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## Setup:Installation Guide/System Preparation/Windows

This part of the installation guide provides step-by-step instructions for the Windows system preparation. This is necessary if you want to install BlueSpice afterwards.

Follow these chapters in the order listed. At the end of each chapter you will see a link to the next chapter.

Please also pay attention to the chapter "Introduction". It contains additional information about this manual.

- [Introduction](#)
- [Setting the system rights of the temporary Windows folder](#)
- [.NET Framework 3.5](#)
- [IIS-Webserver](#)
- [urlrewrite](#)
- [Microsoft Visual C++ Redistributable](#)
- [PHP Manager](#)
- [PHP](#)
- [MariaDB](#)
- [OpenJDK](#)
- [Apache Tomcat](#)
- [OpenSearch \(from BlueSpice 4.4\) / Elasticsearch \(to BlueSpice 4.3\)](#)
- [Python](#)

## Setup:Installation Guide/System Preparation/Windows/.NET Framework 3.5

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3	Next step .....	5



**The .NET Framework 3.5 is required by some of the applications that will be installed in the following chapters. The steps listed here are mandatory.**



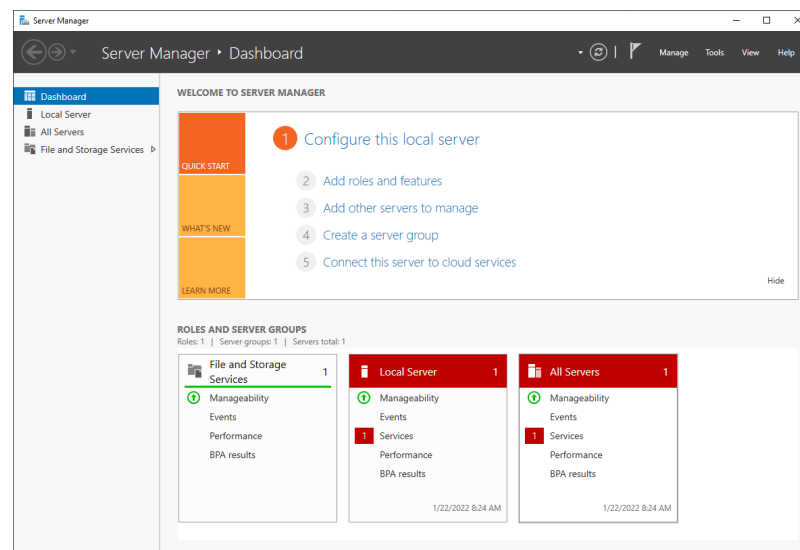
**The .NET Framework setup may fail if your server is in a domain and accessing a WSUS.**

**One solution would be to temporarily take the server out of the domain for this part of the Setup or [follow the documentation steps from this external source](#).**

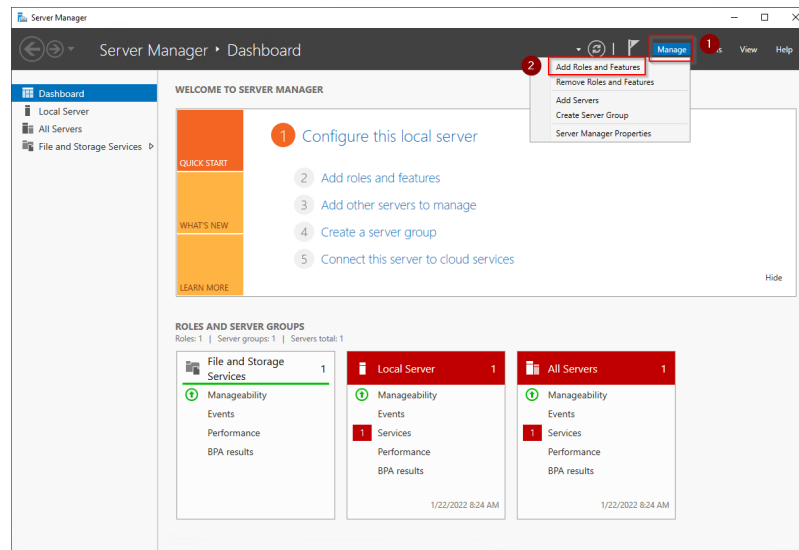
## Open the Server Manager and the roles Manager

**Open** the Server Manager. Unless otherwise configured, it automatically starts when you log on to the server. You can also find it in the start menu with the search term "Server Manager".

