Contents

1. Main Page ... 2
2. Announcement/Log4Shell ... 3
3. BlueSpice 4.1 ... 6
4. Manual:All topics ... 10
5. Manual:Create Pages ... 14
6. Manual:Extension/BlueSpiceDiscovery ... 17
7. Manual:Extension/BlueSpiceDiscovery/Main navigation ... 23
8. Manual:Extension/BlueSpicePermissionManager ... 27
9. Manual:Extension/CustomMenu ... 37
10. Manual:Extension/FlexiSkin ... 37
11. Manual:Extension/VisualEditor ... 44
12. Manual:Extension/Workflows ... 54
13. Manual:Semantic MediaWiki ... 63
14. Setup:Download ... 68
15. Setup:Installation Guide ... 68
16. Setup:Release History ... 71
17. Setup:System requirements ... 73

Welcome to the
Main Page
BlueSpice 4 helpdesk

Important! A critical security vulnerability of the log4j Java library has been reported. After an initial assessment, current versions of BlueSpice are not affected by this issue. In older installations, the search components could be affected. You can find our detailed vulnerability assessment here.

Note: The contents of this helpdesk apply to BlueSpice version 4. You can reach our helpdesk v.3 here. Please note that the help desk is under construction. It will be continuously expanded until the product release on January 19, 2022.

Installation and Setup

Release-Info | What's new neu!

Download of the current version

Installation guide

System requirements

Operating Manual

Getting started

BlueSpice Layout

Create a page

Edit a page

Tracking changes

Video tutorials

Basic tasks

Organizing content

Search and find

User preferences

Bookshelf

Topics

Blog
Quality management
Approving page drafts
Semantic MediaWiki
Workflows

all topics...

Administration

Main navigation
Custom menu
Namespace manager
Permissions

Customization

FlexiSkin
Portal pages
Templates download

Announcement/Log4Shell

Contents

1 Event 4
2 Current vulnerability assessment in BlueSpice (overview) 4
3 Detailed assessment 4
3.1 Current version 4
3.2 Older versions of BlueSpice 3 4
3.3 BlueSpice 2 5
3.4 Inspected components in the Docker image 5
3.5 BlueSpice Cloud 5
4 Related links 5

Event

Log4j vulnerability

- https://nvd.nist.gov/vuln/detail/CVE-2021-44228
- BSI warning from 12/12/2021 (CVE-2021-44228)

Current vulnerability assessment in BlueSpice (overview)

- BlueSpice free, pro, farm:
  - Current on-premise installations => **not affected**
  - Older on-premise installations => **version of Elasticsearch could be vulnerable**
  - The Docker version => **not affected**
- BlueSpice Cloud => **not affected**

This is true for instances that we have installed. **Customers have to check their part of the installation** (i.e., OS, additional packages, etc.)

Detailed assessment

Current version

- **Elasticsearch** => **not vulnerable**
  https://discuss.elastic.co/t/apache-log4j2-remote-code-execution-rce-vulnerability-cve-2021-44228-esa-2021-31/291476
- **Java-Server**
  - Tomcat => explicit configuration of log4j is necessary. By default, log4j is not activated. We do not change this. => **not vulnerable**
  - Jetty => explicit configuration of jetty is necessary. By default, log4j is not activated. We do not change this. => **not vulnerable**
- **Java Webservices**
  - xhtmlrenderer => a log4j plugin exists, but is not used by our service => **not vulnerable**
  - VisualDiff => uses daisydiff + others. Does not use log4j => **not vulnerable**
  - LaTeX2png => uses the jlatexmath library. Does not use log4j => **not vulnerable**
- **Draw.io** reports that the appication is not affected:
  https://twitter.com/drawio/status/1470061320066277382 => **not vulnerable**

Older versions of BlueSpice 3

- **Elasticsearch** => **not vulnerable**
  https://discuss.elastic.co/t/apache-log4j2-remote-code-execution-rce-vulnerability-cve-2021-44228-esa-2021-31/291476
  - **Versions 6.8.9+ (**released on 13th May 2020) => **not vulnerable**
  - **Version 6.4.0 - 6.8.8**: Update of Elasticsearch is recommended.
    => **not vulnerable (updating the version during the next BlueSpice update is recommended)**
    => **vulnerable outside of BlueSpice**

- **Versions 6.3.x and below**: Update of Elasticsearch is recommended.
  => **not vulnerable (updating the version during the next BlueSpice update is recommended)**
  => **vulnerable outside of BlueSpice**

Independently of the Elasticsearch version in use, BlueSpice is not vulnerable due to the setup of Elasticsearch:

- **No direct access:** BlueSpice uses Elasticsearch as an internal service. We set up Elasticsearch in such a way that there cannot be any direct access. The only way to access Elasticsearch if you are not working directly on the server is through BlueSpice, which means there is a very controlled set of access vectors. These are search queries and content which is to be indexed.
- **No logging of data:** We use log level WARN on Elasticsearch, which means no data can find its way to the logs. So there is no way an attacker can add custom information to the logs.

No pass-through of user data: All communication between BlueSpice and Elasticsearch is done user-agnostic. There is no way Elasticsearch can see which user triggers the communication. The user-agent is restricted to the BlueSpice system user.

This is true even if you are running on an older, vulnerable version of Elasticsearch. So we see no urgent action required. Nonetheless, it is recommended to update your Elasticsearch to a non-vulnerable version with the next update of BlueSpice.

If you have changed the Elasticsearch setup to a different log level or loosened the restrictions on Elasticsearch access, you have to check the setup.

BlueSpice 2

- Solr uses log4j => **vulnerable**
  More information on Mitigation is here:
  https://solr.apache.org/security.html#apache-solr-affected-by-apache-log4j-cve-2021-44228

Inspected components in the Docker image

The list of Docker files in the activated packages has been inspected. => **not vulnerable**

- https://security-tracker.debian.org/tracker/CVE-2021-44228

BlueSpice Cloud

- Swarmpit => **not affected**
- Drone => **not affected**

Related links

- https://www.elastic.co/guide/en/elasticsearch/reference/current/deb.html
- https://access.redhat.com/security/vulnerabilities/RHSB-2021-009
- https://www.suse.com/c/suse-statement-on-log4j-log4shell-cve-2021-44228-vulnerability/

BlueSpice 4.1

BlueSpice 4.1 is a Minor Release.

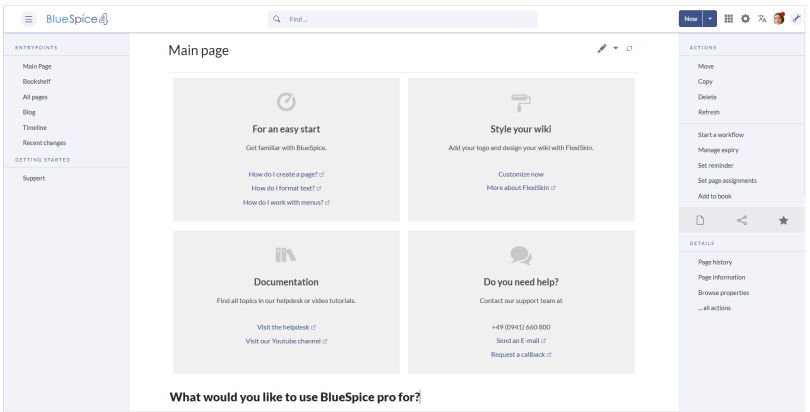
Contents

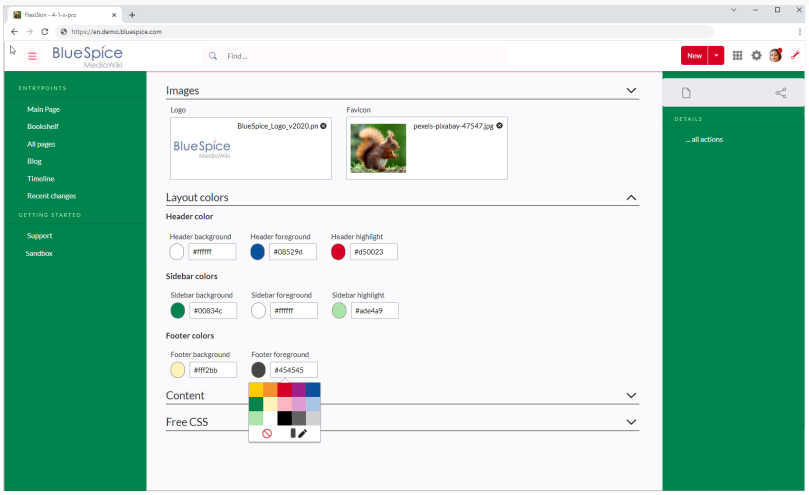
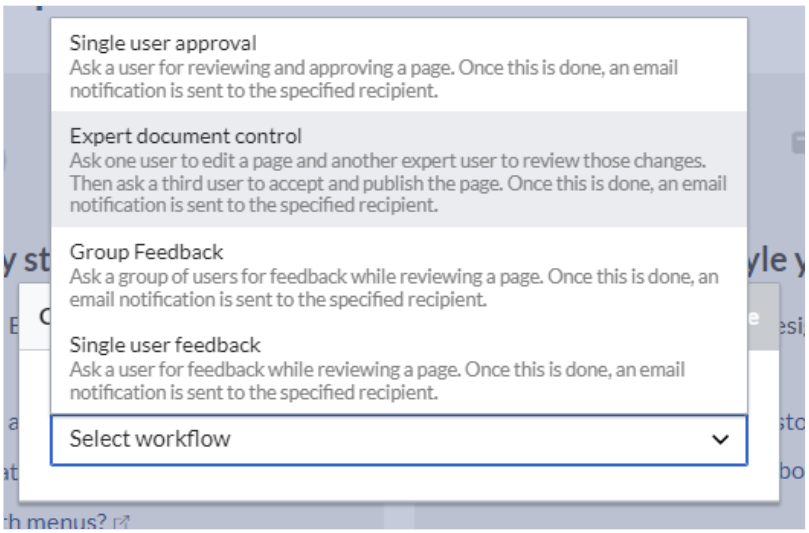
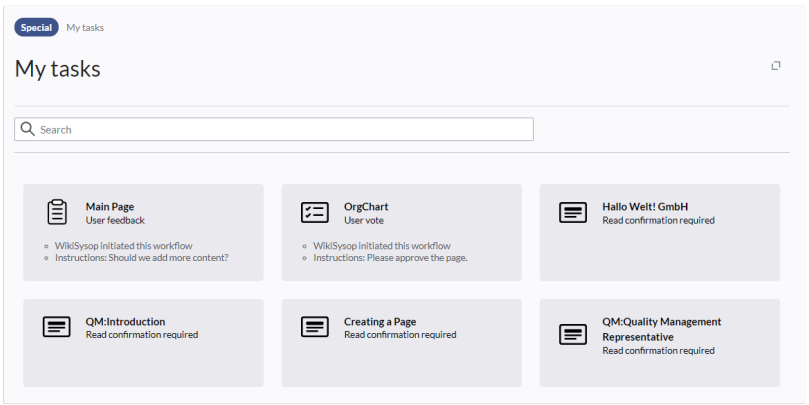
1 Point Releases 7
2 Important new features in BlueSpice 4.1 pro 7
3 Additional added Extensions 9
4 Extensions that are no longer included 10
5 Additional changes in BlueSpice free 10

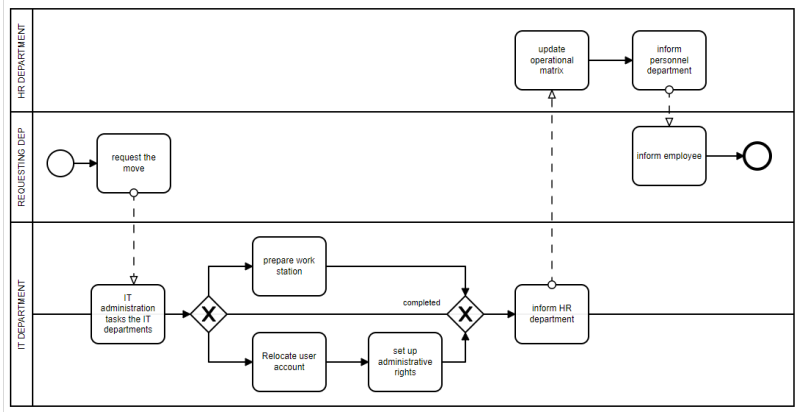
Point Releases

Release	Releasedate
4.1.4	June 15, 2022
4.1.3	April 26, 2022
4.1.2	March 17, 2022
4.1.1	February 8, 2022
4.1.0	January 19, 2022

Important new features in BlueSpice 4.1 pro

Function	Description	Screenshot
New standard skin "Discovery"	Modern, light-weight skin. We focused on a neutral design and thought a lot about usability. As an alternative, you can still activate the previous "Calumma" skin.	 Skin "Discovery"
	With the FlexiSkin	

Function	Description	Screenshot
FlexiSkin	editor, you can change the logo, colors, and fonts within minutes directly in the wiki.	 FlexiSkin
Workflows	The workflow function has been completely revised. Workflows are now based on BPMN. This makes it easier to adapt them to special requirements. Four review workflows are already included.	 Selecting a workflow
My tasks	The new “My Tasks” overview page enables users to view and process all pending workflow tasks or read confirmations.	 My tasks

BPMN diagrams	You can now create business processes in BPMN format. The diagrams can be exported as XML files or in SVG format.	 BPMN diagram
Two-factor authentication	Logins to the wiki can now also be configured to require an additional one-time password or a physical security key (Fido stick).	

Additional added Extensions

Developer: MW=MediaWiki Extension HW: Hallo Welt! Extension

Extension	Developer	Description
DataTransfer	MW	Allows for importing and exporting the contents of a wiki's pages in XML and CSV form, using template calls to define the fields
EventBus	MW	Propagates state changes (edit, move, delete, revision visibility, etc) to a RESTful event service, providing consumers of the service with the means of tracking changes to MediaWiki content.
Forms	HW	A new all-purpose forms framework for MediaWiki.
Loops	MW	Parser functions for performing loops.
OATHAuth	MW	Provides authentication support using HMAC based one-time passwords. Now by default activated in BlueSpice pro.
		Grants a user exclusive rights on a page. Works in conjunction with the

Extension	Developer	Description
PageCheckout	HW	Worfklows extension.
PageHeader	HW	Provides an additional user interface before the page content
RevisionSlider	MW	Shows a slider allowing selecting and comparing of revisions on a diff page.
SecureLinkFixer	MW	Rewrites URLs to HTTPS if domain always requires HTTPS.
StandardDialogs	MW	Provides dialog user interfaces for common page actions.
WebAuthn	MW	Provides authentication support using WebAuthn protocol.

Extensions that are no longer included

- **BlueSpiceBookshelfUI**: Removed since BlueSpice 3.2.
- **BlueSpiceEditNotifyConnector**: Removed since BlueSpice 3.2.
- **BlueSpiceReview** and **BlueSpiceReviewExtended**: Replaced by **Workflows**.
- **BlueSpiceSocialArticleActions**
- **BlueSpiceTagSearch**: Removed since BlueSpice 3.2.
- **BlueSpiceUserMergeConnector**
- **BluespiceVisualDiff**
- **CookieWarning:** Functionality has been integrated in BlueSpicePrivacy.
- **Duplicator** (Copying a page): Replaced by StandardDialogs.
- **EditNotify**: Removed since BlueSpice 3.2.
- **Quiz**
- **Page Schemas**
- **Semantic Internal Objects**

Additional changes in BlueSpice free

- Removal of the LDAP stack: LDAP extensions are now only bundled with BlueSpice pro.
- BlueSpicePermissionManager: Custom settings are only available in BlueSpice pro.

Manual:All topics

Helpdesk topics

Setup

- Administration
- Concepts
- Content & Structure
- Quality assurance
- Personalization
- Social wiki
- Cloud

Note: If you can't find an answer on these pages, you can also visit our Community Forum.

