Contents

Setup:Installation Manual

Redirect to:

- Setup:Installation Guide

Installation Manuals for BlueSpice 2.27.2

A quality version of this page, approved on *20 September 2019*, was based off this revision.

- Installation Manual without installer
  This is recommended if you install your BlueSpice on an already existing MediaWiki or if you want to install MediaWiki yourself first (see also Installation Manual MediaWiki).
- Installation Manual with installer **(BlueSpice free only)**
  This is recommended if you want to install MediaWiki and BlueSpice together in a single installation process.
- Update Manual
  Here you can find an update guide for BlueSpice version 2.23.x (or higher)

Activation and deactivation of BlueSpice-extensions

A quality version of this page, approved on *20 September 2019*, was based off this revision.

Contents

In some cases you could need the possibility to activate or deactivate single extensions of BlueSpice. This document will show you how to do this.

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).

Create a configuration file which will be not overriten while you update BlueSpice

All BlueSpice-extensions are configured in the file `<installpath-bluespice>/extensions/BlueSpiceExtensions/BlueSpiceExtensions.default.php` by default. You should not use this file to configure these extensions because it will by overwritten while you update BlueSpice. Copy this file to `<installpath-bluespice>/extensions/BlueSpiceExtensions/BlueSpiceExtensions.local.php` and do all changes in this file.

Deactivation of extensions

Search the relevant extension in `<installpath-bluespice>/extensions/BlueSpiceExtensions/BlueSpiceExtensions.local.php`. Uncomment the line which includes the extension by typing "//" at the beginning of the line.

Activation of extensions

If you which to activate extensions which are deactivated please search the relevant extension in `<installpath-bluespice>/extensions/BlueSpiceExtensions/BlueSpiceExtensions.local.php`. Remove the commentation at the beginning of the line ('#' or '//').

After that open a command line and switch to the folder `<installpath-bluespice>`. Execute the follwoing command:

```
php maintenance/update.php (Linux)
php maintenance\update.php (Windows))
```

> ⚠️ With Windows, please take care that the environment variables are set correctly to access the php command.

> ⚠ With Linux, please keep in mind that after running the update.php, the file system permissions need to be adjusted again.

When the script is finished with the "Done" message, proceed to the next step.

```
...event_agent field does not exist in echo_event table, skipping modify field patch.
Modifying event_variant field of table echo_event ...done.
Modifying event_extra field of table echo_event ...done.
Modifying event_agent_ip field of table echo_event ...done.
...have etp_id field in echo_target_page table.
...have notification_bundle_base field in echo_notification table.
...echo_event table does not contain event_timestamp field.
...have eeb_event_hash field in echo_email_batch table.
...have event_page_id field in echo_event table.
...index echo_event_type already set on echo_event table.
...index echo_user_timestamp already set on echo_notification table.
Creating titlekey table...ok.
Rebuilding titlekey table...
... 1 ok.
...hitcounter table does not exist, skipping modify field patch.
Creating hit_counter_extension table ...done.
Creating hit_counter table ...done.
...page table does not contain page_counter field.
Creating bs_editnotifyconnector table ...done.
Creating bs_namespacemanager_backup_page table ...done.
Creating bs_namespacemanager_backup_revision table ...done.
Creating bs_namespacemanager_backup_text table ...done.
Adding page_content_model field to table bs_namespacemanager_backup_page ...done.
Adding rev_sha1 field to table bs_namespacemanager_backup_revision ...done.
Adding rev_content_model field to table bs_namespacemanager_backup_revision ...done.
Creating bs_permission_templates table ...done.
Creating bs_dashboards_configs table ...done.
Creating bs_usagetracker table ...done.
Creating bs_pagetemplate table ...done.
Creating bs_pageassignments table ...done.
...se_text field does not exist in bs_saferedit table, skipping modify field patch.
Creating bs_readers table ...done.
...have readers_ts field in bs_readers table.
...site_stats is populated...done.
Checking existence of old default messages...done.
Populating rev_len column
...doing rev_id from 1 to 200
Populating ar_len column
...archive table seems to be empty.
rev_len and ar_len population complete [0 revision rows, 0 archive rows].
Populating rev_sha1 column
...doing rev_id from 1 to 200
Populating ar_sha1 column
...archive table seems to be empty.
Populating ar_sha1 column legacy rows
rev_sha1 and ar_sha1 population complete [0 revision rows, 0 archive rows].
Populating img_sha1 field

Done 0 files in 0.0 seconds
Fixing protocol-relative entries in the externallinks table...
Done, 0 rows updated.
Populating fa_sha1 field from fa_storage_key

Done 0 files in 0.0 seconds
Updating *_from_namespace fields in links tables.
...doing page_id from 1 to 200
Purging caches...done.

Done in 1.6 s.
root@bluespice:/var/www/bluespice#
```

Folder structure under Windows

A quality version of this page, approved on *17 October 2018*, was based off this revision.

Contents

Preface

Microsoft Windows distributes program installations and configurations, the Webroot under IIS etc. to various folders in the file system. Since BlueSpice is a web application based on PHP, it is not always easy to use the Windows default system paths in the application.

