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Setup:Installation Guide/With Installer

A [quality version](#) of this page, [approved](#) on *2 August 2021*, was based off this revision.

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Introduction

With BlueSpice 3, we offer the installation as a complete package with MediaWiki and BlueSpice. This installation guide gives you step-by-step instructions to install BlueSpice.

Important! If you do a fresh install of BlueSpice 3.2 it might be necessary to run `update.php` afterwards if you get an error.

Note: This document only describes the steps for installing the web application itself. For the installation of extended functions such as [VisualEditor](#) and [Extendedsearch](#), please refer to the corresponding documentation.

We will not go into details about your operating system installation here, but assume that you have already [configured your system](#) and stored the installation package in a web root of your choice, where you can access it via your browser. You can find more details in our detailed [installation guide](#).

Further help on optimizing the operating system can be found in our [compendium](#).

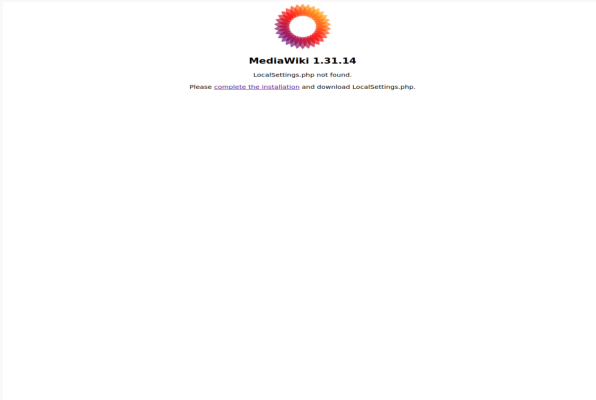
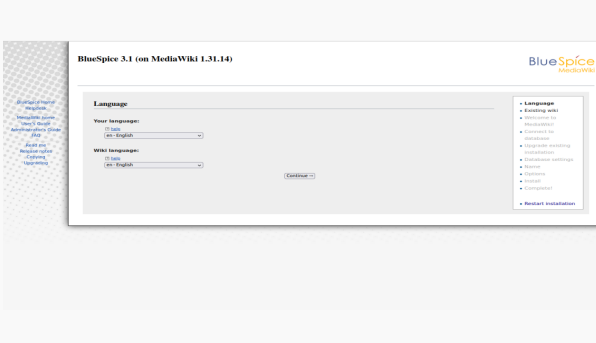
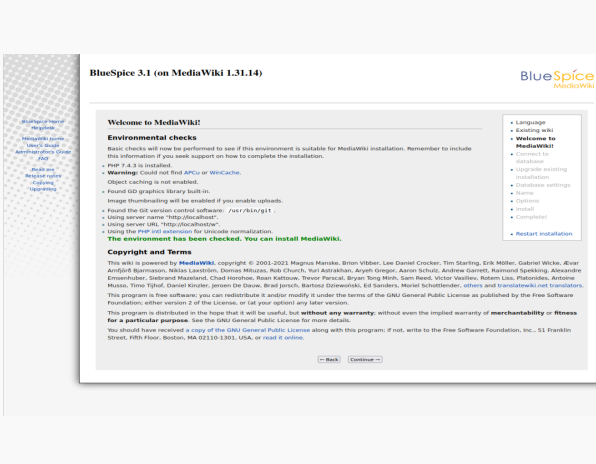
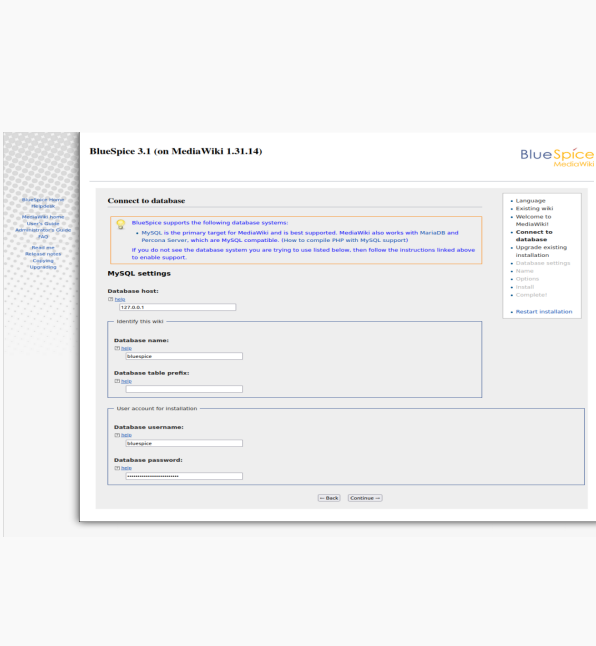
Step-by-step installation