Setup

- BlueSpice Operating Manual
- BlueSpice free Download
- Installation Guide
- Installing BlueSpice free with Docker
- Release History
- Release Notes
- System requirements
- Upgrade from BlueSpice 3 to 4

Administration

- Config manager
- Footer
- Main navigation
- Extended statistics
- Namespace manager

Permissions

- Group manager
- User manager
- Invite users
- 2-Factor-Authentication (2FA)

Concepts

- Creating and using categories
- Magic words
- Subpage
- The pages model
- Wikitext

Content and structure

- Attachments
- Content organization
- Checklists
- Ratings and recommendations
- Tag cloud
- Tasks - Overview
- Templates

Editing

- Create Pages
- Create pages
- Delete pages
- Extension/BlueSpiceCategoryCheck
- Context menu
- CountThings
- Filtering tables
- Insert links
- Insert tags and magic words
- Unsaved changes (autosave)
- Drawio
- Edit pages
- Insert files
- Insert images
- Version history
- Wikitext

Organization

- Content organization

- Creating and using categories
- Books
- Category manager
- Interwiki links
- Generate page lists (smart lists)
- Creating page lists with DPL3
- Menus - Overview
- Page lists
- Page templates
- Recent changes transclusion
- SMW queries
- Templates

Page tools

Search

- Extended search
- Interwiki search
- Search field in the page content (TagSearch)

Customization

- Displaying page sections as cards
- Error messages
- Custom menu
- Main navigation
- Namespace CSS manager
- Attachments
- Creating page lists with DPL3
- Integration of third party content
- Numbering ordered lists

Personalization

- Avatars
- Dashboards
- Notifications
- Visited pages
- Privacy center
- User menu
- Personal navigation
- Preferences

Quality assurance

- Collecting signatures

- Extension/BlueSpiceExpiry
- Page assignments
- Read confirmation
- Reminders
- Extension/BlueSpiceWikiExplorer
- Page approvals (Acceptance)
- Quality management
- Redirects

Maintenance

Social wiki

- Introduction to BlueSpice Social
- Blog
- Attachments

Cloud

BlueSpice pro Cloud topics:

- PDF Customization (Cloud only)
- Customizing the user interface (FlexiSkin)
- Invite users

Manual:Create Pages

An important aspect of the wiki principle is that information can be shared with other people quickly and without any "red tape". Every wiki user with edit rights should therefore be able to create and edit a page at least in one namespace without any prior knowledge or without special privileges to contribute to their knowledge.

Contents

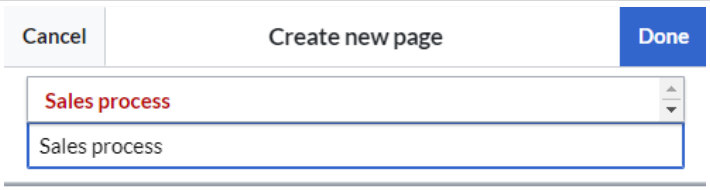
1 Creating a page 16
2 Changing the page name 16
3 Creating subpages 16
4 Alternative options 17
5 Tipps 17

6 Related info 17

Creating a page

To create a page:

1. **Click** the *New* button in the header bar. A dialog window opens.
2. **Enter** a new page name. If the page does not yet exist, you will see a redlink.



Creating a page

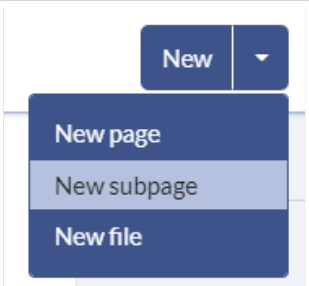
3. **Click** *Done*.
4. **Choose** *Empty page* or a different page template. This step is skipped if there are no available page templates. The page opens in edit mode. You can now switch between visual and source edit mode using the Editor toolbar.
5. **Save** the page. It is now available in the main namespace of your wiki (unless you added a namespace prefix while creating the page).

Changing the page name

If you want to change the page name after the page has been saved — e.g., to save it in a different namespace — you can move the page.

Creating subpages

To create a subpage for the current page, select the *New Subpage* link from the *New* button menu.



Creating a subpage

The subpage is then created as *Current Page/Subpage (e.g.*, Visual Editor/Tables). If a page has subpages, the path is displayed as breadcrumb navigation at the top of the page.

Alternative options

- **Search field:** Maybe information about your topic already exists. Before you create a new page, you can use the search to enter terms for your topic and check existing pages. If no suitable page exists, click on the redlink 'Create page *[page name]*' in the search results **er address bar:** You can also create a page directly from the address bar of your web browser. Simply exchange the current page name with a new one. Then, click enter to create the new page.
- **Form:** In BlueSpice pro, the extension Page Forms is available. It allows to create pages using a form.

Tipps

- **Redirects:** Do you have the impression that an article title is searched more often with a different synonym? Then create a new article with this name and redirect the page to another page that contains the actual information.
- **Title choice:** In a wiki, titles are very important. In wikis with many entries, authors may make references to pages that they deem important in the context of their entry. The page title should, therfore, clearly communicate its content. Single words are very good, but even short sentences like "why wikis work" can be useful names. In addition, meaningful page titles also help readers find their way around when they search for an entry.
- **Spelling:** When linking to an already existing page you should pay attention to their exact spelling. If you e.g. typing a [[hello world]] instead of [[Hello World]] will create a new page as the links are spelled differently. Therefore, consider also capitalization and spaces. Only at the beginning of the letter does it make no difference whether you write a small or capital letter.
- **Namespaces:** If you want to create an article in a different namespace, the namespace must appear before article name. Example: `[[namespace:article name]]`.
- **Special characters:** The following characters **cannot** be used in titles : `{ } & ? < > \` and `,`. For more information, see mediawiki.org/wiki/Manual:Page_title.
- **Subpages:** The character `/` is used to create a subpage.

Related info

- Rename and move pages
- Redirects
- Creating and Using Page Templates

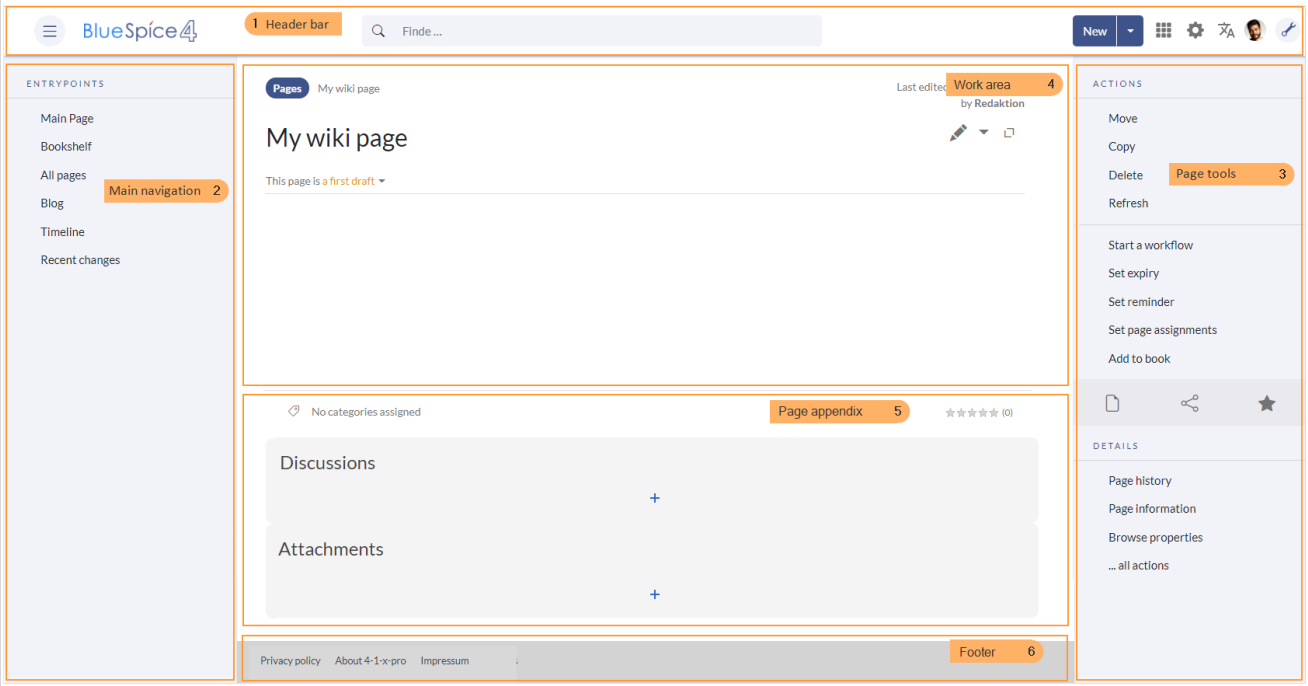
Layout

Contents

1 BlueSpice Layout 19
2 Header bar 20
3 Main navigation 20
4 Page tools 21
5 Work area 22
5.1 Breadcrumb navigation 22
6 Page appendix 22
7 Footer 23

BlueSpice Layout

The user interface is divided into distinct areas that group various wiki functions in a meaningful way. Here you get an overview of all features of the standard skin "Discovery".



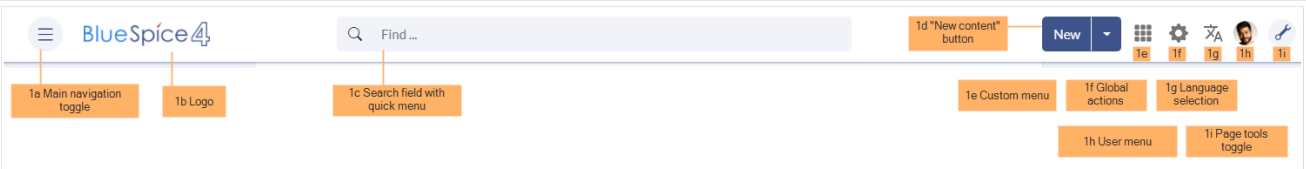
Main areas of the "Discovery" skin

Bereich	Beschreibung
1-Header bar	Contains important elements such as the logo area, the search field and the buttons for various navigation menus (mega menus).
2-Main navigation	The "heart" of the site organization. The navigation links can be customized by admin users. This area also displays the book navigation.
3-Page tools	Contains all the actions that can be performed on a page. In addition, information such as the version history or the page information can be accessed from here.
4-Work area	All content is created and edited here. The work area is divided into the title area and the actual page content.
5-Page appendix	Additional information such as category membership, discussions and attachments are displayed in the supplementary area. In addition, page recommendations and ratings are displayed if they are activated for the page.
	The footer contains links to legal information as well as to external

Bereich	Beschreibung
6-Footer	websites relating to MediaWiki.

Header bar

The header contains important elements such as the logo area, the search field and the buttons for various navigation menus (mega menus).



Header bar

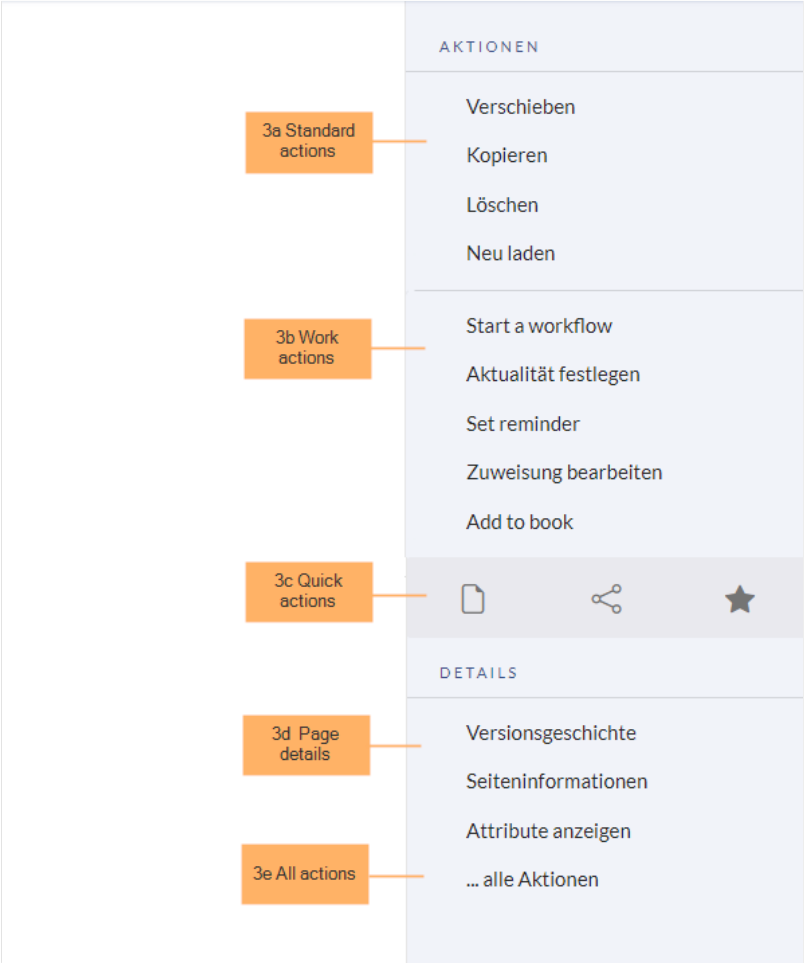
Funktion	Beschreibung
1a-Main navigation toggle	Allows users to show and hide the main navigation.
1b-Logo	The logo can be changed using the special page FlexiSkin.
1c-Search field	Page titles that match the search expression are displayed in a quick menu while the search term is being entered. Pressing the Enter key takes you to the search center, which displays the results of a full-text search and allows filtering the results.
1d-"New content" button	The "New" button allows to create a new page. A subpage can be created directly via the submenu or a new file can be uploaded. A multi-upload is only possible via theManual:Extension/ExtendedFileList.
1e-Custom menu	Allows users with admin rights to create an additional mega menu. The button is only displayed once the additional menu has been created.
1f-Global actions	Direct links to many special pages as well as administrative pages of the wiki.
1g-Language selection	If a page includes links to pages in different versions via language codes that were defined in the Interwikilinks, a mega menu is shown for the language selection.
1h-User menu	Users manage their own settings, tasks and notifications here. A red circle appears above the user avatar if unread notifications exist.
1i-Page tools toggle	Allows users to show and hide the page tools of a page.

Main navigation

Links to the most important wiki pages are shown here. Administrators have the option to customize the main navigation.

Page tools

The page tools area contains all the actions that can be performed on a page. In addition, information such as the version history or the page information can be called up from here.



Page tools

Funktion	Beschreibung
3a-Standard actions	Move, Copy, Delete, Refresh
3b-Extended actions	Start a workflow, Set expiry, Set reminder, Set page assignments, Add to book
3c-Quick actions	Export options, Share, Add to watchlist
3d-Page details	Page history, Page information, Browse properties

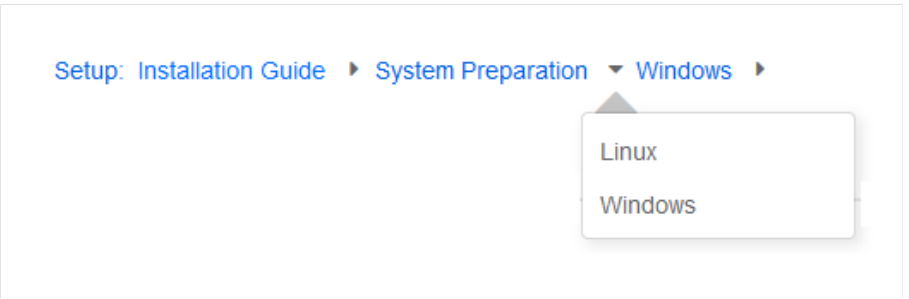
Funktion	Beschreibung
3e-All actions	Opens a dialog window, in which all possible actions on this page are listed.

Work area

Breadcrumb navigation

The breadcrumb navigation at the beginning of the work area consists of links that map the path of the current page:

```
Namespace (=root node) > Pagename > Subpage level 1 > ... > Subpage level x
```



Breadcrumb navigation

If the page *<namespace>:Main_Page* (languae variations: de:*Hauptseite* / fr:*Accueil* / zh:) exists, the root node links to that page.

If this page does not exist, the root node links to "All pages" (*Special:Allpages*) with the namespace selector preset to the respective namespace. If the root node should link to a different page (e.g., *<namespace>:Portal)*, then this page needs to be redirected to the page *<namespace>:Main_Page*.

Page appendix

To hide the page appendix area, the following CSS rules can be added to the page *MediaWiki:Common.css*:

Hide entire area:

```
#data-after-content {display:none} /* Hide discussions and attachments */
```

Hide attachment only (only up to BlueSpice v4.1):

```
#social-stash-cnt {display:none} /* hide only attachements */
```

Hide discussions only:

```
#social-topics-cnt {display:none} /* hide only discussions */
```

The areas above can also be hidden by namespace, e.g.:

```
.ns-0 #data-after-content, .ns-3000 #data-after-content {display:none} /*Hide only in
some namespaces*/
```

Footer

The footer contains links to legal information as well as to external websites relating to MediaWiki. The links to the legal information can be adjusted by wiki administrators via pages in the *MediaWiki* namespace.