You are now looking at the following view:



**Click** "Manage" (1) in the top toolbar and then **click** "Add Roles and Features" (2) in the context menu:

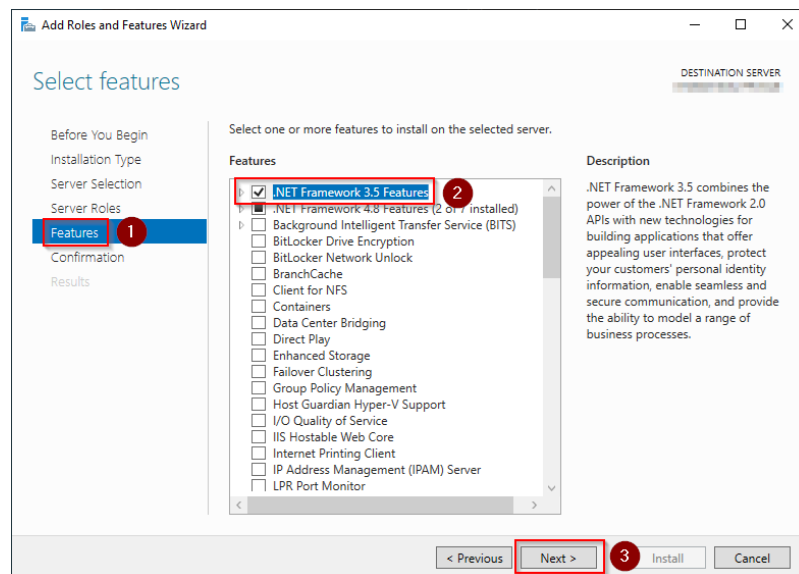


## Installation of the framework in the Roles Manager

You are now in the Roles Manager (Window "Add Roles and Features Wizard").

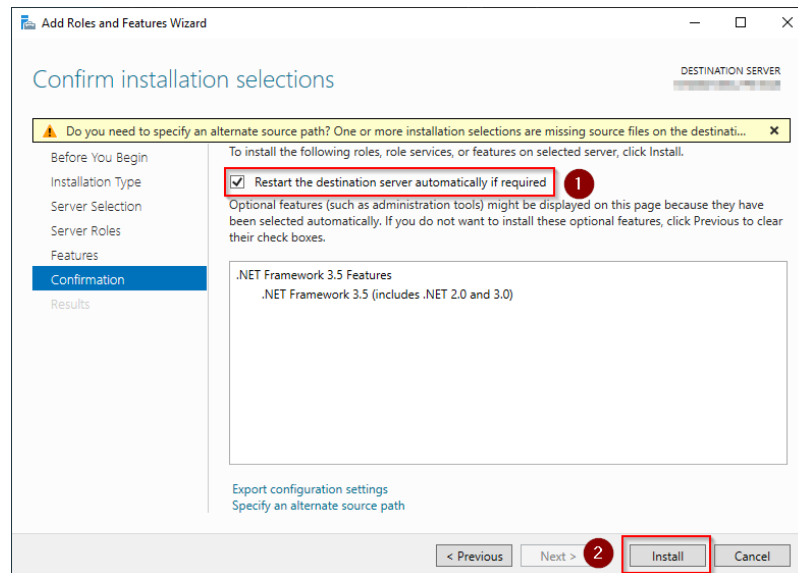
**Click** "Next >" multiple times until you have reached the section "Features" (1) .

**Activate** the checkbox ".NET Framework 3.5-Funktionen" (2). After that, proceed to the next step (3):

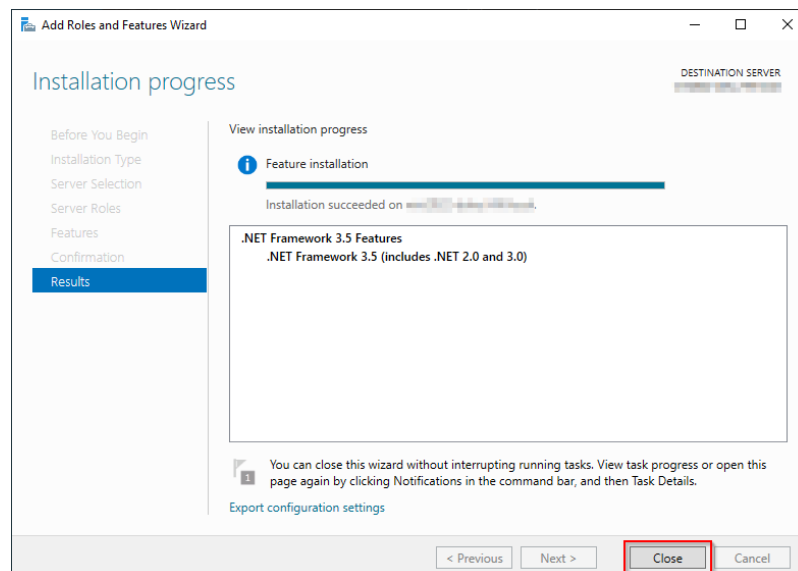


**Activate** the checkbox "Restart the destination server automatically if required" (1) and **click** "Install" (2):





Click "Close" to finish the installation of the .net Framework:



## Next step

If you have successfully completed all of the above steps, proceed to the next step: [IIS-Webserver](#).

## Apache Tomcat on Windows

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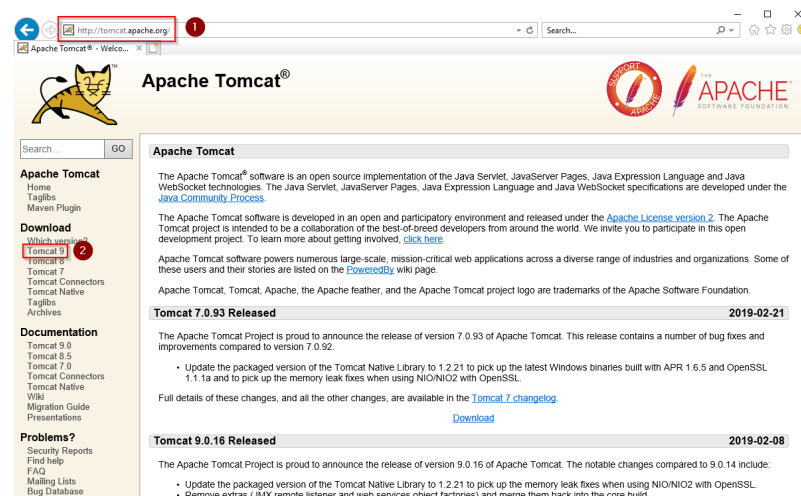
**Apache Tomcat is required for the PDF export. The following steps are optional and only required if you want to use this service in your BlueSpice installation.**



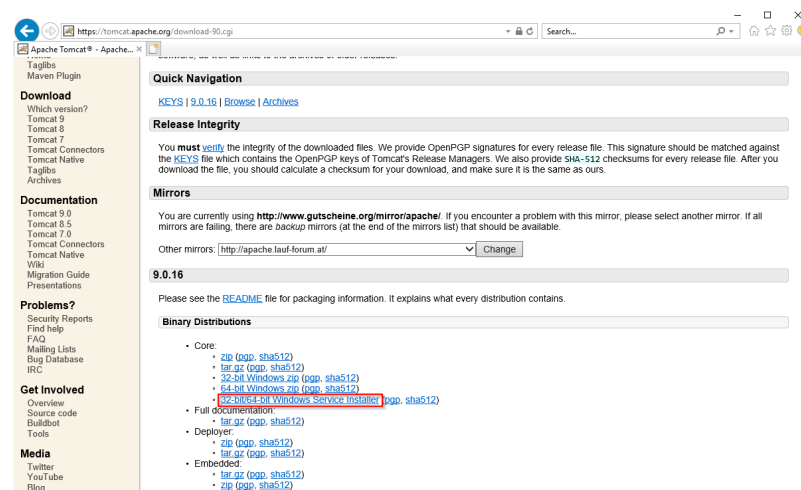
**Operation of Apache Tomcat requires [OpenJDK](#). If you have not installed it, follow the link above.**