For this reason, we recommend creating your own folder structure for BlueSpice, all related data and additional program installations.

In the following we describe a proven folder structure. This is recommended by us.

Folder structure

In the following, "\bluespice\" is defined as the base directory for the installation in the root directory of the drive (e.g. C:\bluespice or D:\bluespice).

The folder structure is based on Unix operating systems:

```
bluespice/

├─ backup/            # for backups

├─ bin/               # for additional programs and own scripts

├─ etc/               # for configuration files

├─ opt/
│   └─ bluespice/
│       ├─ cache/        # BlueSpice cache
│       ├─ images/       # File uploads
│       └─ widgets/      # Rendered widgets

├─ tmp/               # Temporary files

└─ var/
    ├─ log/           # LOG files of the web server
    └─ www/           # Actual BlueSpice application
```

Folder names for program installations

When installing programs in \bluespice\, please make sure to install these programs in subfolders that do not contain special characters and/or spaces.

Technical references for extensions

A quality version of this page, approved on *28 July 2017*, was based off this revision.

- SyntaxHighlight_GeSHi

SyntaxHighlight_GeSHi

A quality version of this page, approved on *28 July 2017*, was based off this revision.

Contents

SyntaxHighlight_GeSHi

This document was created with BlueSpice

The MediaWiki-extensions SyntaxHighlight_GeSHi is not running correctly in some cases of setups. This document will show you how to configure your system environment that you can use the extension.

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).

SyntaxHighlight_GeSHi and Linux

If you are using Linux as BlueSpice server it's enough make two files executable (*chmod 755*):

```
<installpath-bluespice>/extensions/SyntaxHighlight_GeSHi/pygments
/create_pygmentize_bundle
<installpath-bluespice>/extensions/SyntaxHighlight_GeSHi/pygments/pygmentize
```

For more information please refer to the article "File System Permissions".

SyntaxHighlight_GeSHi and Windows

First, please install latest version of Python 2.7.x. It is recommended to use the standard installation path (*C:\Python27*).

After that please open your windows command line and change to the subfolder "Scripts" in the Python installation path. Install the needed package "pygments" by using this command:

```
pip.exe install pygments
```

Now tell your BlueSpice installation where the pygmentize.exe can be found by setup this variable in your LocalSettings.php:

```
$wgPygmentizePath = "c:\\Python27\\Scripts\\pygmentize.exe";
```

At the end please take care that the temporary directory of your PHP installation (default: C:\Windows\Temp) is fully writable by your webserver.

With these steps your should have a working system setup to use the SyntaxHighlight_GeSHi without problem.

Additional Settings and Optimizations

A quality version of this page, approved on *20 July 2017*, was based off this revision.

- Caching
- Cronjobs
- Time zone

Caching

A quality version of this page, approved on *20 September 2019*, was based off this revision.

Contents

This document describes different caching options to enhance the performance of your BlueSpice installation.

Tips for the 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).

Linux vs. Windows

Please note that with equal hardware conditions, BlueSpice empirically runs more performantly on Linux than on Windows servers.

Indicate Cache-Directory

This forces BlueSpice to use the filesystem instead of the database for some internal caches. To do this, create the file `<installpath-bluespice>`/settings.d/001-Directories.php and add the following content:

```
<?php

$wgCacheDirectory = "$IP/cache";
```

Save and close the file.

Note that the directory "cache" in `<installpath-bluespice>` must be writable by the web server. For more information, read the **file system permissions**.

Name Resolution of the Database

If this hasn't already been done while setting up MediaWiki, please make sure that the database server will be adressed via IP if it runs on the same server than BlueSpice. Especially Windows has problems with the resolution of "localhost".

To do this, open `<installpath-bluespice>`/LocalSettings.php and locate the variable **$wgDBserver**. The line should ideally be:

```
$wgDBserver = "127.0.0.1";
```

Activate Memcached

Create the file `<installpath-bluespice>` /settings.d/001-Memcached.php and add the following content:

```php
<?php

$wgMainCacheType = CACHE_MEMCACHED;
$wgSessionCacheType = CACHE_DB;
$wgMemCachedServers = [ "127.0.0.1:11211" ];
```

Save and close the file.

The prerequisite is an installed and configured memcached server on the BlueSpice server. Read the memcached article for more information.

Increase PHP Memory Limit

A higher memory limit of PHP results in a faster execution. ¶ This can be changed in php.ini. Locate and adjust the following option:

```
memory_limit = 512M (means 512 MB - varies from the available memory)
```

After saving and closing php.ini, the web server must be restarted.

Activate Bytecode Cache in PHP

Since PHP 5.5 the bytecode cache "opcache" is included.

This needs to be activated in the php.ini first. Check if the module is integrated there. This is done via the line:

```
zend_extension=opcache.dll (Windows)
zend_extension=opcache.so (Linux)
```

Please also note the specification of the distributor for activating PHP modules under Linux.