- Customize the footer

Technical Reference: BlueSpiceDiscovery

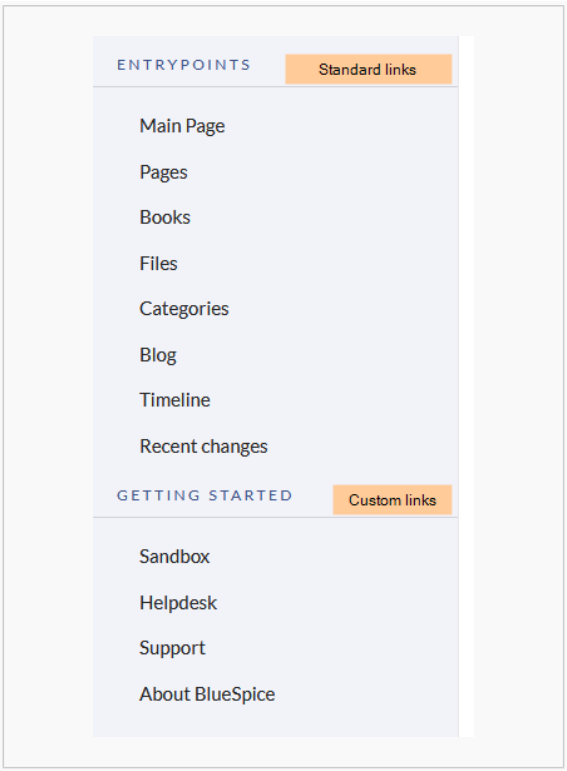
Manual:Extension/BlueSpiceDiscovery/Main navigation

Contents

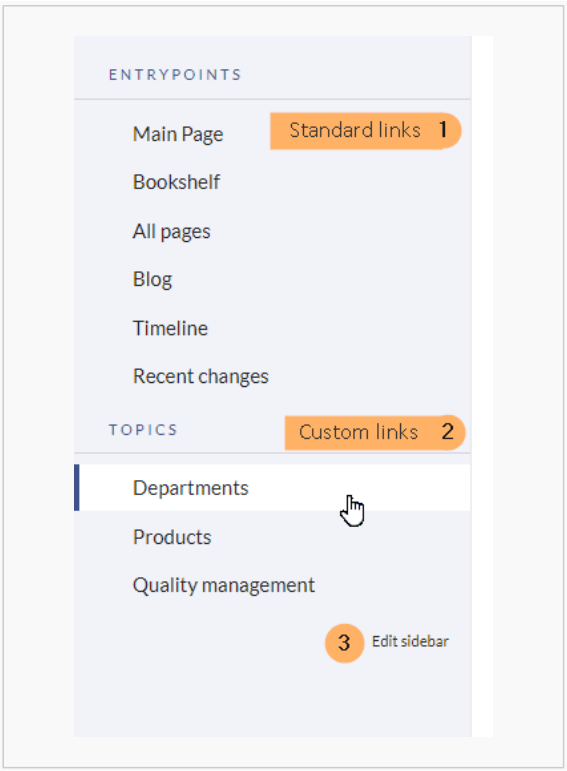
1 Overview 24
2 Editing the main navigation 24
2.1 Menu editor 24
2.2 Source edit mode 26
3 Deactivating standard links 26
4 Group-specific navigation 26
5 Additional customizations 27
6 Related info 27

Overview

By default, some links are provided as entry points to the wiki. Wiki administrators can deactivate these links in the configuration manager if needed. In addition, you can also add new links below the entrypoints (admin permissions required). Please note that no hierarchical links can be created. Therefore, it makes sense to mainly set up links to the most important topics and to portal pages that contain additional links or page lists.



Main navigation BlueSpice 4.4+



Main navigation BlueSpice -4.3

Editing the main navigation

To open the menu editor:

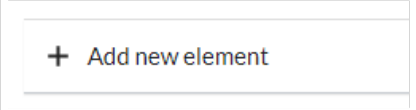
1. **Click** E*dit sidebar* at the bottom of the navigation menu. If the page does not exist yet, you will see a notice on the page.

Menu editor

> Visual menu editor is available from BlueSpice 4.2.

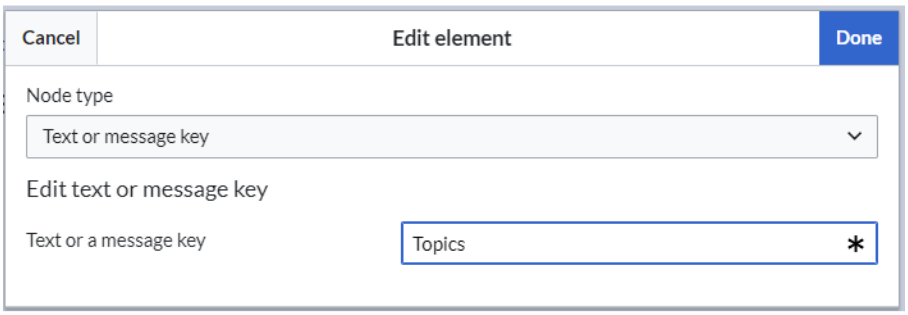
To add a new menu header using the menu editor:

1. **Click** *Add new element* to create a new menu header.



Add a new menu heading

2. **Enter** the text for your menu header. In a multilingual wiki, you can also enter a message key.

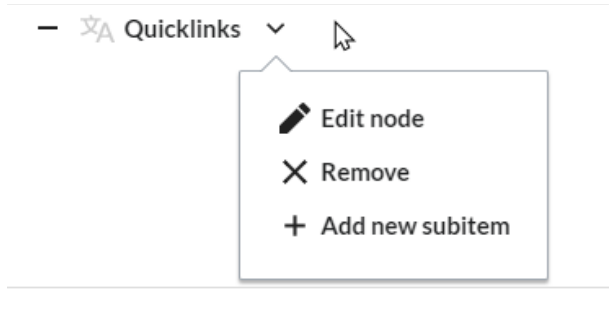


Enter a heading name

3. **Click** Done.

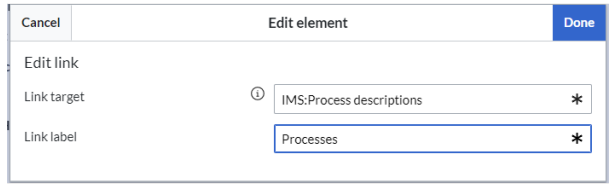
To add links:

1. **Select** *Add new subitem* from the dropdown menu of the menu header.



add a link as a new subitem

2. Enter the page name as the link target and the label that you want to show:



enter link info

3. **Click** *Done.*
4. **Repeat** steps 1-3.
5. **Click** *Save changes*.

> **Note:** If you use the parser function `{{#ifingroup:...` to display navigation elements in the source code, you must always edit the main navigation in the source code. In visual editing mode, saving removes any parser function or semantic queries.

Source edit mode

To add new links:

1. **Change** to source editing mode.
2. **Create** one or more navigation links (with or without section heading). The following example shows a link to the page "Company" with the label "Our company" and an external link to the BlueSpice website with the label "Website". The links are grouped together under the section heading "Quicklinks":

```
*Quicklinks
**Company|Our company
**https//www.bluespice.com/de|Website
```

3. **Save** the page. The links are now shown in the main navigation.

Link labels may collide with system messages. If this is the case, simply append the HTML-code for an empty space to the description:

```
**Portal|Portal 
```

Deactivating standard links

The standard links can be deactivated in the configuration manager. The following settings are available under *Feature > Skinning*:

BlueSpiceBookshelf:

- Show entrypoint "Bookshelf"

BlueSpiceDiscovery:

- Show entrypoint "Mainpage"
- Show entrypoint "All pages"
- Show entrypoint "Recent changes"

BlueSpiceSocial:

- Show entrypoint "Timeline"

BlueSpiceSocialBlog:

- Show entrypoint "Blog"

Group-specific navigation

It is possible to show navigation elements for specific user groups only. Please note that the pipe symbol (|) between the page name and its label has to be escaped as `{{!}}` within this function.

This syntax is defined in the extension UserFunctions.

```
{{#ifingroup:sysop,widgeteditor |
*Test2
**somepage{{!}}Some page
|}}
```

Note: Anytime the page is saved using the visual menu editor, the parser function will be overwritten and no longer works!

Additional customizations

- Alignment for navigation with long link labels
- Display icons with navigation links
- Multi-language navigation

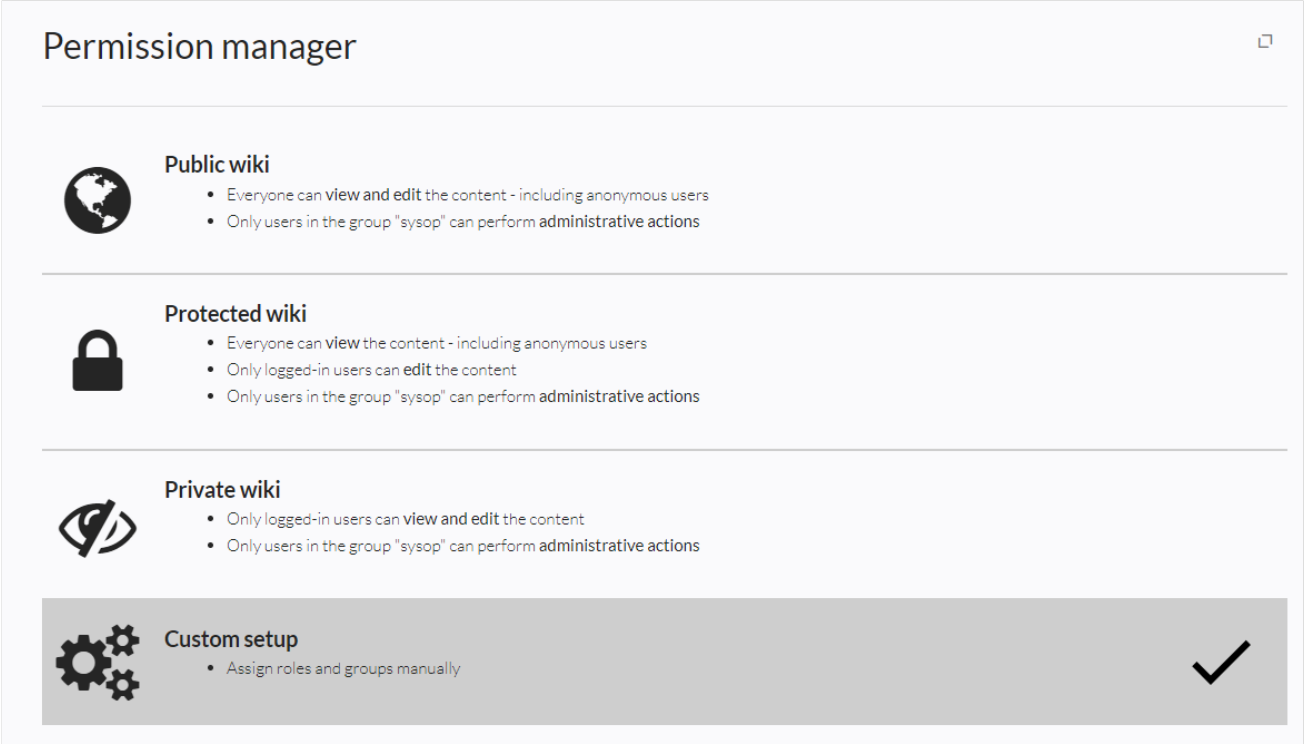
Related info

- Custom menu
- User menu

Permission manager

The permission manager can be accessed from the *Global actions* menu *under Administration > Permissions*. This link loads the page *Special:PermissionManager.*

There are four different permission settings. The default setting is "Private wiki". If you want to grant different permissions in different namespaces, the setting "Custom setup" is required.



Permissions manager

Contents

1 Settings 29
2 Custom setup 30
2.1 About role-based permissions 31
2.2 The roles matrix 32
2.3 Role inheritance 33
2.4 Default roles 33
3 Restricting read permissions 35
3.1 Exensions that are permissions-aware 35
3.2 Extensions and special pages that are not permissions-aware 35
3.3 Limited transclusion 36
4 Technical info 36
4.1 Logging 36
5 Configuration 36
6 Related info 36

Settings

An administrator can choose between three types of settings. The setting **Private Wiki** is activated by default.

Permission type	Description	Special permissions
Public wiki	The wiki is visible to and editable by anyone, including anonymous users (that means users that are not logged in). • All users have edit rights by default. • To approve a page (if the approval mechanism is activated in a namespace), the groups "editor" and "reviewer" must be assigned to a user. • To manage the wiki (administrative tasks), the group "sysop" must be assigned to a user.	Sonderverrechtung: [1] `// Anonymous and logged-in users can read and edit $this->groupRoles ['*']['reader'] = true; $this->groupRoles ['*']['editor'] = true;`
Protected wiki	The wiki is visible to anyone. Only logged-in users can edit the wiki. • All users have edit rights by default. • To approve a page (if the approval mechanism is activated in a namespace), the groups "editor" and "reviewer" must be assigned to a user. • To manage the wiki (administrative tasks), the group "sysop" must be assigned to a user.	Sonderverrechtung:[1]: `// Anonymous users can read, logged-in users can edit $this->groupRoles ['*']['reader'] = true; $this->groupRoles ['*']['editor'] = false; $this->groupRoles ['user']['editor'] = true;`
Private wiki	Only logged-in users can view and edit the wiki. • Logged-in users only have veiw permissions. • **Important!** To **edit** a page, users must be assigned to the "editor" group manually. • To approve a page (if the approval mechanism is activated in a namespace), the groups "editor" and "reviewer" must be assigned to a user.	Sonderverrechtung:[1] `// Only logged-in users can read. The group "editor" has to be manually assigned to users. $this->groupRoles ['*']['reader'] = false; $this->groupRoles ['*']['editor'] = false; $this->groupRoles ['user']['reader'] = true; $this->groupRoles ['user']['editor'] = false; $this->groupRoles`

Permission type	Description	Special permissions
	• To manage the wiki (administrative tasks), the group "sysop" must be assigned to a user.	`['editor']['editor'] = true; $this->groupRoles ['sysop']['editor'] = true;`
Custom setup (BlueSpice pro)	Roles and groups are assigned by an administrator. This is necessary if different namespaces need to have different user rights. See the next section for more info.	

1. ↑ [1.0] [1.1] [1.2] Global permissions (modified by the special permissions shown in the table above):

```
'bureaucrat' => [
'accountmanager' => true
],
'sysop' => [
'reader' => true,
'editor' => true,
'reviewer' => true,
'admin' => true
],
'user' => [ 'editor' => true ],
'editor' => [
'reader' => true,
'editor' => true
],
'reviewer' => [
'reader' => true,
'editor' => true,
'reviewer' => true
```

Note: In BlueSpice pro Cloud, it is not possible to assign *edit*, *comment*, or *upload* rights to anonymous users.

Custom setup

Die Tabelle zeigt typische Standardeinstellungen für eine einfache Benutzerverwaltung:

Group	Default roles	Purpose of the group	Suggested rolees
anonymous user (*)	-	Determines if anonymous users can read wiki pages.	(no role assignment) or *reader*
		Determines the rights authenticated users have if they don't	*reader* or

Group	Default roles	Purpose of the group	Suggested rolees
user	reader, editor	belong to any other groups. All groups except for anonymous users initially inherit permissions from this group.	*reader, editor*
editor	(von user geerbt), editor	Group members can edit the wiki.	*(editor)**
reviewer	(von user geerbt), reviewer	Group members can approve page revisions if the approval feature is activated.	*reviewer*
sysop	(von user geerbt), editor, admin	Grants administrator rights to the wiki. Included in roles: admin, maintenanceadmin	*(editor)*, admin*
			* can be inherited through the group "user"

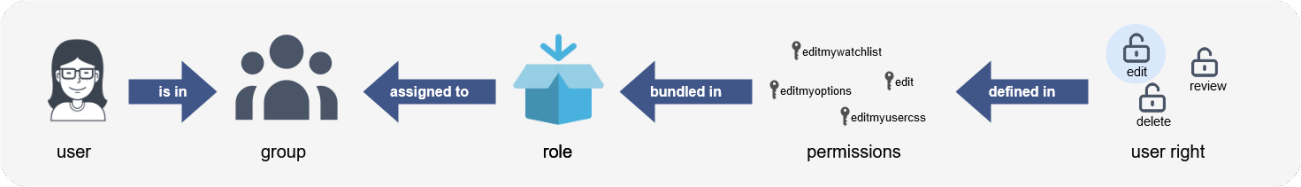
Note: If you have saved the personalized settings at least once and then switch back to a "protected" or "private" wiki, you do not lose your latest personalized settings. You can simply resave the latest saved settings to switch back to a wiki with personalized permissions.

