

# To Patch or Custom

How to select the right path.

# Who You Are.

- Site Builder
- Developer
- Decision Maker
- New to Drupal
- Want to re-enforce habits

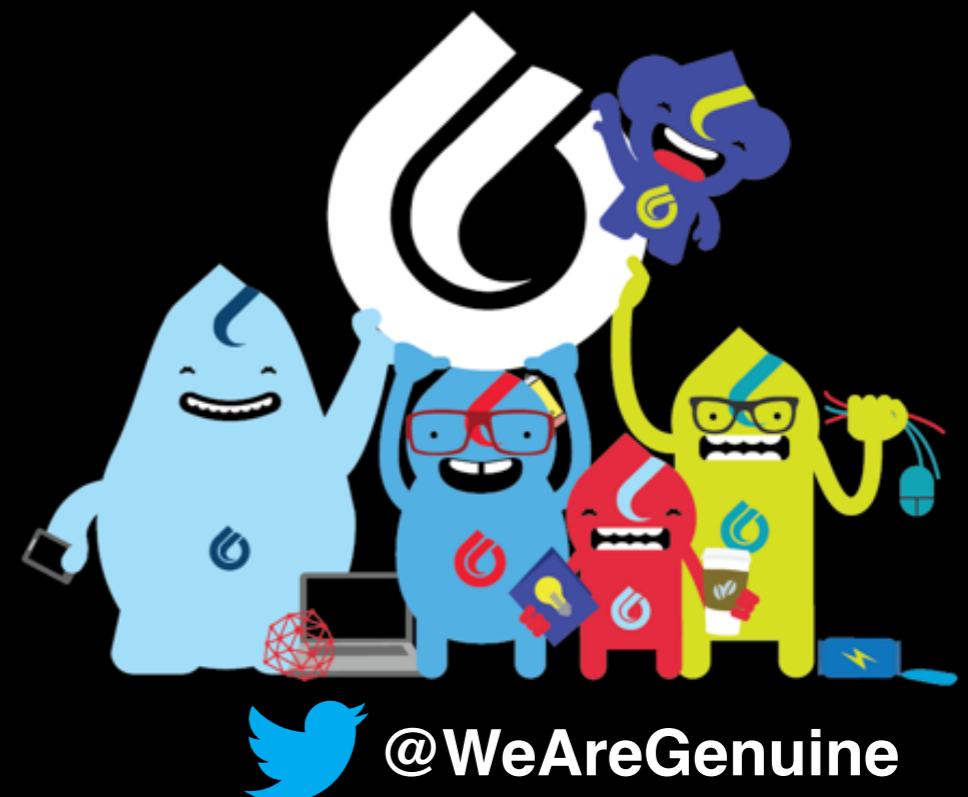
# What's it all about.

How to quickly make smart, informed decisions.

