

Contents

1. Setup:Installation Guide/Webservices/PDF-Export	2
2. Setup:Installation Guide/Security Settings/File System Permissions	5
3. Setup:Installation Guide/System Preparation/Windows/Apache Tomcat	10

Webservice: PDF-Export

Contents

1	Moving the BShtml2PDF Application	3
2	Checking the functionality	3
3	Enable PDF Export in BlueSpice	3
4	Installing BlueSpice 3 with installer	4
5	Troubleshooting	5
6	Download Web services	5

Make sure that the [Apache Tomcat server](#) is completely installed and configured on the BlueSpice server before setting up PDF-Export.

Moving the BShtml2PDF Application

Important! Starting in BlueSpice 4.x, BShtml2 is no longer in the distribution and has to be downloaded and installed separately.

Download: <https://bluespice.com/filebase/html2pdf/>

Download the file "BShtml2PDF.war" and copy it to `<tomcat-webapps>`

The default paths are as follows:

- C:\Program Files\Apache Software Foundation\Tomcat 10.0\webapps (**Apache Tomcat on Windows**)
- /var/lib/jetty9/webapps (**Jetty on Debian**)

Or run the command `sudo mv /var/www/bluespice/w/extensions/BlueSpiceUEModulePDF/webServices/BShtml2PDF.war /var/lib/jetty9/webapps` in the terminal. (**Linux**)

The application usually starts automatically without the need for rebooting the application server.

Checking the functionality

The correct functionality of the BShtml2PDF service can be checked as follows:

On Windows, open Internet Explorer using the URL `http://localhost:8080/BShtml2PDF`. With correct functionality, you should see the following website:



Enable PDF Export in BlueSpice

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

Or open the 020-BlueSpiceUEModulePDF.php in the terminal using the command `sudo nano /var/www/bluespice/w/settings.d/020-BlueSpiceUEModulePDF.php`. (**Linux**)

In the second line is the 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.

Note: Give the user "Everyone" full access to the Temp folder under C:\Windows.

Installing BlueSpice 3 with installer

1. Open `localhost/w` in your Browser and follow the [instructions](#).
2. For BlueSpice WikiFarm, move the .htaccess and web.config files to C:\bluespice\var

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

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

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

Note: Note that you must update the [file system permissions](#) after running update.php.

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

```
...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_shal 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_shal column
...doing rev_id from 1 to 200
Populating ar_shal column
...archive table seems to be empty.
Populating ar_shal column legacy rows
rev_shal and ar_shal population complete [0 revision rows, 0 archive rows].
Populating img_shal field

Done 0 files in 0.0 seconds
Fixing protocol-relative entries in the externallinks table...
Done, 0 rows updated.
Populating fa_shal 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#
```

Troubleshooting

If there is a problem with the PDF export in BlueSpice, first check the [file system permissions](#).

Download Web services

If the required war-file is missing in your installation package, you can download it here:

[Webservices](#).

File System Permissions

Contents

1	Tips for this Document	7
2	Affected Folders	7
3	Assignment of Permissions with Windows	7
4	Assignment of Permissions with Linux	8

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).