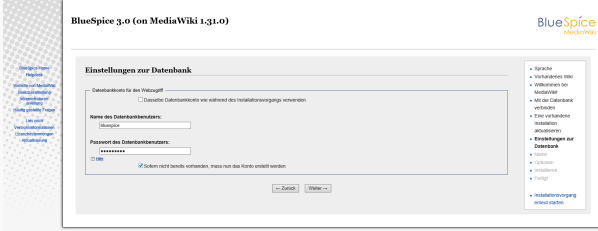
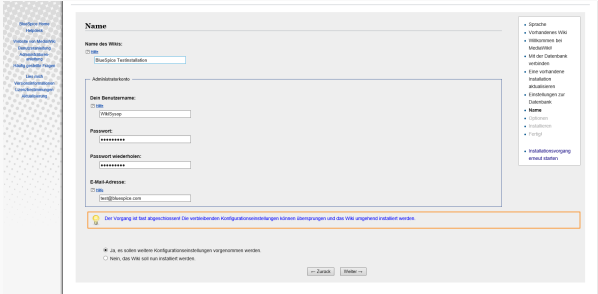


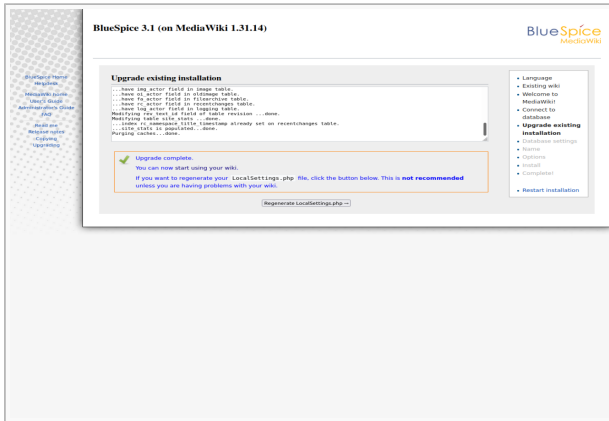
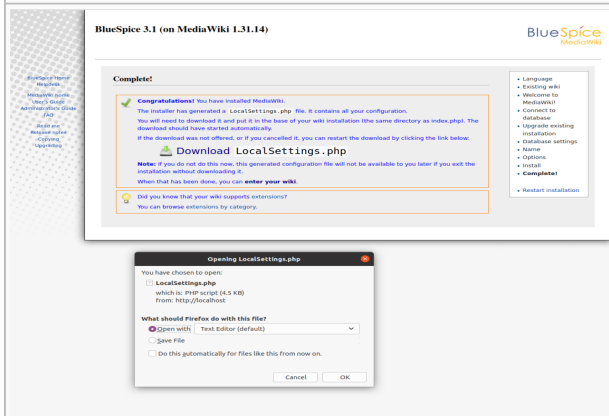
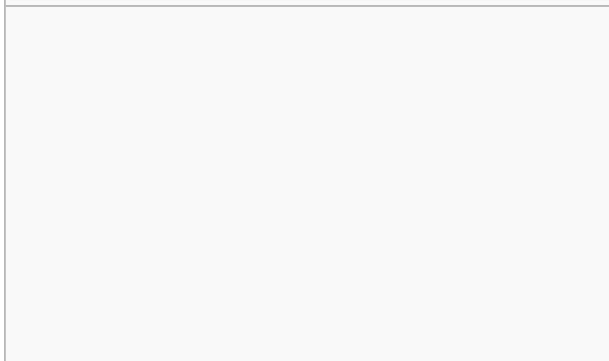
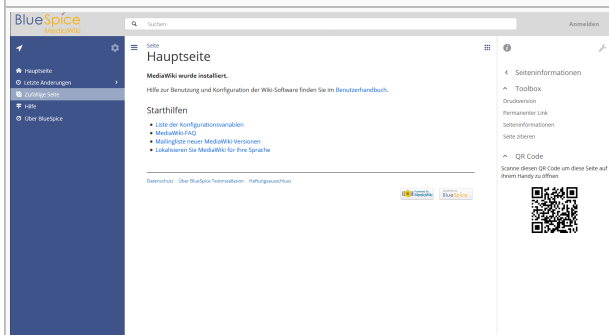
If you also install the paid extension "BlueSpiceWikiFarm", make sure that the codebase is not located directly in the DocumentRoot of your web server or VirtualHost - it must be located in the /w subfolder!

Step 1 - Start the installation setup: First, open the URL of your web application in your browser. Then click on "set up the wiki" to start the installation.

Note: If you don't meet all necessary requirements for PHP yet, you won't be able to view this setup page yet. Please make the

	necessary corrections to your PHP installation first. Otherwise, you are now on the page shown in the screenshot (click on the thumbnail to see the full screenshot).
	Step 2 - Select your language: You are now in the language selection. "Your language" defines the language that guides you through the installer, "Wiki language" the later language settings of your wiki.
	Step 3 - MediaWiki Installation Check: This step takes you to the MediaWiki installation check. Please read this check carefully, as possible hints may not block the installation itself, but may lead to restrictions of the wiki functionality in practice. Make the necessary corrections to your system and reload the page in your browser before proceeding with the setup.
	Step 4 - Establish the database connection: In this step, you configure the database connection. Here you can either specify the root user of your MySQL server and in the following step have the installer create an additional user who only has access to the BlueSpice database. The database will also be created automatically if it does not yet exist. Or, alternatively, you can create a user and a database in advance and directly enter this information here. You can find information on the manual creation of users and databases in the official Mediawiki documentation.