## 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.**

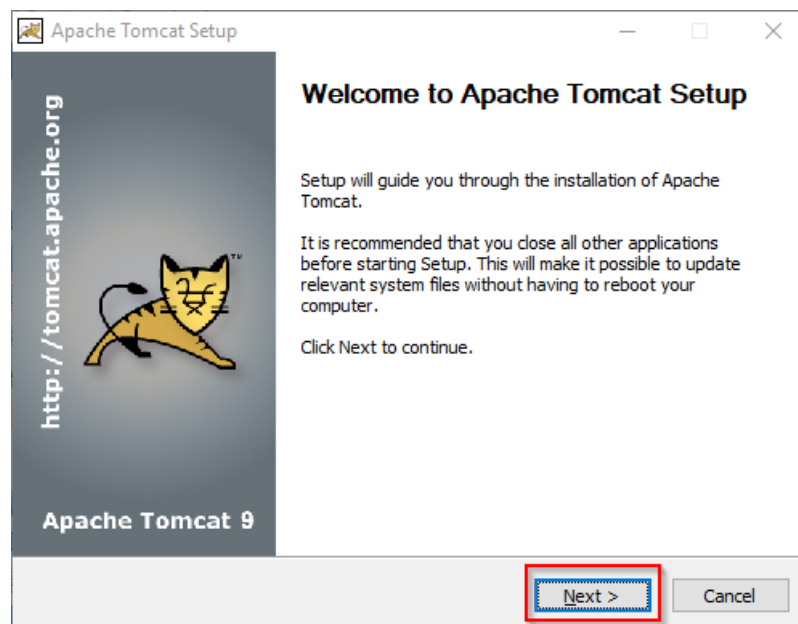


**This guide uses version 9.0.16 of Apache Tomcat and is just an example of the latest version that you can download at the time of installation.**

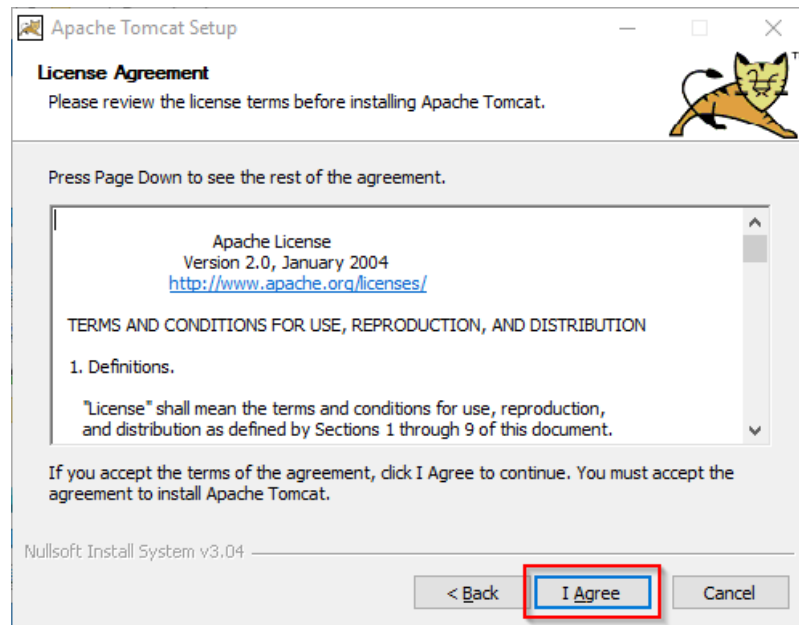
## Installing Apache Tomcat

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

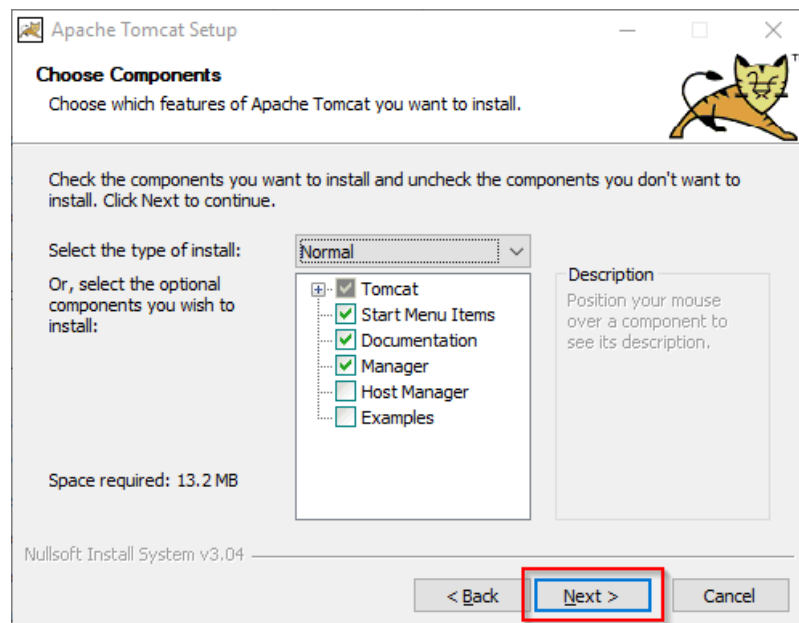
Start the installation by clicking "Next >":