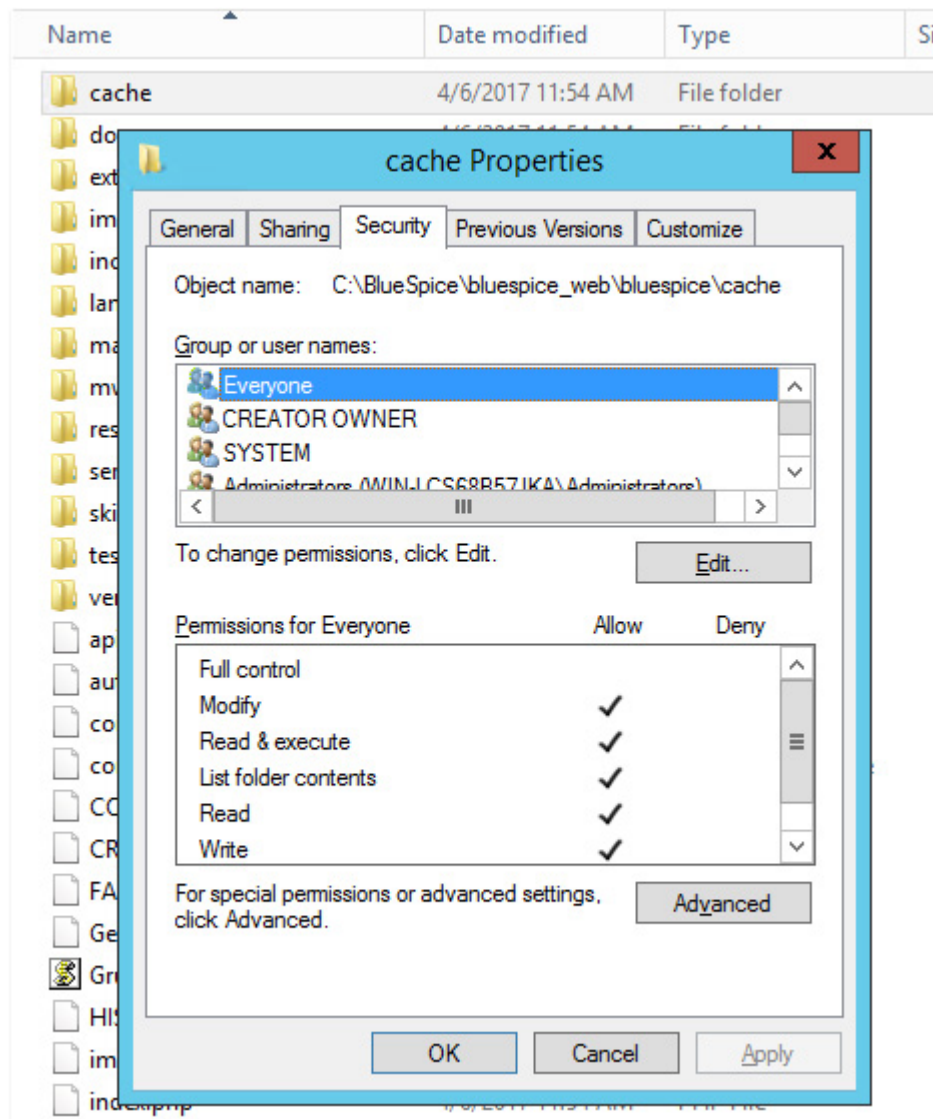
Affected Folders

The folders, which require write permissions, are:

- `<installpath-bluespice>/cache`
- `<installpath-bluespice>/images`
- `<installpath-bluespice>/extensions/BlueSpiceFoundation/config` (only until BlueSpice v. 4.2.x) - v4.2.x
- `<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/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: 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.

Apache Tomcat on Windows

Contents

1 Download	11
2 Installing Apache Tomcat	12
3 Configuring Apache Tomcat	15
4 Reviewing the installation	18
5 Installing the web apps	18
6 Next step	18



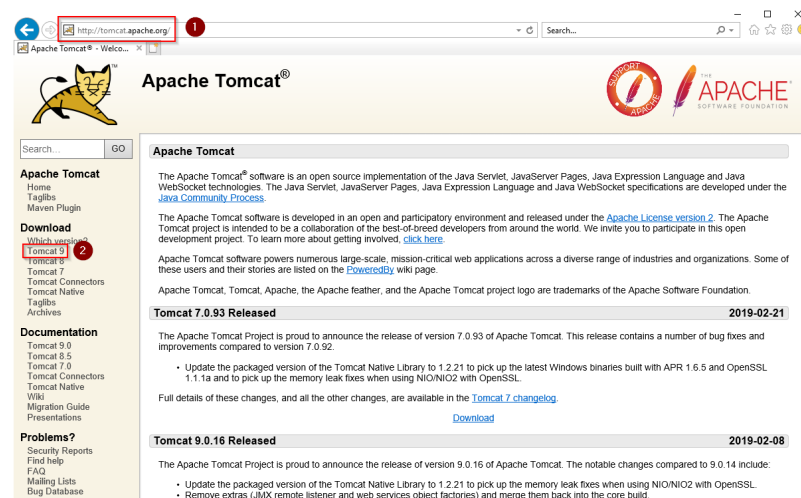
Apache Tomcat is required for the PDF export. The following steps are optional and only required if you want to use this service in your BlueSpice installation.



