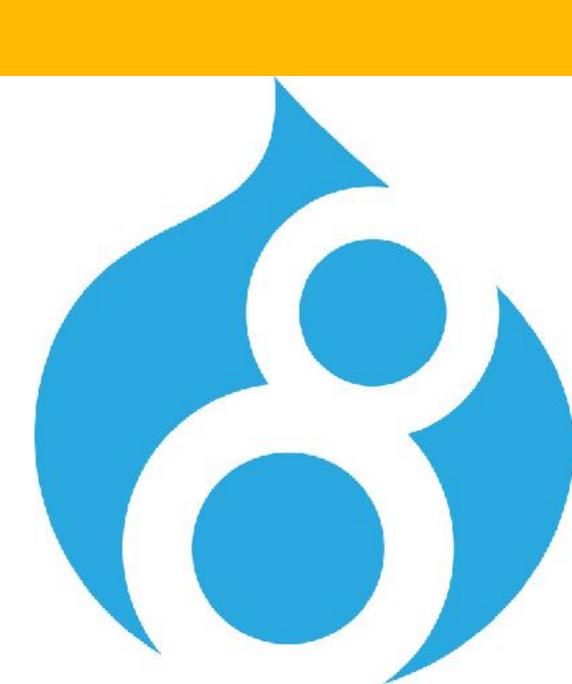
### A NEW HELP SYSTEM FOR DRUPAL

### a cove conversation

### **Amber Himes Matz**

### **DrupalCon Nashville April 2018**



### **Amber Himes Matz** Production Manager and Trainer

### twitter.com/amberhimesmatz

## drupalize me





### SPECIAL THANKS



# Jennifer Hodgdon (jhodgdon) Creator of Help Topics sandbox Mentoring me as new maintainer

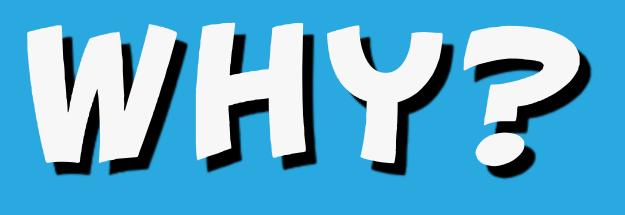
### andypost Contributing code and reviews to Help Topics

