Introduction

Structures are used to group an arbitrary set of wiki pages into a navigable tree. They are very useful for grouping Wiki pages into documentation, manuals, FAQs, HowTos, etc.

1.2. Navigating Structures

1.2.1. Browsing

When browsing through the Wiki:

- If a page is part of one or more structures, a dedicated icon will appear at the top of the page. Select the structure name from this list to activate it.
- The dedicated icon doesn't appear and a structure is automatically activated in the following cases:
  - The wiki page is the structure's root Wiki page.
  - The wiki page is part of only one structure and the "Open page as structure" option has been activated (see Structure Admin).
  - The wiki page is part of only one structure and the structure is defined in the URL: `wiki_page_url&structure=your_structure`.

Once a structure is active, pages belonging to the structure are displayed with a navigation bar.

The navigation bar provides icons to the next, parent, previous and homepage structure pages.

If you have `tiki_p_edit_structures` permission, a structure icon will appear to let you modify the structure and from Tiki15 you can also lock the Structure if you have the `tiki_p_lock_structures` permission (see below Managing an existing structure).

1.2.2. Slide Show

If the slide-show feature is enabled, selecting the 'slides' button from the page bar will display a structure page as a slide-show!

1.2.3. Table of contents tag ({toc})

Using a `{toc}` tag in a page belonging to the structure will display a Table of Contents for any sub-pages the page has. For this to work, the page must have sub-pages. The toc plugin can be used to display the Table of Contents for any structure by using its 'pagename' parameter and from Tiki12 it can also be used in a page that is not in a structure - see PluginToc for full documentation of this plugin.

1.2.4. Print whole Structures at once

You can print a whole structure at once into a single HTML containing all pages with their corresponding images, etc., through the Wiki > Multiple print feature.

And you can optionally produce an ODT file out of that, that you can use to create a PDF out of it easily with
1.3. Structure permissions

As could be expected, both global and category permissions can be granted for Structures, but as a Structure itself is not a categorisable object - whereas all the individual pages in a Structure are - the Structure permissions that apply to categorisation are 'taken' from whatever are applied to the top page of the Structure. This does provide a great deal of flexibility but can be a little confusing if not considered carefully.

From Tiki15 to make the Structure permissions more accessible/visible in the permission tables, a separate section has been created, labelled 'wiki structure' and the following Structure permissions are available:

- `tiki_p_admin_structures` - both a global and a category/object permission that gives all the structure permissions to the user (this permission was added in Tiki15)
- `tiki_p_edit_structures` - both a global and a category/object permission that enables the user to edit an existing structure and create new ones
- `tiki_p_lock_structures` - both a global and a category/object permission that enables the user to lock the structure (this permission was added in Tiki15)
- `tiki_p_watch_structure` - just a global permission at present that enables the user to monitor changes in the structure and receive email notification of changes (logically at some point this could also be made a category/object permission)

1.4. Managing existing structures / creating new ones

To create a new Structure or to modify an existing one, users must have `tiki_p_edit_structures` or `tiki_p_admin_structures` permission, either as a global permission for a non-categorised Structure or that permission must be applied to user for the category of the Structure's top page if categorisation is being used.

Access to the structure administration screens is from `tiki-admin_structures.php`, available from the menu Wiki > Structures, or while navigating the wiki, and the main administration is as shown below in the various tabs for different Tiki versions. It should be noted that the user must also have `tiki_p_view` wiki permission for the top page in order to see the Structure in the listing shown from `tiki-admin_structures.php`
The listing of the existing structures and the 'creation' form for a new structure are separated into two individual tabs with a screenshot of the listing as shown above (the creation form is the same as in Tiki14): the actions for managing an individual structure are accessed by hovering over the 'wrench' icon as shown in the screenshot. Depending upon what features have been 'switched on' the following are all the Actions that are possible and which permissions are needed in order to be able to use them:

- View Structure: no structure permissions needed but when the Structure admin page is subsequently shown the Structure admin tools will only be displayed if the user has either tiki_p_admin_structures or tiki_p_edit_structures
- View page: no structure permissions needed
- Export pages: must have tiki_p_admin_structures to see this Action
- PDF - detail still to be added
- Dump tree: must have either tiki_p_admin_structures or tiki_p_edit_structures to see this Action
- Remove: must have tiki_p_admin_structures to see this Action
- Create WebHelp - detail still to be added
- View WebHelp - detail still to be added
- XML Zip: must have tiki_p_admin_structures to see this Action

From Tiki 15 a wiki structure can also be locked, meaning that the pages that are in a structure and the order/hierarchy of these pages can only be changed by the locking user. A new preference needs to be set to allow this structure locking option to be available and when set, a locked/unlocked icon is shown alongside the 'actions' wrench icon as illustrated above.

If the item is locked, hovering over the icon will show the user that has locked it and if the user has the 'locking' permission i.e. tiki_p_lock_structures, clicking this icon with lock/unlock the structure.

The tiki_p_lock_structures permission was created from Tiki15 onwards to allow individual users the privilege to carry out locking/unlocking and this is applied (as with all Structure permissions) to the top page of the Structure if categorisation is used or as a global permission if categorisation is not being used.
As with all the various permissions 'sets', if a user has been granted tiki_p_admin_structures (also added as a new permission in Tiki15) they can do all the various Structure activities including the unlocking of a structure locked by another user. To make structure permission management clearer and easier to find, a new 'wiki structure' section has been created in the permission tables from Tiki15 onwards.

The listing of the existing structures and the 'creation' form for a new structure are separated into two individual tabs as shown above, and the actions for managing an individual structure are accessed by hovering over the 'wrench' icon as shown in the screen shot on the left.

## 1.5. Editing an existing structure

From the main structure listing table, as discussed above, you can select an individual structure and use the 'View structure' action to show the detailed hierarchy of the structure and from this screen, shown below for various Tiki versions, you can carry out different edits tasks that are discussed in the following sections.
The only difference between Tiki14 and Tiki15 for this screen is that a lock/unlock icon is shown at the top of the hierarchy. In the same way as used in the main structure table, hovering over this icon will show the user that locked the structure if it locked, and if the user has the appropriate permission clicking the icon will lock/unlock the structure.
1.5.1. Adding a new page

Select the structure you wish to edit in `tiki-admin_structures.php` (see above)

From tiki 9, as illustrated in the Tiki14 screen shot above, it is possible to simply drag an existing page from the page list shown at the bottom of the screen, and drop it where you want in the tree. It should be noted that as soon as this is done a Save button appears and the addition will only be finalised in the central database once this button is clicked.

Or you can use the “Add a new child page” button (🔗), shown to the right of each item in the structure page listing, to add a new page which will be created with a PluginToc inside.

Alternatively, you can add a new page while browsing the wiki, as a sister or child page to the page you are viewing.
This second process is often easier to work with in the case of a very long structure (such as the case of the Full Documentation structure here at doc.t.o).

For example you can add a page in the Documentation structure here at doc.t.o with just just 3 clicks:

- First click: doc.t.o left column: **doc.tiki.org > "All the Documentation"** (All the Documentation)
- Second click: at the page name prior to the page where you want to create yours. "Plugin Events" (in this case). Well, yes, you have to scroll the page (which implies some extra click or Ctrl+F for the word "Plugin" ...)  
- Third click (same number of clicks as when creating the page by other means): write the (new) page name at the header section of that page, and click at "Add page".

![Diagram showing the process](image)

- Add you content, Save. Done.

1.5.2. Moving a page around

You can move a page in a structure via tiki-admin_structures.php with simple drag&drop, even through different levels.

![Diagram showing the process](image)
1.5.3. Removing a page

You can remove a page from a structure via `tiki-admin_structures.php`. Just click on the associated button.

Users with the `tiki_p_admin_wiki` permission on a wiki page (or globally) will be prompted a choice to delete the wiki page as well as removing it from the structure.

1.5.4. Watch Structures

`tikiwiki`>=2

If the perms(tiki_p_watch_structure) and the feature (feature_user_watches) have been set, it is possible to watch a structure. It means each time a page in the structure is changed or a page in the structure is added or removed, you can receive an email notification

1.6. Alias