Please, do the following configuration of the opcache in php.ini. Normally, all options should already exist, but are commented out by semicolon (;) at the beginning of the line. Locate the respective option in php.ini, remove the semicolon at the beginning of the line and adjust the settings as follows:

```
opcache.enable=1
opcache.memory_consumption=512 (means 512 MB - varies from the available memory)
opcache.max_accelerated_files=5000
opcache.validate_timestamps=1
opcache.revalidate_freq=2
```

After saving and closing php.ini, the web server must be restarted.

Deactivate JobQueue

For this, read the paragraph "runJobs.php" in the "Cronjobs" article.

Cronjobs

A quality version of this page, approved on *17 December 2020*, was based off this revision.

Contents

This document describes cronjobs an related configurations, which should be set for your BlueSpice (depending on the used version).

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 regarding the documentation "Folder structure under Windows") or `/var/www/bluespice` (Linux).
- The placeholder `<tomcat-webapps>` stands for the path to the webapps directory of your Tomcat server, e.g `C:\Program Files\Apache Software Foundation\Tomcat 8.5\webapps` (Windows) or `/var/lib/tomcat8/webapps` (Linux).

runJobs.php

Time-consuming processes will be moved to a processing queue in the background of BlueSpice. With every page impression, a part of these will be processed. For the case that there are lots of processes in the queue and there are relatively litte page impressions, the tasks will not be processed promptly.

For this reason, the queue should be processed regularly by cronjob.

Now create a cronjob (Windows: "Scheduled task") depending on your operating system. The command to execute is:

```
php <installpath-bluespice> /maintenance/runJobs.php (Linux)
php.exe <installpath-bluespice> \maintenance\runJobs.php (Windows)
```

⚠ It is recommended to specify the complete path to php.exe under Windows. For more information, see the environment variables document.

Execute the cronjob every **10 minutes**.

processBsEmailBatch.php

For reports via email sent from MediaWiki, please create a cronjob and run it daily. The command for this is:

```
php  <installpath-bluespice> /extensions/BlueSpiceEchoConnector/maintenance
/processBsEmailBatch.php (Linux)
php.exe  <installpath-bluespice> \extensions\BlueSpiceEchoConnector\maintenance\processB
sEmailBatch.php (Windows)
```

It is recommended to specify the complete path to php.exe under Windows. For more information, see the environment variables document.

Time Zone

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Contents

Even if every user can change his time zone himself in the user settings, BlueSpice sets the default time zone "Europe/Berlin" when the user first logs in. This document describes how to change this if necessary.

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 regarding the documentation "Folder structure under Windows") or `/var/www/bluespice` (Linux).
- The placeholder `<tomcat-webapps>` stands for the path to the webapps directory of your Tomcat server, e.g `C:\Program Files\Apache Software Foundation\Tomcat 8.5\webapps` (Windows) or `/var/lib/tomcat8/webapps` (Linux).

Changing the Time Zone

Copy the file `<installpath-bluespice>`/settings.d/001-DefaultSettings.php to `<installpath-bluespice>`/settings.d/001-DefaultSettings.local.php and open it. In delivery stat, you can find these two lines there:

```
$wgLocaltimezone = 'Europe/Berlin';
$wgDefaultUserOptions['timecorrection'] = 'ZoneInfo|' . (date("I") ? 120 : 60) .
'|Europe/Berlin';
```

Replace "Europe / Berlin" with your time zone. An overview of all possible time zones can be found in the official PHP documentation.
Save and close the file.

Deactivating installcheck.php

A quality version of this page, approved on *31 July 2017*, was based off this revision.

Contents

As soon as the setup of BlueSpice is completed, you should prevent the execution of the installcheck.php while using the wiki productively.
A short instruction can be found in this document.

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).

Deactivating installcheck.php

Switch to the directory `<installpath-bluespice>` and open the `installcheck.php` file in a text editor. Insert a new line after the first line and insert

```
die( 'Deactivated.' );
```

Save and exit the file. The installcheck.php is no longer accessible now.
If you need to restore this file at a later time, it is sufficient to temporarily disable inserted line by placing the # character at the beginning of the line.

Save Directories

A quality version of this page, approved on *31 July 2017*, was based off this revision.

Contents

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).

Explanation for Saving Directories

It is highly recommended, to lock several directories to save them from access from external browers, so that calling up the directory or the content delivers the HTTP status code (Forbidden).

To find out how this works with the webserver you are using, please read the documentation of your webserver software.

The following directories should be saved:

- `<bluespice-url>` /cache
- `<bluespice-url>` /images
  Please keep in mind that you need to unblock the subfolder `<bluespice-url>` /images/bluespice /flexiskin afterwards, because this subfolder must be accessable.
- `<bluespice-url>` /mw-config

Setup:Installation Manual/Services and system configuration

Redirect to:

- Setup:Installation Guide#Services and system configuration

Apache Tomcat

A quality version of this page, approved on *17 October 2018*, was based off this revision.

Contents

This document describes the configuration of the Apache Tomcat server, which is needed for the [Webservices](#) of BlueSpice.