### SPECIAL THANKS



### [meta] Help system overhaul drupal.org/project/ideas/ issues/2592487





### Improving documentation is a shared concern. Usability testing exposes problems with current help system.

### Provides an official way for contrib maintainers to provide better help for modules, themes, and profiles.



### Core can provide better help for its own modules, themes, and profiles.



### Site builders can provide specific help for custom workflows and processes.



### Sites own their configuration. Sites should own the help that describes how to use their custom configuration.

### WHY SITE BUILDERS?

### Each topic covers a single concept or task

### Near the product

### Maintainable by stakeholders

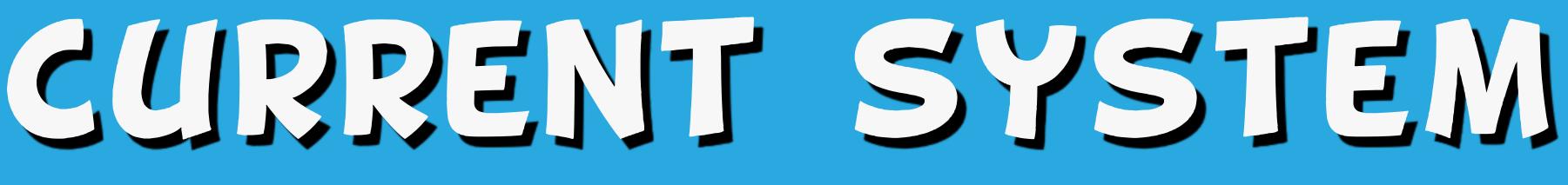


### hook\_help() hasn't changed much since Drupal 4.6

### Only modules can implement

### Provide a "module overview"

### Provide route-specific help





### Finding help Technical implementation Authoring experience Discussion



### LIMITATION: NON-TOPICAL



### Module overviews are organized by module, alphabetically.

### NON-TOPICAL

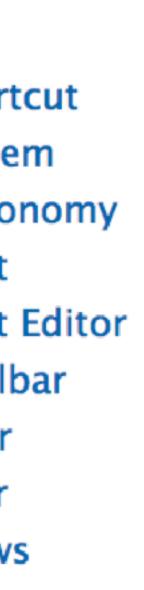
### Module overviews

Module overviews are provided by modules. Overviews available for your installed modules:

- Automated Cron
- BigPipe
- Block
- Breakpoint
- CKEditor
- Color
- Comment
- Configuration Manager
- Configuration Translation
- Contact
- Contextual Links
- Custom Block

- Custom Menu I
- Database Loggi
- Datetime
- Field
- Field UI
- File
- Filter
- Help
- Help Topics
- History
- Image
- Interface Trans

Links	<ul> <li>Internal Dynamic Page</li> </ul>	<ul> <li>Shortcut</li> </ul>
ging	Cache	<ul> <li>System</li> </ul>
Jing		
	<ul> <li>Internal Page Cache</li> </ul>	<ul> <li>Taxonom</li> </ul>
	<ul> <li>Language</li> </ul>	• Text
	• Link	<ul> <li>Text Edite</li> </ul>
	• Menu UI	<ul> <li>Toolbar</li> </ul>
	Node	• Tour
	Options	• User
	• Path	<ul> <li>Views</li> </ul>
	Quick Edit	<ul> <li>Views UI</li> </ul>
	• RDF	
slation	<ul> <li>Responsive Image</li> </ul>	
	Search	





### You need to know what each module does to find help for its functionality.

### NON-TOPICAL



### Each module can only provide 1 help page linked on admin/help

### DESIRED FEATURE: ORGANIZE BY TOPIC

### Enable all project types (modules, themes, profiles) to provide multiple help topics.

### Concept: Something a user needs to know

## Task: Something a user needs to do

### Ability to organize hierarchically or by sections

Custom Block	Interface Translation	
<ul> <li>Contextual Links</li> </ul>	• Image	
Contact	<ul> <li>History</li> </ul>	
<ul> <li>Configuration Translation</li> </ul>	<ul> <li>Help Topics</li> </ul>	
<ul> <li>Configuration Manager</li> </ul>	• Help	
Comment	• Filter	

### **Configured topics**

Configured topics can be provided by modules, themes, installation profiles, or site administrators, and they may be organized hierarchically. Top-level help topics configured on your site:

- Building a help system
- Changing basic site settings

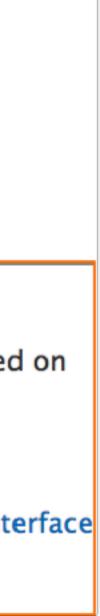
- Defining navigation and URLs
- Defining responsive image styles