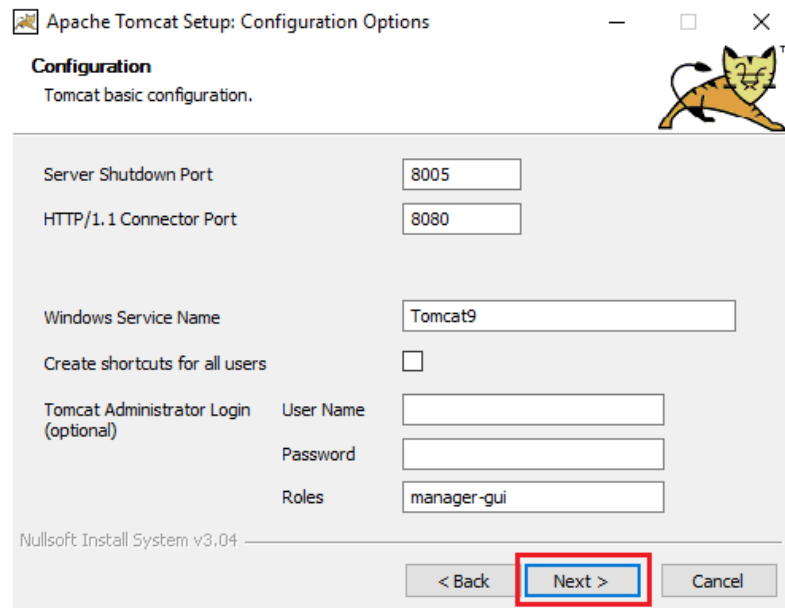
Confirm the license agreement by clicking "I Agree":



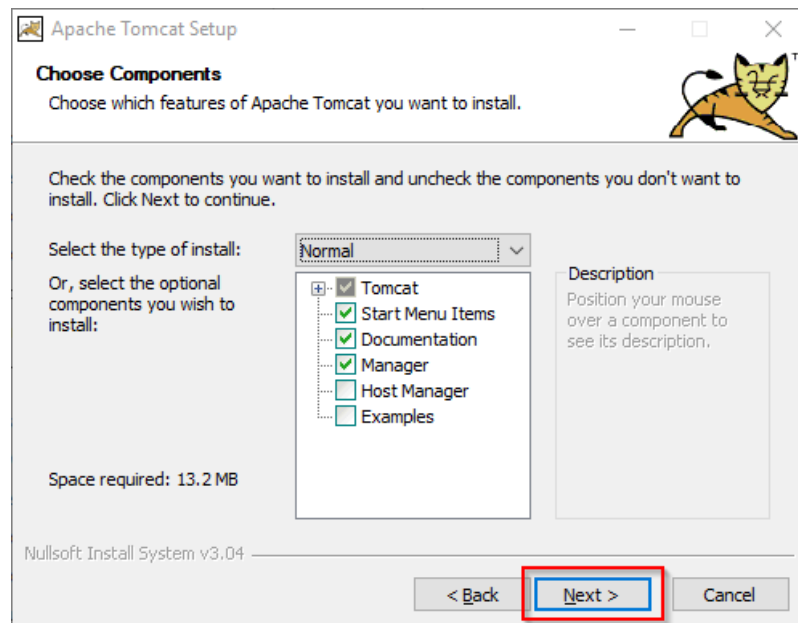
Click "Next >":



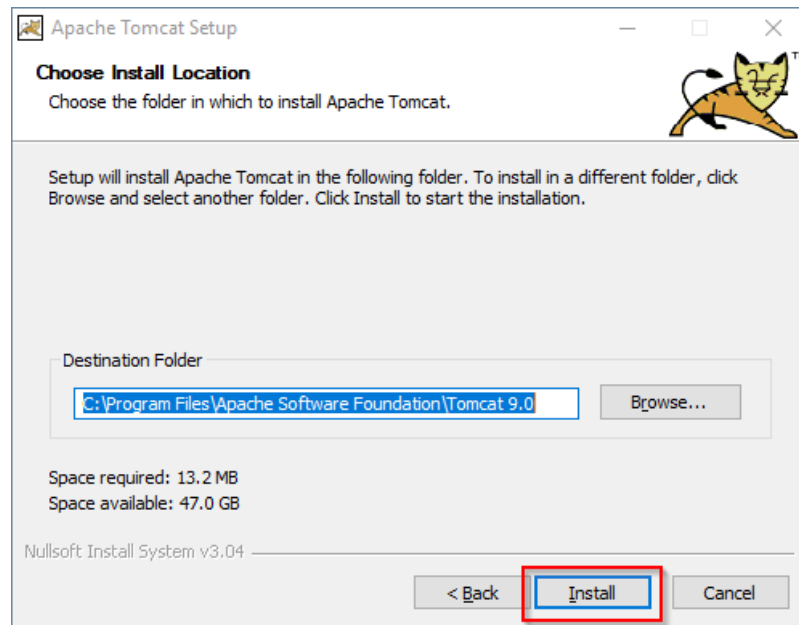
Click "Next >" again:



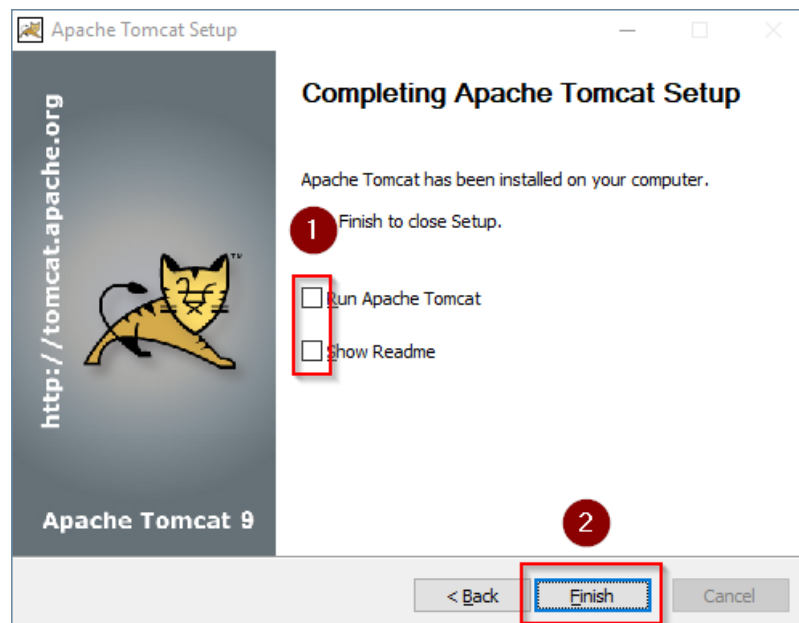
Select (1) the home directory of your [OpenJDK Installation](#) (2) and click "Next>" (3):



Start the Tomcat Installation:



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



## Configuring Apache Tomcat

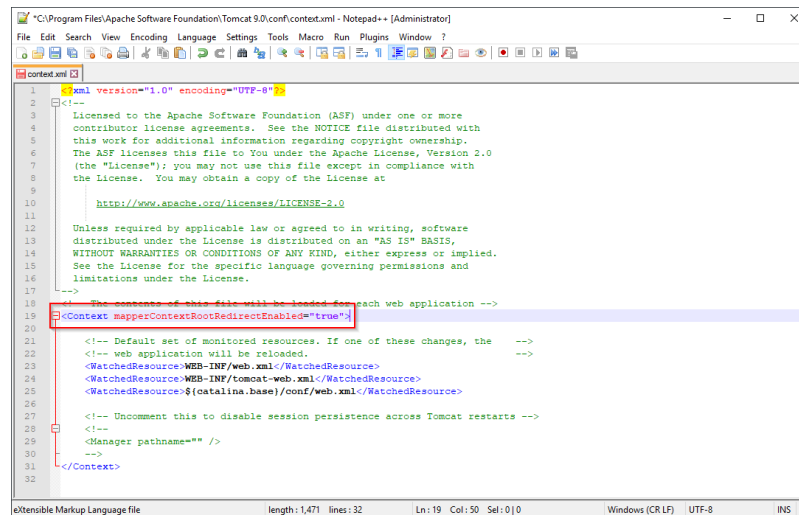
Change to the installation directory of Tomcat. By default, you can find it at `C:\Program Files\Apache Software Foundation\Tomcat 9.0\conf`.

