How to R.E.A.D

Steps for selecting the correct module.

Who You Are.

- Site Builder
- Developer
- Decision Maker

- New to Drupal
- Want to re-enforce habits

What's it all about.

How to quickly make smart, informed decisions.

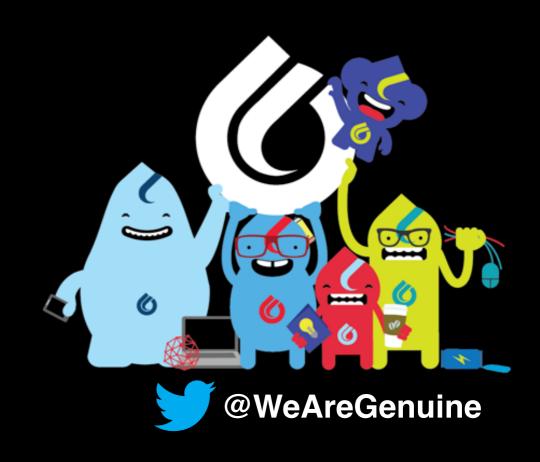
What we'll cover.

- Steps to decide between a contrib, patched or custom module.
- Basics of patching.
- Basics of writing a module.

Michael Miles

- Associate Director of PHP @ Genuine Interactive.
- Drank the Drupal Kool-aid in 2008. (it's grape flavored)

- Twitter: @mikemiles86
- D.o: mikemiles86



A lover of memes.



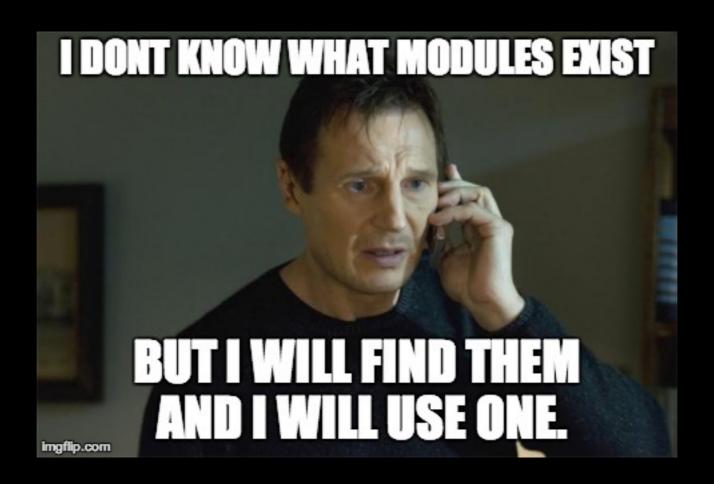
How to R.E.A.D

(yay acronyms!)

R.E.A.D

- Research what exists.
- Evaluate the options.
- Analyze the gap.
- Determine amount of change.





- Isolate keywords about functionality.
- Search for existing modules.
- Use the community.



Evaluate the options.



Evaluate the options.

- Read the module description.
- Look at community adoption.
- Look at maintainer activity.



Analyze the gap.

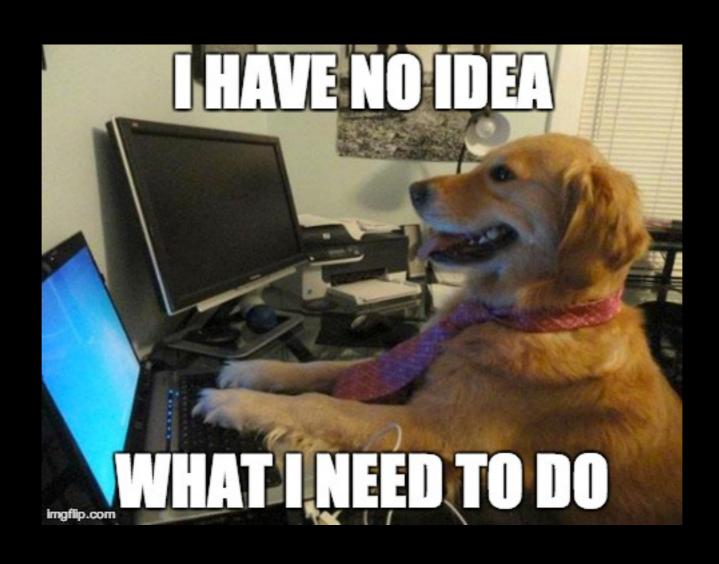


Analyze the gap.

- Download and test the module.
- Discover missing functionality.
- Check issue queue for solutions.



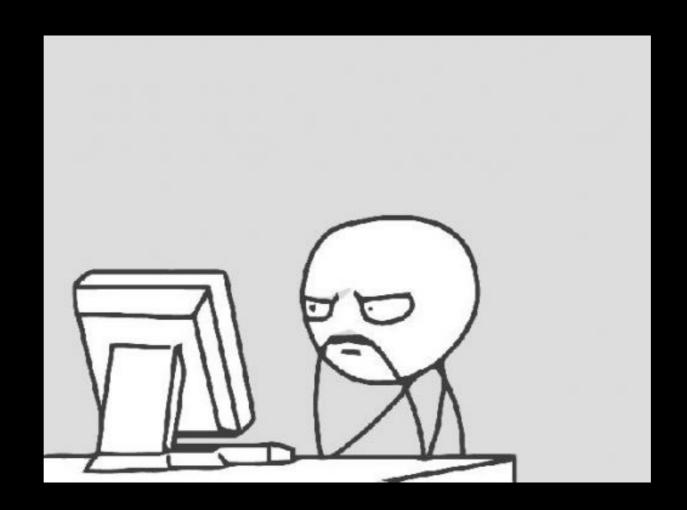
Determine amount of change.