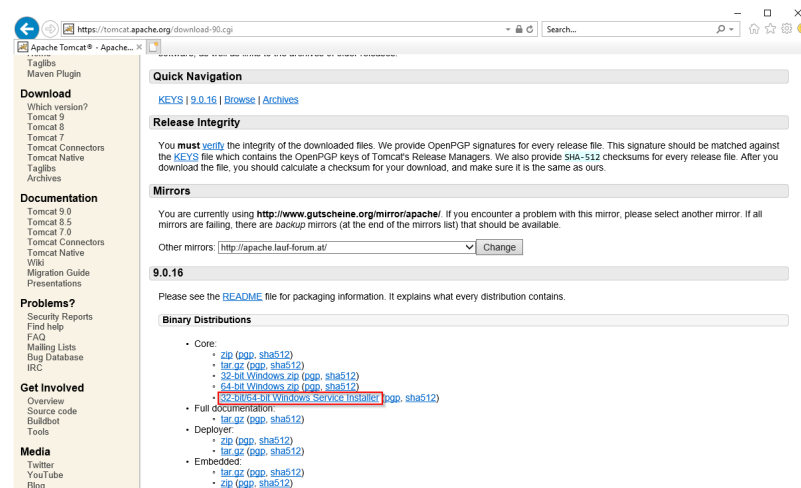
Operation of Apache Tomcat requires [OpenJDK](#). If you have not installed it, follow the link above.

Download

Open the [official download page](#) (1) in your browser and go to the version 10 (2) download page.



Download the "32-bit/64-bit Windows Service Installer"



Please note that the download on your Windows server with Internet Explorer only works if you have configured the Internet Explorer Advanced Security Settings in the Server Manager. Please refer to the technical



documentation from Microsoft.

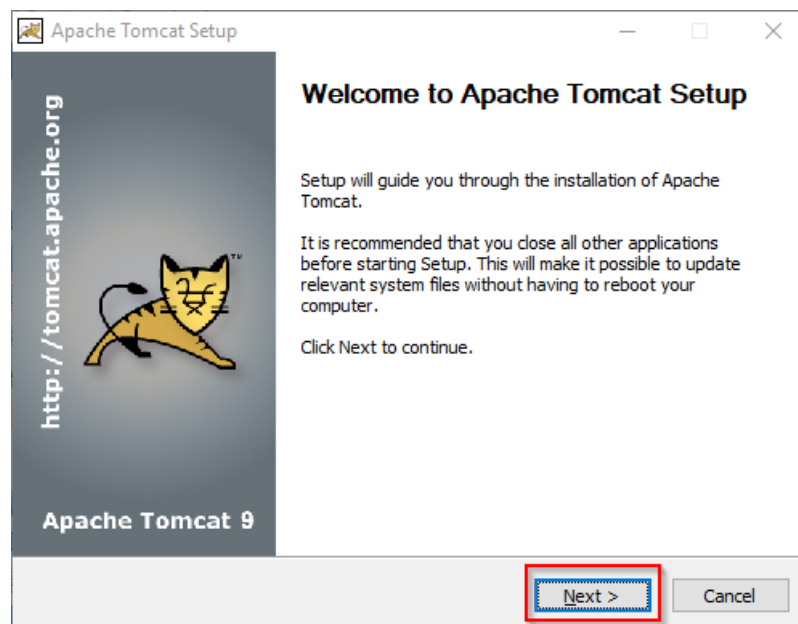


This guide uses version 9.0.16 of Apache Tomcat and is just an example of the latest version that you can download at the time of installation.

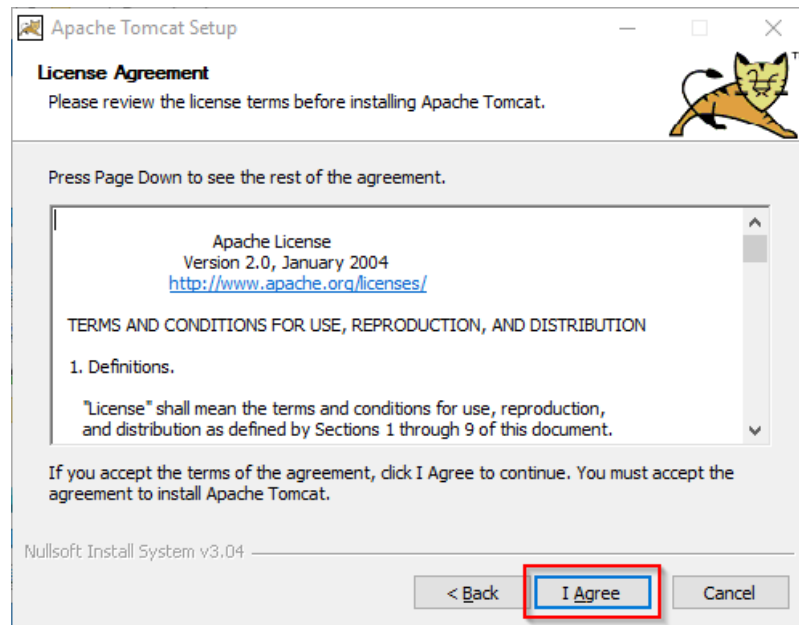
Installing Apache Tomcat

Open the downloaded file "apache-tomcat-10.0.12.exe".