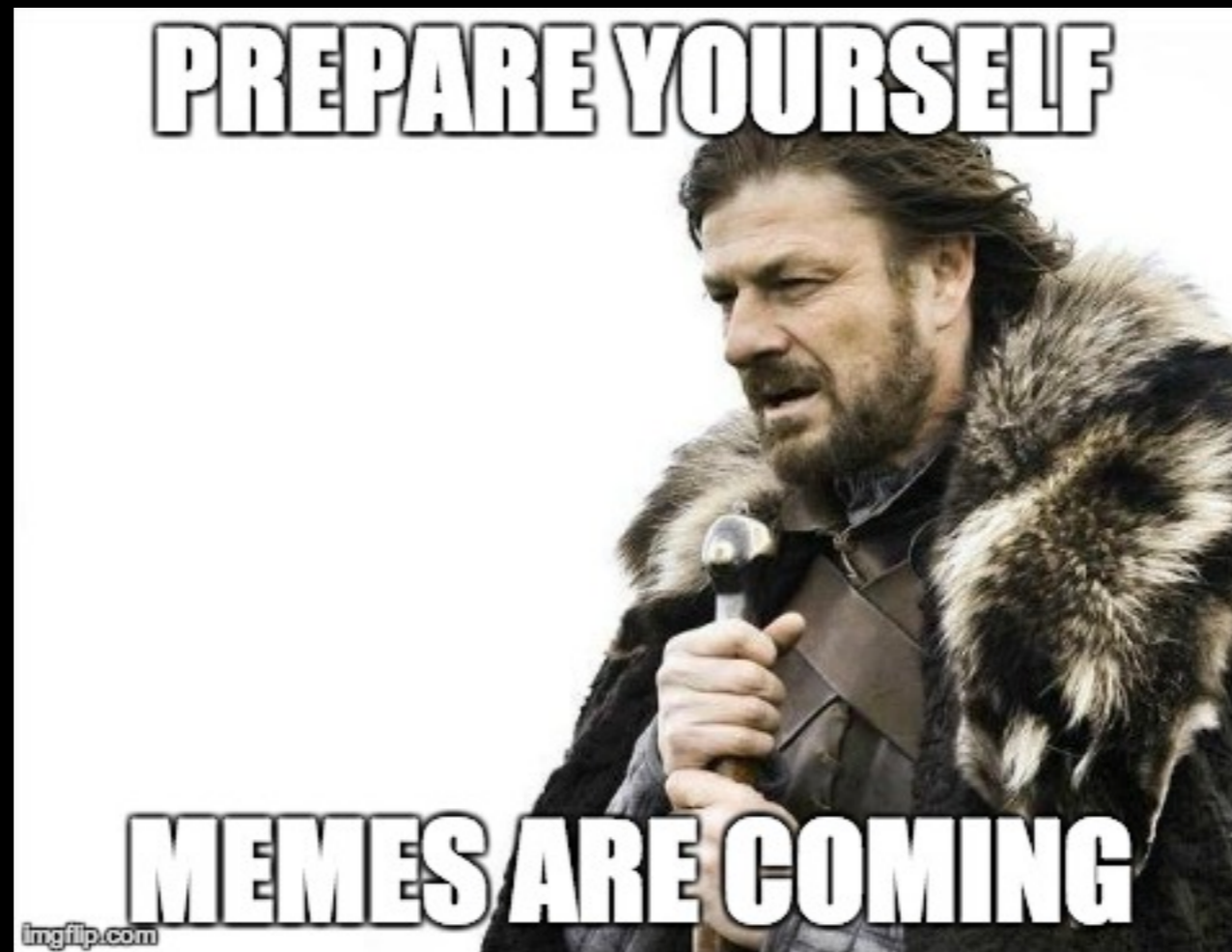
# Michael Miles

- 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.



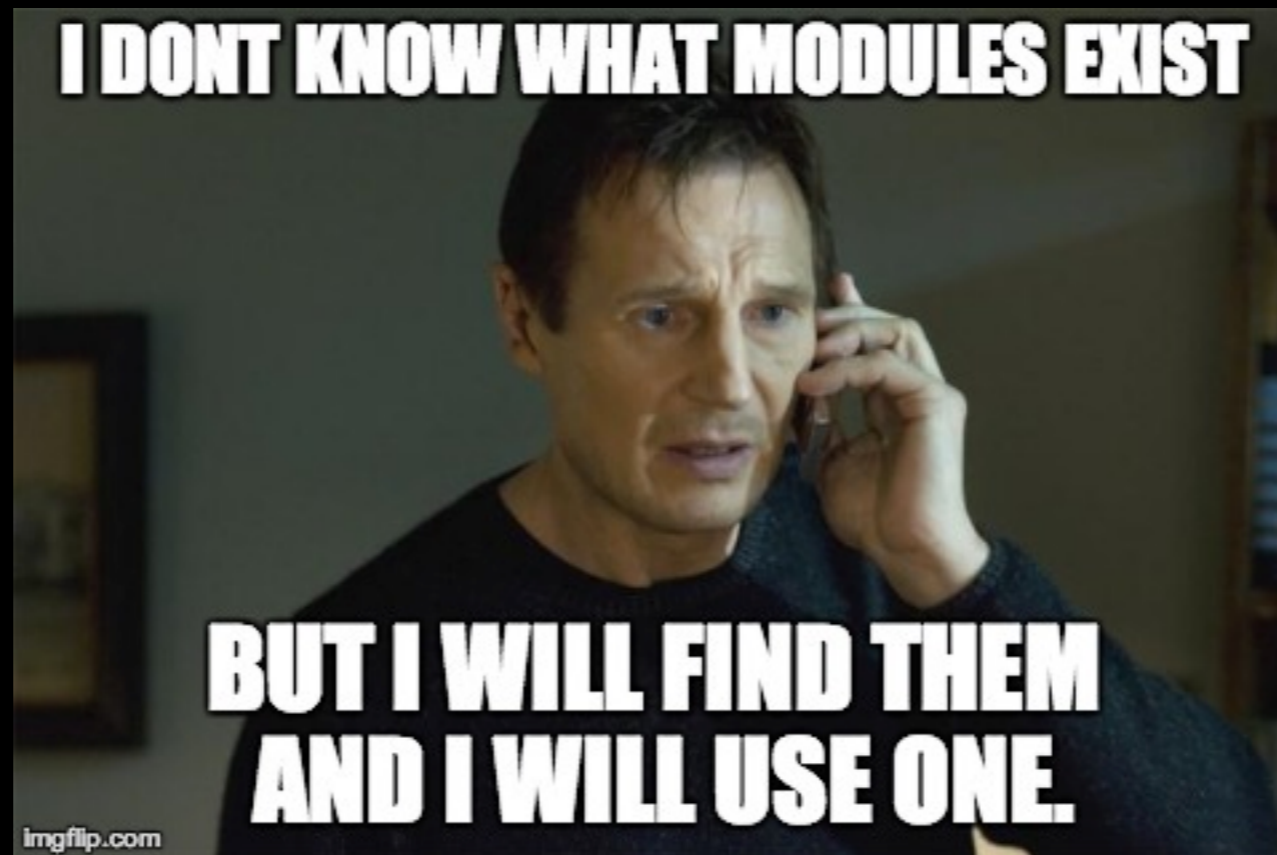
# How to **R.E.A.D**

*(yay acronyms!)*

# R.E.A.D

- **R**esearch what exists.
- **E**valuate the options.
- **A**nalyze the gap.
- **D**etermine amount of effort.

Research what exists.





# Research what exists.

- Isolate key functionality needs.
- 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.

