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Setup:Installation Manual/Webservices/Extended Search

Redirect to:

- [Setup:Installation Guide/Advanced/ExtendedSearch Configuration](#)

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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.

Configuring 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:

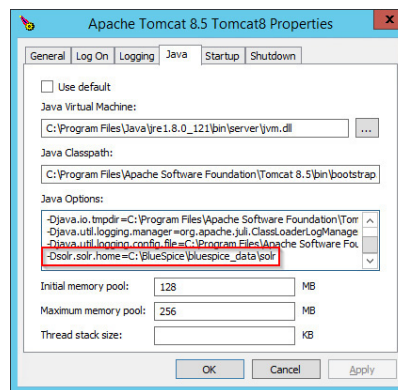
```
JAVA_OPTS="${JAVA_OPTS} -Dsolr.solr.home=/opt/bluespice/data/solr"
```

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 command 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.

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.

Apache Tomcat

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

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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.

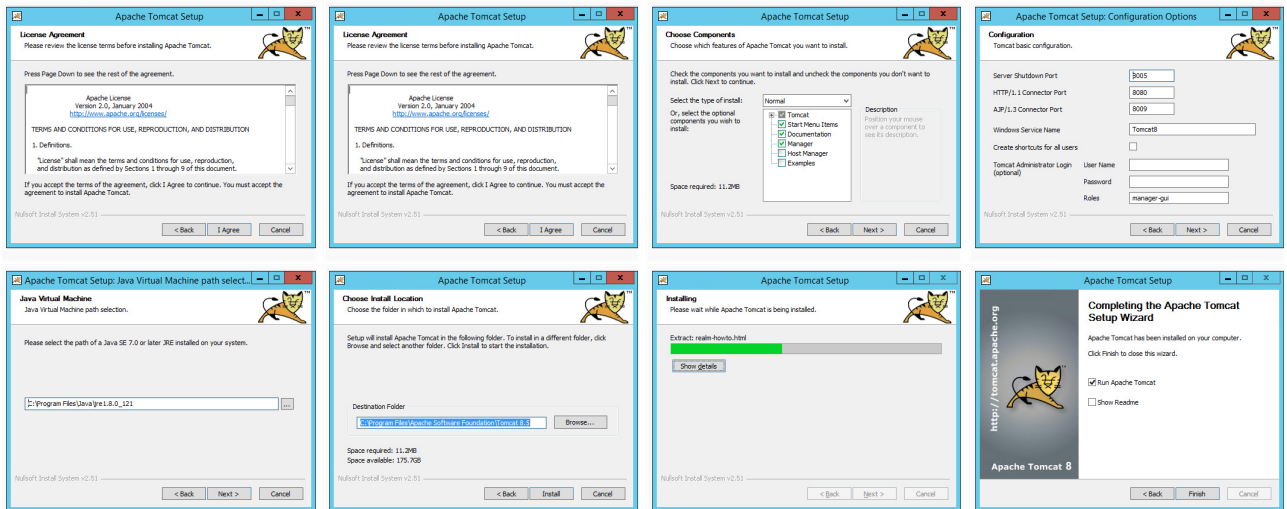
Windows

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 correctly 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

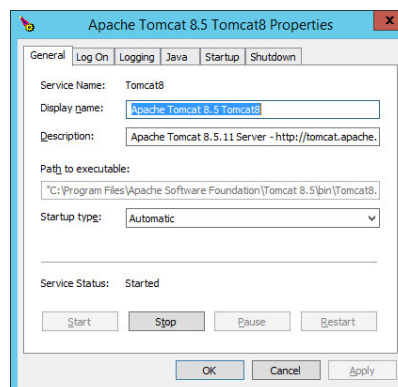
Special features under Windows

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

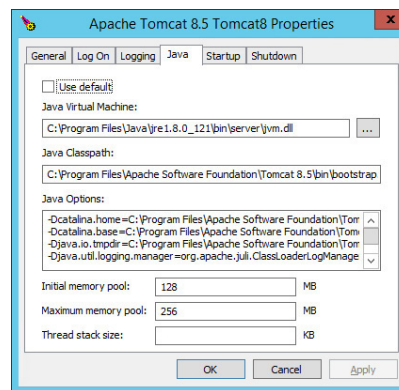
Tomcat will not automatically be started with Windows. This needs to be configured in the first tab, where you also start the service. Switch to "Automatic" under "Startup type" and save this changes with a click on "Apply".

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 .
```



Setup:Installation Manual/System Configuration/Apache Tomcat

Redirect to:

- [Setup:Installation Guide/System Preparation/Windows/Apache Tomcat](#)

Setup:Installation Manual/System Configuration/Environment Variables

Redirect to:

- [Setup:Installation Guide/Services and system configuration/Environment Variables](#)