Determine amount of change.

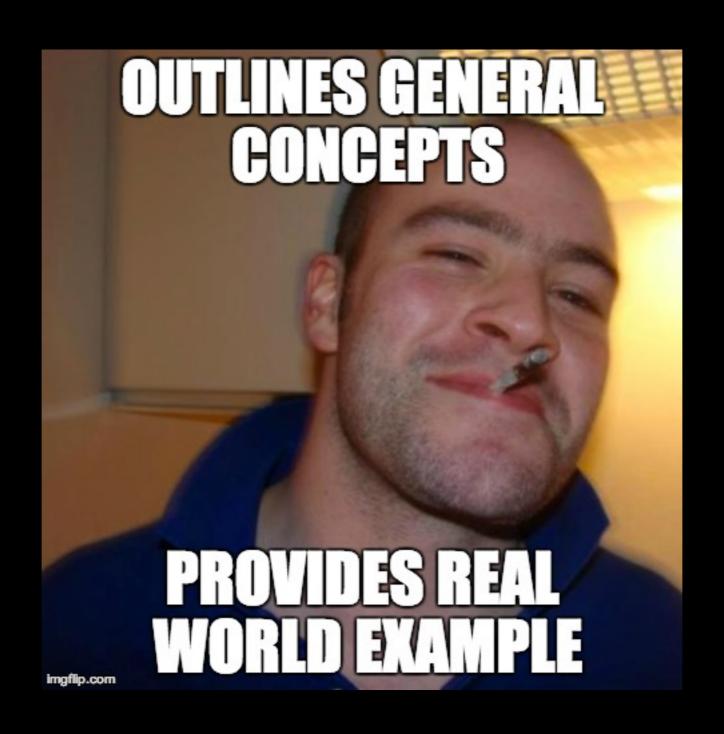
- Review the module code.
- Estimate how much has to be changed.
- Do changes extend or alter module?

Let's review.



Like developers...

Examples.



Scenario #1.

The Requirements.

WHEN SAVING A FILE

AND IT IS A JPEG IMAGE

THEN THE EXIF META DATA NEEDS TO BE CAPTURED

AND MAPPED TO CUSTOM FIELDS

AND THESE MAPPINGS NEED TO BE EXPORTABLE USING FEATURES

Step 1 Research what exists.

Isolate keywords about functionality.

WHEN SAVING A FILE

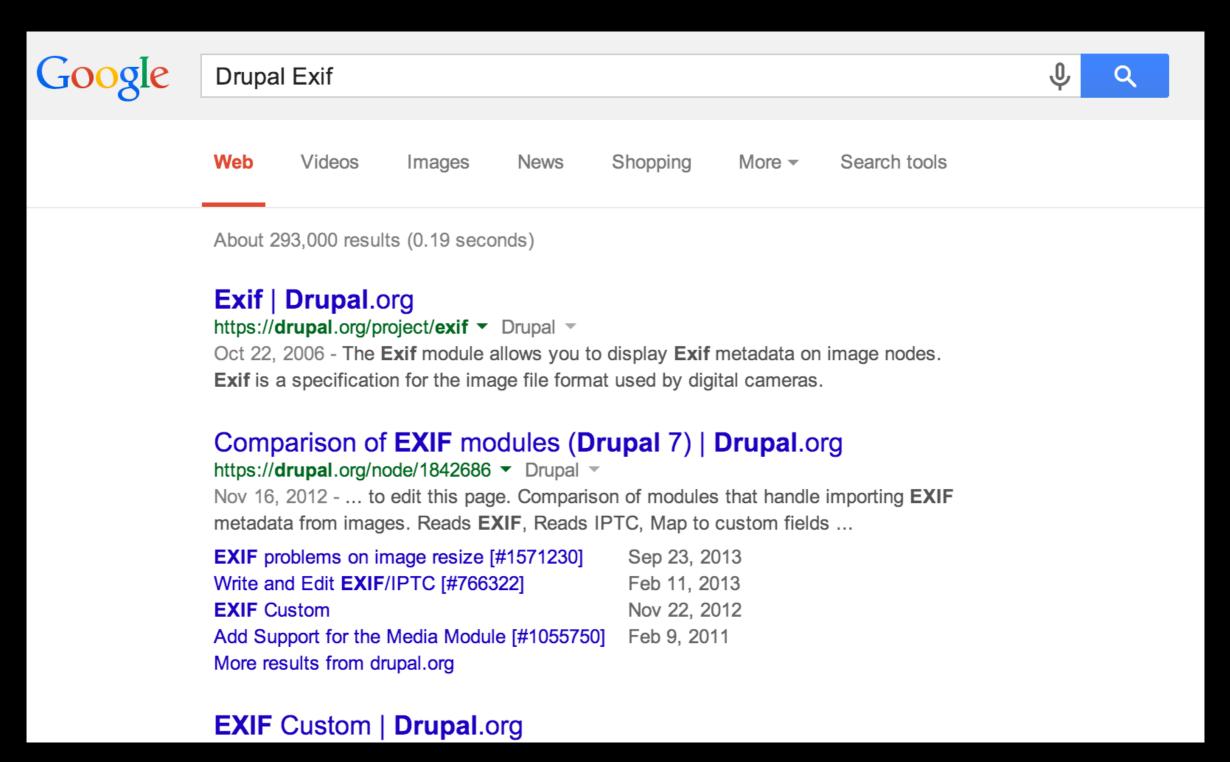
AND IT IS A JPEG IMAGE

THEN THE **EXIF META DATA** NEEDS TO BE CAPTURED

AND MAPPED TO CUSTOM FIELDS

AND THESE MAPPINGS NEED TO BE **EXPORTABLE USING FEATURES**.