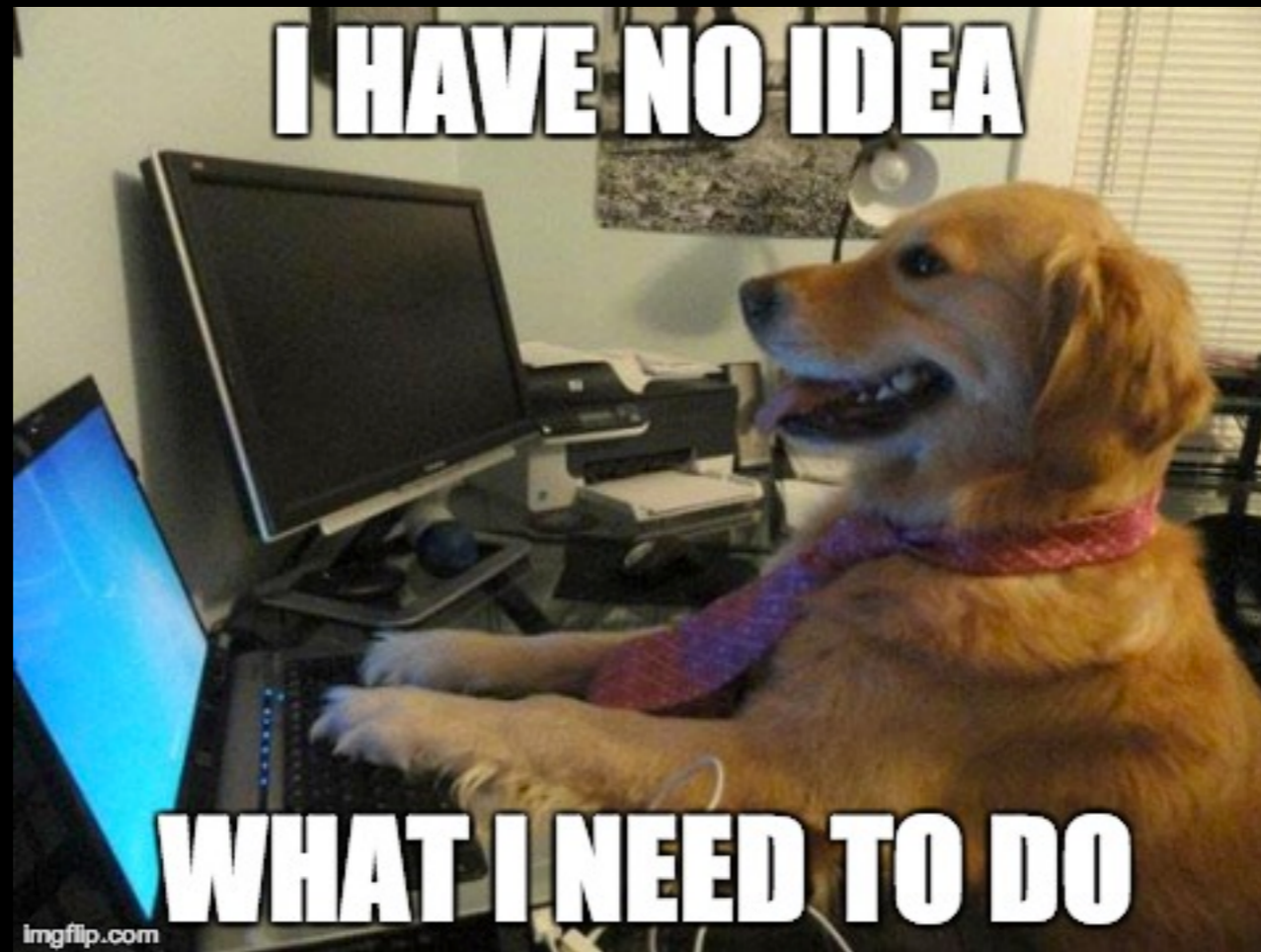
- Download and test the module.
- Discover missing functionality.
- Check issue queue for solutions.



Patch not found.



