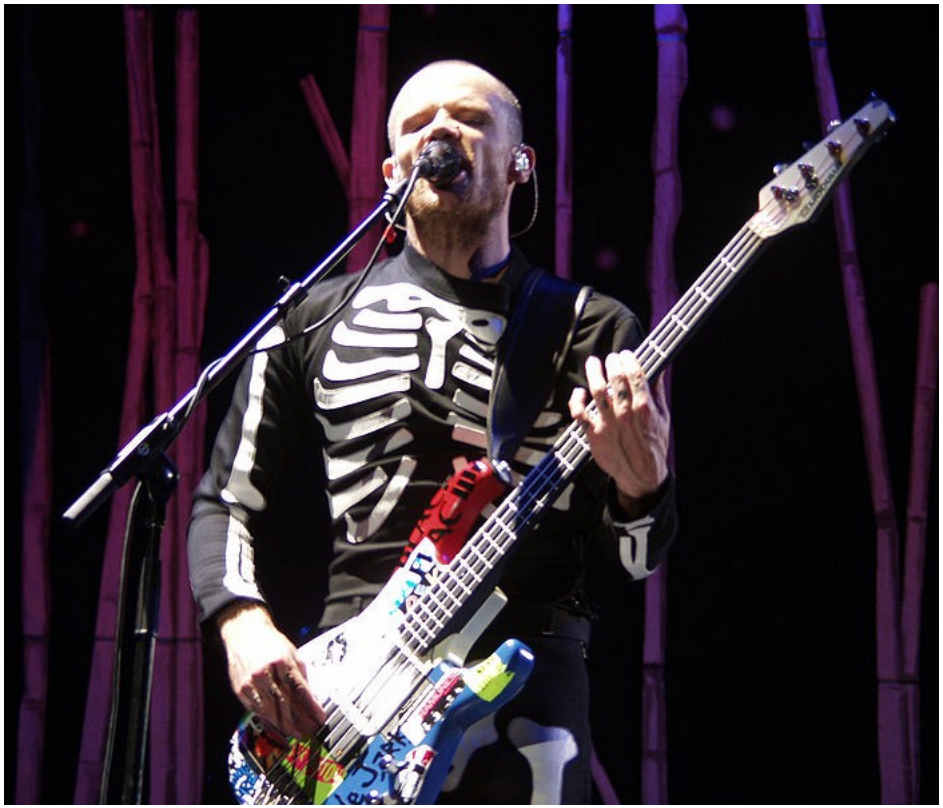
- @fl3a → flEa

whoami: f – l – 3 – what?!

- @fl3a → flea [fli:]

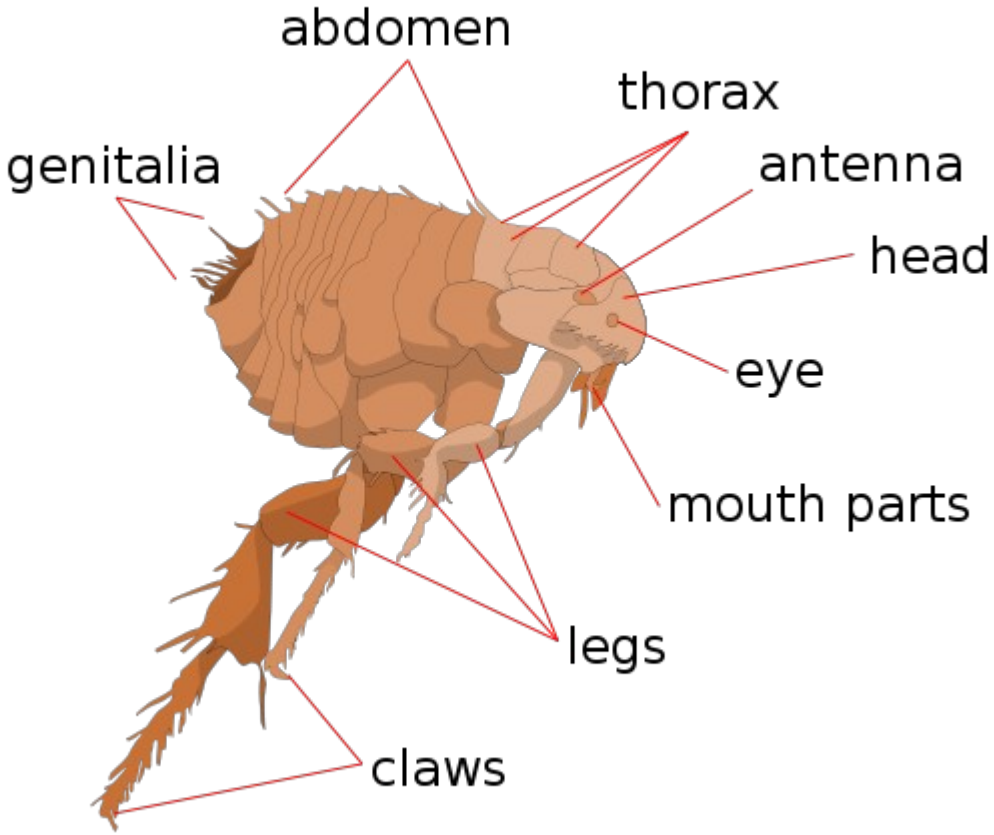
whoami: f — l — 3 — what?!

