

A NEW HELP SYSTEM FOR DRUPAL

a core conversation

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SPECIAL THANKS



- ▶ **Jennifer Hodgdon (jhodgdon)**
- ▶ **Creator of Help Topics sandbox**
- ▶ **Mentoring me as new maintainer**

SPECIAL THANKS

▶ **andypost**

▶ **Contributing code and reviews to
Help Topics**

THE ISSUE

[meta] Help system overhaul

[**drupal.org/project/ideas/**](https://drupal.org/project/ideas/)

[**issues/2592487**](https://drupal.org/project/ideas/issues/2592487)

WHY?

- ▶ **Improving documentation is a shared concern.**
- ▶ **Usability testing exposes problems with current help system.**

WHY *iN* CORE?

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

WHY *i*N CORE?

- ▶ **Core can provide better help for its own modules, themes, and profiles.**

WHY *i*N CORE?

- ▶ **Site builders can provide specific help for custom workflows and processes.**

WHY SITE BUILDERS?

- ▶ Sites own their configuration.
- ▶ Sites *should own the help* that describes how to use their custom configuration.

“BETTER” HELP?

- ▶ **Each topic covers a single *concept or task***
- ▶ ***Near* the product**
- ▶ ***Maintainable* by stakeholders**

CURRENT SYSTEM

- ▶ **hook_help()** hasn't changed much since **Drupal 4.6**
- ▶ **Only modules can implement**
- ▶ **Provide a “module overview”**
- ▶ **Provide route-specific help**

OVERVIEW

- ▶ **Finding help**
- ▶ **Technical implementation**
- ▶ **Authoring experience**
- ▶ **Discussion**

FINDING HELP

**LIMITATION:
NON-TOPICAL**

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 Links
- Database Logging
- Datetime
- Field
- Field UI
- File
- Filter
- Help
- Help Topics
- History
- Image
- Interface Translation
- Internal Dynamic Page Cache
- Internal Page Cache
- Language
- Link
- Menu UI
- Node
- Options
- Path
- Quick Edit
- RDF
- Responsive Image
- Search
- Shortcut
- System
- Taxonomy
- Text
- Text Editor
- Toolbar
- Tour
- User
- Views
- Views UI

NON-TOPICAL

- ▶ **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**

ORGANiZE BY TOPiC

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

ORGANiZE BY TOPiC

- ▶ ***Concept:*** Something a user needs to *know*
- ▶ ***Task:*** Something a user needs to *do*

ORGANiZE BY TOPiC

- ▶ **Ability to organize hierarchically
or by sections**

ORGANiZE BY TOPiC

- Comment
- Configuration Manager
- Configuration Translation
- Contact
- Contextual Links
- Custom Block

- Filter
- Help
- Help Topics
- History
- Image
- Interface Translation

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

- Toolbar
- Tour
- User
- Views
- Views UI



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
- Maintaining and troubleshooting your site
- Making your site secure
- My awesome help topic
- Using the administrative interface

ORGANiZE BY TOPiC

▶ **Related issue: #2516902:**

**Introduce a visual hierarchy
to the help page**

**LIMITATION:
NO SEARCH**

NO SEARCH

- ▶ **There is no way to search help.**

**DESiRED FEATURE:
PROViDE SEARCH**

PROVIDE SEARCH

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

PROVIDE SEARCH

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

PROVIDE SEARCH

► **Issue:**

**#2664830: Add search
capability**

PROVIDE SEARCH

▶ **Other proposal:**

#102254: Add an

administrative search feature

▶ **Search admin + help pages**

**NiCE-TO-HAVE:
GLOSSARY**

GLOSSARY

- ▶ **Glossary of terms**
- ▶ **Especially a single, extensible
glossary**

GLOSSARY

▶ **Filed as a separate issue:**

**#2701289: Glossary to extend
the Help system**

**LIMITATON:
MUST ENABLE
MODULE TO SEE HELP**

MUST ENABLE

- ▶ **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?**

**DESiRED FEATuRE:
READ HELP ABOUT A
MODULE BEFORE
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 *i*n PHP

- ▶ Markup provided in PHP function `hook_help()` by concatenating translatable strings with HTML tags

MARKUP IN PHP

```
function big_pipe_help($route_name, RouteMatchInterface $route_match) {
    switch ($route_name) {
        case 'help.page.big_pipe':
            $output = '<h3>' . t('About') . '</h3>';
            $output .= '<p>' . 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']) .
'</p>';
            $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;
    }
}
```

MARKUP *in* PHP

- ▶ **Some folks object to having any markup outside the theme**

MARKUP *in* PHP

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

MARKUP *in* PHP

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

(...more about this later)

MARKUP *i*n PHP

- ▶ **To keep in mind: Need “short strings” for translatability’s sake**

**DESiRED FEATURE:
MORE APPROPRIATE
PLACE FOR MARKUP**

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**

PLACE FOR MARKUP

Title *

My awesome help topic



Machine name:

my_awesome_help_topic [\[Edit\]](#)

Language

English

Body

B *I* | | | | Format ▾ | Source

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!