Search for existing modules.



Talk to the community.

The dry this office more have two directories, one in side the otherparent and cinia. Both have the same permissions
(777 for both). I can attach a file from a node and upload to the Parent, but not the Childwhy why?
correct
redirect?
redirect: Perform a drupal_goto() to the location provided by the plugin for the => redirect(\$op, \$item = NULL) =>
http://drupalcontrib.org/api/function/redirect/7
redirect is http://httpd.apache.org/docs-2.0/mod/mod_alias.html#redirect and is also http://drupal.org/project/redirect
thejamesjones: iirc the Redirect module is the more recent version of Global Redirects
Anyone have a recommendation for how to capture jpeg exif data from a file entity into custom fields?
globalredirect?
globalredirect is http://drupal.org/project/globalredirect
mikemiles86: Running it through Imagick would probably get you exif:
http://www.php.net/manual/en/imagick.getimageproperties.php
have redirect and it is enabled.
exif?
The Exif module allows you to display Exif metadata on image nodes. Exif is a specification for the image file format used
cameras. http://drupal.org/project/exif
ah, I'll take a look
thanks
jaharmi is now known as zz_jaharmi
benjf i have global redirect as well, and have this setting checked.
Non-clean to Clean
If enabled, this option will redirect from non-clean to clean URL (if Clean URL's are enabled). This will stop, for example,
existing on both example.com/node/1 AND example.com?q=node/1.

IRC: #drupal, #drupal-support

Research what exists. Find possible existing solutions

The Exif module

The Exif custom module

Step 2 Evaluate the options.

Evaluate the options

Read the module description.

Exif



Version control

Revisions Automated Testing

Posted by David Lesieur on October 22, 2006 at 2:00pm

The Exif module allows you to display Exif metadata on image nodes. Exif is a specification for the image file format used by digital cameras.

Drupal 7 version

jphautin is the maintainer of the Drupal 7 branch, an adaptation of the drupal 6 branch to the new Field API.

This version allow you to use metadata as text or as taxonomy terms to classify your images.

EXIF Custom



Version control

Revisions

Automated Testing

Posted by edwbaker on October 29, 2012 at 7:23pm

This module allows automatic population of fields from the EXIF, XMP and IPTC metadata tags when images are uploaded (requires the File Entity module).

Any number of custom mappings between image metadata tags and image fields can be created and saved and it is easy to manage what mapping is used on a site-wide and per-user basis.

To create a new mapping an example image file is uploaded - the available EXIF/XMP/IPTC fields are then listed and can be mapped to the fields attached to an image file entity.

Evaluate the options

Look at community adoption.

Exif

Project Information

Maintenance status: Seeking co-maintainer(s)

Development status: Under active development

Reported installs: 965 sites currently report using this module.

Downloads: 13,082

Last modified: September 21, 2012

Exif Custom

Project Information

Maintenance status: Actively maintained

Development status: Under active development

Module categories: Content

Reported installs: 374 sites currently report using this module.

Downloads: 2,647

Automated tests: Enabled

Last modified: January 19, 2014

Evaluate the options

Look at maintainer activity.

Maintainers for EXIF Custom

edwbaker - 22 commits

last: 7 months ago, first: 1 year ago

View all committers
View commits

Issues for EXIF Custom

To avoid duplicates, please search before submitting a new issue.

Search

Advanced search

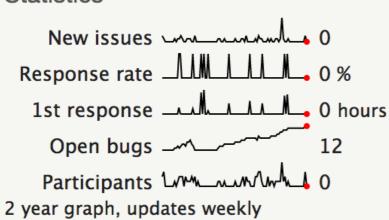
All issues

20 open, 44 total

Bug report

12 open, 28 total Subscribe via e-mail

Statistics



Maintainers for Exif

jphautin - 40 commits

last: 1 year ago, first: 4 years ago

rapsli - 40 commits

last: 3 years ago, first: 5 years ago

neclimdul - 2 commits

last: 5 years ago, first: 6 years ago

David Lesieur - 27 commits

last: 6 years ago, first: 7 years ago

View all committers View commits

Issues for Exif

To avoid duplicates, please search before submitting a new issue.

Advanced coards

Search

Advanced search

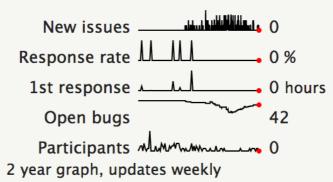
All issues

91 open, 182 total

Bug report

42 open, 93 total Subscribe via e-mail

Statistics



Evaluate the options Determine best fit.

EXIF Custom



Version control Revisions Automated Testing

Posted by edwbaker on October 29, 2012 at 7:23pm

This module allows automatic population of fields from the EXIF, XMP and IPTC metadata tags when images are uploaded (requires the File Entity module).

Any number of custom mappings between image metadata tags and image fields can be created and saved and it is easy to manage what mapping is used on a site-wide and per-user basis.