Notes

- 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 regarding the documentation "[Folder structure under Windows](#)") or `/var/www/bluespice` (Linux).
- The placeholder `<tomcat-webapps>` stands for the path to the webapps directory of your Tomcat server, e.g `C:\Program Files\Apache Software Foundation\Tomcat 8.5\webapps` (Windows) or `/var/lib/tomcat8/webapps` (Linux).

Installation

Linux

Install the latest version of the Apache Tomcat server in the package manager of your distribution. The package manager dissolves all dependencies and installs the required packages.

Windows

Java

Apache Tomcat requires the Java Runtime Environment. If these is not already installed at your system, download (www.java.com) and install it. We recommend the 64 bit version for latest systems.

Tomcat

Download the "32-bit/64-bit Windows Service Installer" from the Tomcat project website. No modifications are necessary during the installation process. Confirm the single steps with "Next".
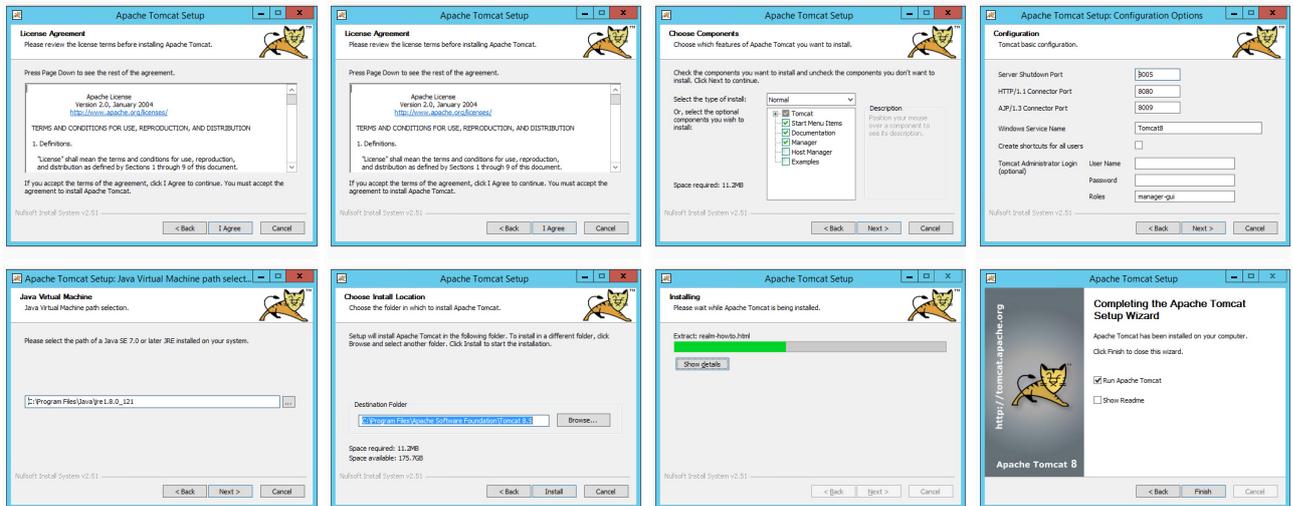
Installation Check

If the Apache Tomcat server has been installed and started correcly can be checked by calling up *http://<host name-or-ip-of-the-server>:8080*. With a correct installation, the default page of the server will be displayed.

Configuration

Now, two configuration files of the Tomcat server need to be adjusted:

- context.xml
- server.xml

Those can - per default - be found at:

- with Windows: *C:\Program Files\Apache Software Foundation\Tomcat 8.5\conf*
- with Linux: */etc/tomcatX* (the "X" stands for the particular Tomcat version)

context.xml

Replace the line

```
<Context>
```

with

```
<Context mapperContextRootRedirectEnabled="true">
```

server.xml

Please make sure that the complete block

```
<Connector port="8080" protocol="HTTP/1.1"
        ... />
```

is as follows:

```
<Connector port="8080" protocol="HTTP/1.1"
        connectionTimeout="20000"
        URIEncoding="UTF-8"
        redirectPort="8443"
        address="127.0.0.1" />
```

Restart Tomcat

Restart the Tomcat server:

- Linux: *service tomcatX restart* (the "X" stands for the particular Tomcat version)
- Windows: See below: Restart Tomcat

Special features under Windows

Configure Tomcat

All of the following settings need to be done in the configuration interface of Tomcat. These can be found in the start menu under "Configure Tomcat".

Restart Tomcat

The restart can be performed in the first tab of the configuration interface. Stop and then start the service there.
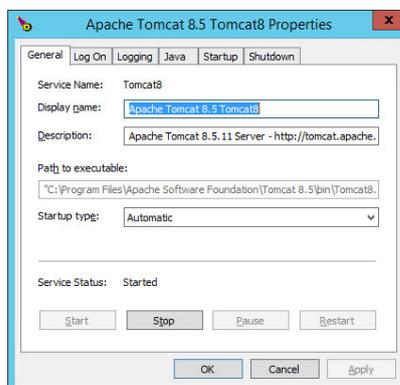
Setup Autostart

Tomcat will not automatically be started with Windows. This needs to be configured in the first tab, where you also start the service. Switch to "Automatic" under "Startup type" and save this changes with a click on "Apply".