PLACE FOR MARKUP

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: '<p>'
    suffix_tags: '</p>'
  -
    text: 'Here is step one'
```

PLACE FOR MARKUP

▶ **Alternative solutions:**

▶ **Plugin?**

▶ **Markdown?**

▶ **Twig?**

▶ **Paragraphs?**

PLACE FOR MARKUP

- ▶ **Other tech implementations might fulfill desired features of resolution (but no patches yet)**

PLACE FOR MARKUP

- ▶ **Related issue: #2188753: Get rid of hard-coded markup in hook_help implementations**
- ▶ **Not to the point of a patch yet**

PLACE FOR MARKUP

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

PLACE FOR MARKUP

- ▶ **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?**

PLACE FOR MARKUP

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

PLACE FOR MARKUP

- ▶ **What about something like Paragraphs module?**
- ▶ **First iteration was very similar to Paragraphs. But UI was clunky and rejected by Usability team.**

LIMITATION:

HOOK_HELP'S CODE

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**

HOOK_HELP'S CODE

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

DESiRED FEATURE:

KEEP HOOK_HELP()

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**

HOOK_HELP'S CODE

- ▶ **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 AUTHORIZING
EXPERIENCE**

AUTHORING UX

- ▶ **Current `hook_help()` syntax may be difficult for documentation writers who are not also PHP programmers**

AUTHORING UX

- ▶ **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**

AUTHORING UX

- ▶ 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) 🧐

AUTHORING UX

- ▶ Impacted by “find a more appropriate place for markup” issue
- ▶ Solution to markup problem should also have positive impact on the authoring experience

**DESiRED FEATURe:
BETTER AUTHORiNG
EXPERiENCE WiTH A
ADMiN UI**

ADMIN UI

- ▶ **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 *

Machine name: my_awesome_help_topic [\[Edit\]](#)

Language

Body

B *I* | | | | Source

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!

Text format

[About text formats](#) ?

ADMIN UI

- ▶ **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**

ADMIN UI

- ▶ **Proposed UI reviewed by Core UX team and approved**

ADMIN UI

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

ADMIN UI

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

LIMITATION:
NO GREAT WAY TO
CROSS-LINK TO
OTHER HELP

CROSS-LINKS

- ▶ **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**

CROSS-LINKS

- ▶ **List** *related topics*
- ▶ *Topics to list this topic on*
- ▶ **Provide relationships to other help topics you wouldn't otherwise edit**

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

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

List this topic on

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

SUMMARY:
REQUIREMENTS

REQUIREMENTS

- ▶ **Help text needs semantic markup**
- ▶ **Desirable to have minimal/no HTML outside of theme**
- ▶ **Translatable (short strings)**

REQUIREMENTS

- ▶ **Help topics need to be distributable with modules, themes, profiles**
- ▶ **Help topics distributed with modules, etc. sometimes need to be updated**

REQUIREMENTS

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

**SUMMARY:
PROPOSED
RESOLUTION**

PROPOSED RESOLUTION

- ▶ **Keep `hook_help()` in place**
- ▶ **Add a new help system that would co-exist with `hook_help()` using config entities**

PROPOSED RESOLUTION

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

PROPOSED RESOLUTION

- ▶ Each module, theme, or profile can provide multiple topics in *config/install* or *config/optional*

PROPOSED RESOLUTION

- ▶ Only topics marked as “top level” (a config property) are listed on the help page (*admin/help*)

PROPOSED RESOLUTION

- ▶ **Site builders can create more topics and organize them into a hierarchy**

PROPOSED RESOLUTION

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

PROPOSED RESOLUTION

- ▶ **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
UI and help topic config entity export

OTHER PROPOSALS

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**
- ▶ **Resolves some issues, but breaks many strings for translatability desired feature**

OTHER PROPOSALS

- ▶ **#2590319: replace hook_help with Help Plugin**
- ▶ **Proposes to resolve code issue with hook_help by replacing it with a help Plugin system**
- ▶ **These plugins could be topics with titles instead of module-level pages**

OTHER PROPOSALS

- ▶ **#1918856: Put each module's help into a separate Twig file**
- ▶ **Proposes to resolve markup issue by putting module topics into Twig templates**
- ▶ **Might resolve code and authoring issues, too. Could resolve translatability if done carefully**

OTHER PROPOSALS

- ▶ **#2188753: Get rid of hard-coded markup in `hook_help()`**
- ▶ **Proposes several ideas to resolve markup and authoring issues.**
- ▶ **Not to the point of a patch yet**

OTHER PROPOSALS

- ▶ **#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**

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?

DISCUSSION

- ▶ **Does the proposed plan seem acceptable?**
- ▶ **Are there any objections to it being committed to Core as an experimental module?**

WHAT'S NEXT?

EXPERIMENTAL MODULE

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

NEXT STEPS

- ▶ **What do we need to achieve this?**
- ▶ **Patch reviews + RTBC**
- ▶ **Release manager review**

REVIEW

▶ **Issue:**

#2592487: [meta] Help system

overhaul



DrupalCon
NASHVILLE 2018
APRIL 9-13

Join us for contribution sprints

Friday, April 13, 2018

Mentored Core sprint

9:00-12:00
Room: Stolz 2

First time sprinter workshop

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>

Thank you!