- Options
- Path
- Quick Edit
- RDF
- Responsive Image
- Search

- Toolbar
- Tour
- User
- Views
- Views UI

- Maintaining and troubleshooting your site
- Making your site secure

- My awesome help topic
- Using the administrative interface



### Related issue: #2516902: Introduce a visual hierarchy to the help page

### LIMITATION: NO SEARCH



## There is no help.

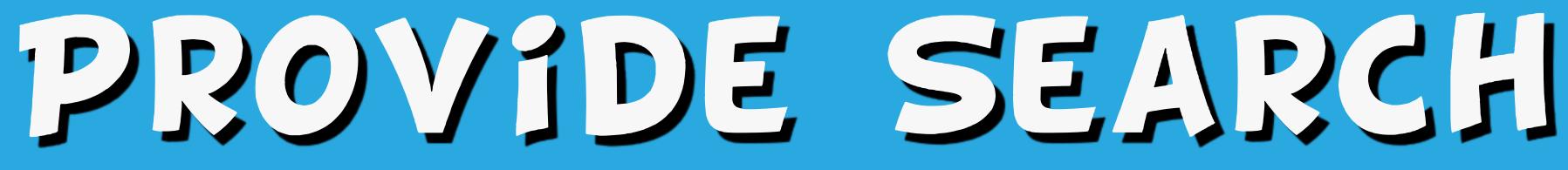
### There is no way to search

### DESIRED FEATURE: PROVIDE SEARCH

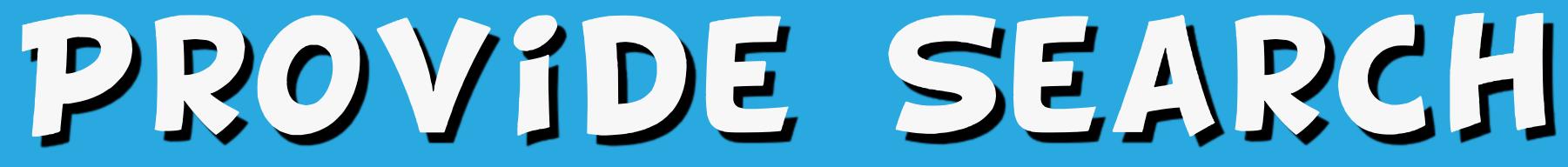
### Extend to all admin pages? Extend to non-installed modules, themes, or profiles?



### Could be done during Beta phase, after initial experimental module commit and before full release



### **Issue:** #2664830: Add search capability



### Other proposal: #102254: Add an administrative search feature

### Search admin + help pages

### PROVIDE SEARCH

### NICE-TO-HAVE: GLOSSARY



# Glossary of terms Especially a single, extensible glossary



### Filed as a separate issue: #2701289: Glossary to extend the Help system

### LIMITATON: MUST ENABLE MODULE TO SEE HELP

#### Must know what a module does before learning how to use it What if I'm looking for a way to do something that's provided by an uninstalled module?

#### 

# READ HELP ABOUT A INSTALLING IT

### HELP FOR ALL MODULES

#### Filed as a separate issue: #2587469: allow hook\_help to run on modules which are not enabled

# TECHNICAL IMPLEMENTATION

# LIMITATION: MARKUP IN PHP FILE

#### Markup provided in PHP function hook\_help() by concatenating translatable strings with HTML tags

## MARKUP IN 2412

## MARKUP IN 2412

function big\_pipe\_help(\$route\_name, RouteMatchInterface \$route\_match) { switch (\$route name) { case 'help.page.big\_pipe': \$output = '<h3>' . t('About') . '</h3>'; \$output .= '' . t('The BigPipe module sends pages with dynamic content in a way that allows browsers to show them much faster. For more information, see the <a href=":big\_pipe-documentation">online documentation for the BigPipe module</a>.', [':big pipe-documentation' => 'https://www.drupal.org/documentation/modules/big pipe']) . ''; \$output .= '<h3>' . t('Uses') . '</h3>'; \$output .= '<dl>'; \$output .= '<dt>' . t('Speeding up your site') . '</dt>'; \$output .= '<dd>' . t('The module requires no configuration. Every part of the page contains metadata that allows BigPipe to figure this out on its own.') . '</dd>'; \$output .= '</dl>';

return \$output;



#### Some folks object to having any markup outside the theme

### MARKUP IN 19HP

### Help pages need semantic markup like headings, paragraphs, lists, etc. Not unlike body fields in content

## MARKUP IN 2412

### Having markup in PHP makes it difficult to write help if: You're not a programmer You don't have access to the file

## MARKUP IN 2HP

(...more about this later)



#### To keep in mind: Need "short strings" for translatability's sake

#### 

# MORE APPROPRIATE PLACE FOR MARKUP

#### Help topics saved as config entities (YAML) Solves: Markup not in PHP file Solves: Modules, themes and profiles can provide help in config/install or config/ optional