- @fl3a → flea [fliː]



whoami: f – l – 3 – what?!

- @fl3a → flea [fliː]



whoami: fl3a → flEa → flea → floh...

- @fl3a → floh

cat features+/toc.txt

- Questions
- Conclusion
- Features
- Drupal API
- Drush
- Installation profiles
- The Plus

Questions: What is stored where?

Filesystem:

- Code
- Code Settings

Database:

- Drupal Settings
- Modules Settings
- Content Types
- Content
- Views
- Rules
- ...

Questions: What is exportable* right now?

Filesystem:

- Code
- Code Settings

*(and importable)

Database:

- ~~Drupal Settings~~
- ~~Modules Settings~~
- Content Types
- ~~Content~~
- Views
- Rules
- ...

Questions...

Questions: How to cooperate with a team*?

- Working together on live?

Questions: How to cooperate with a team*?

- Working together on live?
- Working with ftp?

Questions: How to cooperate with a team*?

- Working together on live?
- Working with ftp?
- Sharing sqldumps?

Questions: How to cooperate with a team*?

- Working together on live?
- Working with ftp?
- Sharing sqldumps?
- Overwriting others' work?

*(Perhaps a distributed team)

Questions: How to handle the staging issue?

Everything works on dev. Now what?

Questions: How to handle the staging issue?

Everything works on dev. Now what?

- Install modules again on stage

Questions: How to handle the staging issue?

Everything works on dev. Now what?

- Install modules again on stage
- Export Views, Rules, CT's manually from dev*

* Also possible via code for Rules[1] and Views[2]

Questions: How to handle the staging issue?

Everything works on dev. Now what?

- Install modules again on stage
- Export Views, Rules, CT's manually from dev*
- Import them manually into stage

Questions: How to handle the staging issue?

Whats about the „unexportable“ functionality?

Questions: How to handle the staging issue?

Whats about the „unexportable“ functionality?

Reproduce manually!

Questions: How to handle the staging issue?

Whats about the „unexportable“ functionality?

Reproduce manually:

- Module Settings / Configuration

Questions: How to handle the staging issue?

Whats about the „unexportable“ functionality?

Reproduce manually:

- Module Settings / Configuration
- Roles and its Permissions

Questions: How to handle the staging issue?

Whats about the „unexportable“ functionality?

Reproduce manually:

- Module Settings / Configuration
- Roles and its Permissions
- And so on...

Questions: How to handle the staging issue?

Whats about the „unexportable“ functionality?

Reproduce manually:

- Module Settings / Configuration
- Roles and its Permissions
- And so on...
- Ooops, i forgot the live environment, repeat....

Conclusion

Conclusion

- Not a good strategy for a team...

Conclusion

- Not a good strategy for a team...
- No granularity...

Conclusion

- Not a good strategy for a team...
- No granularity...
- Mostly cumbersome work...

Conclusion

- Not a good strategy for a team...
- No granularity...
- Mostly cumbersome work...
- Hard to use repeating patterns...

Conclusion

- Not a good strategy for a team...
- No granularity...
- Mostly cumbersome work...
- Hard to use repeating patterns...
- Prone to errors...