To create a new mapping an example image file is uploaded - the available EXIF/XMP/IPTC fields are then listed and can be mapped to the fields attached to an image file entity.

Step 3 Analyze the gap.

Analyze the gap.

Download and test the module.

Home » Administration » Configuration » Content authoring » Custom Exif Mappings

Edit mapping o

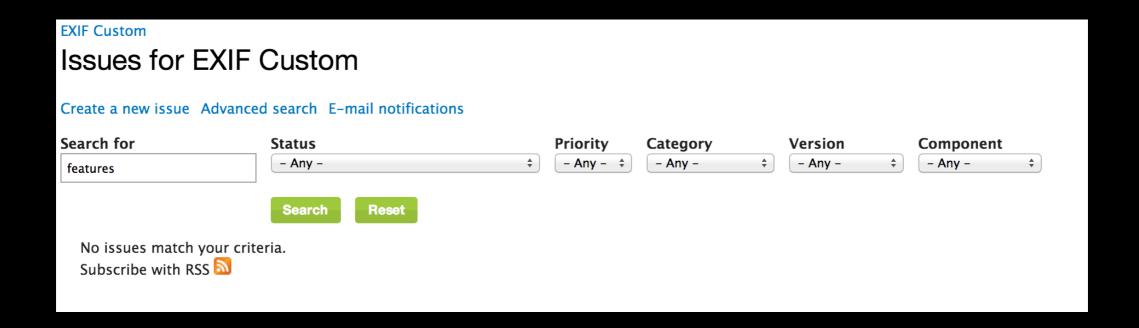
EXIF field	Example	Mapped to
EXIF:FILE:FileName	cv-testbed-kitchensink-untouched.jpg	Asset Name \$
EXIF:FILE:FileDateTime	1385042727	Production Year \$
EXIF:FILE:FileSize	371010	Size 💠
EXIF:FILE:FileType	2	none 💠
EXIF:FILE:MimeType	image/jpeg	Format
EXIF:FILE:SectionsFound	ANY_TAG, IFD0, THUMBNAIL, EXIF	none 💠
EXIF:COMPUTED:html	width="1200" height="800"	none 💠
EXIF:COMPUTED:Height	800	none \$

Analyze the gap. Discover missing functionality.



Analyze the gap.

Check issue queue for solutions.



Step 4 Determine amount of change.

Review the module code.

```
468
469
     | function exif_custom_get_mapping(){
         //First try and get users default
470
471
         $mid = exif_custom_get_user_default();
472
         //Else use site default or item 0
473
     if($mid === FALSE){
          $mid = exif_custom_get_mid(variable_get('exif_custom_default', ''));
474
475
         $sql = "SELECT * FROM {exif_custom_mapped_fields} WHERE mid = :mid AND img_field != 'none'";
476
477
      ':mid' => $mid
478
479
     480
         return $return;
481
     \triangle
482
483
     function exif_custom_get_exif_fields($uri, $concatenate_arrays = TRUE){
484
         $fields = array();
485
         //Get all of the EXIF tags
         $exif = exif_read_data(drupal_realpath($uri), NULL, TRUE);
486
487
     if(is_array($exif)){
488
     foreach($exif as $name => $section){
489
            .foreach($section.as.$key.=>.$value){
              if($concatenate_arrays & is_array($value)){
490
                $value = implode(', ', svalue);
491
492
493
              $fields['EXIF:'..$name..':'..$key] = exif_custom_check_plain($value);
494
495
496
497
         //XMP - test
498
        $fields = array_merge($fields, exif_custom_get_xmp(drupal_realpath($uri)));
499
500
501
         //Look for IPTC data
502
         $size = getimagesize(drupal_realpath($uri), $info);
```

Estimate how much has to be changed.

- Requires little rewriting of code base.
- Need to add new hooks and one new file.

Will changes extend or alter the module?



Which path to choose?

Patch Exif Custom module

Write own Exif module



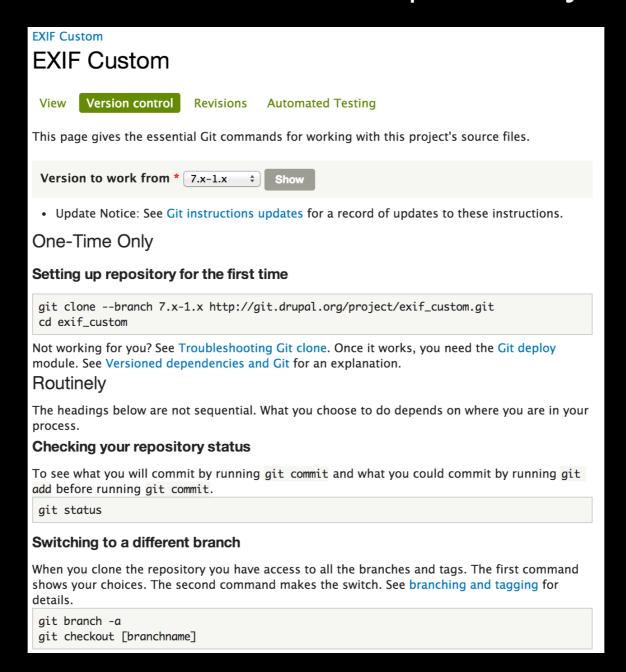
What is a Patch?

- drupal.org/patch
- A structured list of changes to a file.
- Used to re-create changes to a files.
- Focus on a single change.

How to create a Patch.

- Clone module repository.
- Create a new branch.
- Make changes to code.
- Test changes.
- Generate the patch.