About role-based permissions

Roles represent a **collection of individual permissions** that are necessary to perform certain functions in the wiki. For example, for a user who is supposed to only read the wiki, many permissions in addition to the "read" permission are needed: The ability to change their own settings, to search the wiki, to view page ratings, and so on.

All permissions that make up a logical group are encapsulated in a role, in this example the role "reader". If wiki administrators want to grant read-only rights to a user group, they only need to assign that group the "reader" role, instead of assigning many individual permissions that are needed to create a "read"-user.

By assigning roles to a group, all users belonging to that group receive the rights of these roles. Roles are never assigned directly to users, but always to groups instead. Users are then assigned to one or more groups.

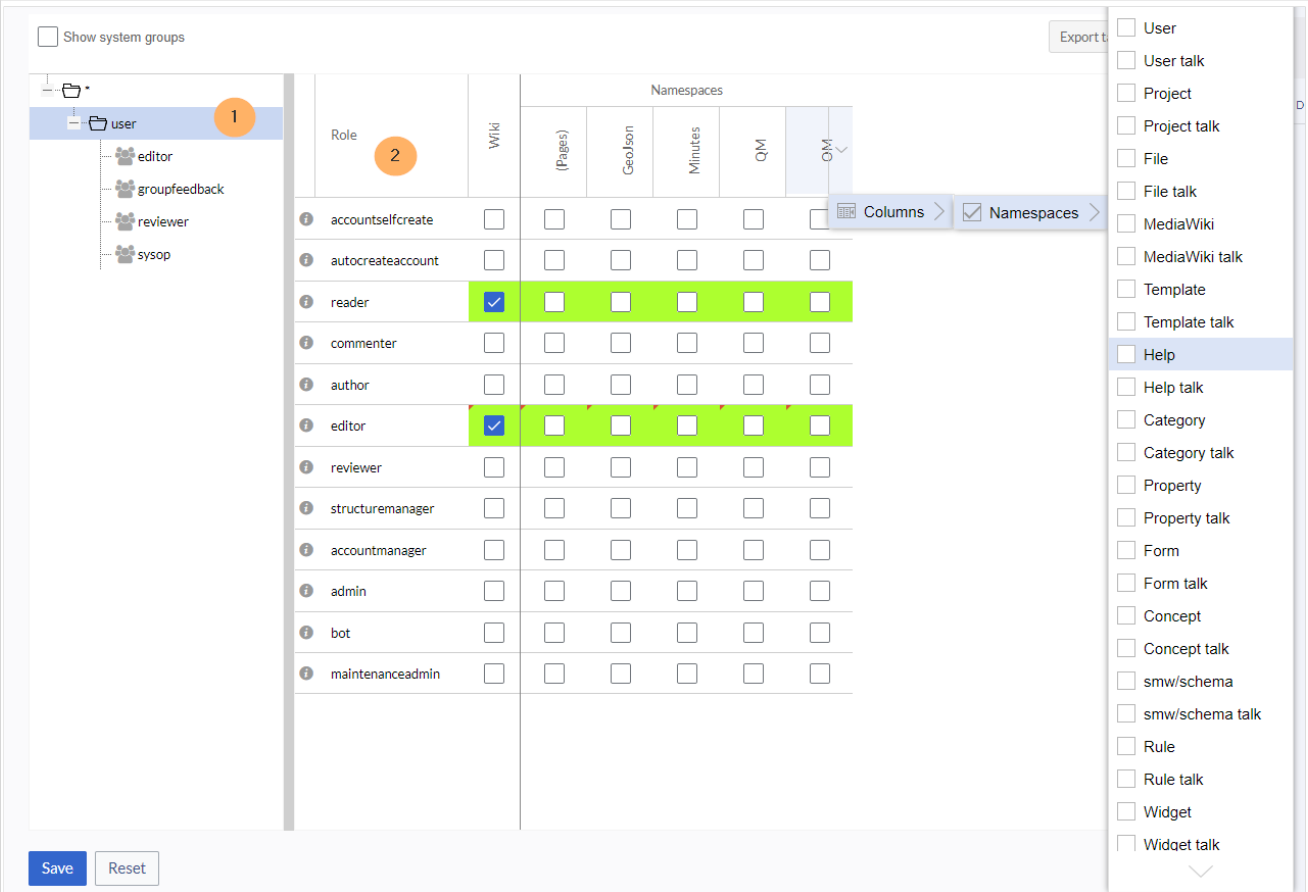


As a result, the following administration pages play a role in rights management:

- Namespace manager: In the wiki, user groups can be granted different permissions via roles in individual namespaces.
- Group manager: Namespace permissions are assigned to user groups, not to individual users.
- User manager: Individual users are assigned to groups to obtain the permissions associated with the group.
- Permission manager: In the Permission manager, the user groups are assigned to their roles in the namespaces.

The roles matrix

The permission manager consists of the group tree (1) and the role matrix (2):



Associating groups with roles in namespaces

The **group tree** shows all existing groups:

- **Group "*":** all non-logged-in (anonymous) users

- **Group "user":** all logged-in users, the default group for all users
- **Subgroups of group "user":** all groups that are defined on the wiki, eiter by default, by MediaWiki, or custom groups created in the Group manager by an administrator. System groups, created by MediaWiki, can be hidden by unchecking the "Show system groups" checkbox above the tree.

The columns in the **role matrix** are:

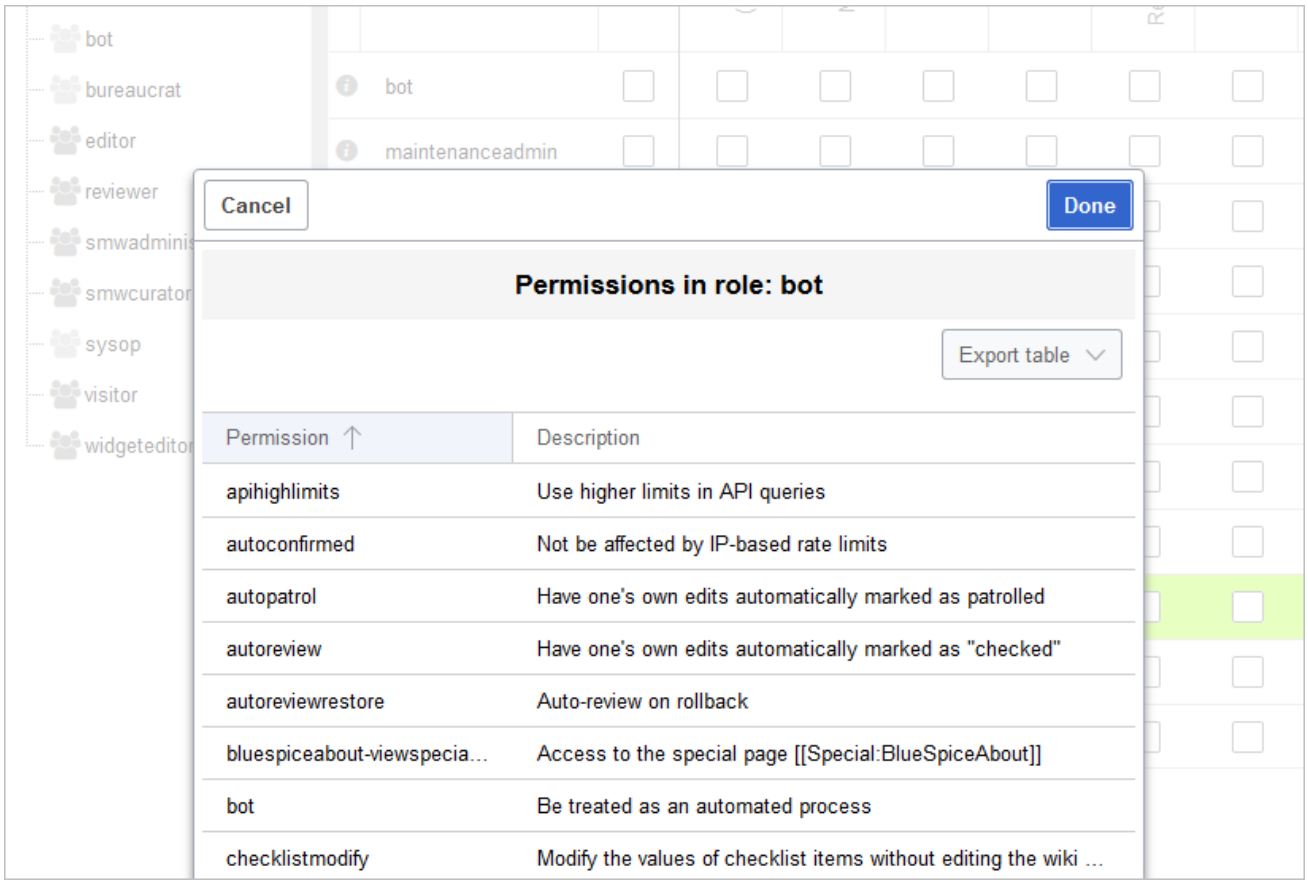
- **Role information** (info icon): Clicking the icon shows all the permissions in a role. This list is exportable.
- **Role name**
- **Wiki:** Assignment of a role to the entire wiki. By assigning the role in this column, a user group gets permissions in this role on the wiki (all namespaces).
- **Individual namespaces:** The following columns list every (applicable) namespace on the wiki.
  - Roles can be assigned to individual namespaces. For example, the group *user* can get the *editor* role only in the namespace *Public. Users in this group cannot edit content in any other* . By granting a role to a particular group in a particular namespace, means that all other groups will lose permissions from this role, eg. granting role "reader" in namespace "Private" to group "sysop" means that all users in any other groups won't be able to read pages in "Private" namespace, even if they have "reader" role granted on the wiki level ("Wiki" column).
  - The same role can be granted to multiple groups for the same namespace.
  - Additional namespaces can be added in the matrix by clicking on the arrow in table header, then "Columns". Then the namespaces can be selected.

Role inheritance

By default, all roles granted to the (*) group will be granted to the *user* group, and all roles granted to the *user* group are granted to its subgroups. If a group inherits the role from an upper-level group field, this is indicated in the role matrix with a green background, but the checkbox is empty.

Default roles

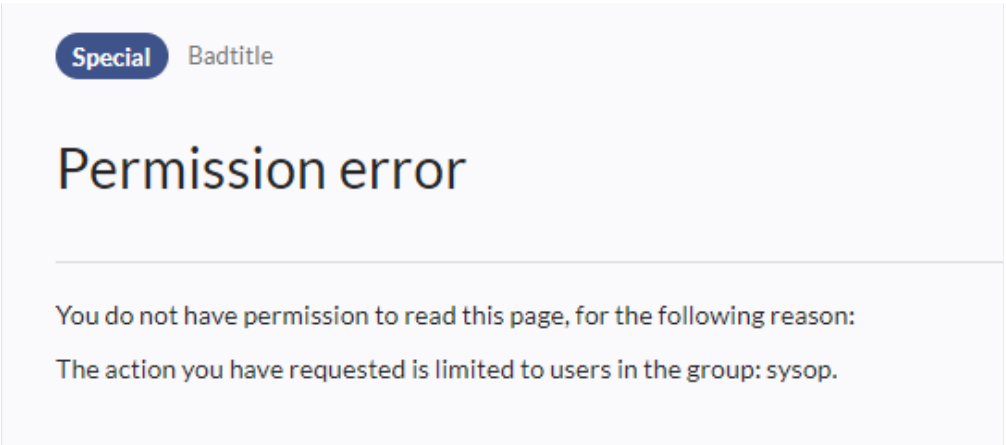
By default, the Permission manager includes a number of predefined roles that serve most user needs. The individual permissions contained in a role can be seen by clicking the info icon in front of the role name. It opens a dialog with a permissions list for the role.



- **bot:** exists to achieve recurring system actions. This role is assigned to the user BSMaintenance in Bluespice via the group bot. The group bot should not be changed.
- **admin:** Grants access to all administrative special pages and to all typical administrative features.
- **maintenanceadmin:** Similar to the *admin* role, but with extended admin rights for maintaining wiki integrity.
- **author:** all permissions necessary for creating content on the wiki. Editing, moving, or deleting pages is not possible.
- **editor:** create content, edit and delete content.
- **reviewer:** If you have activated the review function and, therefore, work draft pages in a namespace, there must be at least one group with the role of reviewer. By default, the group “reviewer” is available for this purpose. Only users in the reviewer role can approve draft pages. Reviewers generally need read, write and review rights via the corresponding three roles of reader, editor and reviewer. However, if you have not activated the review function in any namespace, you do not need this role in your wiki.
- **accountmanager:** enables the administration of user accounts. Since user accounts are managed independently of namespaces in the wiki, this role cannot be restricted to individual namespaces. Grayed-out namespaces have no meaning here as long as the role in the wiki itself is highlighted in green.
- **structuremanager:** allows some actions for wiki maintenance such as moving pages, mass deleting pages or searching and replacing text, as well as renaming namespaces.
- **accountselfcreate:** enables the automatic creation of new user accounts and is required for single-sign-on. You can assign this role, for example, to anonymous users who can create their own account.
- **commenter:** allows the creation of discussion contributions and page ratings, but not of the pages themselves. The editor role includes all the rights of the commenter role. If a group has editor rights, it does not need special commenter rights.
- **reader**: Basic read access. Users can also edit their personal settings.

Restricting read permissions

It is possible to limit read permissions in a namespace by explicitely assigning the role *reader* to one or more particular groups. When users in other groups try to access a page in such a namespace, they will get a message that the permissions are denied.



Access denied

While a user cannot access the content of the page, the wiki still shows links to these pages to all users in some contexts, even if a user does not have permissions to access the page content itself.

The following lists show which extensions or functionalities do not show links to restricted pages — because they are permissions-aware — and where the links are shown regardless of permissions.

Exensions that are permissions-aware

Query results and page lists provided by the following extensions do not show links to pages to which the current user has no access on the namespace level:

- ExtendedSearch (and functionality based on Extended Search in general, e.g. TagSearch, ExtendedFilelist).
- Semantic MediaWiki
- TopList

Extensions and special pages that are not permissions-aware

Extensions that provide page lists and that do not hide links to read-restricted pages to the affected users. Examples:

- DynamicPageList3
- SmartList
- WatchList (both the tag and the special page)

In general, all MediaWiki special pages do not check permissions and therefore list these pages for the affected users. Most common examples:

- Special:All pages
- Special:RecentChanges
- Special:Bookshelf (**Note:** If this is an issue, you can limit access to the namespace *Book* to selected groups. The page *Special:Bookshelf* then won't show any links to books to users who do not have access to the *Book* namespace. Links to individual books can then be provided on various portal pages as needed).
- Category pages: All pages in the namespace *Category*

Limited transclusion

If you explicitely assign the *reader* role (or any other role that contains the *read* permission) in a namespace to a group or groups, that namespace is automatically configured so that its content cannot be transcluded. This is for security reasons, since MediaWiki does not check permissions when transcluding content.

Technical info

Logging

Every change to the roles is logged in `Special:Log`, in the `Permission Manager log` . These logs are available only to wiki administrators (users in groups with the role *admin*).

Configuration

All changes to the role matrix are backed up. By default, the last 5 backups are kept. This limit can be changed in Config manager, under extension BlueSpicePermissionManager.

- **Backup limit:** Sets the number of backups for the permissions manager. Each time the page *Special:PermissionManager* is saved, a backup is created. If the backup limit is set to 5, the last five versions of the permissions configuration are saved as backups.