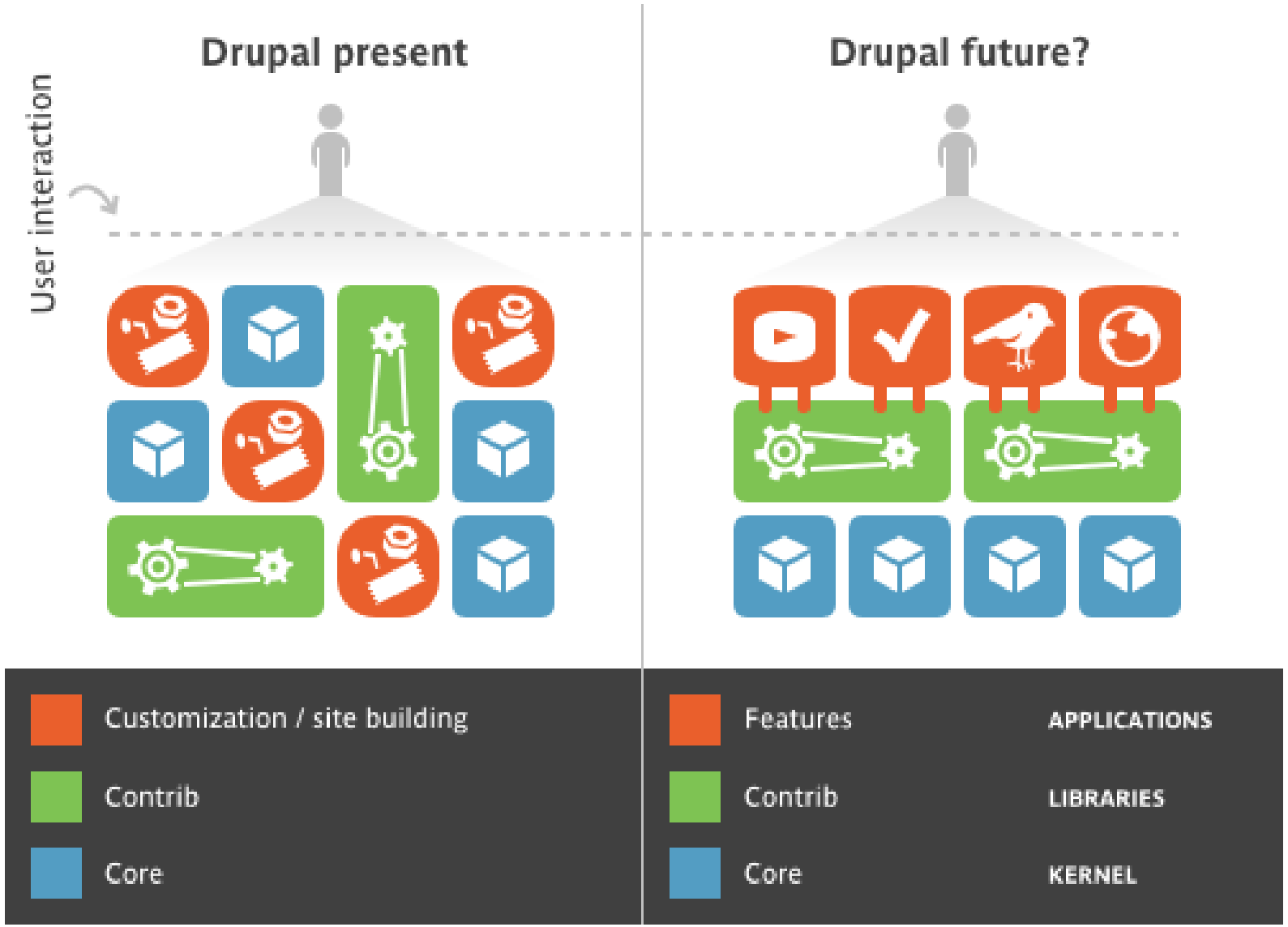
Conclusion

- Not a good strategy for a team...
- No granularity...
- Mostly cumbersome work...
- Hard to use repeating patterns...
- Prone to errors...
- No revision history...

Conclusion

- Not a good strategy for a team...
- No granularity...
- Mostly cumbersome work...
- Hard to use repeating patterns...
- Prone to errors...
- No revision history...
- No VCS / SCM...

features


Drupal present
Drupal future?
User interaction
Customization / site building
Contrib
Core
Features
Contrib
Core
APPLICATIONS
LIBRARIES
KERNEL

features: The Features Module

Features
http://drupal.org/project/features

Requires ctools
http://drupal.org/project/ctools

- Uses the ctools export API
- Export functionality
  and configuration into code
- Code means Drupal Module

features: What can it handle?