Clone module repository.



Create a branch.

mm:exif_custom\$ git checkout -b patch/features_integration

Make changes.

```
<?php
     <u>÷</u>/**
       * Features file for the exif_custom module.
       * Implements hook_features_api().
     function exif_custom_features_api() {
11
     return array(
           'exif_custom' => array(
13
                              => t('EXIF Custom mappings'),
14
             'default_hook'...
                              :=> 'exif_custom_export_maps',
15
             'feature_source' .. => TRUE,
16
             'default_file' => FEATURES_DEFAULTS_INCLUDED,
17
                              => drupal_get_path('module', 'exif_custom')...'/exif_cus
18
19
     `∆}
20
21
22
       * Implements COMPONENT_features_export_options().
25
       * Inform features about the available mappings in the database.
26
27
     function exif_custom_features_export_options() {
28
         return db_select('exif_custom_maps', 'ecm')
29
           ->fields('ecm', array('name', 'name'))
           ->execute()
           ->fetchAllKeyed();
     △}
32
33
34
35
       * Implements COMPONENT_features_export().
36
37
       * Process the features export array for mappings.
      function exif_custom_features_export($data, &$export, $module_name) {
40
         $export['dependencies']['exif_custom'] = 'exif_custom';
42
     ($data_as_$component) {
           $export['features']['exif_custom'][$component] = $component;
```

Test changes.

Description test of featrues integration for exif custom module Provide a short description of what users should expect when they enable your feature. Package Features Organize your features in groups.	lame	
Description test of featrues integration for exif custom module Provide a short description of what users should expect when they enable your feature. Package Features Organize your features in groups.	Exif Custom test	
Provide a short description of what users should expect when they enable your feature. Package Features Organize your features in groups. Version	Machine name: exif_custom_test [Edit]	
test of featrues integration for exif custom module Provide a short description of what users should expect when they enable your feature. Package Features Organize your features in groups. Version	xample: Image gallery (Do not begin name with numbers.)	
test of featrues integration for exif custom module Provide a short description of what users should expect when they enable your feature. Package Features Organize your features in groups. Version		
test of featrues integration for exif custom module Provide a short description of what users should expect when they enable your feature. Package Features Organize your features in groups. Version		
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Package Features Organize your features in groups. Version	rovide a short description of what users should expect when they e	
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Features Organize your features in groups. Version		
Version	our feature.	
Version	Package	
	Package Features	
	Package Features	
	Package Features	
7.x-1.x	Package Features Organize your features in groups.	
	Package Features Organize your features in groups.	
Fyamples: 7 y 1 0 7 y 1 0 heta1	Package Features Organize your features in groups. Version	
Examples. 7.x-1.0, 7.x-1.0-beta1	Package Features Organize your features in groups. Version 7.x-1.x	
	Package Features Organize your features in groups. Version	

▶ ADVANCED OPTIONS

Download feature

COMPONENTS
Expand each component section and select which items should be included in this feature export.
Search Clear Select all
► APACHE SOLR FRAMEWORK (1) (apachesolr_environment)
► APACHE SOLR SEARCH (2) (apachesolr_search_page)
► BLOCK SETTINGS (53) (fe_block_settings)
► BRIGHTCOVE (1) (brightcove_player)
► CUSTOM KEYWORD SETS (34) (custom_keywords_sets)
► DEPENDENCIES (162) (dependencies)
Custom EXIF mapping
▼ EXIF CUSTOM MAPPINGS (0) (exif_custom)
✓ Sample Exif Mappings
► FEATURE OVERRIDES (303) (features_override_items)
► FEATURE OVERRIDES (INDIVIDUAL ADVANCED) (985) (features_overrides
► FIELD BASES (2) (field_base)
► FIELD INSTANCES (4) (field_instance)
► MENU LINKS (139) (menu_links)

Create the patch file.

mm:exif_custom\$ git diff 7.x-1.x > exif_custom-features_integration.patch

How to submit a Patch.

- Create/Comment on an issue.
- Attach the patch.
 - [description]-[issue-number]-[comment-number].patch
- Revise based on testing/reviews.

Create an issue.

EXIF Custom » Issues

Features integration



Edit

Revisions

CLONE ISSUE

Posted by mikemiles86 on November 21, 2013 at 11:47am

It would be very helpful if this module had features integration so that mappings could be exported to code so that they could be managed. For example, sharing across development environments, or pushing field mapping updates to other environments.

Project:	EXIF Custom
Version:	7.x-1.13
Component:	Code
Priority:	Normal
Category:	Feature request
Assigned:	Unassigned

Comments

Attach the patch.

Comments

#1

Posted by mikemiles 86 on November 21, 2013 at 4:21pm



Here is a patch that will add features integration into this module.

One thing worth noting that I changed was to have the 'exif_custom_default' variable store the name value instead of the serial id.

edit

#2

Posted by danquah on December 17, 2013 at 5:42am

Status: Patch (to be ported) » Reviewed & tested by the community

Just tested it and it works as advertised!

Should probably be tested a bit more as features integration has a tendency to be tricky, but for now it works like a charm.

report spam

#3

Posted by edwbaker on January 21, 2014 at 9:34am

Status: Reviewed & tested by the community » Fixed

Fantastic - thanks for this. In 7.x-1.x branch for next release.

report spam

Contributing back to the community.



Scenario #2.

The Requirements.