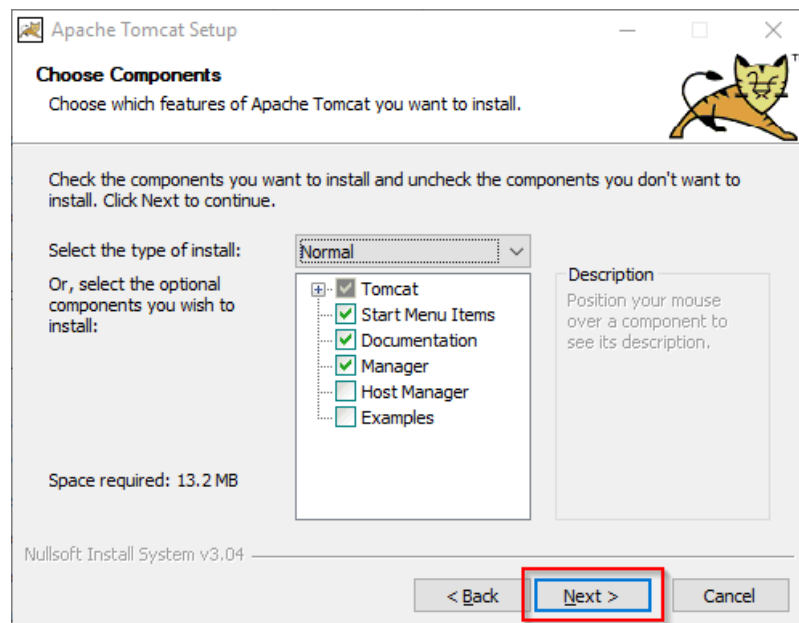
Start the installation by clicking "Next >":



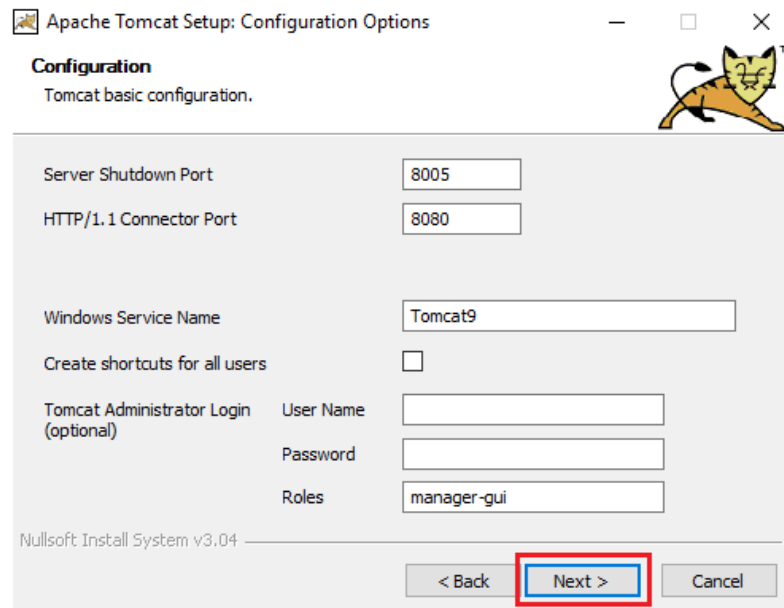
Confirm the license agreement by clicking "I Agree":