Related info

- Reference:BlueSpicePermissionManager
- Group manager

Technical Reference: BlueSpicePermissionManager

Custom menu

Redirect to:

- Manual:Extension/BlueSpiceCustomMenu

Technical Reference: CustomMenu

Customizing the user interface

Contents

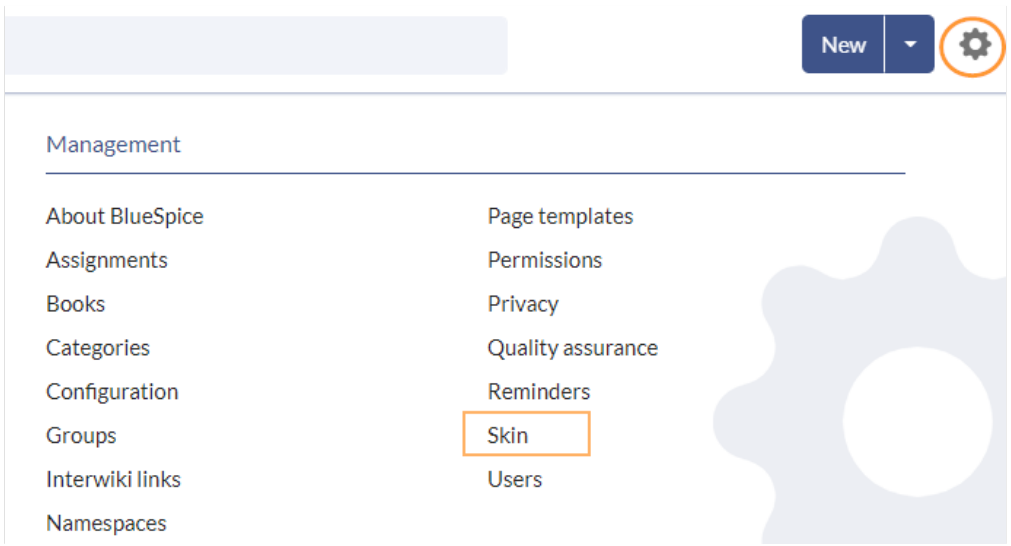
1 Access 38
2 Logo and Favicon 38
2.1 Logo 38
2.2 Favicon 39
3 Layout colors 39
4 Content 41
4.1 Colors 41
4.2 Font 41
4.3 Layout 41
4.4 Headers 41
5 Free CSS 42
5.1 Neutral page tools (right sidebar) 42
5.2 Neutral top bar backgrounds and hovers 43

Access

You can access the special page (*Special:FlexiSkin)* for customizing the skin from the *Global actions* menu:

⚙ *(Global actions) > Management > Skin*

The page allows you to customize the logo, favicon, colors and font settings of the wiki. To edit the page, you need *admin*-rights in the wiki.



Link for customizing the skin

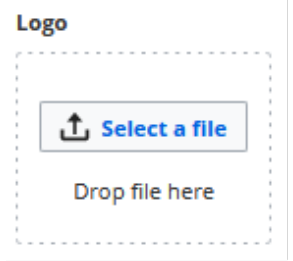
Important! If you don't see the changes in the wiki after saving your settings, you need to clear your browser cache (`Ctrl` + `F5`).

Logo and Favicon

Logo

To upload your logo:

1. **Click** *Select a file* to choose a file from your file explorer **or drag the file** into the dotted area of the Logo upload area.



Upload a logo

2. **Click** the *Preview* button on the page and check the placement of the logo.
3. **Click** *Save & activate*. The logo is now visible for all users.

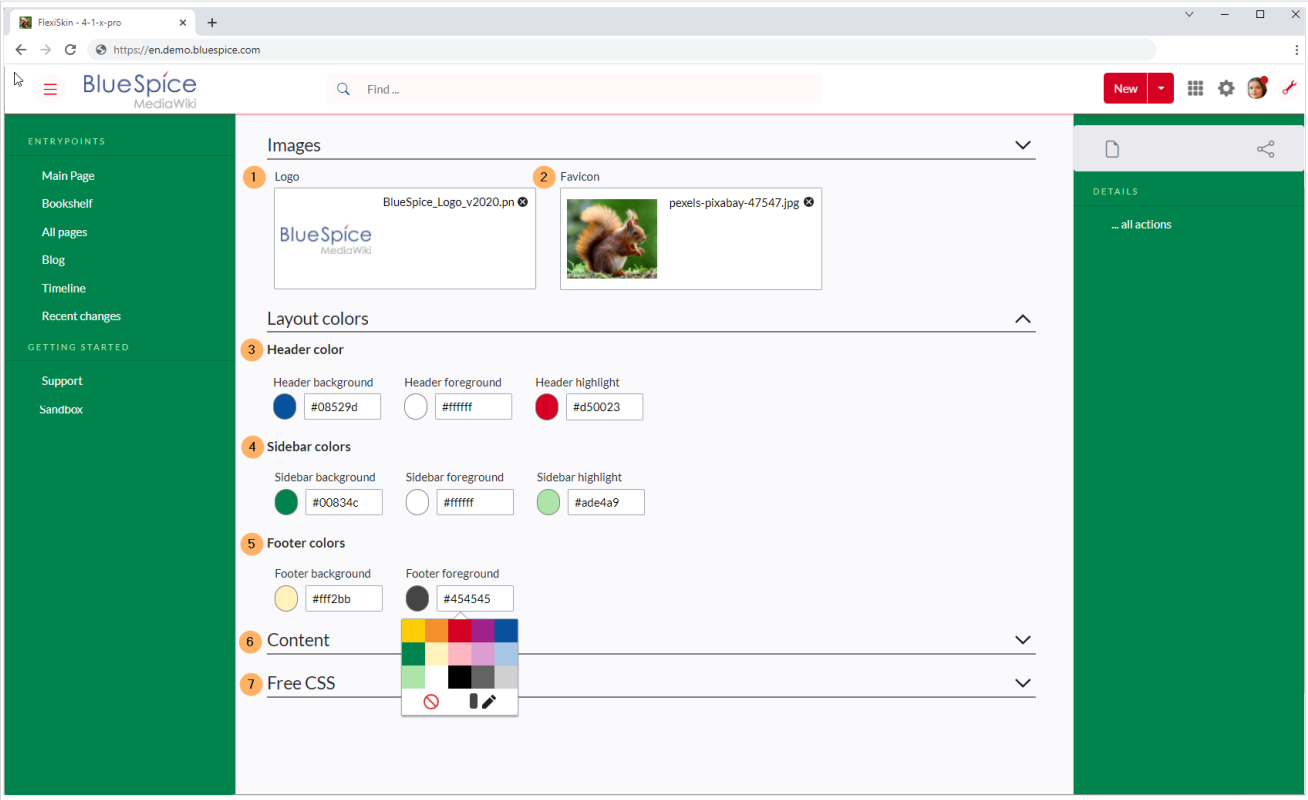
To use **a different logo**, click the "x" symbol in the upload area of the logo and repeat the steps above.

Favicon

The favicon is the image that is shown in the browser tabs. Follow the steps for uploading a logo, just use the favicon upload area instead.

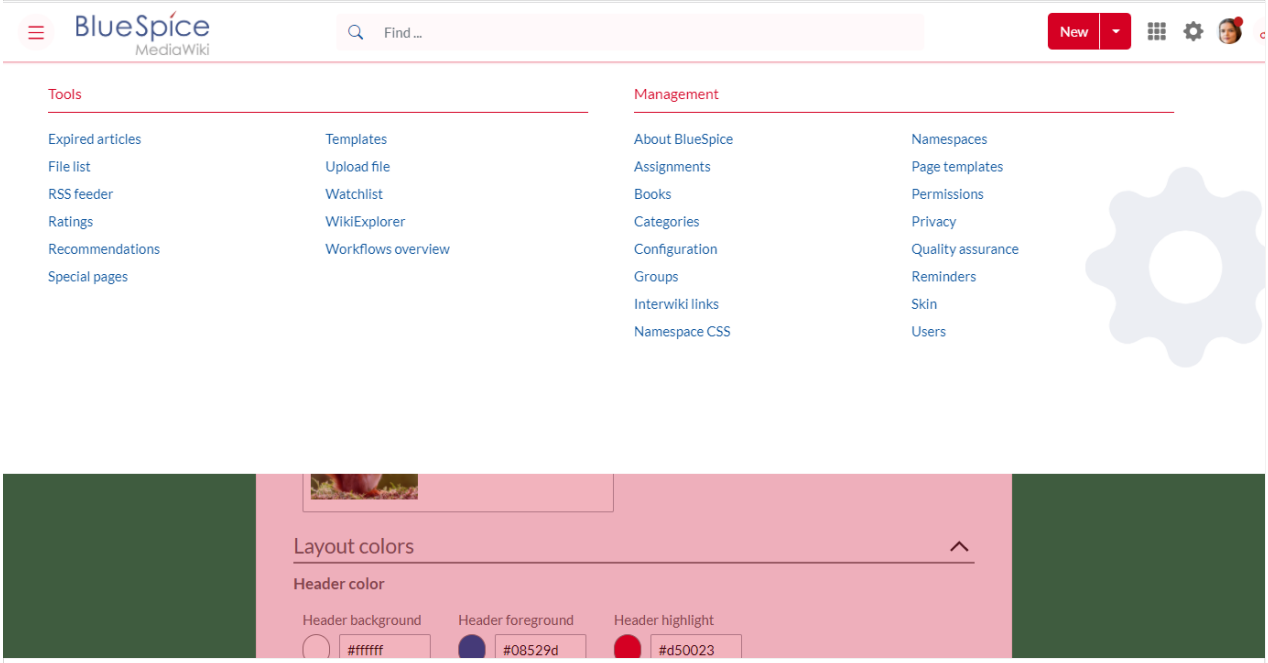
Layout colors

Here you can adjust the colors of the individual layout areas.



Flexiskin layout colors

- **Header color (3):** Color settings for the header bar. These colors also apply to the mega menus.

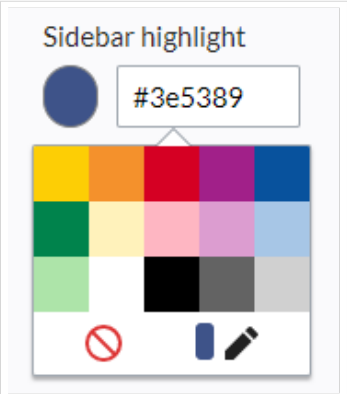


Mega menu

- **Sidebar colors (4):** Color settings for the main navigation and the page tools.
- **Footer colors (5):** Color settings for the footer.

The following options to enter a color value are available:

- **Standard color palette:** A standard color can be selected by clicking on a color preview.



Color picker

- **Pencil symbol:** Click on the pencil symbol to select a color from the color mixer.
- **Manually entering a value:** To provide a custom value (e.g., your for your CI colors), enter the hex-value for the color.

If you delete a color and FlexiSkin is saved with one or more empty color values, the standard colors of the Discovery skin are saved as values instead.

Standardfarben des "Discovery"-Skin

	Background	Foreground	Highlight
Header	#ffffff	#252525	#3e5389

	Background	Foreground	Highlight
Sidebar	#f1f3f9	#252525	#3e5389
Footer	#d3d3d3	#454545	-

Content

These settings apply to all styles of the content area of a wiki page:

Colors

Here you can adjust the background, font and link colors. Broken links in the wiki are shown in red by default so that they can be easily identified. You should carefully consider whether you want to deviate from this convention. If you want to color visited links differently than standard links, you can insert the following setting in the Free CSS area:

```
#mw-content-text a:visited,[class^="mw-content-"] a:visited {color: #951b81;}
```

Font

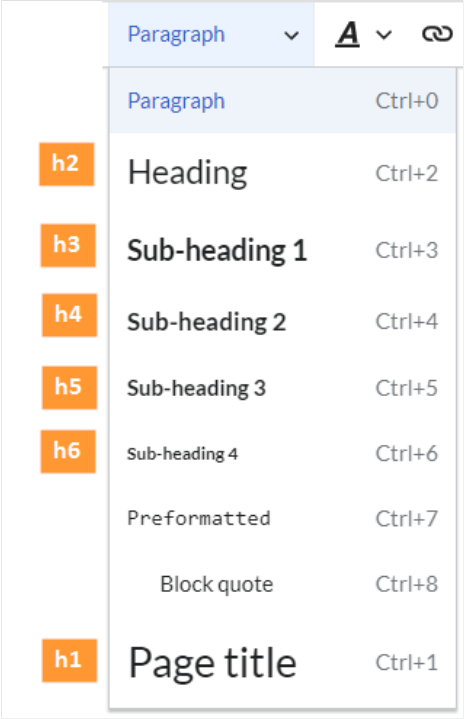
The font settings only apply to the text in the content area. The text in other areas such as B. in the navigation and toolbars or in the menus is not affected.

Layout

If you want to change the layout width just test it on many devices to make sure your setting works as intended. Other wiki users work with different display settings and can be negatively affected by this change. Unless you have a specific reason to change the content width, you shouldn't adjust this setting. The standard content width is 61.25 rem.

Headers

You can adjust the color, font size and underlining for all heading levels. You can also change the unit for the font settings (e.g. *px* instead of *rem*). If you are not familiar with the differences between these units, just leave the default setting, *rem*. This is based on the superordinate size setting in the wiki. In contrast, *em* sizes are in relation to the enclosing container.



Heading levels

Free CSS

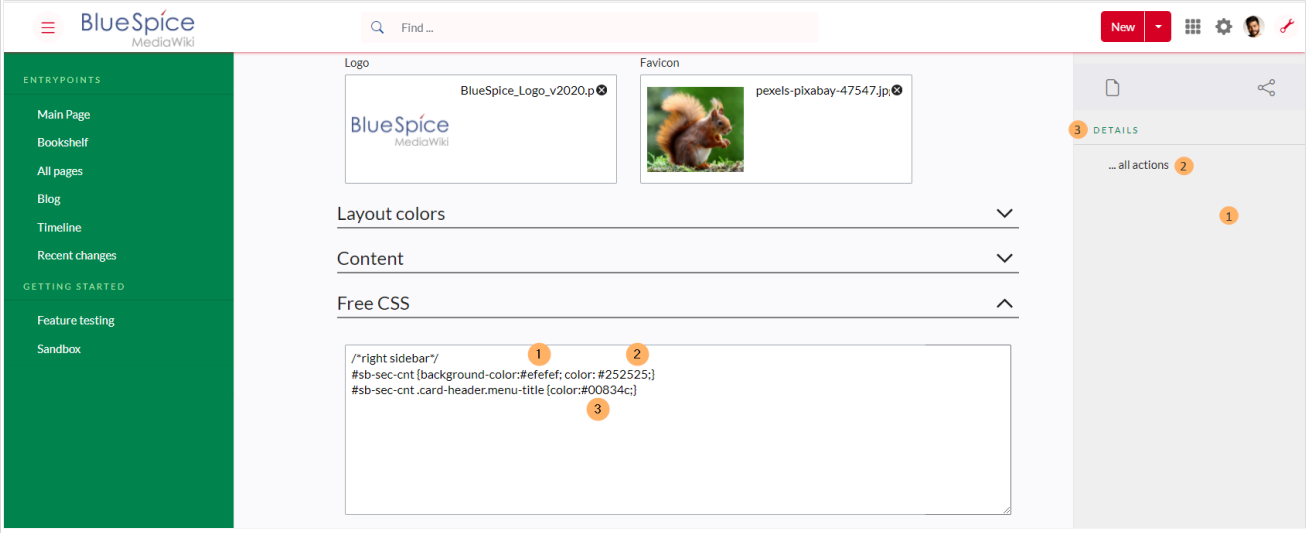
> **Note:** If the same styles are defined in both FlexiSkin or FlexiSkin Free CSS and in MediaWiki:Common.css, the styles from Common.css are applied.

For additional customizations that are not possible with the FlexiSkin settings, you can use the *Free CSS* field if you are familiar with CSS. Here are some examples.