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

```
<Context>
```

with

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



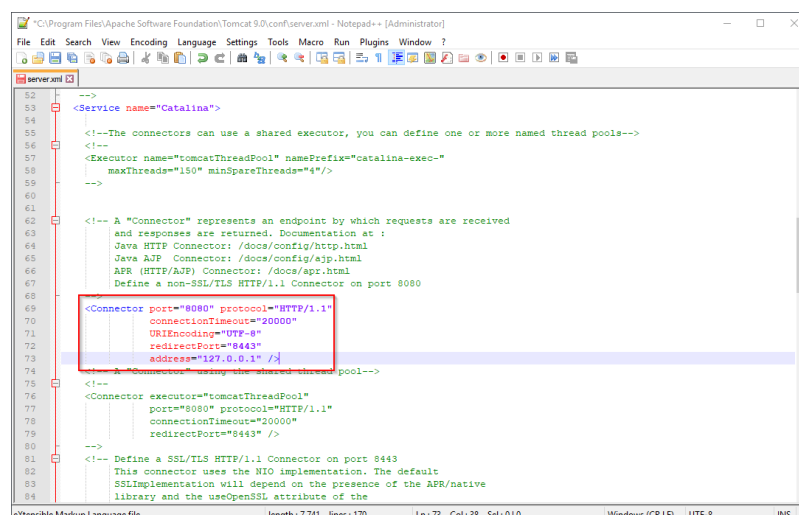
Save and close the file.

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:

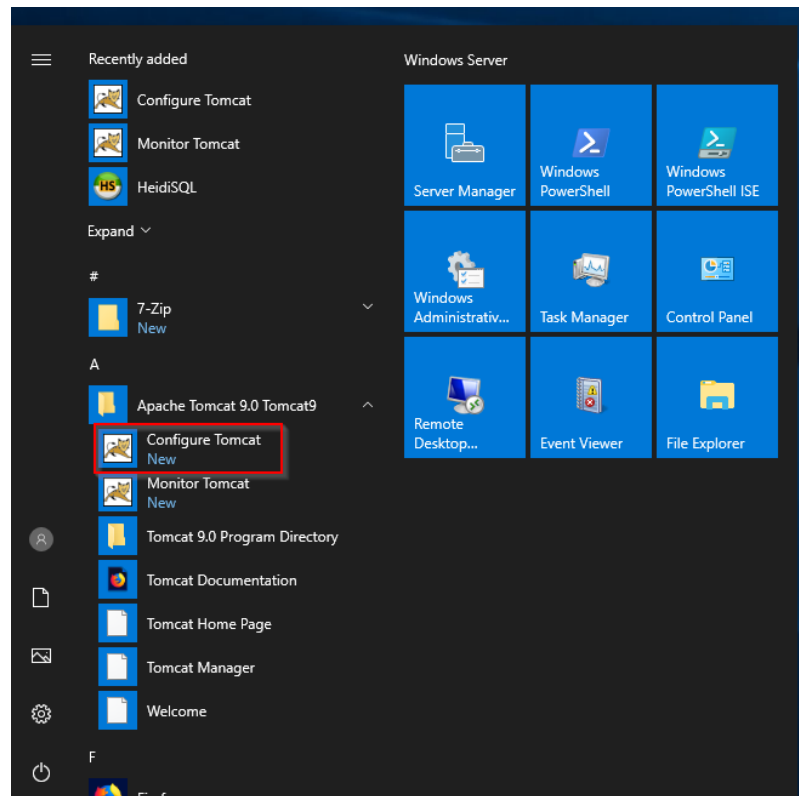
```
<Connector port="8080" protocol="HTTP/1.1"
connectionTimeout="20000"
URIEncoding="UTF-8"
redirectPort="8443"
address="127.0.0.1" />
```