WHEN SITE USES WORKBENCH TO MODERATE CONTENT

THEN CAN CREATE MULTIPLE TRANSITIONS BETWEEN STATES

AND TRANSITIONS ARE EXPORTABLE USING FEATURES

WHEN EDITNG A CONTENT REVISION

THEN CAN SCHEDULE A TRANSITION

AND CAN SELECT DATE FOR FIRST STATE

AND CAN SELECT DATE FOR SECOND STATE

Step 1 Research what exists.

Research what exists.

Isolate keywords about functionality.

WHEN SITE USES **WORKBENCH** TO MODERATE CONTENT

THEN CAN CREATE MULTIPLE TRANSITIONS BETWEEN STATES

AND TRANSITIONS ARE **EXPORTABLE USING FEATURES**

WHEN EDITNG A CONTENT REVISION

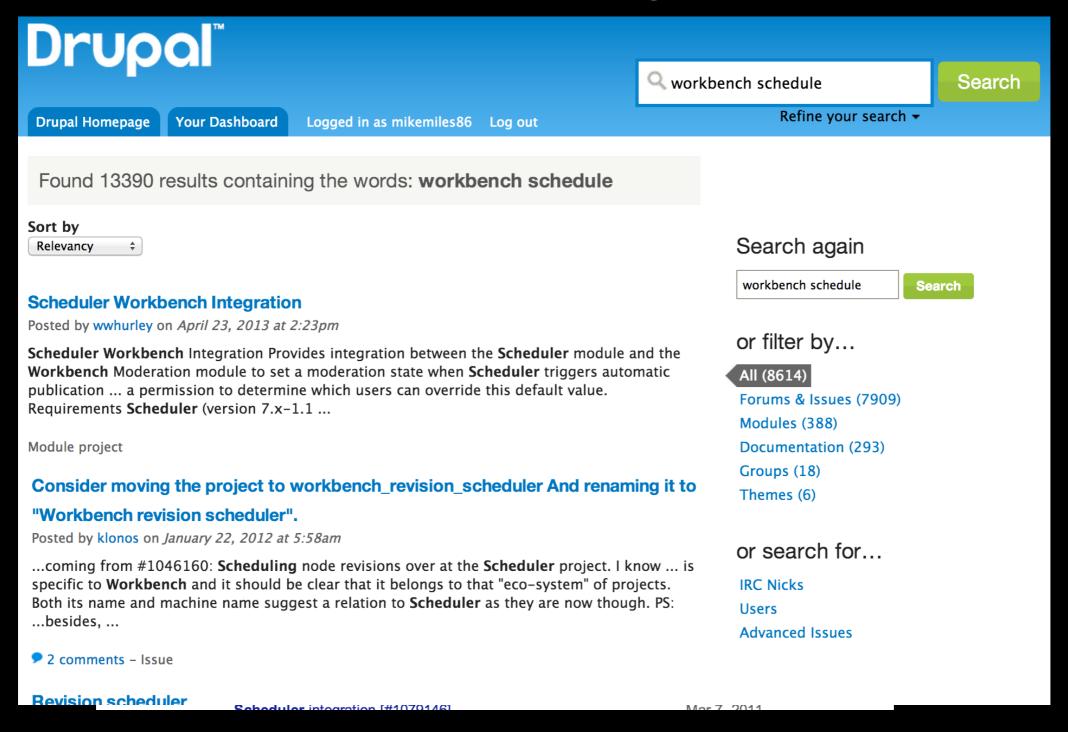
THEN CAN **SCHEDULE A TRANSITION**

AND CAN SELECT DATE FOR FIRST STATE

AND CAN SELECT DATE FOR SECOND STATE

Research what exists.

Search for existing modules.



Step 2 Evaluate the options.

Evaluate the options

Read the module description.

Scheduler Workbench Integration



Version control

Posted by wwhurley on June 20, 2012 at 7:01pm

Scheduler Workbench Integration

Provides integration between the Scheduler module and the Workbench Moderation module to set a moderation state when Scheduler triggers automatic publication unpublication of a module. It also adds a field to capture a default value for unpublication and adds a permission to determine which users can override this default value.

Requirements

- Scheduler (version 7.x-1.1 or higher)
- Workbench Moderation

Evaluate the options Look at community adoption.

Project Information

Maintenance status: Actively maintained

Development status: Under active development

Module categories: Administration, Utility

Reported installs: 1,397 sites currently report using this module.

Downloads: 7,948

Last modified: April 23, 2013

Evaluate the options

Look at maintainer activity.

Maintainers for Scheduler Workbench Integration

whurleyf1 - 2 commits

last: 1 year ago, first: 2 years ago

View all committers

View commits

Issues for Scheduler Workbench Integration

To avoid duplicates, please search before submitting a new issue.

Advanced search
All issues
10 open, 25 total
Bug report
3 open, 11 total
Subscribe via e-mail
Statistics

New issues

New issues

10 open, 25 total
0 open, 25

Open bugs -----

2 year graph, updates weekly

Step 3 Analyze the gap.

Analyze the gap.

Download and test the module.

Some Scheduler options are set for each different content type, and are accessed via the admin content type list. The options and settings below are common to all content types.