	Step 5 - Create the BlueSpice database user: Depending on the procedure you followed in the previous step, you can now define an exclusive user for your BlueSpice database. If you have already created the user explicitly for the database in advance, leave the check mark at "Use the same database account as during the installation process".
	Step 6 - Create your wiki name and administrator account: Enter the name for your wiki. This name is displayed in the title bar of your browser and in various other places such as in notification mails. Pay extra attention to the correct spelling, because this name can afterwards only be changed with a certain effort and certain risks. Next, enter the username, password and e-mail address of the first wiki administrator. The administrator account is then created by the wiki during setup.
	Step 7 - Options: In this step, you specify the e-mail address for notification e-mails.
	Step 8 - Installation: This step announces the installation of the wiki. If you don't need to make any changes to the previous steps, click "Next" to start the installation process.

	Step 9 - Installation status: After the successful installation of BlueSpice, you see a confirmation page that you confirm with "Next".
	Step 10 - Download LocalSettings.php: In the last step of the installation, you will be asked to download the configuration file "LocalSettings.php" of your installation. Download it and place it in the root directory of your BlueSpice codebase.
	Step 11 - Rename the template folders: Open the folder <code>..\extensions\BluespiceFoundation</code> and rename the subfolder <code>config.template</code> to <code>config</code> and create the new folder <code>data</code>. These folders should have read and write access, see File System Permissions. Run the script <code>..\maintenance\update.php</code> from the console.
	Step 12 - Load the BlueSpice welcome page: If you now access the URL you specified for BlueSpice, you now see the BlueSpice welcome page. You can start using BlueSpice immediately.

Note: If the page is not loading, give the group "users" change-permissions for the folder C:\Windows\Temp.

Important! As next step, you can configure [VisualEditor](#) and [Extendedsearch](#).

Setup:Installation Guide

A [quality version](#) of this page, [approved](#) on *21 September 2021*, was based off this revision.

For general questions regarding the installation, maintenance, and usage of BlueSpice, go to our [SourceForge help forum](#) .

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Introduction

We are happy that you decided to install the latest version of BlueSpice, our innovative and feature-packed wiki system. Carefully follow our step-by-step instructions, and BlueSpice will be up and running in no time!

After checking your system requirements and preparing your server environment, you will install the BlueSpice application and optionally tweak your configuration to improve your system performance so that your users can enjoy working with their new wiki.

Prerequisites

Before installing BlueSpice 3, review that you meet all system requirements and that your server environment is ready. If you need to set up a server environment first, we provide detailed instructions here:

1. [Check the system requirements](#)
2. Prepare your system for the BlueSpice installation.
To set up your server environment, follow the step-by-step instructions or read our [quick reference](#):
 - [Linux](#)
 - [Windows](#)

Installing BlueSpice 3

Please select which installation type you need:

- [Full BlueSpice 3 installation with Installer](#)
 - Extended Functions: [VisualEditor](#), [ExtendedSearch](#)
- [BlueSpice 3 WikiFarm installation](#)
- [Docker image](#)

Upgrade and patch updates

- [BlueSpice 3 upgrade from version 2.27.x to the current version of BlueSpice](#)
- [Patch Update from version 3.1.x to a higher version 3.1.x](#)
- [Upgrade from BlueSpice free 3.1.x to BlueSpice pro 3.1.x](#)

Migration from MediaWiki to BlueSpice

- [Migration from MediaWiki to BlueSpice](#)

Quick reference: Configuration, services, and optimization

Warning: Pages in the namespaces *SocialEntity* and *User* are indexed by search engines by default until version 3.1.13. If you run a public wiki with an earlier version, you should [exclude these namespaces from being searchable](#) unless you want these pages to be indexed by public search engines.

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:

Services and system configuration

- Linux
 - [Introduction](#)
 - [Apache und PHP](#)
 - [MariaDB](#)
 - [Jetty](#)
 - [Elasticsearch](#)
 - [Node.js](#)
 - [Parsoid](#)
 - [Python](#)
 - [Memcached](#)
 - [Texvc \(BlueSpice pro only\)](#)
 - [PhantomJS](#)
- Windows
 - [Introduction](#)
 - [IIS Web Server](#)
 - [Visual C++ Redistributable for Visual Studio 2015](#)
 - [PHP Manager](#)
 - [PHP 7.3](#)
 - [MariaDB](#)
 - [OpenJDK](#)
 - [Apache Tomcat](#)
 - [Elasticsearch](#)
 - [Git](#)
 - [Node.js](#)
 - [Parsoid](#)
 - [Python](#)
 - [PhantomJS \(BlueSpice pro only\)](#)