Drupal Core:

- CCK Fields
- CCK Fieldgroups
- Content Types
- Dependencies (required modules)
- Menus and Menu links*
- Permissions
- Roles
- Taxonomy (Vocabularies)*

* Currently in development.

features: What can it handle?

Contributed Modules:

- Context
- CKEditor Profiles
- Feeds
- Flags (from 6.x-2.x)
- ImageCache
- Panels (Page Manager)
- Rules
- Views

features: What is missing?

- Configuration
- Custom Blocks
- Input Formats
- Content

features: Rule #35?

Rule #35: "There's a Drupal module for that." [3]

features: Rule #35 - Configuration

Strongarm
http://drupal.org/project/strongarm

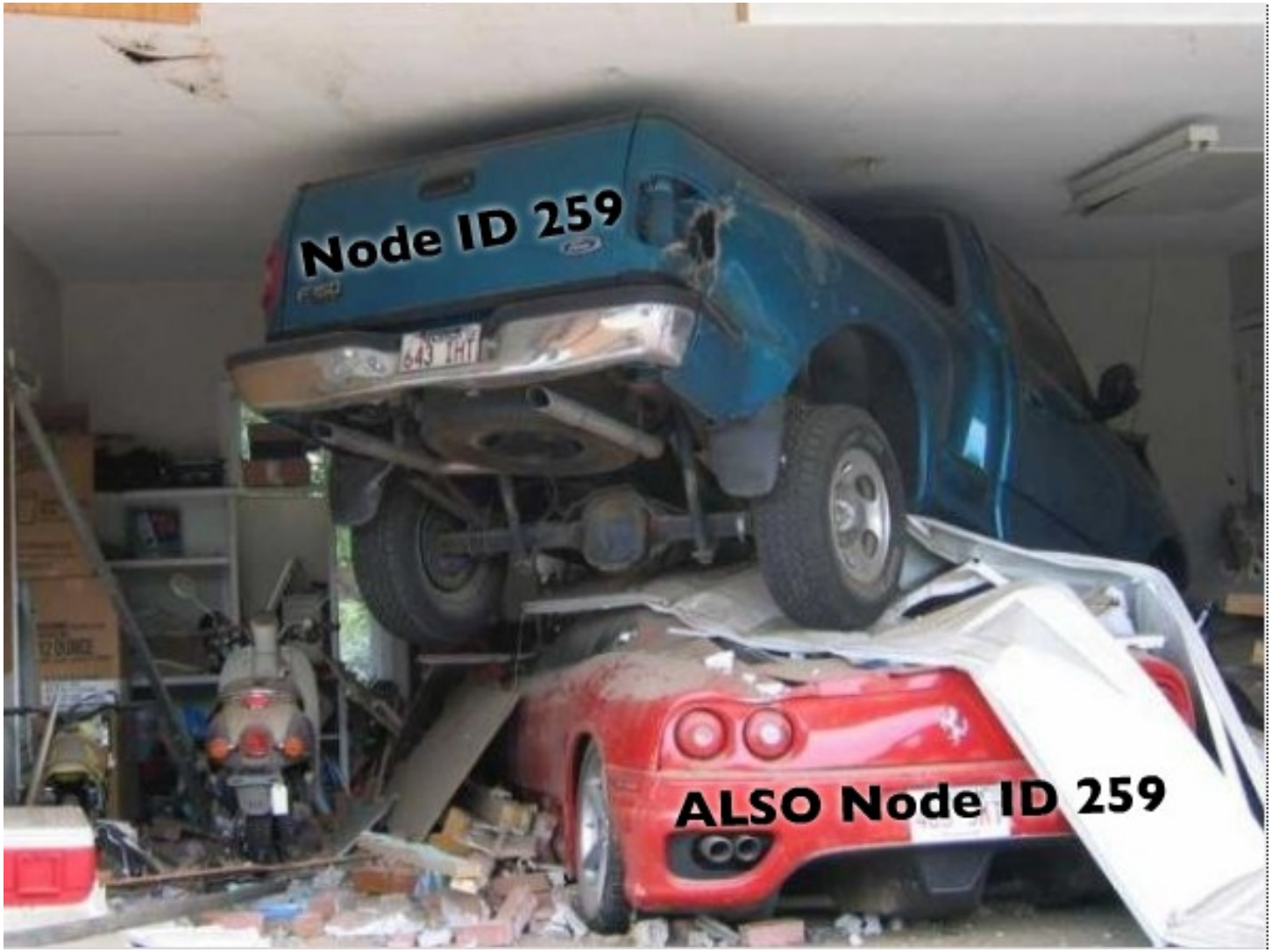
- Settings are usually stored in `{variables}`
- Strongarm makes variables exportable via features
- Uses the ctools export API