Date format *

Y-m-d Hi:is Example: 2014-04-04 02:36:43

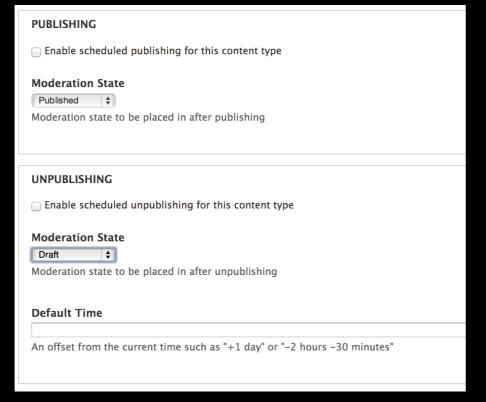
The format for entering scheduled dates and times. For the date use the letters djmnyY and for the time use hHgGi:

Field type

Standard text field

Date Popup calendar

Date Popup is enabled. See the configuration page for details.



ate	Time
E.g., 2014-04-05	E.g., 14:39:22
ave the date blank f	or no scheduled publishi
npublish on	
npublish on	Time
	Time E.g., 14:39:22

Analyze the gap. Discover missing functionality.

- Unable to create different transitions per type
- Unable to select different transitions for revisions
- No features integration.

Step 4 Determine amount of change.

Review the module code.

```
* <u>@param</u> string $action
154
            Action being performed on node
155
156

function scheduler_workbench_scheduler_api(&$node, $action) {

157
      if (!workbench_moderation_node_type_moderated($node->type)) {
158
            return:
     台..}
159
160
161
         $func = "_scheduler_workbench_scheduler_{$action}";
      if (function_exists($func)) {
162
           $func($node);
163
164
165
     166
167
     ⊝/**
        * Handles when scheduler unpublishes a node.
168
169
170
        * @param stdClass $node
171
            Node being unpublished
172
      173
      function _scheduler_workbench_scheduler_unpublish(&$node) {
174
      if ($state = variable_get('scheduler_unpublish_moderation_state_'...
175
           workbench_moderation_moderate($node, $state);
176
      △ . . }
     △}
177
178
179
     ⊝/**
180
        * Handles when scheduler publishes a node.
181
182
        * @param stdClass $node
183
            Node being published
184
185
      function _scheduler_workbench_scheduler_pre_publish(&$node) {
186

    if ($state = variable_get('scheduler_publish_moderation_state_'...$)

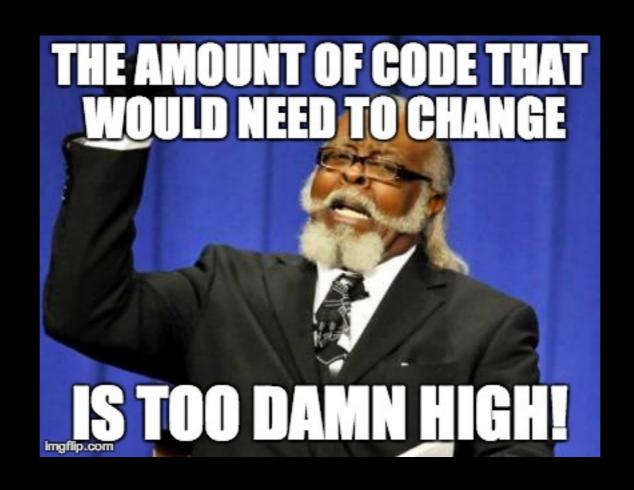
187
            $node->workbench_moderation_state_current = $node->workbench_mode
188
           $node->workbench moderation state new = $state;
189
      190
191
```

Estimate how much has to be changed.

- Will need to change how transitions are created.
- Will need to change how schedules are stored.
- Will need to add features integration.

Determine amount of change.

Will changes extend or alter the module?



Which path to choose?

Patch Scheduler workbench module

Write own scheduler module



CUSTOM MODULE!

Module Writing Guidelines.

- drupal.org/developing/modules
- Follow Drupal coding standards.
- Make use of hooks and APIs.
- Test your code.

Contributing a module.

- Is it functionality other could use?
- Name appropriately.
- Provide accurate description.
- Be an active maintainer.

Name appropriately.

Workbench Scheduler



Version control

Maintainers for Workbench Scheduler

partdigital - 3 commits

last: 1 week ago, first: 1 month ago

mikemiles86 - 8 commits

last: 1 month ago, first: 1 year ago

View all committers View commits

Issues for Workbench Scheduler

To avoid duplicates, please search before submitting a new issue.

Advanced search

All issues

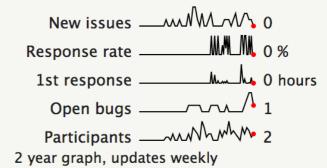
9 open, 30 total

Bug report

1 open, 10 total

Subscribe via e-mail

Statistics



Provide detailed description.

Workbench Scheduler



Version control

Posted by mikemiles86 on October 4, 2013 at 6:03pm

Workbench scheduler provides users with the ability to create schedules that change moderated content from one workbench moderation state to another. When editing moderated content, users can select a schedule and set the start and end dates for when it should be applied.

A simple example of when this can be helpful is to have a content revision set to be published on a specific date, and unpublished at another.

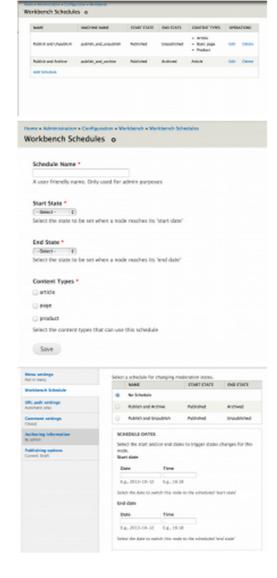
Users with the correct permissions can create custom workbench schedules where they specify:

- The moderation state to be set when content reaches the "start date"
- The moderation state to be set when content reaches the "end date"
- Which content types should be able to use the schedule

When editing content, users with the correct permissions can select which schedule to apply to their content and set the start and end dates from the "Workbench Scheduler" settings of the node edit form.