#### Title \*

My awesome help topic

my\_awesome\_help\_topic [Edit]

#### Language

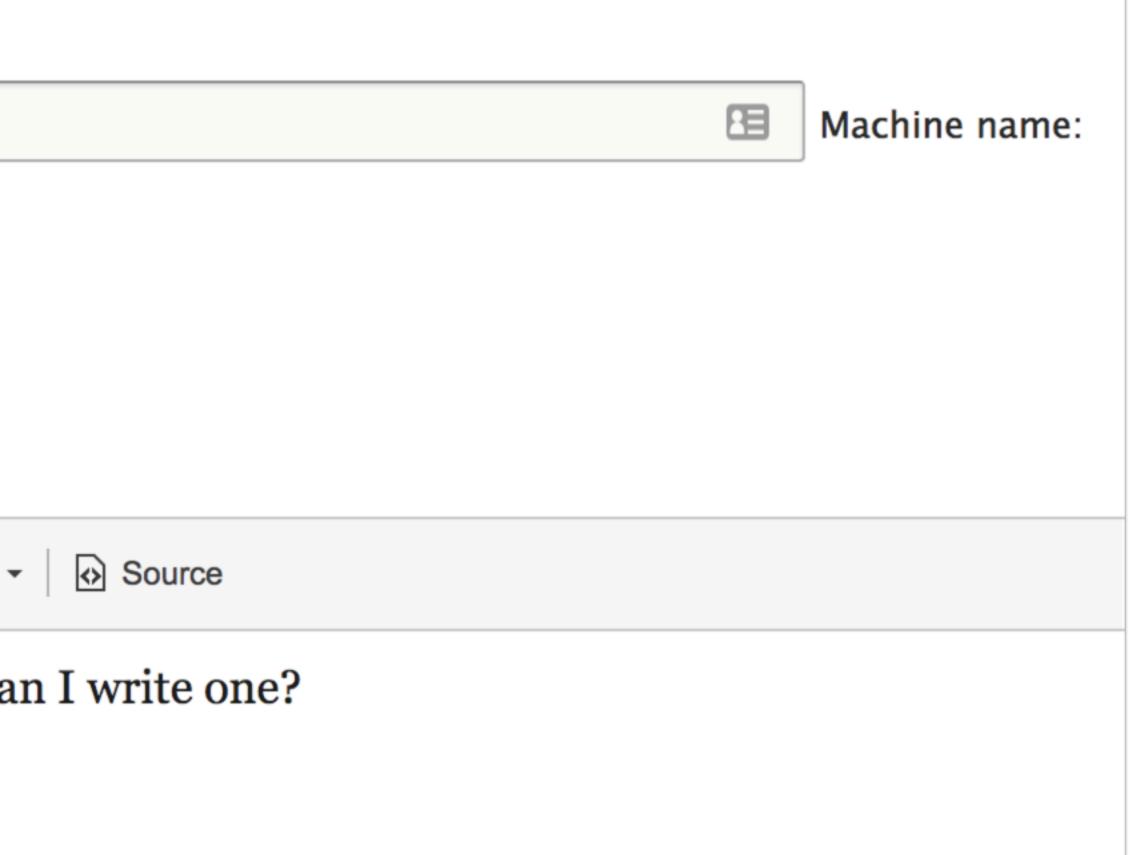
English 🔻

#### Body

В	Ι	æ	ez	•= •=	1=	,,,	2.4	Format	-
	-		~		2				

What is an awesome help topic and how can I write one?

- 1. Here is step one
- 2. Here is step two
- 3. Here is step three
- 4. Tada!