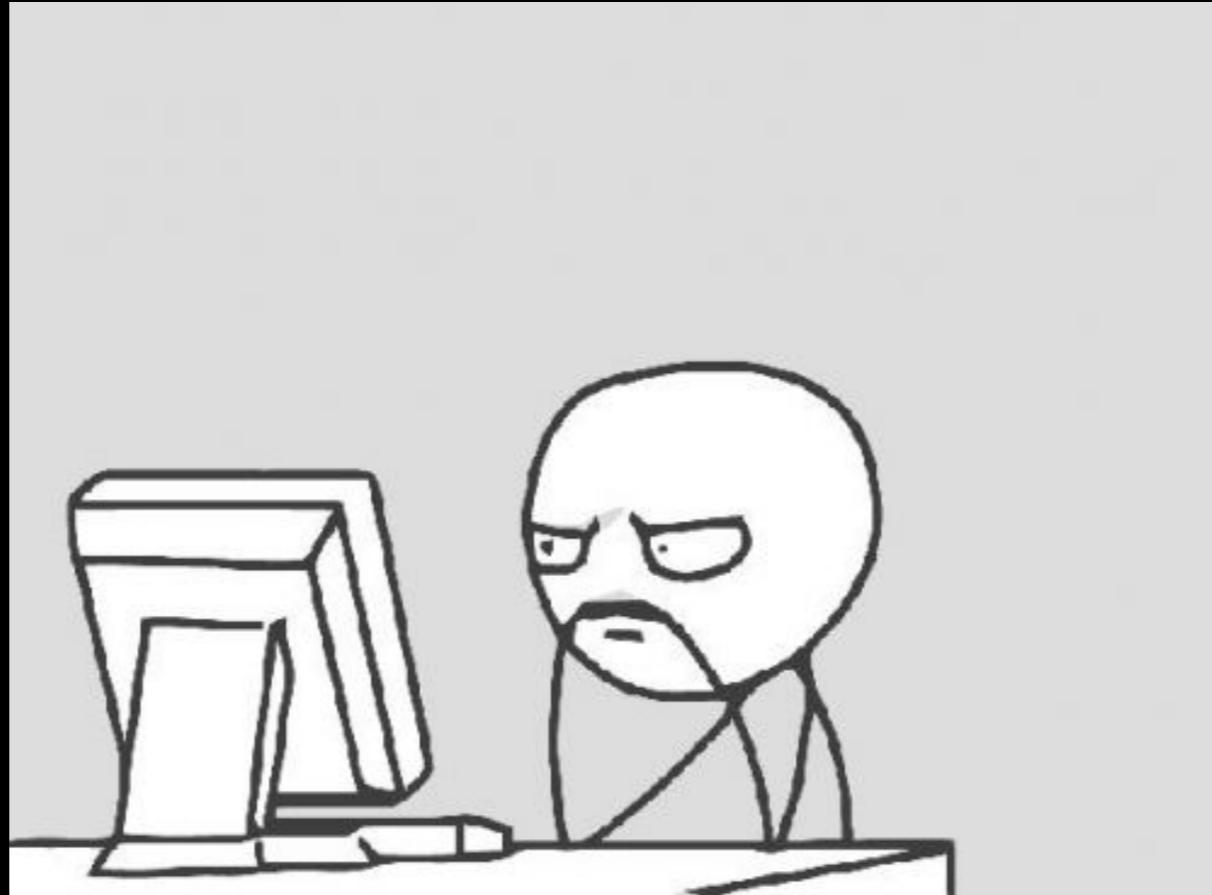
Determine amount of effort.



# Determine amount of effort.

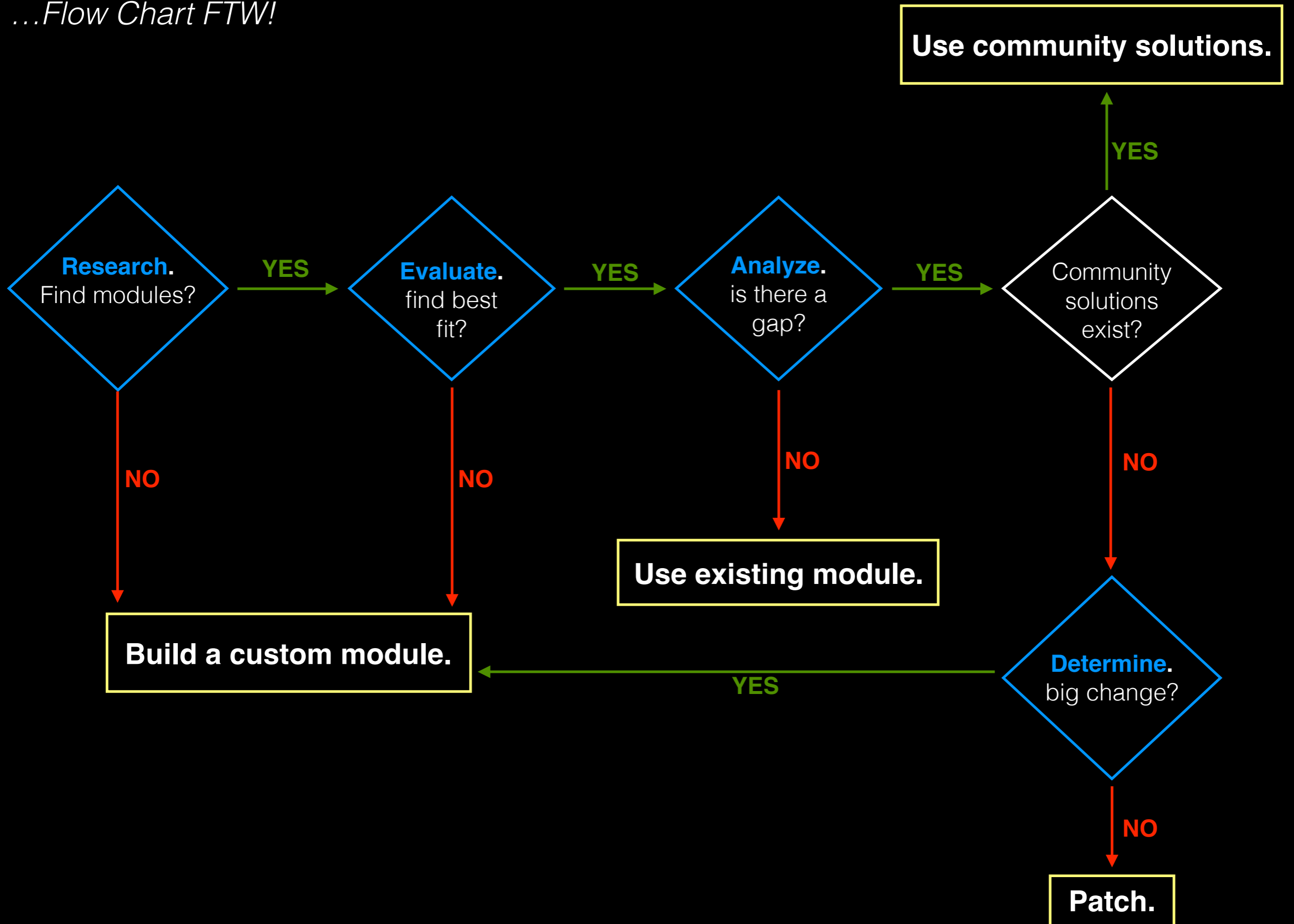
- Review the module code.
- Estimate how much has to be changed.
- Do changes extend or alter module?