Particular Caution: Java Update

Tomcat requires Java. The path for this is firmly defined in Tomcat. Java, however, changes the installation path with every update. Those needs to be configured in Tomcat after every update to guarantee the functionality of Tomcat.

To do this, switch to the tab "Java" and change the path to jvm.dll under "Java Virtual Machine" - normally this is

`C:\Program Files\Java\>\bin\server\jvm.dll` .
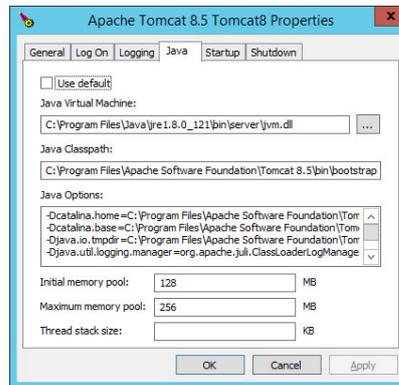
ElasticSearch

A quality version of this page, approved on *20 September 2019*, was based off this revision.

Contents

Linux

There is an official repo from the manufacturer: Documentation on manufacturer's website

Summary:

```
$ wget -qO - https://artifacts.elastic.co/GPG-KEY-elasticsearch | apt-key add -
$ apt-get install apt-transport-https
$ echo "deb https://artifacts.elastic.co/packages/6.x/apt stable main" > /etc/apt
/sources.list.d/elastic-6.x.list
$ apt-get update && apt-get install elasticsearch
$ /usr/share/elasticsearch/bin/elasticsearch-plugin install ingest-attachment
$ systemctl enable elasticsearch
```

Then please execute "service elasticsearch start". It takes about 10 seconds to start, then the service should appear on port 9200 under "netstat -tulpn".

Activating the ElasticSearch in BlueSpice

Go to the directory `<installpath-bluespice>/settings.d` . Open the file **020-BlueSpiceExtendedSearch.php** in a text editor.

In the second line is a code to activate the extension:

```
return; // Disabled. Needs Tomcat
```

You can either add a comment character (#) to the beginning of this line or delete the line completely, save the file and exit it.

Open a command line and change to the `<installpath-bluespice>` folder. Execute the following command:

```
php maintenance/update.php (Linux)
php maintenance\update.php (Windows))
```

⚠️ In Windows, make sure that the environment variables are set correctly to access the php command.

Note that you must update the file system permissions after running update.php.

When the script is finished with the "Done" message, the web service is successfully installed.

Installation of Git

A quality version of this page, approved on *17 October 2018*, was based off this revision.

Contents

Git is a version management tool that can be used, among other things, to record changes to files and restore them if necessary.

Git is required for some extensions if they are to be obtained directly from the publisher and are not to be installed using a ready-made installation package.

Linux

Under Debian/Ubuntu you can install Git with the following command:

```
apt install git
```

Windows

Download Git for Windows

Download the latest version of Git (64-bit Git for Windows Setup) from the official project website.

Installation of Git under Windows

Install Git into the folder *\bluespice\bin\git* with the default settings of the installer. Please pay attention to our notes on the page Folder structure under Windows, which we use in this complete installation manual - do not use spaces and special characters in folder names.

Memcached

A quality version of this page, approved on *17 October 2018*, was based off this revision.

Contents

This document describes how to set up the memcached server, with which you can achieve some speed optimization. For the configuration of BlueSpice, also read the paragraph "Activate Memcached" in the "Caching" article.

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).

Linux

Installation

Install the memcached server in the package manager of your distribution.

Configuration

Open the file that contains the memcached configuration (for example, /etc/memcached.con under Debian / Ubuntu).Locate the -m argument and increase the amount of memory available depending on the capabilities of your server:

```
-m 1024
```

Save and close the file, and restart memcached.

Check the Server

Verify that the memcached server is running:

```
netstat -tulpn | grep 11211
```

If you receive an output that is similar to this, memcached has started successfully:

```
root@bluespice:/var/www/bluespice# netstat -tulpn | grep 11211
tcp   0 0 127.0.0.1:11211   0.0.0.0:*     LISTEN      15163/memcached
udp   0 0 127.0.0.1:11211   0.0.0.0:*                 15163/memcached
root@bluespice:/var/www/bluespice#
```

Windows

The use of Nick Pirocanac's MemCacheD Manager is highly recommended. This makes the configuration very simple.

Requirements

An installed .NET Framework version 3.5 is required for the MemCacheD Manager.

Download

Download the MemCacheD Manager from software.informer.com.

Installation

During the installation you have hardly any setting possibilities, so you can "click" throuch the installation process without any changes.

Starting the MemCacheD Manager

Always start the MemCacheD Manager from the start menu **as administrator** (right click -> Run as administrator)!