It is possible to select only a start or end date, so that only the respective state change will be applied.

Workbench scheduler comes packaged with views support to allow the creation of custom dashboards.



Workbench scheduler comes packaged with features support to allow exporting of schedules.

Dependencies

This module is dependent on the following modules:

Maintainers for Workbench Scheduler

partdigital - 3 commits

last: 1 week ago, first: 1 month ago

mikemiles86 - 8 commits

last: 1 month ago, first: 1 year ago

View all committers

View commits

Issues for Workbench Scheduler

To avoid duplicates, please search before submitting a new issue.

Advanced search

All issues

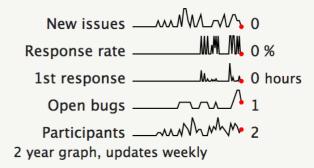
9 open, 30 total

Bug report

1 open, 10 total

Subscribe via e-mail

Statistics



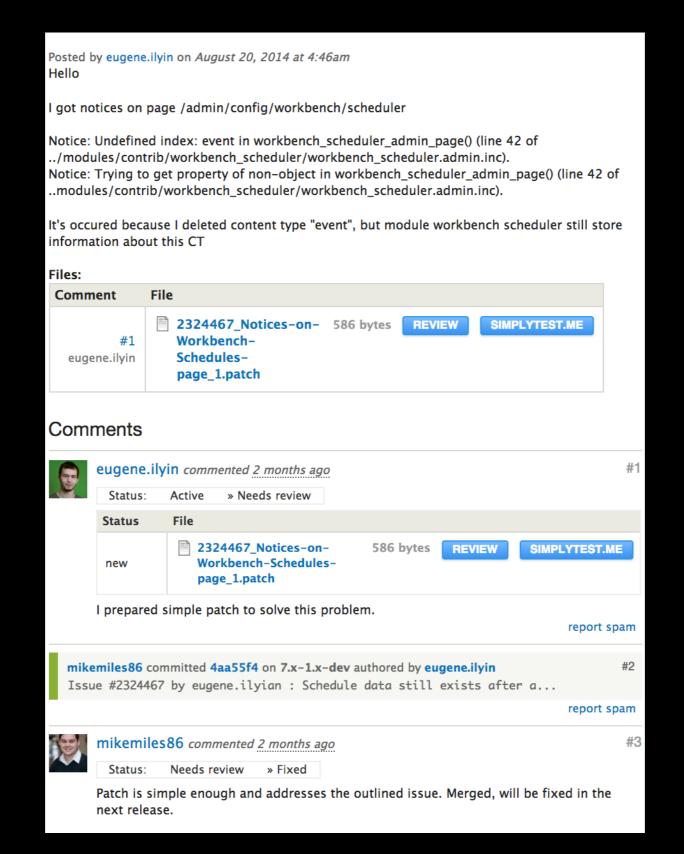
Resources

Read license

Be an active maintainer.

Workbench Scheduler									
Issues for Workbench Scheduler									
Create a new issue Advanced search E-mail notifications									
	tatus		Priority Category			Component			
	- Any -		♦	- +	nny -	– Any –	• -	Any -	\$]
	Search Reset								
Displaying 30 issues.						Hide	irrelevant	issues Mark	all as read
Displaying 50 issues.							Last		
Summary	Status	Priority	Category	Version	Component	Replies	updated	Assigned to	Created
			_	_					5
Optional end and start date	Closed (fixed)	Normal	Bug report	7.x- 1.x-dev	Code	20	1 week 1 day		months
Footures integration				7 v			1 week		3 weeks
Features integration overridden state fix	Closed (fixed)	Normal	Bug report	7.x- 1.x-dev	Code	3	1 day		4 weeks 1 day
Saving a new revision of a			Bug	7.x-			1 week		4 weeks
node creates a new schedule entry for that revision	Needs review	Normal	report	1.x-dev	Code	8	1 day		1 day
			Footure	7 v			1 wook		2
Display workbench scheduler summary on vertical tab new	(IOSEA (TIXEA)	Normal	Feature request	7.x- 1.x-dev	Code	7 2 new	1 week 3 days		months 4 days
Node schedule manager page	е		Feature	7.x-			2 weeks		3 weeks
improvements	Needs review	Normal	request	1.x-dev	User interface	2	4 days		2 days
Edit Schedule admin	Needs review	Minor	Feature	7.x-	Code	1	2 weeks 4 days		2 weeks
improvements			request	1.x-dev					4 days
Integrations with actions and VBO	Needs review	Normal	Feature request	7.x- 1.x-dev	Code	6	3 weeks 2 days		months
			request						3 weeks
Function declaration typo in	Closed (fixed)	Minor	Bug	7.x-	Code	4	1 month	partdigital	1 month
workbench_scheduler.api.inc			report	1.x-dev			2 days		4 days
When performs the schedule the author and moderation	,		Feature				1 month		6
message may be	Postponed	Normal	request	7.x-1.1	Code	4	3 days		months 2 weeks
inappropriate									2 weeks

Free QA and improvements from community.





How to R.E.A.D.

- Research what exists.
- Evaluate the options.
- Analyze the gap.
- Determine amount of change.



Thank You!