Webservices for Apache Tomcat

- [PDF-Export](#)
- [VisualDiff \(BlueSpice pro only\)](#)
- [LatexRenderer \(BlueSpice pro only\)](#)

Additional settings and optimizations

- [Caching](#)
- [Cronjobs](#)
- [Time Zone](#)

Security settings

- [File System Permissions](#)
- [Deactivating installcheck file](#)
- [Save Directories](#)

Compendium

- [Backup](#)
- [Configuration Folder settings.d](#)
- [ExtendedSearch Configuration](#)
- [Performance Optimization](#)
- [Performance Optimization/ManualRecache](#)
- [Performance Optimization/MySQL](#)
- [Performance Optimization/PHP](#)
- [Rebuilding the Search Index](#)
- [VisualEditor Configuration](#)
- [Windows Folder Structure](#)

Advanced

A [quality version](#) of this page, [approved](#) on *21 December 2021*, was based off this revision.

- [Installation Guide/Advanced/Backup](#)
- [Installation Guide/Advanced/Configuration Folder settings.d](#)
- [Installation Guide/Advanced/ExtendedSearch Configuration](#)
- [Installation Guide/Advanced/Performance Optimization](#)
- [Installation Guide/Advanced/Performance Optimization/ManualRecache](#)
- [Installation Guide/Advanced/Performance Optimization/MySQL](#)
- [Installation Guide/Advanced/Performance Optimization/PHP](#)
- [Installation Guide/Advanced/Rebuilding the Search Index](#)
- [Installation Guide/Advanced/VisualEditor Configuration](#)
- [Installation Guide/Advanced/Windows Folder Structure](#)

[Special:PrefixIndex/Setup:Installation Guide/Advanced/](#)

ExtendedSearch configuration

A [quality version](#) of this page, [approved](#) on *2 December 2020*, was based off this revision.

If the [ElasticSearch service is up and running](#), you can enable BlueSpice Extended Search.

- Go to your BlueSpice install path. For example:

```
cd /var/www/bluespice
```

- Go to the folder *settings.d*:

```
cd settings.d
```

- Create a file in this folder and name it *020-BlueSpiceExtendedSearch.local.php*.
- Put the following content in the newly created file.

```
<?php
wfLoadExtension( 'BlueSpiceExtendedSearch' );
$GLOBALS['wgSearchType'] = 'BS\\ExtendedSearch\\MediaWiki\\Backend\\BlueSpiceSearch';
```

- Go to your BlueSpice install path again. For example:

```
cd /var/www/bluespice
```

- Run the following scripts to build the search index.

```
php extensions/BlueSpiceExtendedSearch/maintenance/initBackends.php --quick
php extensions/BlueSpiceExtendedSearch/maintenance/rebuildIndex.php --quick
php maintenance/runJobs.php
```

Done! The extended search functionality is now active.

VisualEditor configuration

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Parsoid is the rendering service for VisualEditor. Make sure to install and configure Parsoid before configuring VisualEditor. See the instructions for [Windows](#) and [Linux](#).

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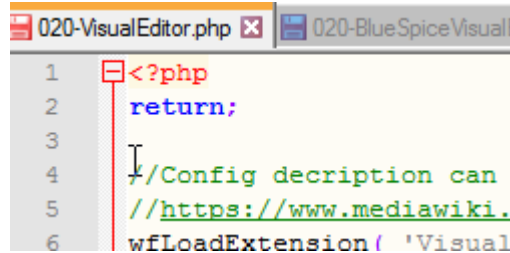
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3	Activating VisualEditor for a namespace	13
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Server settings

Before you can use VisualEditor in BlueSpice, you have to activate it in your installation:

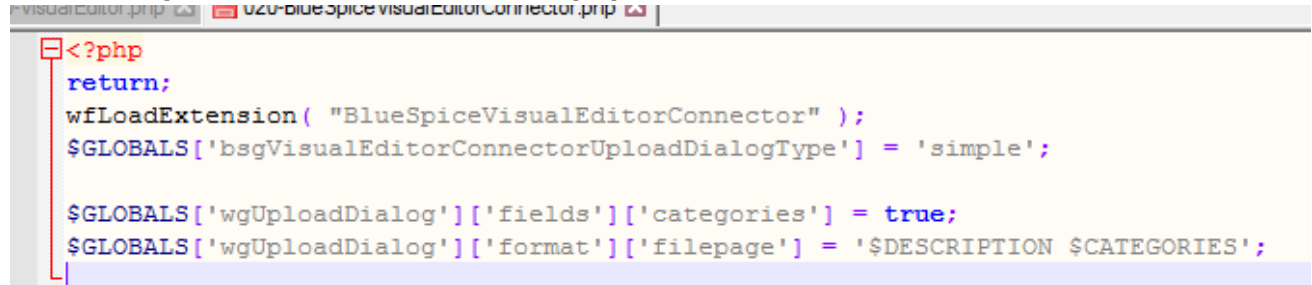
In the BlueSpice installation directory, locate the following files inside the folder „var\www\settings.d“:

020-VisualEditor.php:



```
1 <?php
2 return;
3
4 //Config decription can
5 //https://www.mediawiki.
6 wfLoadExtension( 'Visual
```

020-BlueSpiceVisualEditorConnector.php:



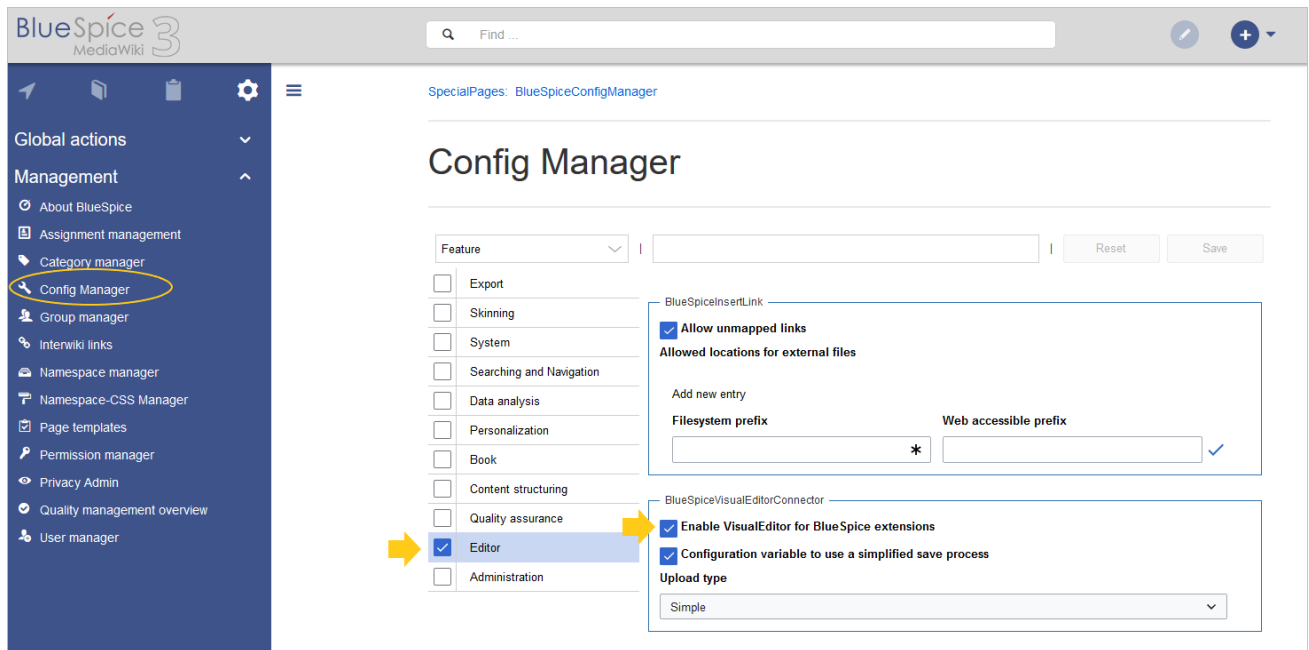
```
1 <?php
2 return;
3 wfLoadExtension( "BlueSpiceVisualEditorConnector" );
4 $GLOBALS['bsgVisualEditorConnectorUploadDialogType'] = 'simple';
5
6 $GLOBALS['wgUploadDialog']['fields']['categories'] = true;
7 $GLOBALS['wgUploadDialog']['format']['filepage'] = '$DESCRIPTION $CATEGORIES';
```

1. Remove the line containing the „return;“ command in both files and save them.
2. Restart your web server (recommended).

Checking the Configuration manager

In case the VisualEditor is still not appearing, check if VisualEditor is shown as activated in the configuration manager of your wiki:

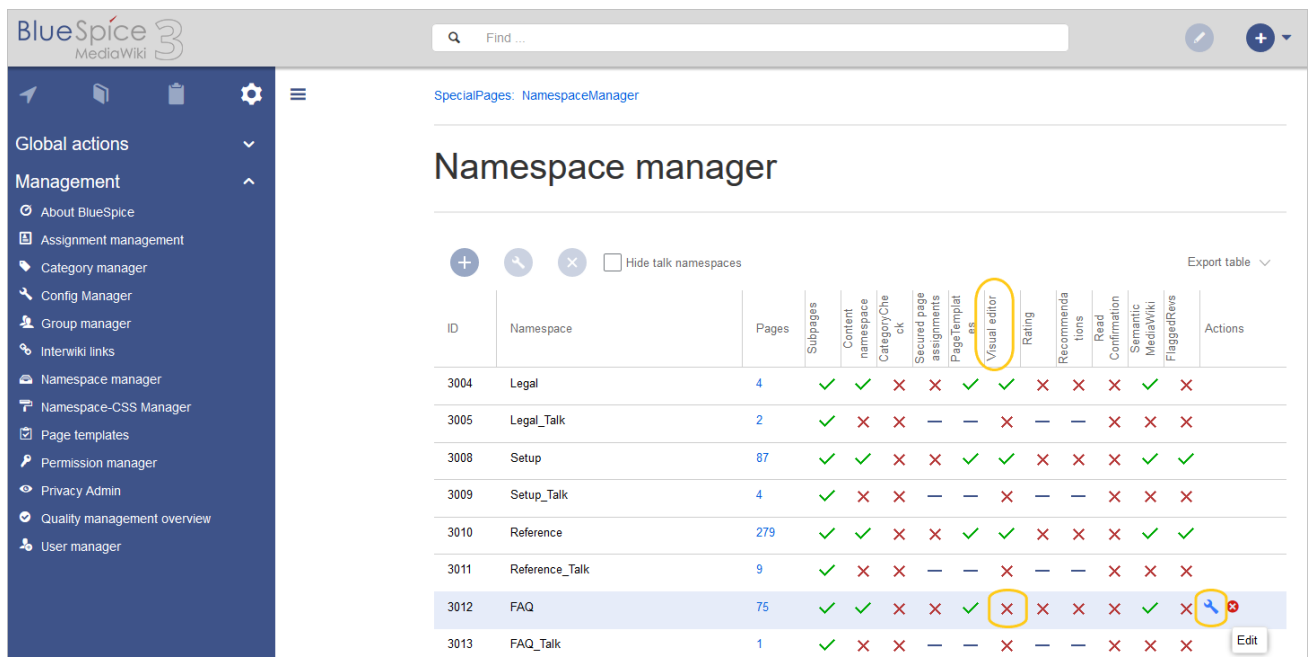
1. Go to *Global actions > Config manager*
2. Make sure the checkbox "Enable VisualEditor for BlueSpice extensions" is activated:



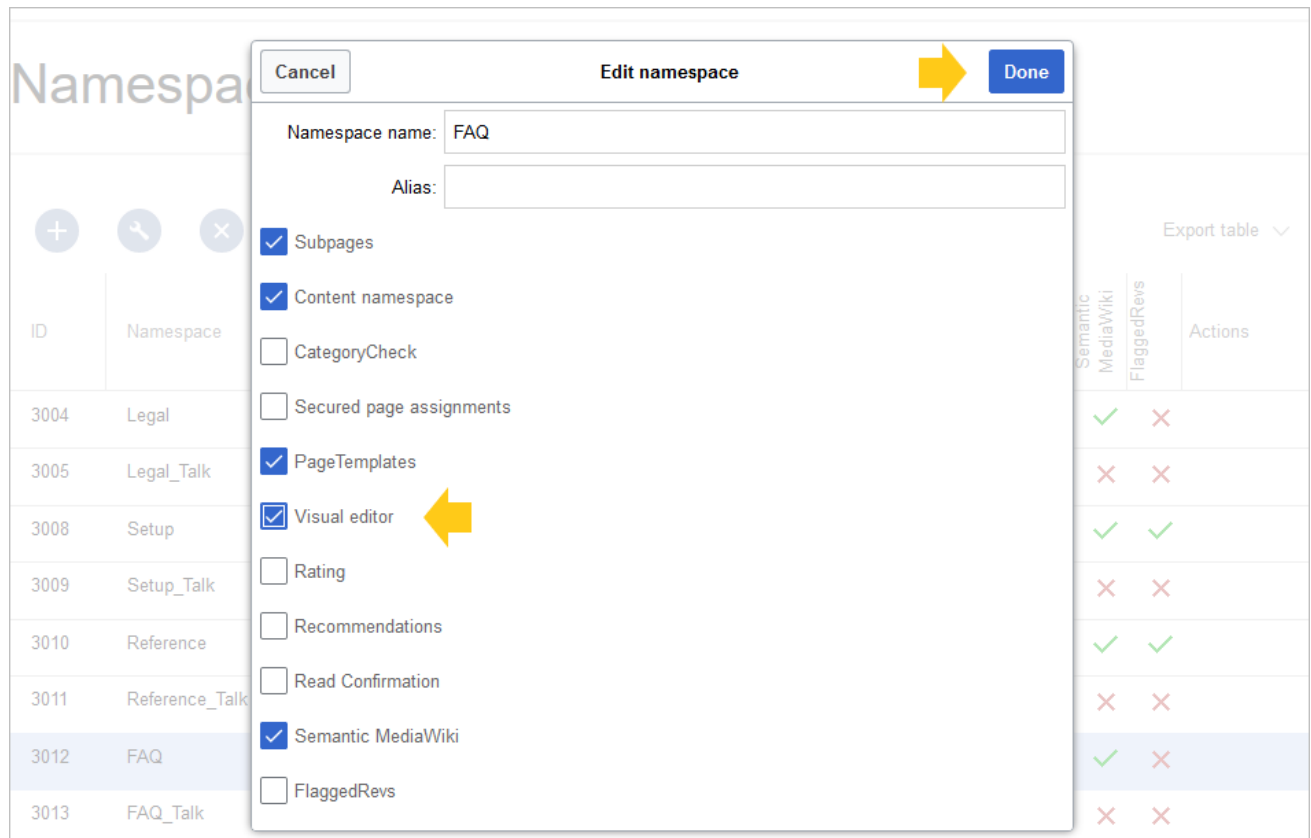
By default, VisualEditor is only activated in the main (Pages) and the User namespaces.

