

## Contents



A quality version of this page, approved on 2 August 2021, was based off this revision.

### Contents

1	Download	. 3
2	Installing Apache Tomcat	. 4
3	Configuring Apache Tomcat	. 8
4	Reviewing the installation	11
5	Installing the web apps	12
6	Next step	12





Apache Tomcat is required for the PDF export, VisualDiff (BlueSpice pro only) and the LaTeX renderer (BlueSpice pro only). The following steps are optional and only required if you want to use one or more of these services 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 9 (2) download page.



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



https://tom	mcat.apache.org/download-90.cgi	sarch P - G	1 57 69
Apache Tomcat® - Apac	ache X		
Taglibs Maven Plugin	Quick Navigation		
Download Which version?	KEYS   9.0.16   Browse   Archives		
Tomcat 9 Tomcat 8	Release Integrity		
Tomcat 7 Tomcat Connectors Tomcat Native Taglibs Archives	You <b>must</b> yearly the integrity of the downloaded files. We provide OpenPGP signatures for every the KEYS file which contains the OpenPGP keys of Torncat's Release Managers. We also provid download the file, you should calculate a checksum for your download, and make sure it is the sa	r release file. This signature should be matched ag de SHA-512 checksums for every release file. Afte ame as ours.	jainst r you
Documentation	Mirrors		
Tomcat 9.0 Tomcat 8.5 Tomcat 7.0 Tomcat Connectors	You are currently using http://www.gutscheine.org/mirror/apache/. If you encounter a problem mirrors are failing, there are backup mirrors (at the end of the mirrors list) that should be available Other mirrors [http://apache.lauf-forum.at/ Change	n with this mirror, please select another mirror. If a le.	,I
Wiki Migration Guide	9.0.16		
Presentations	Please see the README file for packaging information. It explains what every distribution contain	ins.	
Problems? Security Reports			
Find help FAQ Mailing Lists Bug Database IRC	Binary Distributions - Core: - 21p (pgp. sha512) - Br.gz (pgp. sha512)		
Get Involved	<u>32-bit Windows zip (pgp, sha512)</u> <u>64-bit Windows zip (pgp, sha512)</u>		
Overview Source code Buildbot Tools	<ul> <li><u>322btf64-bit Windows Service Installer</u> [pgp. sha512)</li> <li>Fuil documentation:</li> <li>tar.gz (pgp. sha512)</li> <li>Deployer:</li> </ul>		
Media	<ul> <li><u>zip (pgp, sna512)</u></li> <li><u>tar.gz (pgp, sha512)</u></li> </ul>		
Twitter	Embedded:     tar (z (og) sha512)		
Blog	<ul> <li>zip (pgp, sha512)</li> </ul>		



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-9.0.16.exe".

Start the installation by clicking "Next >":





Confirm the license agreement by clicking "I Agree":

💐 Apache Tomcat Setup —	
License Agreement Please review the license terms before installing Apache Tomcat.	
Press Page Down to see the rest of the agreement.	
Apache License Version 2.0, January 2004 <u>http://www.apache.org/licenses/</u>	^
TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION 1. Definitions.	
"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.	~
If you accept the terms of the agreement, click I Agree to continue. You must agreement to install Apache Tomcat.	accept the
Nullsoft Install System v3.04 —	Cancel

#### Click "Next >":





🗮 Apache Tomcat Setup		– 🗆 X
Choose Components Choose which features of Apac	che Tomcat you want to install.	
Check the components you wa install. Click Next to continue.	nt to install and uncheck the comp	onents you don't want to
Select the type of install:	Normal 🗸	
Or, select the optional components you wish to install:	Tomcat     Start Menu Items     Occumentation     Manager     Host Manager     Examples	Description Position your mouse over a component to see its description.
Space required: 13.2 MB		
Nullsoft Install System v3.04		
	< <u>B</u> ack	Next > Cancel

#### Click "Next >" again:

減 Apache Tomcat Setup: Cor	nfiguration Opt	ions	-	
Configuration Tomcat basic configuration.				
Server Shutdown Port		8005		
HTTP/1.1 Connector Port		8080		
Windows Service Name		Tomcat9		
Create shortcuts for all users				
Tomcat Administrator Login	User Name			]
(optional)	Password			]
	Roles	manager-gui		]
Nullsoft Install System v3.04				
		< Back Ne	ext >	Cancel

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





減 Apache Tomcat Setup: Java Virtual Machine path selection	_		×
Java Virtual Machine Java Virtual Machine path selection.		X	
Please select the path of a Java SE 8.0 or later JRE installed on your s	ystem.		
2 C:\bluespice\bin\jdk-11.0.2			
Nullsoft Install System v3.04	dt >	Can	cel

Start the Tomcat Installation:

😹 Apache Tomcat Setup		—		$\times$
Choose Install Location			-	7.7
Choose the folder in which to install Apache Tomcat.			X	X
Setup will install Apache Tomcat in the following folder. To Browse and select another folder. Click Install to start th	o install in a diffe e installation.	erent fol	der, dick	
Destination Folder				
C:\Program Files\Apache Software Foundation\Tomo	at 9.0	B <u>r</u> ows	se	
Space required: 13.2 MB				
Space available: 47.0 GB				
Nullsoft Install System v3.04				
< <u>B</u> a	ck <u>I</u> nsta	11	Cano	el

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">



📔 *C:\	Program Files\Apache Software Foundation\Tomcat 9.0\conf\context.xml - Notepad++ [Administrator]	-	×
File Ed	lit Search View Encoding Language Settings Tools Macro Run Plugins Window ?		x
۵ 🖨	⊟ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		
🔚 conte	t anni 🔀		
1	<pre></pre> <pre>&lt;</pre>		
2	Hkle-		
3	contributor license agreements - See the NOTICE file distributed with		
5	this work for additional information recarding convicts overship		
6	The ST live constraints Antonimotoric regarding cograph Official Provide The St live of the file to You under the Anache Livere Version 2 0		
7	(the "license"): you may not use this file event in compliance with		
8	the License, You may obtain a conv 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	L>		
18	C: The contents of this file will be loaded for each web application>		
19	<pre>Context mapperContextRootRedirectEnabled="true"&gt;</pre>		
21	Default set of monitored resources. If one of these changes, the		
22	<pre><!-- web application will be reloaded--></pre>		
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	⊨ </p		
29	<manager pathname=""></manager>		
30	>		
31	L		
32			
eXtensib	e Markup Language file length : 1,471 lines : 32 Ln : 19 Col : 50 Sel : 0   0 Windows (CR LF) UTF-0	3	INS .

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" />
```





Save and close the file.

Recently added Windows Server Configure Tomcat Ŀ Σ 놆 Monitor Tomcat Windows PowerShell Windows PowerShell ISE HeidiSQL HS ver Manage Expand ÷ <u>e</u>-E ł 7-Zip New Task Manager <u>4</u> 0 Apache Tomcat 9.0 Tomcat9 Remote Desktop nfigure Tomcat Event Viewe 8 Tomcat 9.0 Program Directory ۲ Tomcat Documentation Ľ Tomcat Home Page Ś Tomcat Manager <u>ت</u> Welcome ம்

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):



Apache Tomcat	9.0 Tomcat9 Pro	perties		$\times$
General Log On	Logging Java	Startup	Shutdown	
Service Name:	Tomcat9			
Display <u>n</u> ame:	Apache Tomcat	t 9.0 Tomo	at9	
Description:	Apache Tomcat	t 9.0. 16 Se	erver - https://tom	cat.apache
Path to executabl	e:			
"C:\Program File	s\Apache Softwar	re Foundat	ion\Tomcat 9.0\bi	n\Tomcat9.
Startup typ <u>e</u> :	Automatic		1	~
Service Status:	Stopped			
<u>S</u> tart	<b>2</b> pp	<u>P</u> a	ause <u>R</u>	estart
		ОК	3 cel	Apply

### 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:





http://localhost:8080/				+ م
Home Documentat	ion Configuration	Examples Wiki Mailing Lists		Find Help
Apache Tomca	t/9.0.16	APACHE SOFTWARE FOUNDATION		
	f you're seeing thi	s, you've successfully installed To	omcat. Congratulations!	
	Recommended Rea	ading:		Server Status
	Security Considerati	ons How-To		Manager App
	Clustering/Session F	Replication How-To		Host Manager
Developer Quick St	tart			
Tomcat Setup	Realms & A	AA Examples	Servlet Specifica	tions
First Web Application	JDBC DataS	ources	Tomcat Versions	
Managing Tomca	t	Documentation	Getting Help	
For security, access to the	e <u>manager webapp</u> is	Tomcat 9.0 Documentation	FAQ and Mailing List	ts
CARATINE HOME (and	f/herest-users up1	Tomcat 9.0 Configuration	The following mailing lists	are available:
CRIRDINA_HOME/ 60	ir/ compac-users.xmr	Tomcat Wiki	tomcat-announce Important announcements	, releases, security
application is split between	en different users.	information in:	vulnerability notifications.	(Low volume).
Dependences		SCATALINA_HOME/RUNNING.txt	User support and discussion	
Read more			loadbo user	
Release Notes		Developers may be interested in:	User support and discussion	for Apache Taglibs

### Installing the web apps

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

- PDF-Export
- VisualDiff (BlueSpice pro only)
- LatexRenderer (nurBlueSpice pro only)

### Next step

If you have completed all steps successfully, you can delete the previously downloaded "apachetomcat-9.0.16.exe" file from your hard drive and continue to the next step " Elasticsearch".