Neutral page tools (right sidebar)

If you select a color for your left navigation bar, you sometimes don't want the color to be applied to the right sidebar (the page tools). To keep the light-grey background, add the following Free CSS:

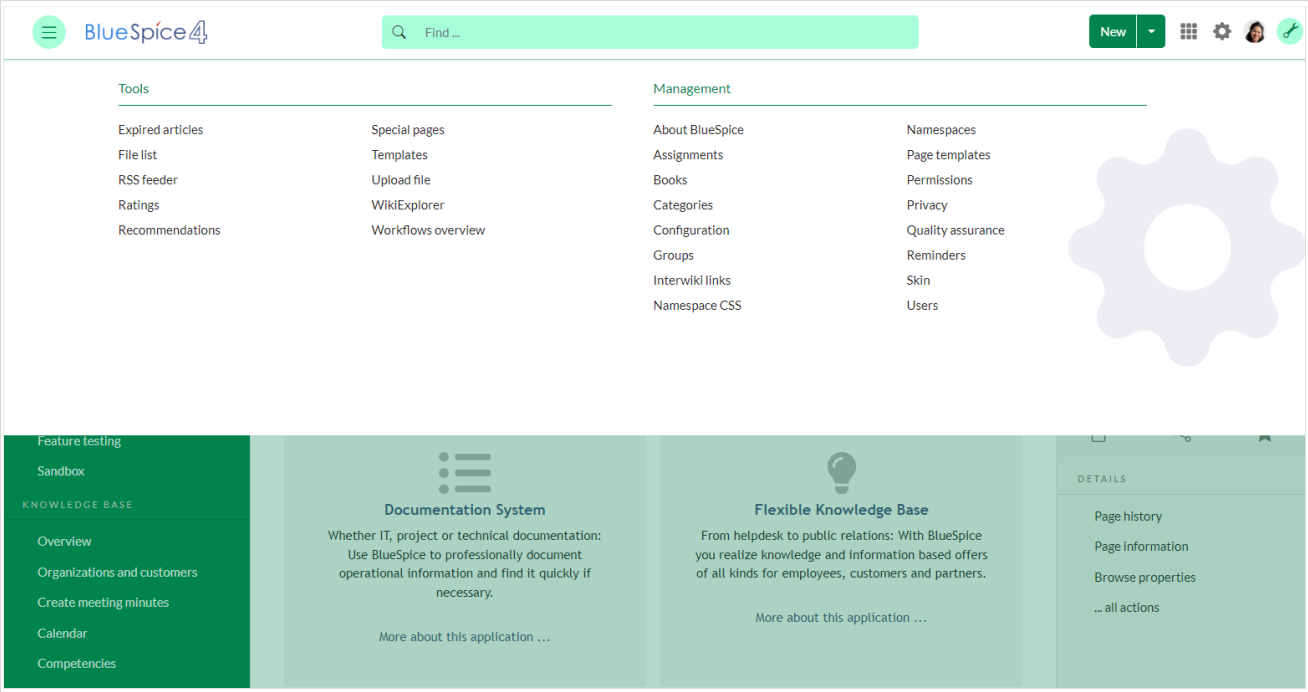
```
/*right sidebar*/
#sb-sec-cnt {background-color:#efefef; color:#252525;}
#sb-sec-cnt .card-header.menu-title {color:#747474;}
```



Example of Free CSS

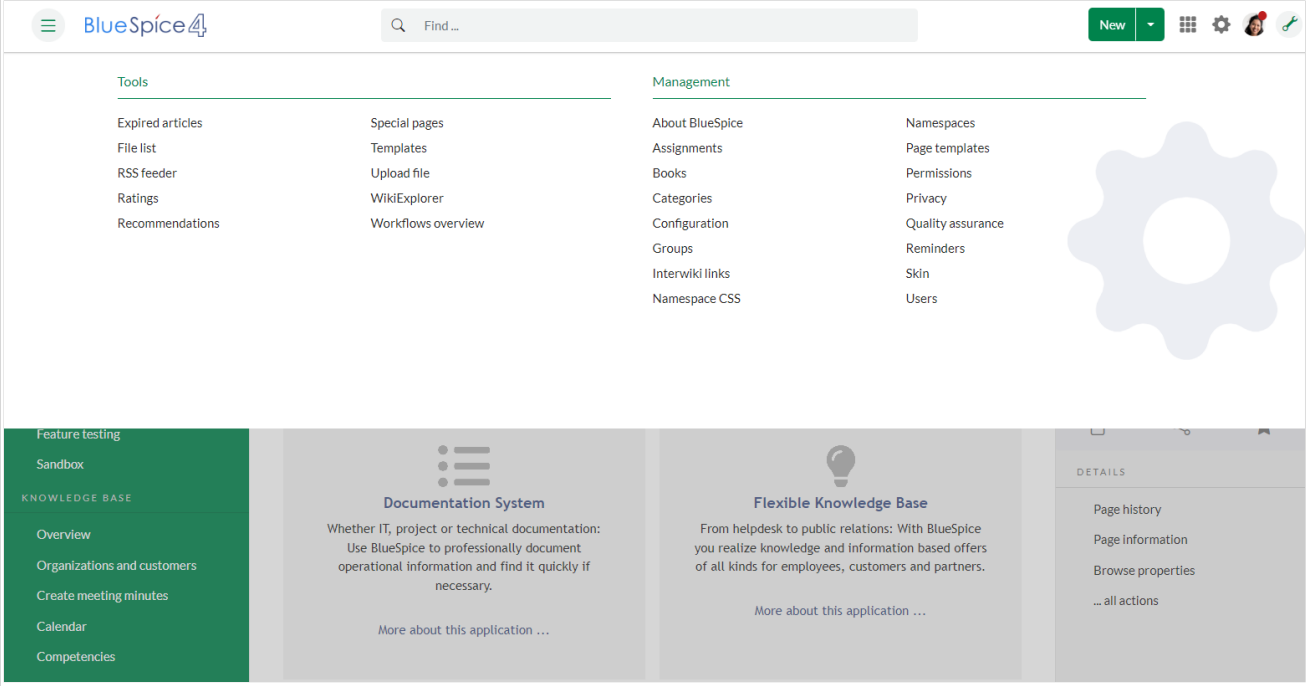
Neutral top bar backgrounds and hovers

When you set the header hightlight color, it can happen that the automatically calculated values for the searchbar as well as the button hovers and backgrounds don't fit your needs.



Flexiskin highlights standard

In this case, you can neutralize them to grey.



Neutral highlight colors

Add the following Free CSS:

```
/*top bar neutral search box, button backgrounds and hovers */
#nb-pri form input, #nb-pri form button{border-color:#f1f3f3}
#nb-pri form input, #nb-pri form button,#sb-pri-tgl-btn, #sb-pri-tgl-btn:hover,.mws-
dropdown-primary.dropdown-menu a:hover,a.ico-btn:hover, a#sb-sec-tgl-btn, #nb-pri form
.bs-extendedsearch-searchbar-clear   {background:#f1f3f3}
.mws-button-primary:hover {background-color:#747474; color:#fff}
/*top bar neutral bottom border*/
#nb-pri {box-shadow: 0 0 4px 0 #747474}
.card.mega-menu {box-shadow: inset 0 2px 3px -2px #747474}
/*mega menu neutral bottom overlay*/
@media (min-width: 768px){.dropdown-menu.megamenu .mm-bg {background-color:#747474}}
```

Technical Reference: FlexiSkin

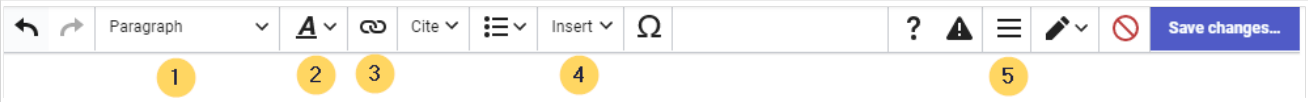
Edit

BlueSpice uses a slightly customized version of the MediaWiki extension VisualEditor as editing tool. This editor supports all common edit tasks that are useful in a wiki environment. You can refer to the official documentation for basic help. Here in the BlueSpice Helpdesk, we only give some hints and tips for using the editor.

Contents

1 What is the visual editor? ... 46
2 Text editing ... 46
3 Pasting content from your clipboard ... 46
4 Shortcuts ... 47
5 Inserting other content ... 47
6 Wiki-specific content ... 48
7 Switching between edit modes ... 48
8 Hints and tips ... 48
8.1 Text formatting ... 48
8.2 Insert special content ... 50
8.3 Page options ... 52
9 Troubleshooting: Visual editing is disabled ... 54

What is the visual editor?



VisualEditor

The visual editor is optimized for editing wiki pages. Important characteristics and functions are:

1. **Page structuring** with headings.
2. Consistent **text formatting**.
3. **Linking** of contents.
4. **Inserting special content** (files/media, tables, templates, magic words)
5. Adjusting **page options**.

Text editing

Typical text formatting options such as **bold**, *italics*, or text color are available as a context menu. When you highlight text, a menu with common formatting elements appears. For example, you can apply a different text color.

Applying text color

Pasting content from your clipboard

If you paste content from your clipboard (e.g., copied from MS Word or MS Excel), you usually also paste many unnecessary formatting tags from the original application. To avoid, this you should paste the content as plaintext.

Undo

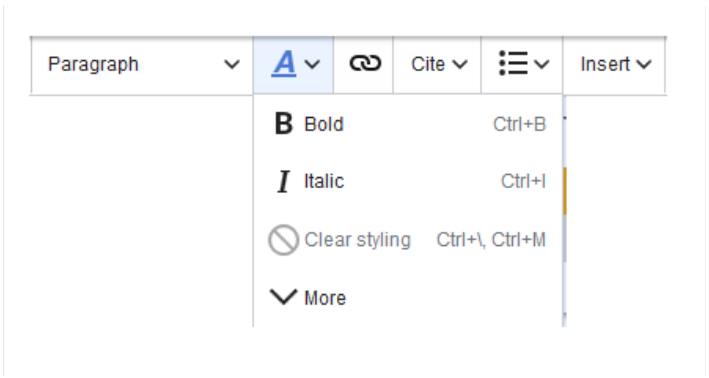
If you already pasted text which resulted in undesirable formatting, you can use the undo function in VisualEditor to remove the content again if you have not yet saved the page or switched between visual and source editing mode.

To paste content as plain text instead, use the shortcut `Ctrl+Shift+v`.

Shortcuts

If you want to apply multiple formatting options at the same time, shortcuts are often the quickest way. For example, to show text in bold and italic, highlight the text and press `Ctrl+b` (for "**bold**") and `Ctrl+i` (for "*italics*"). Even a link can be quickly inserted by pressing `Ctrl+k`. Pressing `Ctrl+b` again will cancel the bold. Multiple formats can be removed after text selection with `Ctrl+m`.

All available keyboard shortcuts are marked accordingly in VisualEditor next to each menu item.



Menu items with shortcuts

> **Note:** For a list of all available shortcuts, click on "Keyboard shortcuts" in the Visual Editor help menu (the question mark menu item).

Inserting other content

Many typical page elements such as images, files and tables can be integrated into your page from the *Insert* menu.

- File formats with a preview option: jpg/jpeg, png, gif, pdf
- File formats without preview option are always inserted as links (e.g., Microsoft Office formats)

If you want to learn more about inserting these elements, go to the following help pages:

- Images
- Files (PDF, xls, doc, ...)
- Tables

- Templates

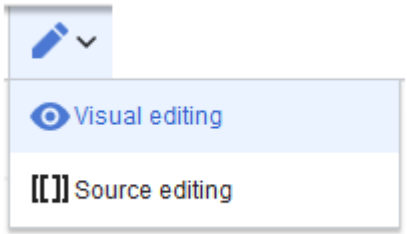
Wiki-specific content

Some functions in the *Insert* menu are little known from traditional word processing, but are quite typical for working with a wiki. Therefore, they are briefly introduced here. Find more information on the help pages here in the helpdesk or at mediawiki.org:

- **Comment:** Add comments to the page. These are only visible in the source code.
- **Gallery:** A simple picture gallery can support many process flows.
- **Magic word:** Wiki features such as signature, word counter, category tree or even process diagrams with draw.io can be integrated as a "magic word".
- **Your signature:** Only works on pages that allow signatures. Pages in the Namespace "Pages" are not included.
- **Codeblock:** Programming code is displayed here in clean code blocks, optionally with line numbers.
- **References list:** Creates footnote references.
- **Chemical formula:** The formula rendering uses an external service via Wikimedia's REST API.
- **Math formula:** An editor opens for entering a mathematical formula.

Switching between edit modes

When creating or editing a page, the page usually loads in visual editing mode. If you are familiar with the formatting language of MediaWiki ("Wikitext"), you can easily switch to source editing mode using the "Switch editor" menu item and edit your page content there:



Hints and tips

VisualEditor is optimized for editing web pages. That's why it has exactly the features that are often needed to create a wiki page. The consistent formatting of content supports the readability of your wiki content.

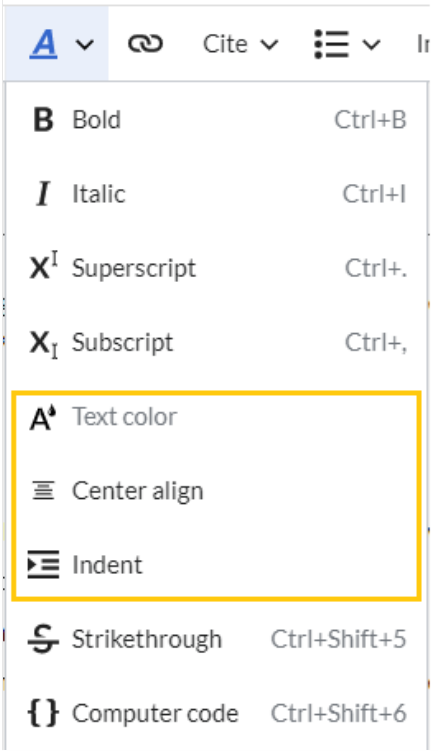
Text formatting

In the text formatting menu, the following additional options are available when a text passage has been selected:

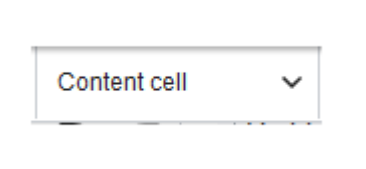
Text color: different text colors can be selected via an inspector menu.

Center align: Text can be selected and centered paragraph by paragraph.

Indent: Text can be indented once (note: multiple indentation is only possible via the source text).

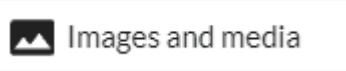


Text formatting options

Text formatting	
Undo function	Left arrow: Undo last action (greyed out: there is no last action yet) Right arrow: Restore last action (greyed out: there's nothing to restore yet)
Format Paragraph	Here text can be defined as heading or specific paragraph type. *Note:* If you work in a table, the options will change accordingly (content cell and header cell): 
Style text	If no text has been selected before clicking on the " ***A***" button and on a button, the text will be formatted from the current position of the cursor.

Text formatting	
	(More Info at mediawiki.org/wiki/Help:VisualEditor/User_guide/en#Getting_Started:_The_VisualEditor-Toolbar])
Insert hyperlink	If no text was selected before the hyperlink dialog was opened, the link will be generated with a number: [1] To subsequently change the hyperlink description, just click on the link to open the edit menu. In a table, you may need to double-click the cell first and then click the hyperlink again.
Cite	The citation menu is used to insert footnote references within the text.
Structure	Formats ordered and unordered lists. If paragraph breaks or images need to be inserted within a bullet point, use `Shift+Enter` to avoid creating a new list item. If you want to style numbered lists like 1, 1.1, 1.1.1, etc., you need to add some additional CSS instructions to the page *MediaWiki: Common.css*.

Insert special content

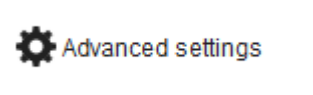
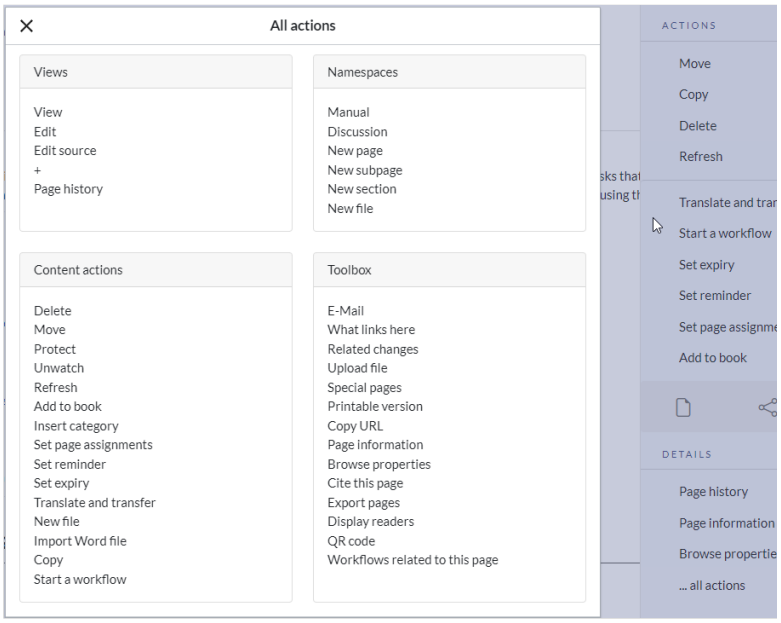
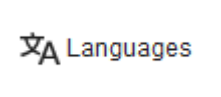
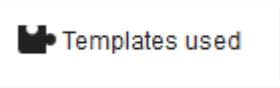
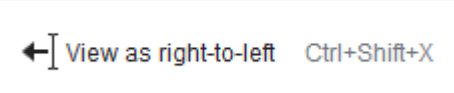
Insert special content	
Insert menu	Use the "insert" menu to insert various media (images, videos) and text formats:
Media 	Inserting pictures and videos (Details on MediaWiki])
Templates	

Insert special content	
Template	Include a template in the page.
Tables Table	Tables are an important tool for formatting tabular page content.
Comment Comment	Comments are not visible to readers, but only in edit mode. A comment can be inserted anywhere on a page. It is text-based and cannot be formatted.
Magic word -v4.2.x Magic word	With a "magic word" you can insert certain wiki tags in your page. More about Magic words
Gallery Gallery	Allows to display a set of images as a gallery. Formatting examples for the different settings can be found at mediawiki.org/wiki/Help:Images#Gallery_syntax
Your signature Your signature	This option allows to add your wiki signature (User name and timestamp) at any location in the page.
Code block Code block	With code block various code examples can be entered, like e.g. in HTML syntax. The code is then displayed properly formatted: `<span style="color: red">red text</span>`
References list References list	This menu item creates a <references /> tag at the location where it is inserted. The footnote references up to this point are then displayed at that location instead of the end of the page. Remaining footnotes in the page are still shown at the end of the page.
Chemical formula Chemical formula	The formula rendering uses an external service via Wikimedia's REST API.
Math formula	It opens an editor for entering a mathematical formula.