Let's review.

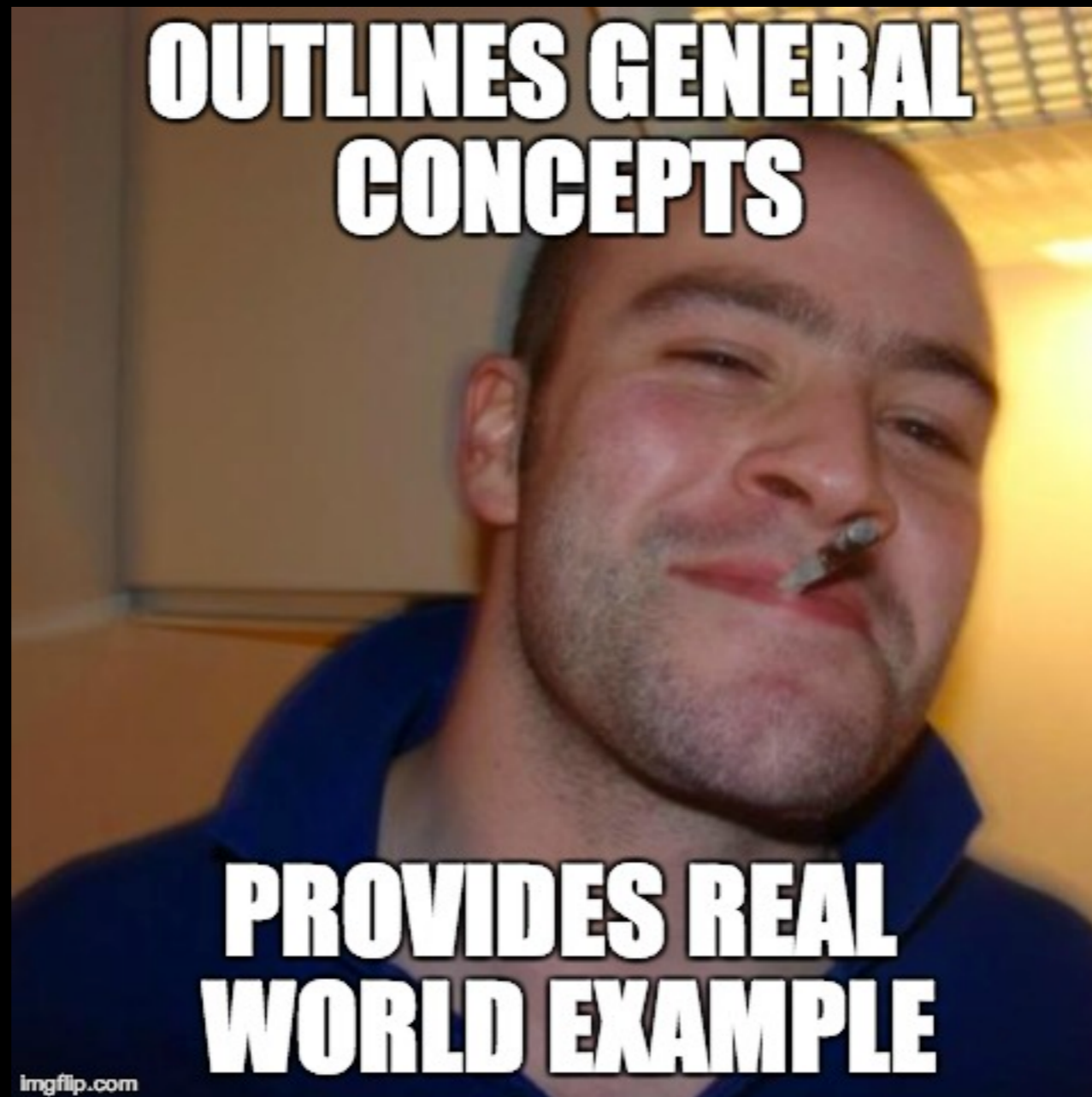


Like developers...

...Flow Chart FTW!



# 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

*Research what exists.*

Isolate key functionality needs.

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.**



Research what exists.

# Search for existing modules.



Drupal Exif



**Web**

Videos

Images

News

Shopping

More ▾

Search tools

About 293,000 results (0.19 seconds)

## **Exif | Drupal.org**

<https://drupal.org/project/exif> ▾ Drupal ▾

Oct 22, 2006 - 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.