features: Rule #35 - Boxes

Boxes
http://drupal.org/project/boxes

- A reimplementation of custom blocks (boxes)
- Uses the ctools export API

features: Rule #35 - Content



features: Rule #35 - Content

Nodes, Node revisions, User, Taxonomy
http://drupal.org/project/uuid_features

- Requires uuid
  → Universally Unique Identifier
  http://drupal.org/project/uuid
- e.g. `node/259` gets the following uuid:
  `f3159efc-3e1c-102e-882c-fd9c148d8804`

Features: Rule #35 - import formats

Input Formats
http://drupal.org/project/input_formats

- Allows you to export / import Input Formats manually like CT's and Views
- Features Module Integration
- Requires Exportables
  http://drupal.org/project/exportables
- Requires Strongarm and Ctools, too

features: myfeature

A Profile CT with...

- content_profile
- cck_private_fields
- flag_friend, flag_friend_access
- content_taxonomy
- And a lot of fields...

features: myfeature

```
myfeature/
├── myfeature.features.content.inc
├── myfeature.features.fieldgroup.inc
├── myfeature.features.inc
├── myfeature.info
├── myfeature.module
└── myfeature.strongarm.inc
```

Features: myfeature.info

```
core = "6.x"
dependencies[] = "cck_private_fields"
dependencies[] = "cck_private_fields_flag_friend"
dependencies[] = "content_profile"
...
description = "Myfeature desciption"
features[ctools][] = "strongarm:strongarm:1"
...
features[fieldgroup][] = "profile-group_personal"
...
features[node][] = "profile"
...
features[user_permission][] = "edit own profile content"
features[user_permission][] = "edit privacy options for field field_relations
features[user_permission][] = "view private data for field field_relationshi
...
features[user_role][] = "Community member"
features[variable][] = "comment_anonymous_profile"
...
name = "myfeature"
package = "Features"
```

features: myfeature.module

```
<?php

include_once('myfeature.features.inc');
```

Features: myfeature.features.inc (1)

```
<?php

/**
 * Implementation of hook_ctools_plugin_api().
 */
function myfeature_ctools_plugin_api() {
  list($module, $api) = func_get_args();
  if ($module == "strongarm" && $api == "strongarm") {
    return array("version" => 1);
  }
}
```

Features: myfeature.features.inc (2)

```
/**
 * Implementation of hook_node_info().
 */
function myfeature_node_info() {
  $items = array(
    'profile' => array(
      'name' => t('Profile'),
      'module' => 'features',
      'description' => t('A user profile built as content.'),
      'has_title' => '1',
      'title_label' => t('Title'),
      'has_body' => '0',
      'body_label' => '',
      'min_word_count' => '0',
      'help' => '',
    ),
  );
  return $items;
}
```

Features: myfeature.features.inc

```
<?php

/**
 * Implementation of hook_ctools_plugin_api().
 */
function myfeature_ctools_plugin_api() {
  list($module, $api) = func_get_args();
  if ($module == "strongarm" && $api == "strongarm") {
    return array("version" => 1);
  }
}
```

features: myfeature.features.content.inc

```
<?php

/**
 * Implementation of hook_content_default_fields().
 */
function myfeature_content_default_fields() {
  $fields = array();
  ...
  // Exported field: field_relationship_status
  $fields['profile-field_relationship_status'] = array(
    'field_name' => 'relationship_status',
    'type_name' => 'profile',
    'display_settings' => array(
      'weight' => '37',
      'parent' => 'group_common,
      'label' => array(
        'format' => 'above',
      ),
     ...
     'allowed_values' => 'solo^M
In a relationship^M
complicated',
     ...
    'label' => 'relationship status',
  );
}
```

features: Specifications

Kit [4]

- KIT Feature Specification (kitf 1.0-draft)
- KIT Theme Specification (kitt 1.0-draft)

features: Known Issues

Lost in translation [5]...

- e.g. a field is named `'Beziehungsstatus'`
- e.g. in your `myfeature.content.inc`
  you will get: `t('Beziehungsstatus')`
  that will be used as translation source
- but it should be `t('relationship status')`
- Still a open issue in Features Module [6]
- Solution: Features Export Language [7]

Drupal API: If a feature is not enough...