#### **Configuration type**

Help topic

#### **Configuration name**

My awesome help topic (my\_awesome\_help\_topic)

#### Here is your configuration:

label: 'My awesome help topic' top\_level: true locked: false related: help\_topic\_writing list\_on: help\_system\_building body: text: 'What is an awesome help topic and how can I write one?' prefix\_tags: '' suffix\_tags: '' text: 'Here is step one'

▼

#### Alternative solutions:

#### Plugin?

#### Markdown?

#### **Twig**?

#### Paragraphs?

#### Other tech implementations might fulfill desired features of resolution (but no patches yet)



## Related issue: #2188753: Get rid of hard-coded markup in hook\_help implementations Not to the point of a patch yet

#### Related issue: #1918856: Put each module's help into a separate Twig file Marked as postponed

#### Related issue: #2820166: Flexible plugin based help system (also proposes to put topics in Twig files) Does this improve UX for help topic writers? What about Twig file access?

#### What about Markdown-based solution? Is this really better than HTML? What about short strings for translatability?



#### What about something like Paragraphs module?

#### First iteration was very similar to

# rejected by Usability team.

- Paragraphs. But UI was clunky and

## LIMITATION: HOOK\_HELP'S CODE

## 

#### Module overviews created by responding to a fake route which is weird Hooks are outdated in general

#### Pages now generated by controllers, plugins, or YAML files





#### The admin/help page now allows other Help providers (such as the Tour module) to list their topics on the Help page

### ドロのドード ドロバン こうり デ

## DESIRED FEATURE: KEEP HOOK\_HELP()

## 

#### Module overviews still have a place/purpose Many (many) modules use hook\_help for module overviews

#### Proposed resolution is complementary to hook\_help(), not a wholesale replacement

## ドロのド ドミレンシ くのり ジ

#### Allows logic (because PHP) Can check to see if a module is enabled before displaying a link

#### Other complicated use cases (which might partially be solved by proposed resolution)

# AUTHORING EXPERIENCE

# LIMITATION: POOR AUTHORING EXPERIENCE

#### Current hook\_help() syntax may be difficult for documentation writers who are not also PHP programmers





#### No way for a site builder to add pages to the help system for their own site Except to create a custom module with a hook\_help() implementation





#### Even with hook\_help(), site builders could not build help pages because of the limitation of one help page per module (Unless they create multiple modules each with a hook\_help() implementation) 🧐



#### Impacted by "find a more a appropriate place for markup" issue Solution to markup problem should also have positive impact on the authoring experience



# BEITTER AUTHORING EXPERIENCE WITH A



#### Provide a UI that is familiar and easy to learn

#### Make tokens available for internal routes and links to other topics

#### Allow limited HTML tags and CKEditor toolbar via text format config

# 

#### Handle "short strings" for translation behind-the-scenes

### Edit My awesome help topic 🕸

	View	Edit	Delete	Translate help topic		
Home » Administration » Configuration » Development » Help topics Title *						
	My awesome help topic					
	Language					
	English	•				
Body						
	B I ⊕ ⊕ 1≣ 1≣ 1≣ 1≣ ⊞ I I I I I I I I I I I I I I I I I I					
	<ul> <li>What is an <i>awesome</i> help topic and <u>how can I write one</u>?</li> <li>1. Here is step one</li> <li>2. Here is step two</li> <li>3. Here is step three</li> <li>4. Tada!</li> </ul>					
	Text format Help					

8

Machine name: my\_awesome\_help\_topic [Edit]





### Provide a UI that is familiar and easy to learn

### Make tokens available for internal routes and links to other topics

### Allow limited HTML tags and CKEditor toolbar via text format config

## 

### Handle "short strings" for translation behind-the-scenes



# Proposed UI reviewed by Core UX team and approved



### Makes it easier for a non-coder to contribute help topics (i.e. no PHP needed)

## 



## Roles can be granted permissions to add/edit/unlock help topics Topics can be locked (read-only) Exportable/Importable/Deployable



## 

## LIMITATIONE NO GREAT WAY TO CROSS-LINK TO



### Currently this is done with PHP code (to check if the other module is enabled) and placeholders for the URLs.

## 

## DESIRED FEATURE: CROSS-LINKS TO OTHER HELP TOPICS

### List related topics

Topics to list this topic on

Provide relationships to other help topics you wouldn't otherwise edit

### CROSS-LINKS

### CROSS-LINKS

### ▼ RELATIONSHIPS AND HIERARCHY

### Top-level topic

Check box if this topic should be displayed on the Help page topics list

### **Topics to list here**

help\_topic\_writing

Topics to list in this topic's Related topics section. Comma-separated list of machine names.