## **Comparison of EXIF modules (Drupal 7) | Drupal.org**

<https://drupal.org/node/1842686> ▾ Drupal ▾

Nov 16, 2012 - ... to edit this page. Comparison of modules that handle importing **EXIF** metadata from images. Reads **EXIF**, Reads IPTC, Map to custom fields ...

**EXIF** problems on image resize [#1571230] Sep 23, 2013

Write and Edit **EXIF**/IPTC [#766322] Feb 11, 2013

**EXIF** Custom Nov 22, 2012

Add Support for the Media Module [#1055750] Feb 9, 2011

[More results from drupal.org](#)

## **EXIF Custom | Drupal.org**

*Research what exists.*

# Find possible existing solutions

- The Exif module
- The Exif custom module

*Evaluate the options*

# Read the module description.

## Exif

[View](#) [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

[View](#) [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

New issues  0

Response rate  0 %

1st response  0 hours

Open bugs  12

Participants  0

2 year graph, updates weekly

## 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.

Search

[Advanced search](#)

All issues

91 open, 182 total

Bug report


42 open, 93 total


[Subscribe via e-mail](#)

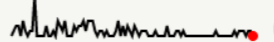
Statistics

New issues  0

Response rate  0 %

1st response  0 hours

Open bugs  42

Participants  0

2 year graph, updates weekly

*Evaluate the options*  
Determine best fit.

## EXIF Custom

[View](#) [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.

Analyze the gap.

# Download and test the module.

[Home](#) » [Administration](#) » [Configuration](#) » [Content authoring](#) » [Custom Exif Mappings](#)

Edit mapping 

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

*Analyze the gap.*

Discover missing functionality.





Analyze the gap.

# Check issue queue for solutions.

EXIF Custom

## Issues for EXIF Custom

[Create a new issue](#) [Advanced search](#) [E-mail notifications](#)

Search for

Status

- Any -

Priority

- Any -

Category

- Any -

Version

- Any -


Component

- Any -

Search

Reset

No issues match your criteria.

Subscribe with RSS 

# Which path to choose?

- Patch Exif Custom module
- Write own Exif module



**PATCH!**

# What is a Patch?

- [drupal.org/patch](http://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 submit a Patch.

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

# Contributed a Patch

[EXIF Custom](#) » [Issues](#)

## Features integration

[View](#)

[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.

### Files:

Comment	File
<a href="#">#1</a> <a href="#">mikemiles86</a>	 <a href="#">exif_custom-features_integration-2141235-1.patch</a> 10.26 KB <a href="#">REVIEW</a> <a href="#">SIMPLYTEST.ME</a>

### Comments



[mikemiles86](#) *commented 10 months ago*

[#1](#)

Status: [Active](#) » [Patch \(to be ported\)](#)

Status	File
<a href="#">new</a>	 <a href="#">exif_custom-features_integration-2141235-1.patch</a> 10.26 KB <a href="#">REVIEW</a> <a href="#">SIMPLYTEST.ME</a>

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](#)

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** EDITING 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.*

Isolate key functionality needs.

WHEN SITE USES **WORKBENCH** TO MODERATE CONTENT

THEN CAN CREATE **MULTIPLE TRANSITIONS BETWEEN STATES**

AND TRANSITIONS ARE **EXPORTABLE USING FEATURES**

WHEN **EDITING 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.

The screenshot shows the Drupal search interface. At the top left is the Drupal logo. A search bar contains the text 'workbench schedule' and a green 'Search' button. Below the search bar, navigation links include 'Drupal Homepage', 'Your Dashboard', and 'Logged in as mikemiles86 Log out'. A 'Refine your search' dropdown is also visible. The main content area shows 'Found 13390 results containing the words: workbench schedule'. A 'Sort by' dropdown is set to 'Relevancy'. The first search result is titled 'Scheduler Workbench Integration', posted by wwhurley on April 23, 2013. The description states: 'Scheduler Workbench Integration Provides integration between the Scheduler module and the Workbench Moderation module to set a moderation state when Scheduler triggers automatic publication ... a permission to determine which users can override this default value. Requirements Scheduler (version 7.x-1.1 ...'. It is categorized as a 'Module project'. Below this is another result titled 'Consider moving the project to workbench\_revision\_scheduler And renaming it to "Workbench revision scheduler"', posted by klonos on January 22, 2012. The description begins: '...coming from #1046160: Scheduling node revisions over at the Scheduler project. I know ... is specific to Workbench and it should be clear that it belongs to that "eco-system" of projects. Both its name and machine name suggest a relation to Scheduler as they are now though. PS: ...besides, ...'. It has '2 comments - Issue'. On the right side, there is a 'Search again' section with a search bar containing 'workbench schedule' and a 'Search' button. Below that is an 'or filter by...' section with a list of filters: 'All (8614)', 'Forums & Issues (7909)', 'Modules (388)', 'Documentation (293)', 'Groups (18)', and 'Themes (6)'. At the bottom, there is an 'or search for...' section with links for 'IRC Nicks', 'Users', and 'Advanced Issues'.