Insert special content	
Σ Math formula	[[on MediaWiki]]
Special Characters Ω	Opens a panel to select special characters that are not available on your keyboard. To close the panel, click the menu item again.

Page options

Page options	
Options menu	The options menu allows editing of all page settings. It is not
Options Options	This button allows the page settings and page information to be updated simultaneously within a dialog box. To change any page options on the page, you need to be in **visual editing mode**.
Categories Categories	Here, you assign the page to one or more categories while in edit mode.
Page Settings Page settings	*Page redirection:* When the page is redirected, the content of the pag is no longer displayed, but the target page is loaded directly. *Show Table of Contents:* By default, a table of contents is show if a page has more than three headings. You can use this setting to always force or suppress the table of contents.
	• *Let this page be indexed by search engines:* Only applies to publi search engines. The wiki's internal search is not affected. • *Show a tab on this page to add a new section:* Not supported in BlueSpice 4 Discovery skin. • *Display title:* Sets a title that is shown as page heading. It can be found by the search and is used in page lists created by Semanti MediaWiki inline queries.

Page options	
Advanced Settings  	• *Title visibility:* This setting hides the entire title section of a page and is often applied on the main page or other portal pages of th wiki. If the title is not visible, the edit button is also not available. this case, you can click on `all actions... > Edit` in the page tools.  "all actions" Menu
Languages  	Shows wiki pages on different wikis that are connected via Interlanguage links. Depending on the wiki's skin, the links are shown in a specific location. In the BlueSpice 4 Discovery sk the interlanguage links are shown in the top menu. Menu item to access interlanguage links mediawiki.org/wiki/Help:Links#Interwiki_links
Templates used  	List the templates that are embedded on the page.
View as right-to-left  	Support for languages that are read from right to left. Clicking this button right-side formats the page text. Click again to set the text flu left.

Page options	
Find and replace Find and replace Ctrl+F	Words or characters can be searched and replaced directly on the page. The "Undo" button can be used to cancel the change.

Troubleshooting: Visual editing is disabled

If you only have the source editing option in your editor toolbar, please contact an administrator of your wiki. The following settings must be checked in this case:

- Global settings via the configuration manager
- Namespace manager settings

Technical Reference: VisualEditor

Workflows

Contents

1 Introduction 55
2 Workflow activities 55
2.1 Single user approval 55
2.2 Expert document control 56
2.3 Group feedback 58
2.4 Feedback 59
3 Overview page 59
3.1 Tasks overview 60
4 Notifications 60
4.1 Events that trigger notifications 60
4.2 Sending out notifications 61
5 Workflow triggers 61
6 How to add a custom workflow 61
7 Permissions 62
8 Example tutorial 62

Introduction

In BlueSpice 4.1, workflows are based on BPMN 2.0. Four different types of page-based workflows are already integrated. Their purpose is a page review to obtain feedback via a user vote or to trigger a page approval. In the following, these workflows are therefore called review workflows.

Types of reviews

Workflow type	Participants	Description
Single user approval	1 user	A single user is asked to vote about a page. If a user submits a positive vote, the page is automatically approved.
Expert document control	3 users	After a page has been edited by a specific user, the page is reviewed by an expert and then approved by a user who is responsible for approvals.
Group feedback	1 group	A group (which needs to exist in the group manager) is requested to leave a comment on a page.
Single user feedback	1 user	A user is asked to send a comment regarding a page.

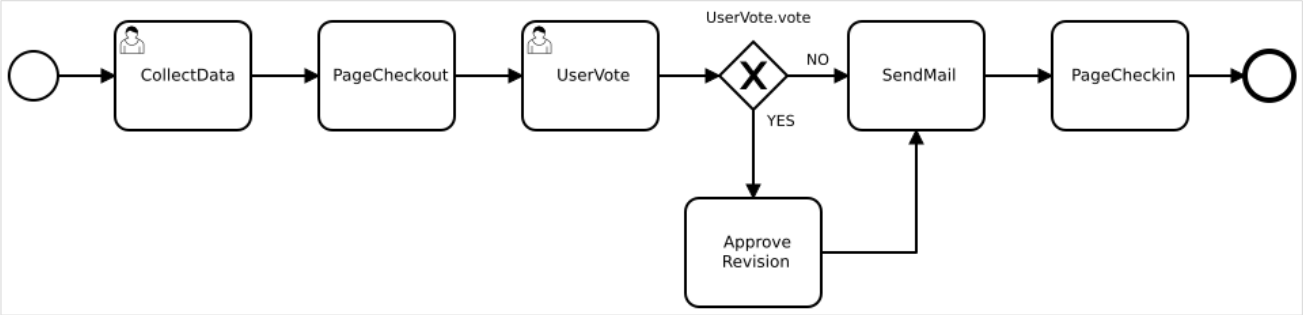
Workflow activities

All approval workflows start with a form where the necessary workflow data is entered by the workflow initiator. Each workflow results in one or more workflow activities.

Single user approval

Purpose: Approval of a draft page by a user with approval rights. This workflow only makes sense if the approval function (FlaggedRevs) is activated on a page.

Workflow instances: Only one approval workflow can run per page.



BPMN diagram of a "Single user approval" workflow

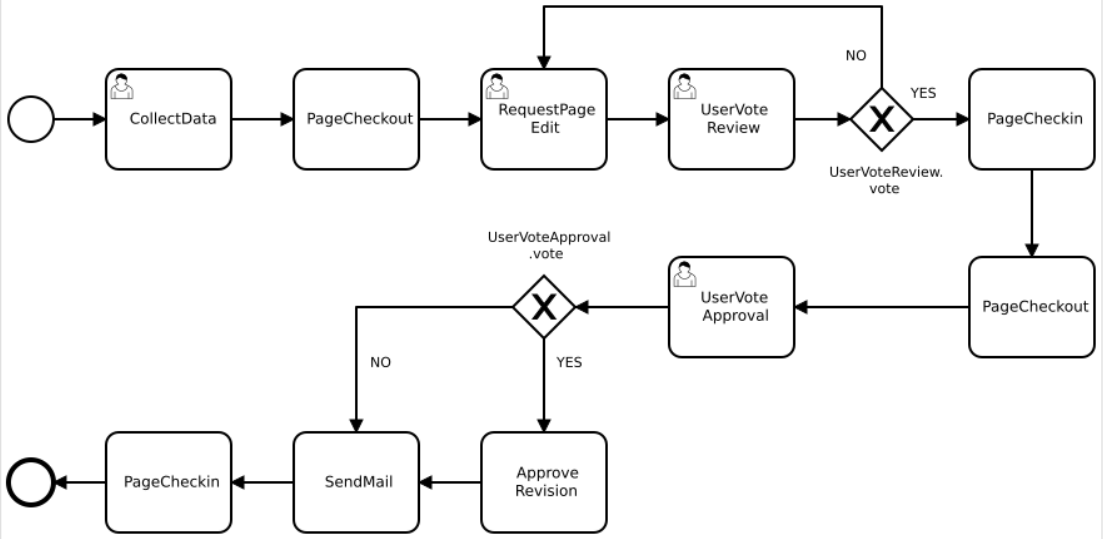
Activity	Description
CollectData	In the first workflow step, the workflow initiator enters the settings: • *User:* ser who is assigned to the task. • *Instructions:* A comment or instructions for the user to understand the task. • *Send report to:* An email report with the results will be sent to this email address when the review is finished. If a username is specified here, an email address must be stored in the user administration so that the report can be sent.
PageCheckout	The page is locked for editing. The reviewer also cannot make any edits.
UserVote	The assigned user carries out a vote and either accepts the page or rejects it. Alternatively, the task can be delegated. In the event of a rejection, the workflow skips the next step (ApprovePage). The workflow initiator gets an email about the voting result.
ApprovePage	**Only if** the user has submitted a positive vote (accept), the page is set to an approved state.
SendMail	An email report is sent to the report recipient who was specified in the first step.
PageCheckin	The page is unlocked.

View BPMN

Expert document control

Purpose: Approval of a draft page according to the "4-eyes principle".

Workflow instances: A page can only have one approval worfklow at a time.



BPMN diagram of the "Expert document control" workflow

Activity	Description
CollectData	In the first workflow step, the workflow initiator enters the settings: *User:* User who is assigned to a task. Three different users have to be specified: **Editor**, **Reviewer**, **Approver** *Instructions:* A comment or instructions for the users to understand their tasks. *Send report to:* An email report with the results will be sent to this email address when the review is finished. If a username is specified here, an email address must be stored in the user administration so that the report can be sent.
PageCheckout	The page is locked for users who do not participate in the workflow. Only the **Editor** (first workflow participant) can edit the page during checkout. While the **Reviewer** (second participant) of the workflow is reviewing the page, the page stays checked-out to thecan edit the page can edit the page during checkout.checkout. in case the Reviewer requests more edits.
EditPage	The **Editor** user can edit the page and completes the task without comment.
UserVote	After the **Editor** step has been completed, the **Reviewer** user can review the page and submit a vote. Editing by the **Reviewer** is not possible. As an alternative, the **Reviewer** can delegate the task. If the vote is positive (Approve), the workflow continues. If the **Reviewer** rejects, the workflow goes back to the **Editor**. The workflow initiator gets an email about the voting result.

Activity	Description
PageCheckin	After the **Reviewer** submits a positive vote (accept), the page is checked in and the workflow continues.
PageCheckout	In this step, the page checkout locks the page for editing completely. The **Approver** user will not be able to change the page, but needs to approve it.
ApprovePage	The Approver can either complete or delegate the task. After the **Approver** (or the delegate) finishes the assigned task, the page is set from "draft" to "approved" status if the page was in draft status (only if the approver submits a positive vote). If not, this step is skipped.
SendMail	If an email or user was specified in the workflow settings, the report is now getting sent to that user.
PageCheckin	The page gets unlocked for editing.

view BPMN

Group feedback

Purpose: Obtaining feedback from the members of a user group. The group must exist in the group manager.

Workflow instances: Several feedback workflows can run independently of one another on one page at the same time.

BPMN diagram of the "Group feedback" workflow

Activity	Description
CollectData	In the first workflow step, the workflow initiator enters the settings: • *Group:* User group who is assigned to the task. • *Instructions:* A comment or instructions for the users to understand their task. • S*end report to:* An email report with the results will be sent to this email address when the review is finished. If a username is specified here, an email address must be stored in the user administration so that the report can be sent.
	All users in the assigned group provide feedback via a comment field.

Activity	Description
GroupFeedback	This is a parallel workflow, which means that the order of the feedback does not matter.
SendMail	If an email or user was specified in the workflow settings, the report is now getting sent to that user.

view BPMN

Feedback

Purpose: Obtaining feedback from a single user on a page.

Workflow instances: Multiple feedback worfklows can run independently of one another on one page at the same time.

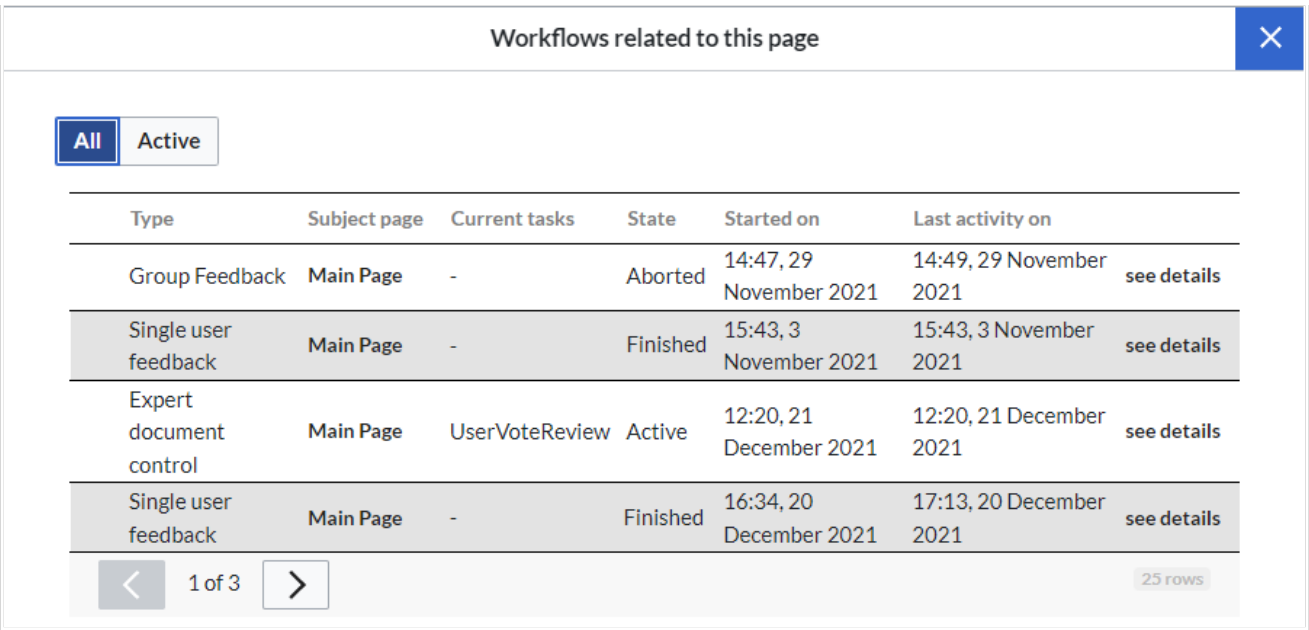
BPMN diagram of the "Single user feedback" workflow

Activity	Description
CollectData	In the first workflow step, the workflow initiator enters the settings: • *User:* User who is assigned to the task. • *Instructions:* A comment or instructions for the users to understand their task. • Send report to: An email report with the results will be sent to this email address when the review is finished. If a username is specified here, an email address must be stored in the user administration so that the report can be sent.
UserFeedback	The assigned user sends a comment.
SendMail	If an email or user was specified in the workflow settings, the report is now getting sent to that user.

view BPMN

Overview page

All workflows in the wiki are listed on the page *Special:Workflows overview*. A view for all *active* workflows and a view for *all* workflows can be selected.



Workflows overview page

Tasks overview

Users are informed about new and pending tasks in their notifications. They can view assigned workflows on their *My tasks* page.

Notifications

Events that trigger notifications

There are two types of events that trigger notification

- **generic:** notifications happen for every workflow/activity type
- **activity-specifiy**: activities themselves can decide to send additional notifications

Triggering event	Recipients	Generic	Notes
Task started (task assigned)	All assigned users	Yes	Only triggered for type *UserInteractiveActivity,* i.e., only for activities that have users assigned.
UserVote	Initiator	Yes	The workflow initiator gets an email about the voting result.
Workflow aborted (manual or automatic)	Initiator and all users that were assigned to the current task at time of aborting (not users who were assigned on previous tasks)	Yes	

Triggering event	Recipients	Generic	Notes
Workflow ended (only when naturally ended, not when aborted)	Initiator	Yes	
DueDateClose (2 days before Workflow will expire)	Initiator and all currently assigned users	Yes	
Workflow expired	Initiator and all currently assigned users	Yes	Expiration is just a type of workflow abort, so the same notification as for abort will be sent with the reason explaining that the workflow expired.
Task delegated	User to whom the task was delegated	No	Specific to *UserVote* activity. After delegation, the newly assigned user will be considered assigned and will receive all further notifications that go out to assigned users.

Sending out notifications

- Users can choose whether to subscribe to e-mail notifications in their preferenceds. All users are force-subscribed to web notifications.
- Web notifications are sent out immediatelly after triggering, while email notifications will be sent async, on runJobs.php execution. This applies to notifications in general, not only to workflows

Workflow triggers

Workflows can either be started manually on each wiki page or started only under certain conditions using individual workflow triggers. Triggers also allow to define in which namespaces both manual and automatic workflows are available.