Configuration

1. In MemCacheD Manager, click "Add Server"
2. Enter the local IP "127.0.0.1" under "Server Name" and click on "Apply"
3. Click "Add Instance"
4. Enter any desired name under "Instance Name"
5. Under Maximum Memory, increase the available memory depending on the capabilities of your server
6. Click "Apply"
7. Start the new created instance by clicking on "Yes"
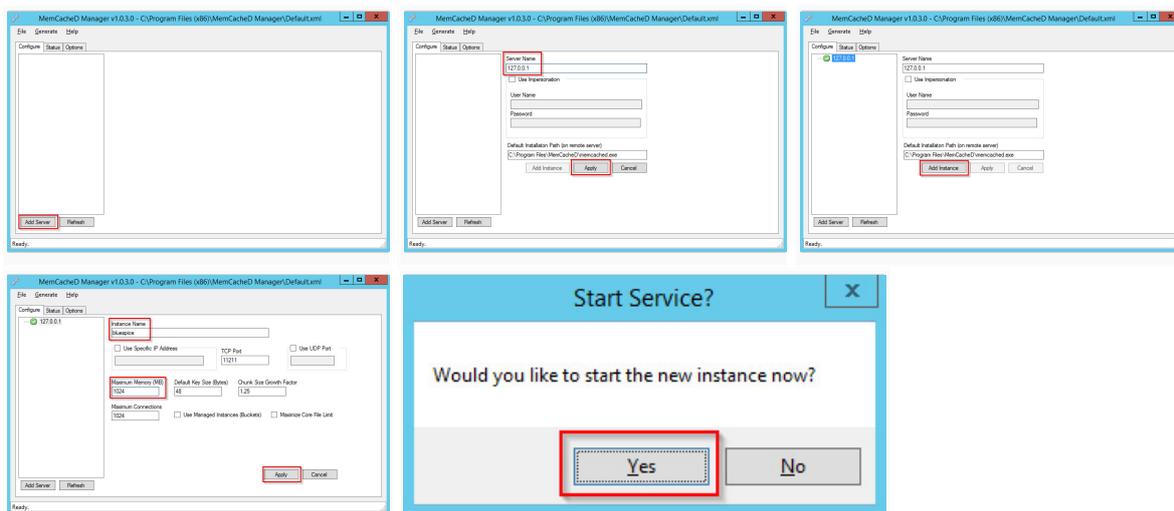
The Memcached Server is now installed and configured.

Installation of Node.js

A quality version of this page, approved on *20 September 2019*, was based off this revision.

Contents

System requirements

The installation of Node.js under Windows can be done via Git. Alternatively, the installation package can be obtained directly from NodeJS.
During the installation you have to make sure to install the Node Packet Manager NPM as well.

Under Debian/Ubuntu Nodejs and NPM can be installed as follows:

```
apt install npm
npm -g install npm@latest
```

Download Node.js for Windows

Download the current package of Node.js from the Project website. Please use the 64bit version if possible.

Installation of Node.js

Install Node.js into the *\bluespice\bin\nodejs* folder using the default settings of the installer. When selecting this folder, be sure to pay attention to our instructions on the page Folder Structure under Windows, which we apply in this complete installation manual.

Open a console with administrator rights and change to the installation directory of NodeJS (usually C:\Program Files (x86)\nodejs). Execute the following commands there:

```
npm install --global --production windows-build-tools
npm -g install npm@latest
```

Setup:Installation Manual/Services and system configuration /Parsoid

A quality version of this page, approved on *22 September 2021*, was based off this revision.

The installation of Parsoid requires the installation of Node.js.

The installation can be verified by

```
$ nodejs --version
$ node -v
$ npm -v
```

Contents

Installation and Configuration

Linux

Install Parsoid

There is no installation from package sources of the distribution. Parsoid is installed under */usr /local*.

For this we move to

```
$ cd /usr/local
```

Getting Parsoid:

```
$ git clone --depth 1 --branch v0.10.0 https://gerrit.wikimedia.org/r/p/mediawiki
/services/parsoid parsoid
```

Installing Parsoid:

```
$ cd parsoid
$ npm install
```

Checking the installation:

```
$ npm test
```

Default configuration:

```
$ cp config.example.yaml config.yaml
```

Configuring Parsoid

Opening the file config.yaml:

```
$ vi /usr/local/parsoid/config.yaml
```

For the basic installation of Parsoid it is sufficient to adjust the URL to the MediaWiki api (**uri:**) and the domain (**domain:**). We strongly recommend never to work with "localhost" but with the actual vhost alias, with which the MediaWiki can also be reached from outside. This avoids additional Apache configurations.

> ⚠️ When using the alias, it is essential to store it with a loopback IP (127.0.0.1) in /etc/hosts! Please also make sure that the web server does not bind to the external IP.

Start Parsoid manually

Parsoid can be started manually with console output:

```
$ npm start
```

Start Parsoid as Daemon

There are several ways to do this. Most likely pm2 is the best choice, because it combines several applications/services in nodejs.

Installation of pm2:

```
$ npm install -g pm2
```

Starting Parsoid as Daemon via pm2:

```
$ pm2 start /usr/local/parsoid/bin/server.js
```

Save the pm2 process list - this will add Parsoid to the pm2 services:

```
$ pm2 save
```

pm2 in den System-Autostart legen:

```
# Render startup-script for a specific platform, the [platform] could be one of:
#   ubuntu|centos|redhat|gentoo|systemd|darwin|amazon
$ pm2 startup [platform]
```

Windows

Open a console with administrator permissions and change to the installation directory of Node.js (if you followed our recommendations for the folder structure under Windows *\bluespice\bin\nodejs*). Execute the command npm install parsoid there.