Activating VisualEditor for a namespace

1. Go to Global actions > Namespace manager In the column "VisualEditor", you can see which namespaces have VisualEditor activated. They have a green check mark.
2. Click the wrench icon in the "Actions" column. The wrench appears, when you hover over the row of the namespace:



1. Activate the checkbox for VisualEditor in the dialog window and click "Done":

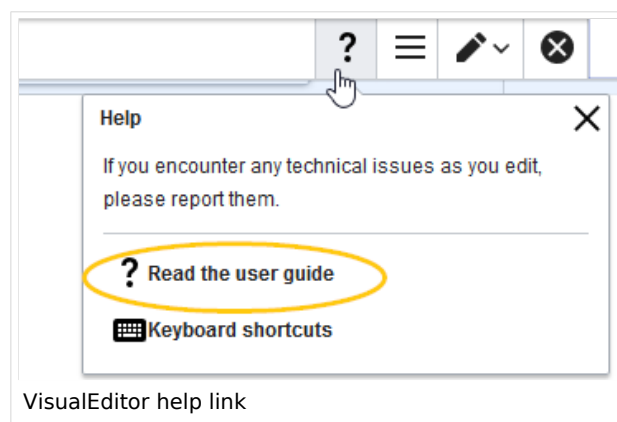


1. Refresh the Namespace manager page (F5) to confirm the change.

VisualEditor should now be working correctly in all namespaces that actively use it.

Customizing the link to the help pages

By default, the help link for VisualEditor links to the help page for VisualEditor on the BlueSpice helpdesk.



The link can be changed to go to a custom URL:

To configure the url, add:

```
`$GLOBALS['bsgVisualEditorConnectorHelpUrl'] = 'https://your_url';`
```

to 'LocalSettings.php' or the appropriate config file.

File System Permissions

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For trouble-free usage of your BlueSpice installation, the web server requires write permissions to several folders of the file system. However, it is recommended to keep the rights for all other files and folders to a minimum. This document shows you the relevant folders and the correct permissions setting.

Tips for this Document

- Please, read this manual completely and work through the single installation steps one after another.
- For editing the configuration files with a text editor, the files must be saved in UTF-8 coding without BOM (Byte Order Mark).
- The placeholder `<installpath-bluespice>` stands for the path to your BlueSpice installation, e.g. `C:\inetpub\wwwroot\bluespice` (Windows) or `/var/www/bluespice` (Linux).