How to add a custom workflow

Users can upload an xml-file of a BPMN diagram with custom activities to the wiki. Currently, the following predefined activities exist:

Extension: Workflows

- CustomForm
- UserVote
- GroupVote
- UserFeedback
- GroupFeedback
- SendMail
- EditRequest

Extension: PageCheckout

- PageCheckOut
- PageCheckIn

Extension: BlueSpiceFlaggedRevsConnector

- ApprovePage

Example of a customized workflow (coming soon)

Permissions

The following permissions are used by this extension:

Permission	Included in role	Description
workflows-view	reader	• allows viewing workflow elements, including listing of workflows (e.g., viewing all running workflows on a page • user can view the page *Special:Workflows_overview*
workflows-execute	editor, reviewer, admin	• allows starting a workflow and executing a task
workflows-admin	admin	• allows aborting, restoring and administering all workflows • user fcdan view and edit the page *MediaWiki:WorkflowTriggers*

Example tutorial

You can follow our tutorial for creating a custom workflow that allows users to classify a document and notify a user about the classification.

Technical Reference: Workflows

Semantic MediaWiki Basics

Contents

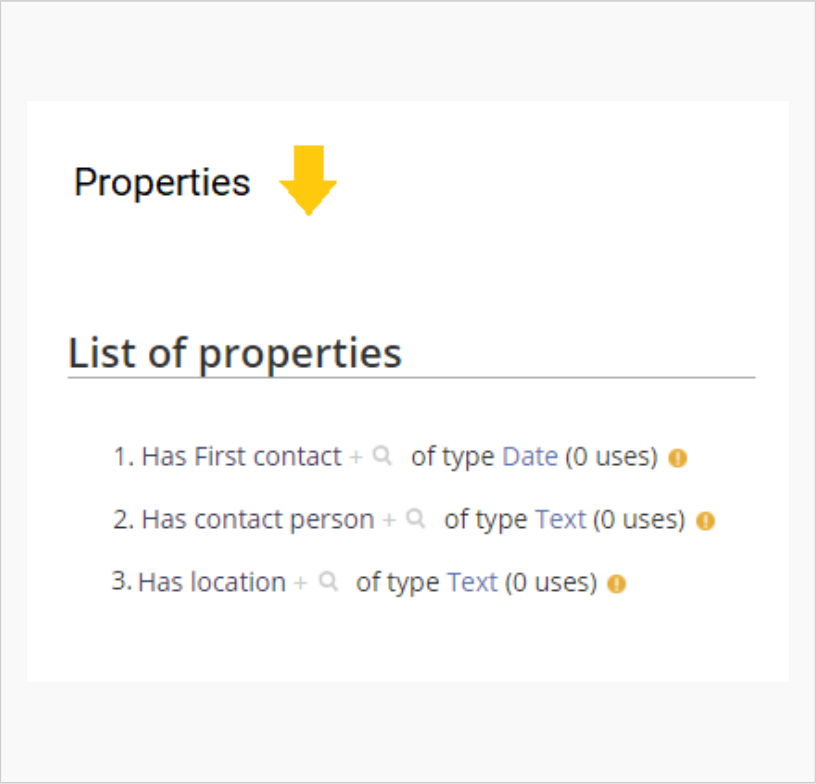
1 Scope and terminology 64
2 Define properties 67
3 Create a template 67
4 Create a form 67
5 Assign a category 68
6 Example 68

Scope and terminology

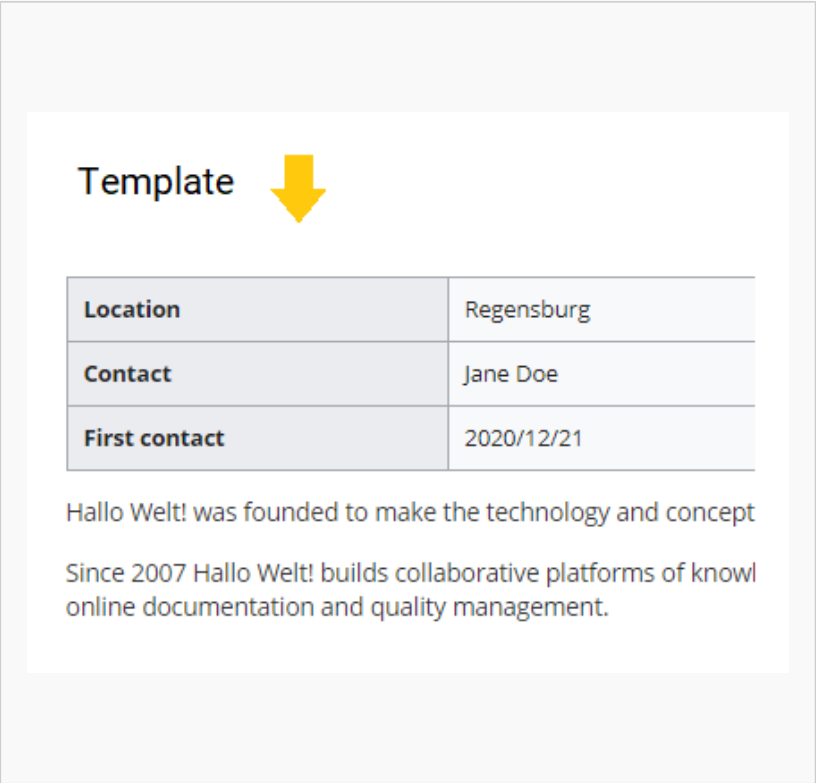
Semantic MediaWiki (SMW) is a MediaWiki extension that enables you to define and query data on a wiki page.

The following steps are usually taken to work with data-based content in your wiki :

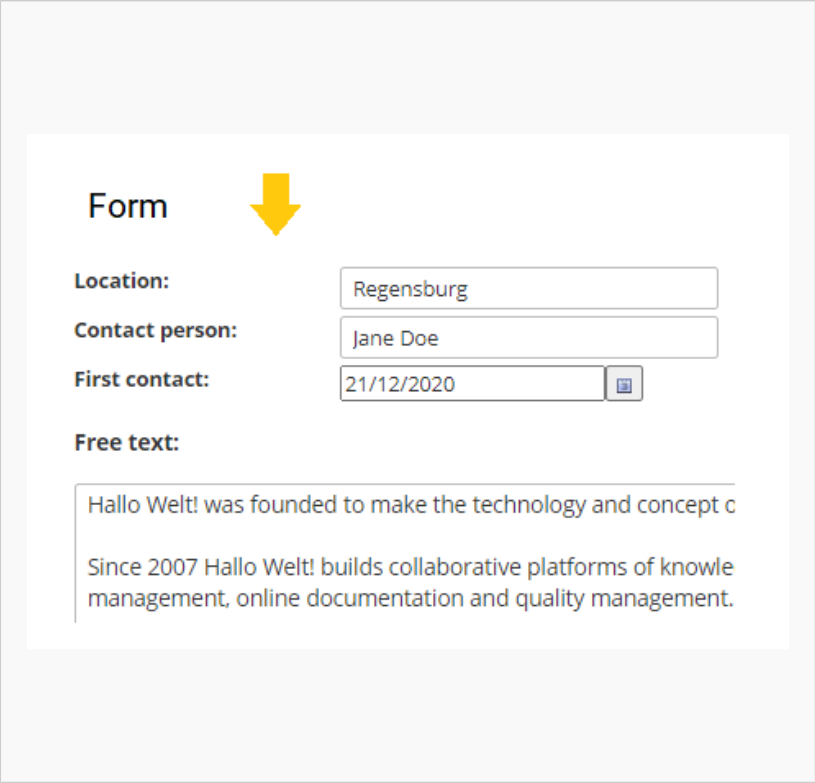
1. **Define properties:** Properties determine which values can be queried in the wiki.
2. **Create a template:** This creates the output format of the data set on the wiki pages.
3. **Create a form:** Using this form, Wiki users can comfortably enter their data.
4. **Assign a category:** Each page that contains a semantic query is usually tagged with a category that was created for this purpose. This, in addition to the attributes, provides an important means of querying and filtering the pages. It also creates a form editing mode for the wiki pages that contain this category.



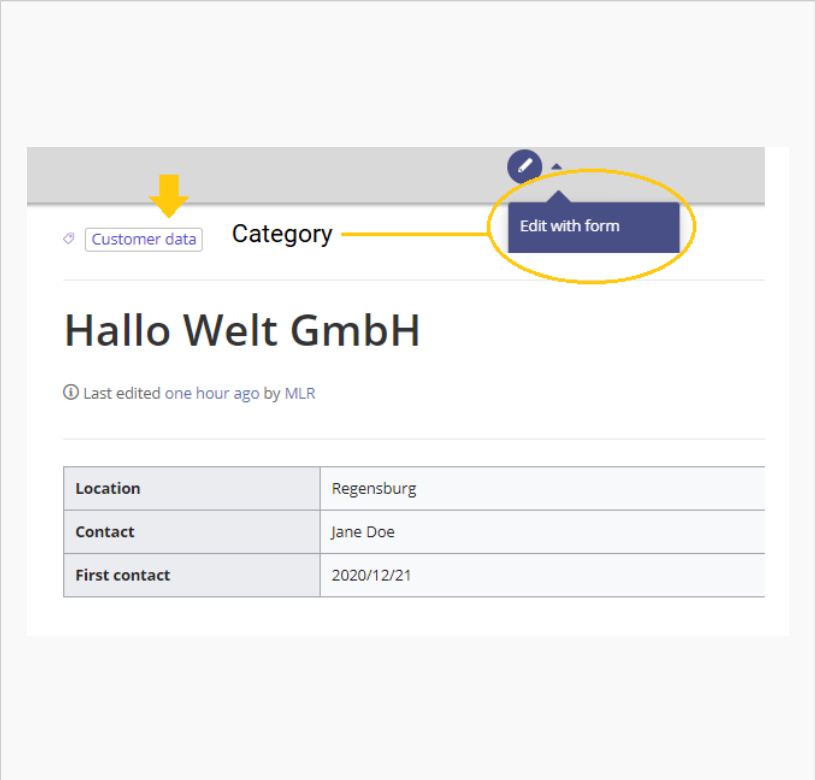
Semantic properties



Semantic template



Data entry form



Category to organize data

Define properties

To make information available as data on a wiki page, we create so-called **properties**. For example, if we want to semantically record customer data, we create a wiki page for each customer. We collect customer data such as location on every customer page. To do this, we create a property that records the location of the customer.

```
[[Has location::Regensburg]]
```

Afterwards I can list all customers at a certain location or all customers with their associated locations in the wiki.

Create a template

Since we often want to display several such properties and their values on one page at the same time, we format a special area that clearly shows the collected page attributes. This requires a (data) template, which can then be used on any wiki page.

Location	Regensburg
Contact	Jane Doe
First contact	2020/12/21

Data template

Create a form

To support our users with data entry tasks, we create an input form. The input form is shown when users switch to the edit mode of a wiki page that has the semantic template included.

Location: Regensburg

Contact person: Jane Doe

First contact: 21/12/2020

Data entry form

Assign a category

Wiki pages that use semantic templates are tagged with a category. This category enables the assignment of the input form to the wiki page. The category is also used to query the data collected via the template and display it anywhere in the wiki.

Example

On the following pages, we will create an example that collects and displays customer data it in the wiki.

Example: Collect customer data

BlueSpice free Download

Download options

BlueSpice free is available at the following websites:

- BlueSpice homepage: BlueSpice free is downloaded as Installer which includes a MediaWiki 1.35.
- Sourceforge (Downloads also for previous BlueSpice free versions)

Before using the Installer

For a successful installation with the BlueSpice free Installer, it is important to review the system requirements and to configure the server environment. We have prepared detailed instructions for preparing your system:

1. BlueSpice system requirements
2. Blue Spice system preparation
   1. Windows (currently being revised)
   2. Linux

To make your BlueSpice setup as easy as possible, we provide installation instructions for installing BlueSpice with Installer. These can be found in our Installation Guide.

Setup:Installation Guide

Note: For general questions regarding the installation, maintenance, and usage of BlueSpice free, go to our community forum.

Contents

1 Introduction 70
2 Check the system requirements 70
3 Prepare the server environment 70
4 Install the BlueSpice application 70
5 Upgrade and patch updates 70
6 Migration from MediaWiki to BlueSpice 70
7 Optimize the configuration 70
7.1 Webservices for Apache Tomcat 70
7.2 Additional settings and optimizations 71
7.3 Security settings 71
7.4 Compendium 71

Introduction

We are happy that you decided to install the latest version of BlueSpice 4.

Please follow these steps:

1. Check the system requirements
2. Prepare the server environment
3. Install the BlueSpice application
4. Optimize the configuration

Check the system requirements

- System requirements

Prepare the server environment

- Linux server environment
- Windows server environment

Install the BlueSpice application

Please select which installation type you need:

- Full BlueSpice installation
  - Extended Functions: VisualEditor, ExtendedSearch
- BlueSpice WikiFarm installation
- Docker image

Upgrade and patch updates

- Patch update from BlueSpice 4.2.x to a higher version 4.2.x+n
- Upgrade from BlueSpice 3.2.x to BlueSpice 4.2.x

Migration from MediaWiki to BlueSpice

- Migration from MediaWiki to BlueSpice

Optimize the configuration

If you don't need to set up a server environment "from scratch", you can directly refer to the setup instructions for individual system components. Just make sure that you really have everything configured as needed:

Webservices for Apache Tomcat

- Drawio
- Mathoid
- PDF-Export

Additional settings and optimizations

- Caching
- Cronjobs
- Time Zone

Security settings

- File System Permissions
- Save Directories

Compendium

- Backup
- Configuration Folder settings.d
- ExtendedSearch Configuration
- Folder structure under Windows
- Maintenance scripts
- Maintenance scripts/batchStabilize
- Maintenance scripts/dumpPDF
- Maintenance scripts/executeTransfer
- Maintenance scripts/export
- Performance Optimization
- Performance Optimization/ManualRecache
- Performance Optimization/MySQL
- Performance Optimization/PHP
- VisualEditor Configuration
- Windows Folder Structure

Setup:Release History

> **Note:** Support für BlueSpice 3.x ended on March 15, 2023.

BlueSpice versioning follows the *Semantic Versioning Specification* from semver.org.

Major Release	Version	Published	Details	Type
BlueSpice 4	4.4.2	March 18, 2024	Release notes	Patch release
	4.4.1	February 15, 2024	Release notes	Patch release
	4.4	December 07, 2023	Description, Release notes	Minor release
	4.3.3	October 19, 2023	Release notes	Patch release
	4.3.2	September 14, 2023	Release notes	Patch release
	4.3.1	July 20, 2023	Release notes	Patch release
	4.3	June 29, 2023	Description, Release notes	Minor release Triggers content changes
	4.2.7	May 22, 2023	Release notes	Patch release
	4.2.6	March 16, 2013	Release notes	Patch release
	4.2.5	February 21, 2023	Release notes	Patch release
	4.2.4	December 15, 2022	Release notes	Patch release
	4.2.3	November 17, 2022	Release notes	Patch release
	4.2.2	October 27, 2022	Release notes	Patch release
	4.2.1	September 15, 2022	Release notes	Patch release Security patch!

Major Release	Version	Published	Details	Type
	4.2	July 28, 2022	Description, Release notes	Minor release Triggers content changes
	4.1.4	June 15, 2022	Release notes	Patch release Security patch!
	4.1.3	April 26, 2022	Release notes	Patch release Security patch!
	4.1.2	March 17, 2022	Release notes	Patch release
	4.1.1	February 10, 2022	Release notes	Patch release
	4.1.0	January 19, 2022	Description, Release notes	Combined major /minor release
4.1.0-RC2	(Release candidate: December 15, 2021)	Description	Combined major /minor release	
BlueSpice 1-3	Release history			

Setup:System requirements

For a trouble-free installation of the current version of BlueSpice 4, we recommend the following system requirements.

Browser

- Microsoft Edge
- Google Chrome
- Firefox

Server Environment

- **Operating system:**
  - We strongly recommend Linux (preferably Debian 11, Ubuntu 22.04, CentOS 7)
  - You might use Windows Server starting at 2016, but we have seen performance issues on Windows Server
- **Webserver:**
  - Apache 2.4.x, IIS >= 10 *or* nginx 1.x (*nginx not possible in WikiFarm*)
- **PHP:**
  - PHP 8.1 / PHP 8.2
- **Database**:
  - MySQL: >= 5.6 or
  - MariaDB >= 10.3
- **(Virtual) hardware requirements:**
  - **CPU:**
    - **Linux: 8 Cores** (min. 4 Cores)
    - Windows: 16 Cores (min. 8 Cores)
  - **Main memory:**
    - **Linux: 16 GB** (min. 8GB)
    - Windows: min. 16 GB
  - **Available hard drive space:**
    - > 20 GB (depends on the planned storage of data)
- **Other:**
  - Apache Tomcat >= 9 oder Jetty >= 9 (for PDF export and LaTexRenderer)
  - ElasticSearch 6.8 with plugin “ingest-attachment”
  - OpenJDK >= 10
  - NodeJS 16