The configuration of Parsoid under Windows is almost identical to Parsoid under Linux. In this manual, however, there is a distinction between the corresponding articles due to the different paths in the file system. Here, too, we adhere to the above folder structure and assume the paths in this documentation accordingly.

Creating the configuration file

Create the file *\bluespice\etc\parsoid.yaml*. Copy the following content into it:

```
worker_heartbeat_timeout: 300000

logging:
    level: info

services:
  # Enter the absolute path of the index.js in "module".
  # in the subfolder "lib" of the parsoid module of nodejs
  # The first "/" represents the top level of your drive.
  # Don't user "\" but "/"
  - module: /bluespice/bin/nodejs/node_modules/parsoid/lib/index.js
    entrypoint: apiServiceWorker
    conf:
        mwApis:
        # For "uri", enter the URL where you want the api.php of your MediaWiki
        # installation. This must not be a public address, you can use it with
        # "localhost", provided that your web server is configured accordingly.
        - uri: 'http://localhost/api.php'
          domain: 'bluespice'
```

The two relevant changes that you have to adjust yourself ("module" and "uri") are explained in the corresponding comment above.

Save and close the file.

Activating VisualEditor in BlueSpice

Change to the directory *<install path-bluespice>/settings.d*. Open the files

020-BlueSpiceVisualEditorConnector.php and

020-VisualEditor.php

in a text editor.

In the second line you will find a code that deactivates both extensions:

```
return; // Disabled. Needs Parsoid
```

Add a comment character **(#)** to the beginning of this line or delete this line completely, save the two files and exit them again.

Now open a command line and change to the folder *<installpath-bluespice>*. Execute the following command there:

```
php maintenance/update.php (Linux)
php maintenance\update.php (Windows))
```

> On Windows, make sure that the environment variables are set correctly to access the php command.

> Note that under Linux, after you run update.php, you must re-customize the file system permisisons.

As soon as the script is completed with the message "Done", the VisualEditor is successfully activated.

Installation and configuration of PhantomJS

A quality version of this page, approved on *11 July 2019*, was based off this revision.

Contents

Download

[Download directly from the project page](#)

Installation

An installation is not needed, neither on Linux, nor on Windows. Simply put the files in the corresponding binary folder (/usr/local/bin or C:\BlueSpice\bluespice_bin) and make them executable.

Include in your Wiki installation

```
$bsgArticlePreviewCapturePhantomJSExecutable = "/usr/local/bin/phantomjs";
```

On Windows, adjust accordingly ("C:\\BlueSpice\\bluespice_bin\\phantomjs.exe").

Setup:Installation Manual/Services and system configuration /Python

A [quality version](#) of this page, [approved](#) on *17 October 2018*, was based off this revision.

Download Python

Download the current Python package from the [project website](#).

Installation of Python

Install Python and be sure to do this for each user. Install into the folder *|bluespice|bin|python* - when selecting this folder, be sure to follow our instructions on the page [Folder Structure under Windows](#).

The most important information about installing Python can be found in these screenshots:
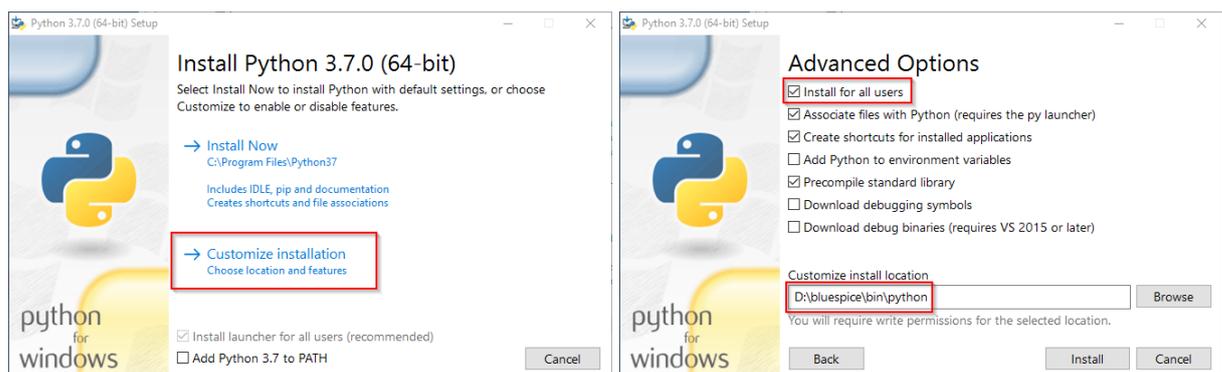
Installation of Pygmentize

Open the command prompt with admin privileges. Change to the *|bluespice|bin|python|Scripts* folder and enter the command *"pip install pygments"*. Wait until the following process is complete.

You may be informed that your version of *pip.exe* is outdated. You can update it with the command *python -m pip install --upgrade pip*:

System Configuration

A quality version of this page, approved on *31 July 2017*, was based off this revision.