### List this topic on

help\_system\_building

Topics that should have this topic listed in their Related topics sections. Comma-separated list of machine names.

## SUMMARY: REQUIREMENTS



### Help text needs semantic markup

### Desirable to have minimal/no **HTML outside of theme**

### Translatable (short strings)

## REQUIREMENTS

## REQUIREMENTS

### Help topics need to be distributable with modules, themes, profiles

Help topics distributed with

be updated

# modules, etc. sometimes need to

## REQUIREMENTS

### Help authoring needs a UI that is familiar/usable to non-programmers Help topics need to be author-able by site builders

## SUMMARYS シアのション

## Keep hook\_help() in place Add a new help system that would co-exist with hook\_help() using config entities



### Help Topics as config entities **Same as Tours do** Makes updating a bit difficult and some (semantic) markup is outside theme

### Each module, theme, or profile can provide multiple topics in config/install or config/optional



### Only topics marked as "top level" (a config property) are listed on the help page (admin/ help)



### Site builders can create more topics and organize them into a hierarchy

### 



### Non-programmers can author and contribute help topics by using the UI and exporting the configuration entities



### Short strings for translation are saved in the translatable config entity YAML file in no larger than paragraph-sized chunks



### Demo: Show Help Topics listing page, editing Ul and help topic config entity export



OTHER PROPOSALS



### Other proposals are not part of this core ideas plan

OTHER PROPOSALS



### #402404: Use approach like D7 Advanced Help for the Help module

### Module provide help topics in HTML format with a hierarchy file

for translatability desired feature

### OTHER PROPOSALS

## Resolves some issues, but breaks many strings



### #2590319: replace hook\_help with Help Plugin

- instead of module-level pages

### OTHER PROPOSALS

### Proposes to resolve code issue with hook\_help

### by replacing it with a help Plugin system

### These plugins could be topics with titles

- #1918856: Put each module's help into a separate Twig file
  - module topics into Twig templates

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# Proposes to resolve markup issue by putting

Might resolve code and authoring issues, too. **Could resolve translatability if done carefully** 



### #2188753: Get rid of hard-coded markup in hook\_help()

## Proposes several ideas to resolve markup and authoring issues.

### のゴビア「シアのシのシムレン

### Not to the point of a patch yet



### #2820166: Flexible plugin based help system

### Use Plugin system

### Put topics in Twig files

### Does this improve authoring experience?

### OTHER PROPOSALS



## Help Topics as content entities Distribution difficult Some markup outside the theme

### OTHER PROPOSALS

### DISCUSSION

## DISCUSSION

### Are there features/limitations we've identified that are *unimportant* or we shouldn't try to solve with this system? Are there additional features/limitations we should try to solve?

### Does the proposed plan seem acceptable?

### Are there any objections to it being committed to Core as an experimental module?

### D1SCUSS10N



## EXPERIMENTAL MODULE

## We propose that Help Topics to be committed to 8.6.x as an Experimental module. **Write help topics**



## What do we need to achieve this? Patch reviews + RTBC Release manager review





# Issue: #2592487: [meta] Help system

### overhaul



First time sprinter workshop

### Mentored **Core sprint**

9:00-12:00 Room: Stolz 2

Join us for contribution sprints Friday, April 13, 2018

> 9:00-12:00 Room: Stolz 2

### General sprint

9:00-12:00 Room: Stolz 2

### #drupalsprint





### What did you think?

Feedback survey located on the session page: https://events.drupal.org/nashville2018/sessions/new-help-system-drupal

Conference-wide survey:

https://www.surveymonkey.com/r/DrupalConNashville