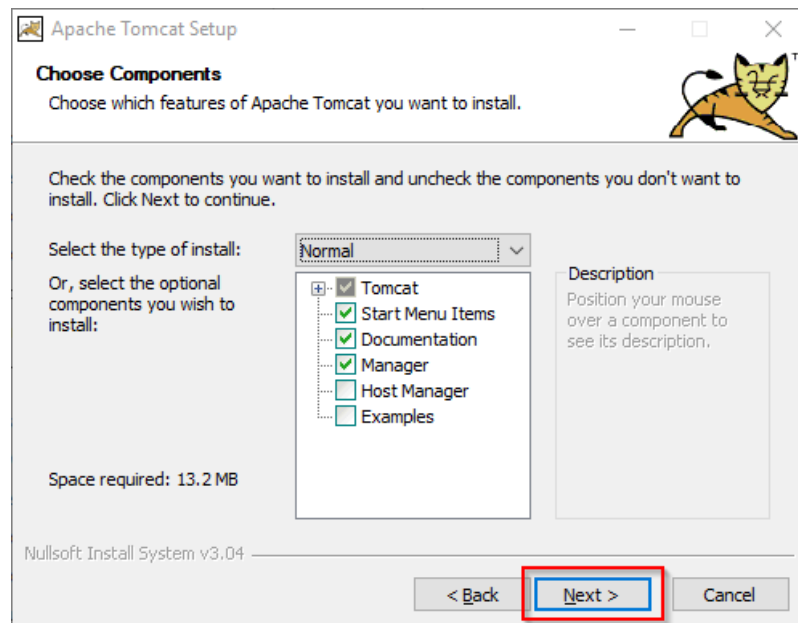
Click "Next >":



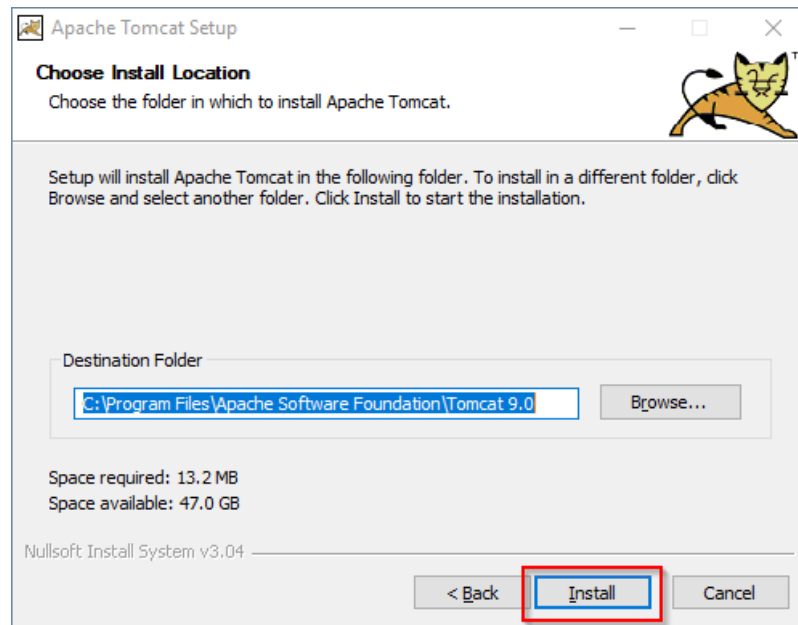
Click "Next >" again:



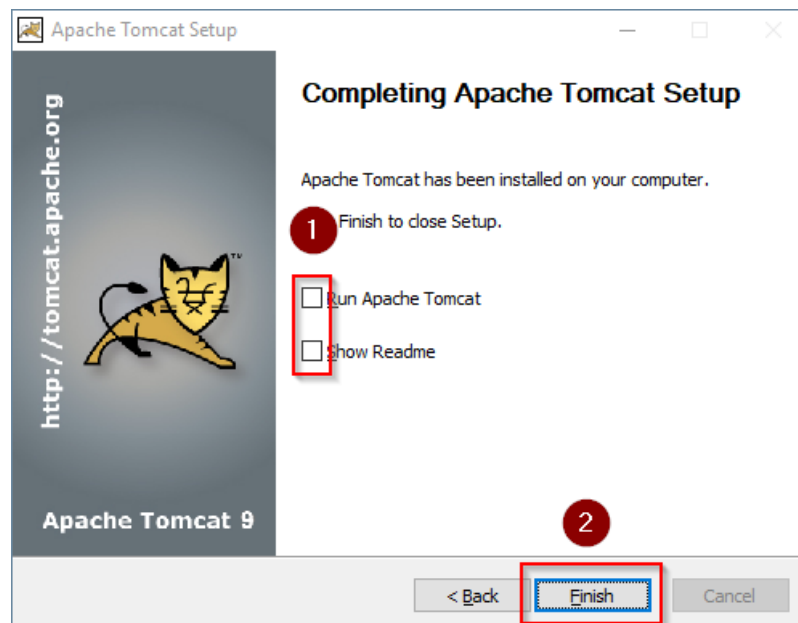
Select (1) the home directory of your [OpenJDK Installation](#) (2) and click "Next>" (3):