- Environment variables (Windows)
- Apache Tomcat
- Memcached

Setup:Installation Manual/System Configuration/Apache Tomcat

Redirect to:

- Setup:Installation Guide/System Preparation/Windows/Apache Tomcat

Setup:Installation Manual/System Configuration/ElasticSearch

Redirect to:

- Setup:Installation Guide/Services and system configuration/ElasticSearch

Setup:Installation Manual/System Configuration/Environment Variables

Redirect to:

- Setup:Installation Guide/Services and system configuration/Environment Variables

Setup:Installation Manual/System Configuration/Memcached

Redirect to:

- Setup:Installation Guide/Services and system configuration/Memcached

Webservices

A quality version of this page, approved on *20 September 2019*, was based off this revision.

- Extended Search
- PDF-Export
- VisualDiff **(BlueSpice pro only)**
- LatexRenderer **(BlueSpice pro only)**

Webservice: Extended Search

Redirect to:

- Setup:Installation Guide/Advanced/ExtendedSearch Configuration

Contents

This document describes the installation of the extended search for BlueSpice. Please take into account, that the Apache Tomcat server must be installed and configured completely.

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).
- The placeholder `<tomcat-webapps>` stands for the path to the Webapps directory of your Tomcat server, e.g. `C:\Program Files\Apache Software Foundation\Tomcat 8.5\webapps` (Windows) or `/var/lib/tomcat8/webapps` (Linux).

Setting-up the Solr-Cores

Create the following directory:

```
/opt/bluespice/data (Linux)
C:\BlueSpice\bluespice_data (Windows)
```

Move the directory "solr" from `<installpath-bluespice>/extensions/BlueSpiceExtensions/ExtendedSearch/webservices` to the just created directory.

Switch to this directory and go to the subfolder `bluespice/conf/lang`. Choose `stopwords_<LANG>.txt` there, which matches your language and replace the file `stopwords.txt` in the folder `bluespice/conf` (one level higher) with this file.

⚠️ **With Linux, please transfer the folder /opt/bluespice/data/solr recursively to the user and group, under which the Tomcat server is running.**

Configurating Tomcat

The Tomcat server needs to know the directory to the Solr core. The following describes how to configure this.

Linux

The distributions differ at this point regarding the configuration file. How this needs to be configured with the distribution you are using can be found in the documentation of the distributor. The following steps explain the configuration using Debian/Ubuntu and Tomcat 8:

Open the file `/etc/default/tomcat8` and add the following line at the end:

```
JAVA_OPTS="${JAVA_OPTS} -Dsolr.solr.home=/opt/bluespice/data/solr"
```

Save the changes and exit the file.

Windows

Open the configuration interface of Tomcat and switch to the tab "Java". At the field "Java Options", add this as the last point in the line:

```
-Dsolr.solr.home=C:\BlueSpice\bluespice_data\solr
```
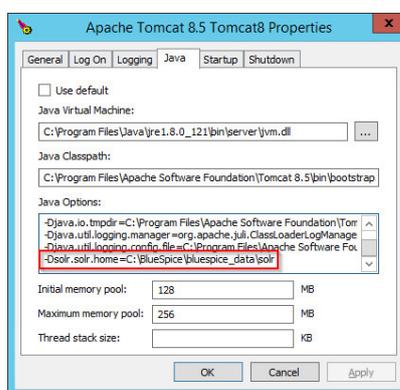

Save this settings by clicking at "Apply".

Copying of the Solr Application

Move the file "solr.war" from the directory `<installpath-bluespice>/extensions/BlueSpiceExtensions/ExtendedSearch/webservices` to `<tomcat-webapps>`

Restarting Tomcat

Restart the Tomcat Webserver like described here.

Activating the Extended Search in BlueSpice

Go to the directory `<installpath-bluespice>/extensions/BlueSpiceExtensions` . If the file **BlueSpiceExtensions.local.php** does not exist already, please copy the file **BlueSpiceExtensions.default.php** and paste it in the folder. Rename it to **BlueSpiceExtensions.local.php**. Open this file in a text editor.

Scroll to the end of the file. There you can find the following line:

```
#require_once( __DIR__."/ExtendedSearch/ExtendedSearch.setup.php" );
```

Delete the first character (**#**), save and exit the file.

Open a comman line and change to the directory `<installpath-bluespice>` . Run the following command there:

```
php maintenance/update.php (Linux)
php maintenance\update.php (Windows))
```

With Windows, please take care that the environment variables are set correctly to access the command "php".

With Linux. please take care that after running the update.php, the file system permissions must be set again.

As soon as the script finished its work with the message "Done", run a further maintenance script to create the search index:

```
php extensions/BlueSpiceExtensions/ExtendedSearch/maintenance/searchUpdate.php (Linux)
php extensions\BlueSpiceExtensions\ExtendedSearch\maintenance\searchUpdate.php (Windows
))
```

Running this script may take some time. This depends on the amount of content, which has been created in the wiki. When the script was completely executed, the extended search is installed successfully and is ready to use.