Drupal™

workbench schedule Search

Drupal Homepage Your Dashboard Logged in as mikemiles86 Log out Refine your search ▾

Found 13390 results containing the words: **workbench schedule**

Sort by  
Relevancy ▾

**Scheduler Workbench Integration**  
Posted by wwhurley on April 23, 2013 at 2:23pm

**Scheduler Workbench** Integration Provides integration between the **Scheduler** module and the **Workbench** Moderation module to set a moderation state when **Scheduler** triggers automatic publication ... a permission to determine which users can override this default value.  
Requirements **Scheduler** (version 7.x-1.1 ...

Module project

**Consider moving the project to workbench\_revision\_scheduler And renaming it to "Workbench revision scheduler".**  
Posted by klonos on January 22, 2012 at 5:58am

...coming from #1046160: **Scheduling** node revisions over at the **Scheduler** project. I know ... is specific to **Workbench** and it should be clear that it belongs to that "eco-system" of projects. Both its name and machine name suggest a relation to **Scheduler** as they are now though. PS: ...besides, ...

2 comments - Issue

**Search again**  
workbench schedule Search

**or filter by...**

- All (8614)
- Forums & Issues (7909)
- Modules (388)
- Documentation (293)
- Groups (18)
- Themes (6)

**or search for...**

- IRC Nicks
- Users
- Advanced Issues

Revision scheduler Scheduler integration [#1079146] Mar 7, 2011

*Evaluate the options*

# Read the module description.

## Scheduler Workbench Integration

[View](#) [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](#)

Analyze the gap.

# Download and test the module.

[Home](#) » [Administration](#) » [Configuration](#) » [Content authoring](#)

## Scheduler

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 \***  
 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.

### PUBLISHING


Enable scheduled publishing for this content type

**Moderation State**  
   
Moderation state to be placed in after publishing

---

### UNPUBLISHING

Enable scheduled unpublishing for this content type

**Moderation State**  
   
Moderation state to be placed in after unpublishing

**Default Time**  
  
An offset from the current time such as "+1 day" or "-2 hours -30 minutes"

### Publish on

**Date**  **Time**   
E.g., 2014-04-05 E.g., 14:39:22

Leave the date blank for no scheduled publishing.

### Unpublish on

**Date**  **Time**   
E.g., 2014-04-05 E.g., 14:39:22

Leave the date blank for no scheduled unpublishing.

*Analyze the gap.*

## Discover missing functionality.

- Unable to create different transition schedules
- Unable to select different transitions for revisions
- No features integration.

*Determine amount of effort.*

Estimate how much has to be changed.

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

# Which path to choose?

- Patch Scheduler workbench module
- Write own scheduler module





**CUSTOM MODULE!**

# Module Writing Guidelines.

- [drupal.org/developing/modules](http://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.

# Wrote a custom module.

## Workbench Scheduler

[View](#) [Edit](#) [Version control](#) [Revisions](#) [Maintainers](#) [Automated Testing](#)

Posted by [mikemiles86](#) on *October 4, 2013 at 2:03pm*

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.

Workbench Schedules

NAME	MACHINE NAME	START STATE	END STATE	CONTENT TYPES	OPERATIONS
Publish and Unpublish	publish_and_unpublish	PUBLISHED	UNPUBLISHED	Article Book Page Product	Save Delete
Publish and Archive	publish_and_archive	PUBLISHED	ARCHIVED	Article	Save Delete

Workbench Schedules

Schedule Name \*

Start State \*

End State \*

Content Types \*

Solve

Workbench Scheduler

Select a schedule for changing moderation states.

SCHEDULE DATES

Start date

End date

## Maintainers for Workbench Scheduler

[mikemiles86](#) – 6 commits  
last: 1 month ago, first: 11 months ago

[View all committers](#)  
[View commits](#)

## Issues for Workbench Scheduler

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

[Advanced search](#)

All issues

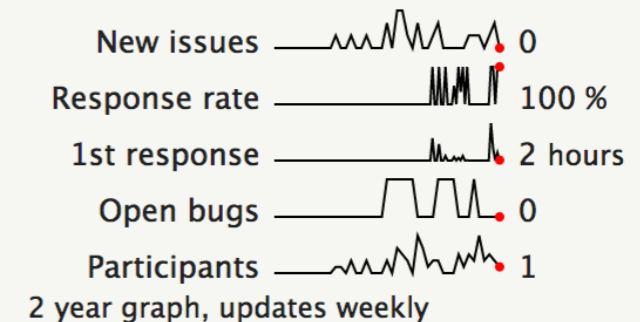
8 open, 23 total

Bug report

0 open, 6 total

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Statistics



# Be an active maintainer.

Workbench Scheduler

## Issues for Workbench Scheduler

[Create a new issue](#) [Advanced search](#) [E-mail notifications](#)

Search for  Status  Priority  Category  Version  Component

Displaying 23 issues.