Start the Tomcat Installation:



At the end of the installation, leave both preselected checkboxes (1) and finish the setup (2)



Configuring Apache Tomcat

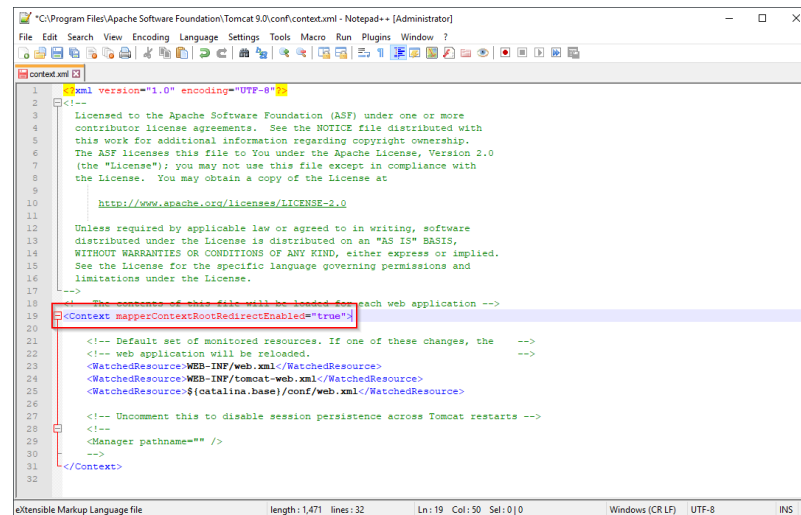
Change to the installation directory of Tomcat. By default, you can find it at `C:\Program Files\Apache Software Foundation\Tomcat 9.0\conf`.

Open the context.xml file in a text editor and replace the one-time line

```
<Context>
```

with

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



```
1 <?xml version="1.0" encoding="UTF-8" ?>
2 <!--
3 Licensed to the Apache Software Foundation (ASF) under one or more
4 contributor license agreements. See the NOTICE file distributed with
5 this work for additional information regarding copyright ownership.
6 The ASF licenses this file to You under the Apache License, Version 2.0
7 (the "License"); you may not use this file except in compliance with
8 the License. You may obtain a copy of the License at
9
10 http://www.apache.org/licenses/LICENSE-2.0
11
12 Unless required by applicable law or agreed to in writing, software
13 distributed under the License is distributed on an "AS IS" BASIS,
14 WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
15 See the License for the specific language governing permissions and
16 limitations under the License.
17 -->
18 <!-- The contents of this file will be loaded for each web application -->
19 <Context mapperContextRootRedirectEnabled='true' />
20
21 <!-- Default set of monitored resources. If one of these changes, the
22 <!-- web application will be reloaded. -->
23 <WatchedResource>WEB-INF/web.xml</WatchedResource>
24 <WatchedResource>WEB-INF/tomcat-web.xml</WatchedResource>
25 <WatchedResource>${catalina.base}/conf/web.xml</WatchedResource>
26
27 <!-- Uncomment this to disable session persistence across Tomcat restarts -->
28 <!--
29 <Manager pathname="" />
30 -->
31 </Context>
32
```

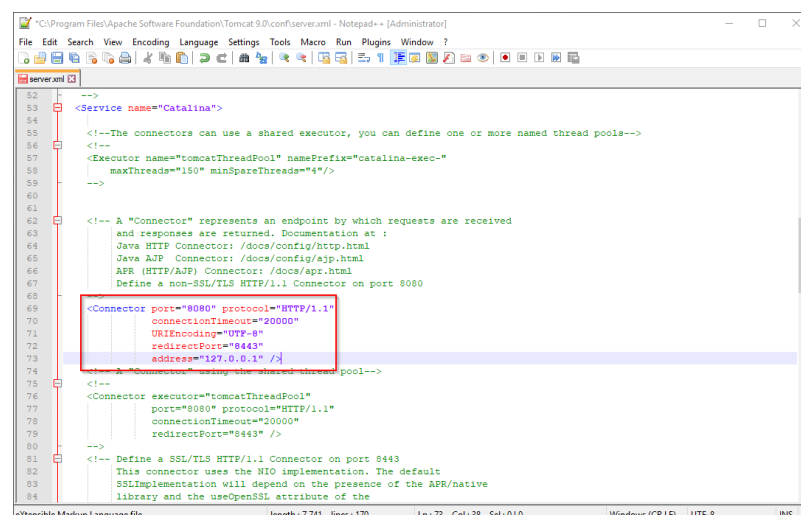
Save and close the file.