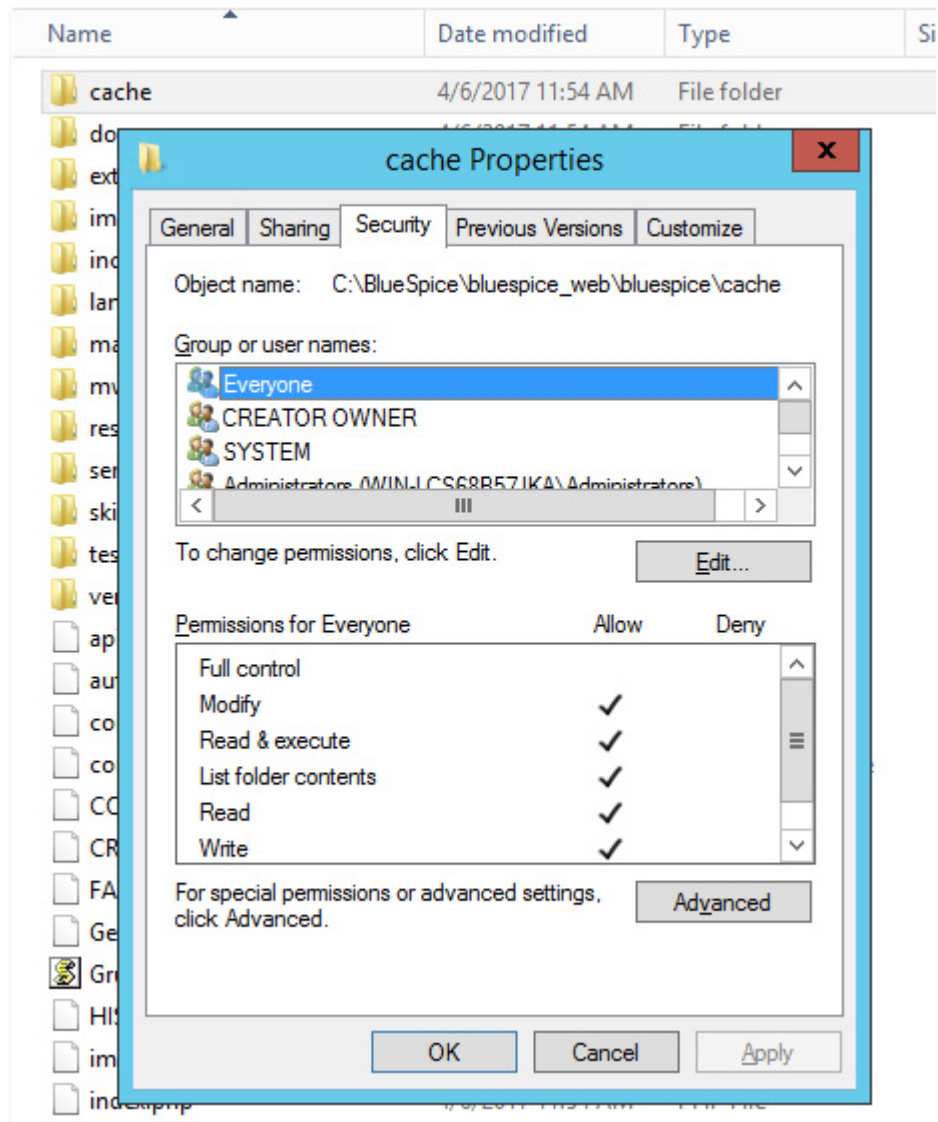
Affected Folders

The folders, which require write permissions, are:

- `<installpath-bluespice>/cache`
- `<installpath-bluespice>/images`
- `<installpath-bluespice>/extensions/BlueSpiceFoundation/config`
- `<installpath-bluespice>/extensions/BlueSpiceFoundation/data`
- `<installpath-bluespice>/extensions/Widgets/compiled_templates` (**only BlueSpice pro**)

Assignment of Permissions with Windows

Assign "change" rights for this folder for the local user "Everyone".



Assignment of Permissions with Linux

Here you can assign rights much more strictly, which is also recommended. Transfer the directory `<installpath-bluespice>` recursively to the user root (CHMOD for Files 644, CHMOD for Directories 755) and after this, transfer the mentioned directory recursively to the user and the group, under which the Apache Web Server runs (Debian/Ubuntu e.g. "www-data").

In the following, we provide a bash script, which works through this tasks for you with only one command.

To do so, create the file `/usr/local/bin/setWikiPerm` and copy the following code into this file:

```
#!/bin/bash

WWW_USER="www-data"
WWW_GROUP="www-data"

WWW_HOME=`eval echo ~$WWW_USER`
```

```
WWW_CFG=$WWW_HOME/.config

if [ $# -eq 0 ]; then
    echo "You must enter the path of your MediaWiki installation."
    exit
elif [ ! -d $1 ]; then
    echo "$1 does not exist or is no path."
    exit
fi

if [ ! -f $1/LocalSettings.php ]; then
    echo "$1 contains no Localsettings.php"
    exit
fi

PATH=`echo "$1" | sed -e 's#/###'`

/usr/bin/find $PATH -type d -exec /bin/chmod 755 {} \;
/usr/bin/find $PATH -type f -exec /bin/chmod 644 {} \;

/bin/chown -R root:root $PATH

pathes=(
    "$PATH/cache" \
    "$PATH/images" \
    "$PATH/_sf_archive" \
    "$PATH/_sf_instances" \
    "$PATH/extensions/BlueSpiceFoundation/data" \
    "$PATH/extensions/BlueSpiceFoundation/config" \
    "$PATH/extensions/Widgets/compiled_templates" \
)

for i in "${pathes[@]"; do
    if [ -d $i ]; then
        /bin/chown -R $WWW_USER:$WWW_GROUP $i
    fi
done

if [ ! -d $WWW_CFG ]; then
    /bin/mkdir $WWW_CFG
fi

/bin/chown -R $WWW_USER:$WWW_GROUP $WWW_CFG

/usr/bin/find $PATH/extensions -iname 'create_pygmentize_bundle' -exec /bin/chmod +x {} \;
/usr/bin/find $PATH/extensions -iname 'pygmentize' -exec /bin/chmod +x {} \;
/usr/bin/find $PATH/extensions -name 'lua' -type f -exec /bin/chmod 755 {} \;
```

If needed, replace the content of the variables

```
WWW_USER="www-data"
WWW_GROUP="www-data"
```

with the appropriate user and group of your distribution.

After this, assign CHMOD 755 to this file. Now you can run the script and let it do the complete permission setting automatically with the following command:

```
setWikiPerm <installpath-bluespice>
```



Note that when the `update.php` is executed on the console, the rights can be partially discarded. For this reason, set the rights to "`update.php`" again.