Summary	Status	Priority	Category	Version	Component	Replies	Last updated	Assigned to	Created
<a href="#">Notices on Workbench Schedules page updated</a>	Closed (fixed)	Normal	Bug report	7.x-1.x-dev	Code	4 <b>1 new</b>	4 days 16 hours		2 weeks 6 days
<a href="#">Display workbench scheduler summary on vertical tab</a>	Needs review	Normal	Feature request	7.x-1.x-dev	Code	2	1 week 4 days		1 week 4 days
<a href="#">Optional end and start date</a>	Needs review	Normal	Feature request	7.x-1.x-dev	Code	12	1 week 4 days		3 months 4 weeks
<a href="#">Rescheduling the same node</a>	Active	Normal	Feature request	7.x-1.2	Code	3	1 week 6 days		4 months 1 week
<a href="#">Dependencies information is wrong on module page.</a>	Closed (fixed)	Minor	Task	7.x-1.x-dev	Documentation	1	1 week 6 days		1 week 6 days
<a href="#">Fix views integrations</a>	Closed (fixed)	Normal	Bug report	7.x-1.x-dev	Code	6	4 weeks 1 day	<a href="#">mikemiles86</a>	3 months 2 days
<a href="#">Invalid argument supplied for foreach() in workbench_scheduler_features_rebuild</a>	Closed (fixed)	Normal	Bug report	7.x-1.x-dev	Code	6	4 weeks 1 day		1 month 1 week
<a href="#">Different schedules for different revisions</a>	Closed (fixed)	Normal	Task	7.x-1.x-dev	User interface	12	4 weeks 1 day		5 months 1 week
<a href="#">Create permissions for individual workbench schedules</a>	Closed (fixed)	Normal	Support request	7.x-1.x-dev	Code	7	4 weeks 1 day		1 month 6 days

**SUMMERIZE**

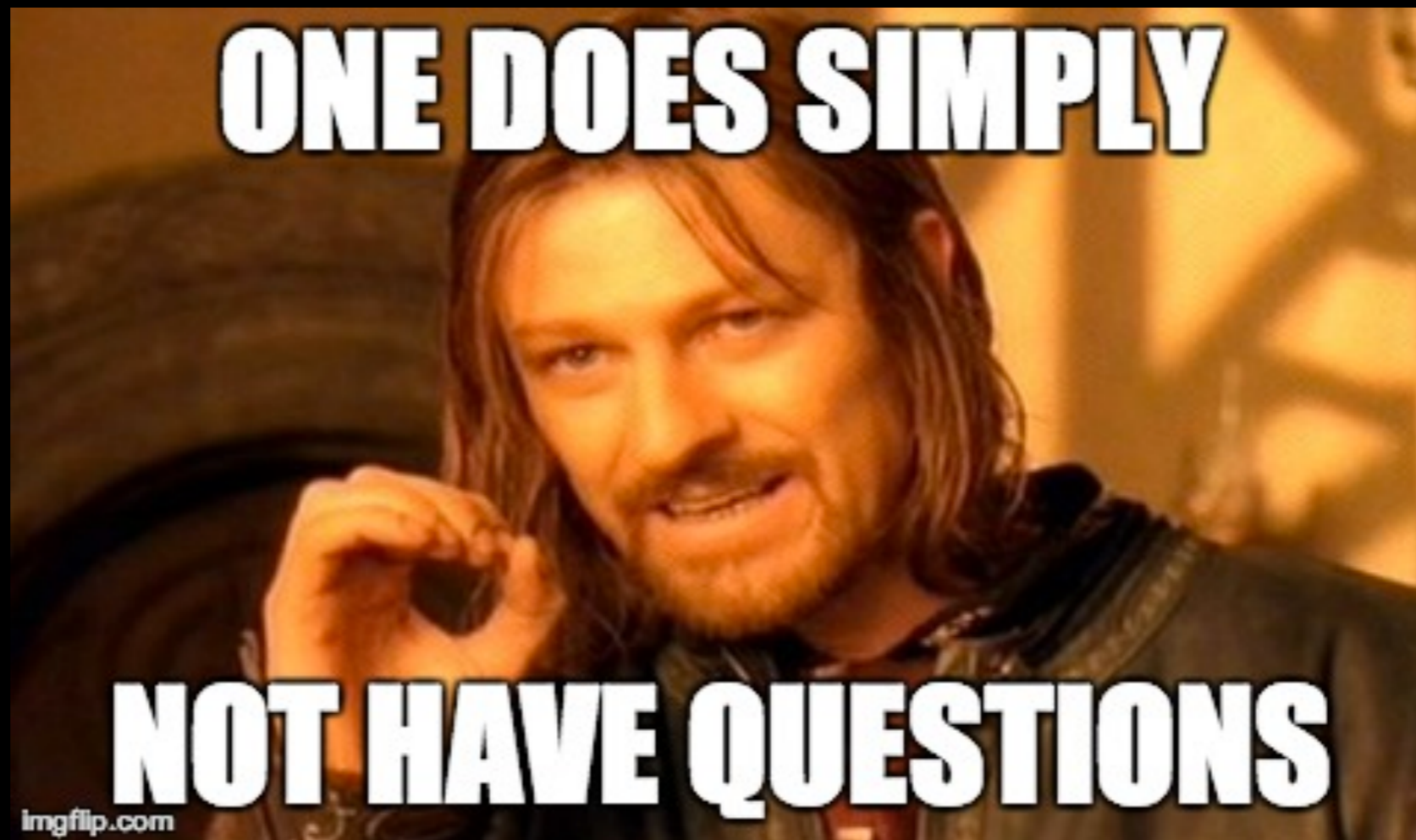


**ALL THE THINGS**

# Remember R.E.A.D.

- **R**esearch what exists.
- **E**valuate the options.
- **A**nalyze the gap.
- **D**etermine amount of effort.

Thank You!



 @mikemiles86