In the same directory, open the file server.xml in a text editor and make sure that the complete block

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

looks like this:

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

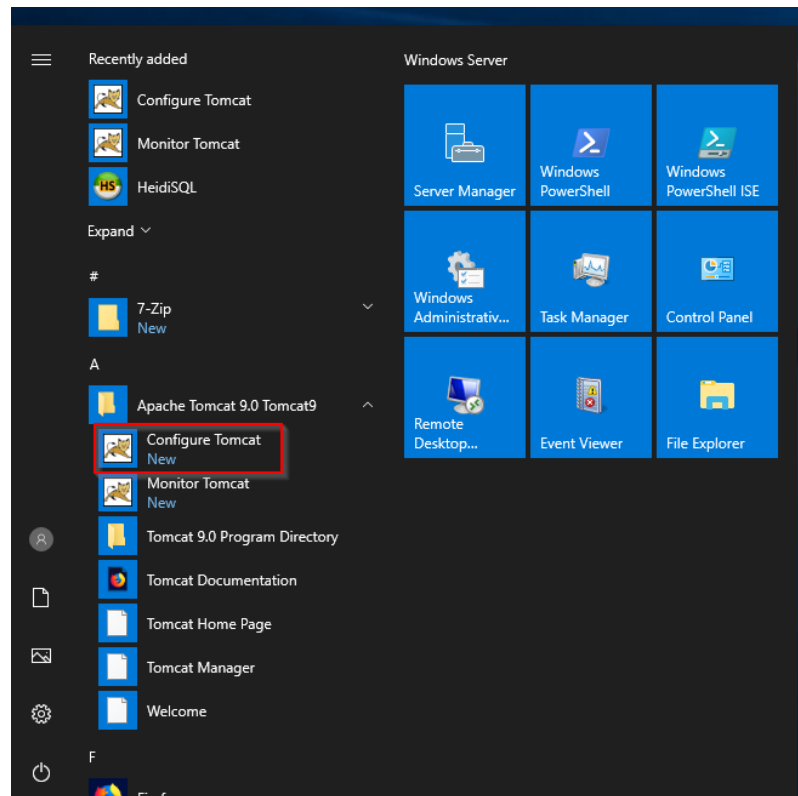


```
52 <!--
53 <Service name="Catalina">
54
55 <!--The connectors can use a shared executor, you can define one or more named thread pools-->
56 <!--
57 <Executor name="tomcatThreadPool" namePrefix="catalina-exec-"
58 maxThreads="150" minSpareThreads="4"/>
59 -->
60
61 <!-- A "Connector" represents an endpoint by which requests are received
62 and responses are returned. Documentation at :
63 Java HTTP Connector: /docs/config/http.html
64 Java AJP Connector: /docs/config/ajp.html
65 AFR (HTTP/AJP) Connector: /docs/apr.html
66 Define a non-SSL/TLS HTTP/1.1 Connector on port 8080
67
68 <Connector port="8080" protocol="HTTP/1.1"
69 connectionTimeout="20000"
70 URIEncoding="UTF-8"
71 redirectPort="8443"
72 address="127.0.0.1" />
73
74 <!-- A "Connector" using the shared thread pool-->
75 <!--
76 <Connector executor="tomcatThreadPool"
77 port="8080" protocol="HTTP/1.1"
78 connectionTimeout="20000"
79 redirectPort="8443" />
80 -->
81 <!-- Define a SSL/TLS HTTP/1.1 Connector on port 8443
82 This connector uses the NIO implementation. The default
83 SSLImplementation will depend on the presence of the AFR/native
84 library and the useOpenSSL attribute of the

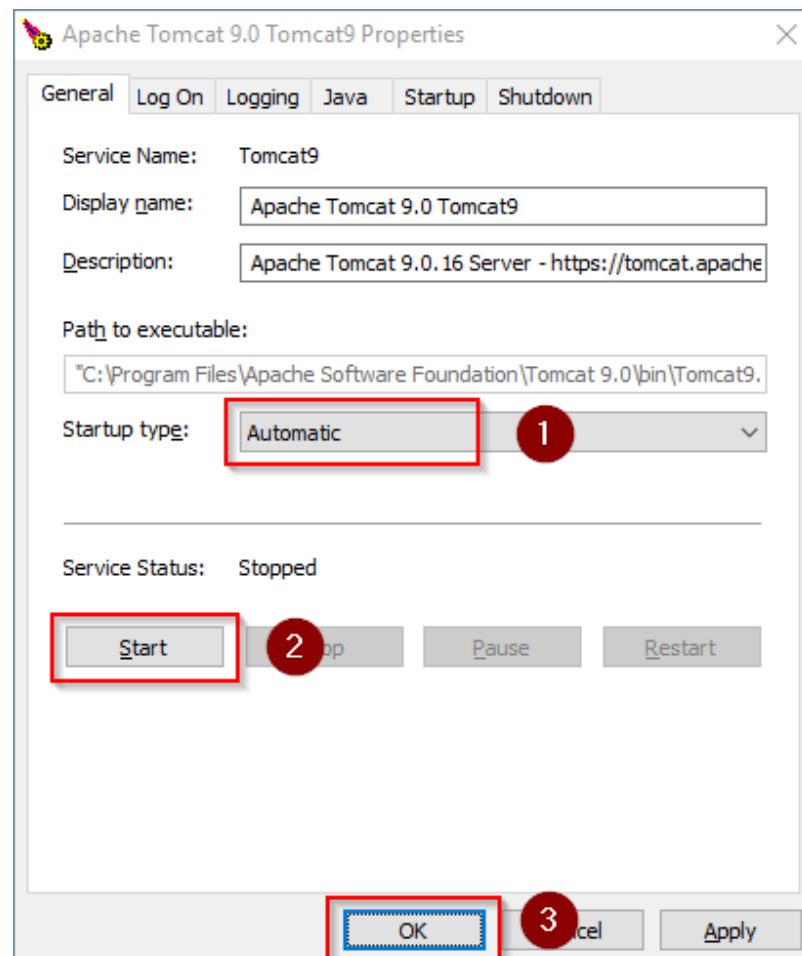
```