You know, Drupal has an API...
Create Upgrade-Path's with Drupal's `update.php`

- Create `myfeature.install` file
- Implement `hook_install()`
  http://api.drupal.org/api/drupal/developer--hooks--install.php/function/hook_install/6
- Implement `hook_update_N()`
  http://api.drupal.org/api/drupal/developer--hooks--install.php/function/hook_update_N/6

Perhaps you might use `db_query()`
or implement `hook_you_name_it()`

drush

drush fu

Features Module provides some drush commands:

- `drush features`
- `drush features-export [feature name] [component list]`
- `drush features-update [feature name]`
- `drush features-revert [feature name]`
- `drush features-diff [feature name]`

drush: Useful features related extensions

- Features Clone
  http://drupal.org/project/features_clone
- Features Plumber
  http://drupal.org/project/features_plumber
- Features Fetch
  http://drupal.org/project/features_fetch

Installation profiles

You might know Installation Profiles from...

- DrupalCenter
- OpenAtrium
- Acquia Drupal
- Commons
- Open Publish
- ...

Installation Profiles: myprofile

```
drupal-6.x/
├── COPYRIGHT.txt
├── cron.php
├── includes
├── index.php
├── install.php
├── misc
├── modules
├── profiles
│   ├── default
│   │   └── default.profile
│   └── myprofile
│       ├── myprofile.profile
│       └── translations
│           └── de.po
├── robots.txt
├── scripts
├── sites
├── themes
├── update.php
└── xmlrpc.php
```

Installation Profile: myprofile.profile

```
/**
 * Implementation of hook_profile_modules()
 *
 * @return
 *   array of modules to be required and activated
 */
function myprofile_profile_modules(){
  return array(

    // feature-stuff
    'myfeature',
    …
  );
}
```

The Plus

- Perhaps your own Drupal Distribution?

The Plus

- Perhaps your own Drupal Distribution?
- Feature Server
  http://drupal.org/project/fserver

The Plus

- Perhaps your own Drupal Distribution?
- Feature Server
  http://drupal.org/project/fserver
- Drush Make
  http://drupal.org/project/drush_make

The Plus

- Perhaps your own Drupal Distribution?
- Feature Server
  http://drupal.org/project/fserver
- Drush Make
  http://drupal.org/project/drush_make
- Drush make UI
  http://drupal.org/project/drush_make_ui

The Plus

- Perhaps your own Drupal Distribution?
- Feature Server
  http://drupal.org/project/fserver
- Drush Make
  http://drupal.org/project/drush_make
- Drush make UI
  http://drupal.org/project/drush_make_ui
- drush site-install
  (in drush core >= 4.0)

The Plus

- Perhaps your own Drupal Distribution?
- Feature Server
  http://drupal.org/project/fserver
- Drush Make
  http://drupal.org/project/drush_make
- Drush make UI
  http://drupal.org/project/drush_make_ui
- drush site-install
  (in drush core >= 4.0)
- CI – Continious Integration
  (with e.g. Hudson / Jenkins)

echo -e “Thank you!\n“

Questions?

- @fl3a
- http://is-loesungen.de
- http://netzaffe.de

cat ~/feature+/appendix/references.txt

[1] http://drupal.org/node/298634

[2] http://api.lullabot.com/hook_views_default_views

[3] Robert Douglass at DrupalCamp Stockholm
http://twitter.com/#!/toddross/statuses/1970578988

[4] http://drupal.org/project/kit

[5] http://blog.erdfisch.de/2011/05/features-international

[6] http://drupal.org/node/874760

[7] http://drupal.org/sandbox/xamanu/1161994

cat ~/feature+/appendix/image-credits.txt

- Flea (RHCP)
  http://en.wikipedia.org/wiki/File:Flea_in_skeleton_t-shirt.jpg
- Flea (anatomy)
  http://en.wikipedia.org/wiki/File:Scheme_flea_anatomy-en.svg
- Feature Monster
  http://drupal.org/files/images/features_monster.png
- The future of drupal features
  http://www.flickr.com/photos/developmentseed/3575550279/
- Strongarm Monster
  http://drupal.org/files/images/strongarm.png
- Boxes Monster
  http://drupal.org/node/820924
- „Node Collision“
  http://www.slideshare.net/eaton/drupal-deployment-presentation
- Adrian <3 drush
  http://www.flickr.com/photos/developmentseed/3614279203/

Feature related images by developmentSEED, monsters by Saman Bemel Benrud