Save and close the file.

Find the entry "Configure Tomcat" in the start menu and open it:



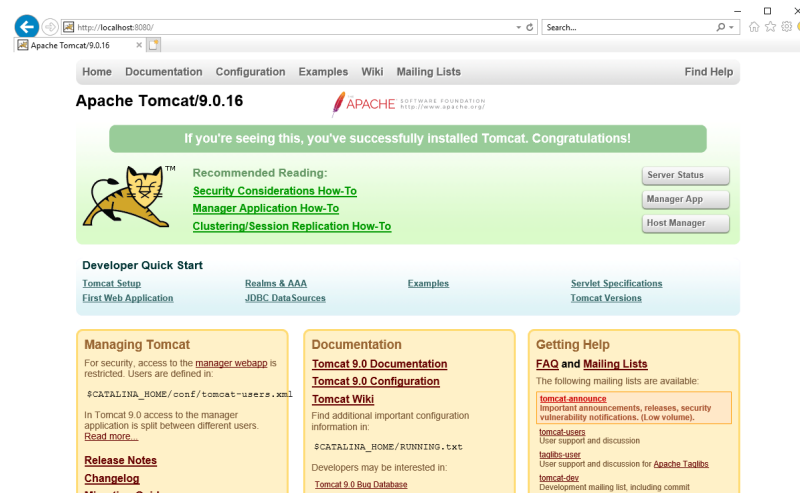
Set "Startup type" to "Automatic" (1) and start Tomcat (2). Then exit the configuration console (3):



Reviewing the installation

To check if Tomcat is working correctly, open the address <http://localhost:8080/> in a browser on the server.

You should now see the homepage of the Tomcat server:



Installing the web apps

[[File:{{{file}}}]] **Please unzip the installed BlueSpice folder and move the subfolder to C: |center]]** **\bluespice\var\www. Rename the folder to "w".**

After the successful installation of BlueSpice, please follow the next steps to install the web services and activate the respective BlueSpice extension:

- [PDF-Export](#)

Next step

If you have completed all steps successfully, you can delete the previously downloaded "apache-tomcat-10.0.11.exe" file from your hard drive and continue to the next step "[Elasticsearch](#)".