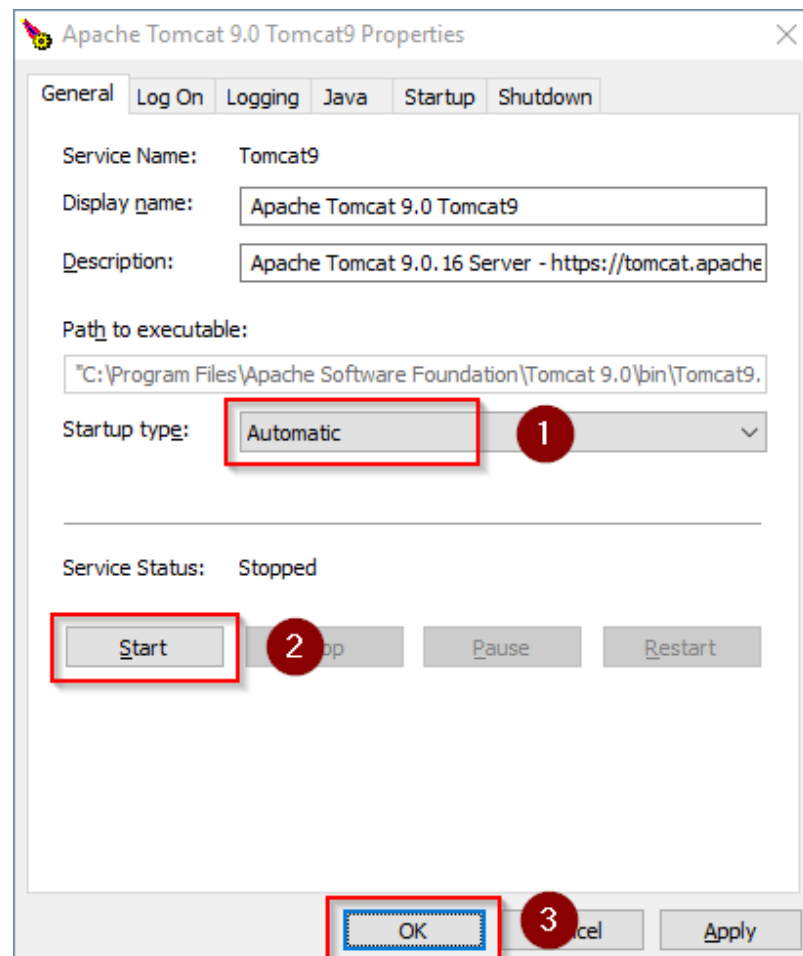
Save and close the file.

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





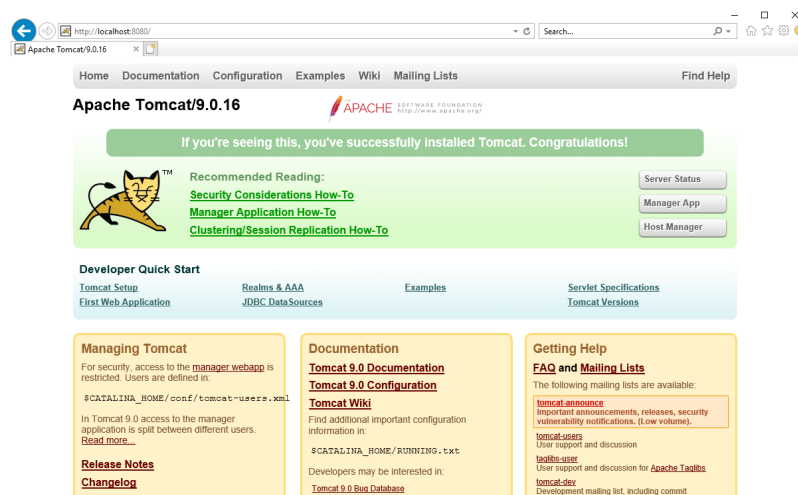
Set "Startup type" to "Automatic" (1) and start Tomcat (2). Then exit the configuration console (3):



## 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](#)".

## Setup:Installation Guide/System Preparation/Windows /Elasticsearch



Elasticsearch is available up to BlueSpice 4.3. Newer versions of BlueSpice 4 support [OpenSearch](#).

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3 Installing the plugin ingest-attachment .....	17
4 Installing the Elasticsearch service .....	18
5 Configuring and starting the Elasticsearch service .....	18
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Elasticsearch is a prerequisite for running Advanced Search. The steps listed here are optional and only required if you plan to use them in your BlueSpice installation.



To run Elasticsearch, OpenJDK is required. If you have not installed it, [install it now](#).

## Download



The content of this section refers to external sources and is current at the time of writing this documentation. We cannot guarantee how long these sources will remain unchanged. Please let us know if you notice any discrepancies to the information provided here.

BlueSpice ist derzeit mit Elasticsearch 6.x ab Version 6.8.21 kompatibel. Elasticsearch > 6.8.x wird derzeit nicht unterstützt.

Die jeweils aktuelle Version können Sie [dieser Liste](#) entnehmen. Daraus ergibt sich folgender direkter Download-Link: <https://artifacts.elastic.co/downloads/elasticsearch/elasticsearch-<Versionsnummer>.zip> also bspw. <https://artifacts.elastic.co/downloads/elasticsearch/elasticsearch-6.8.23.zip>.

Folgen Sie dabei den Download-Anweisungen Ihres Browsers.



In the following, the Elasticsearch version 6.8.23 is used and only serves as an example for the latest version of the 6.x version series, which you can download at the time of your installation.

## Unpacking the ZIP archive

**Unpack** the ZIP archive that you have just downloaded in a Archiv in a suited system path of your hard drive.

This documentation assumes the [folder structure recommended by us](#). For



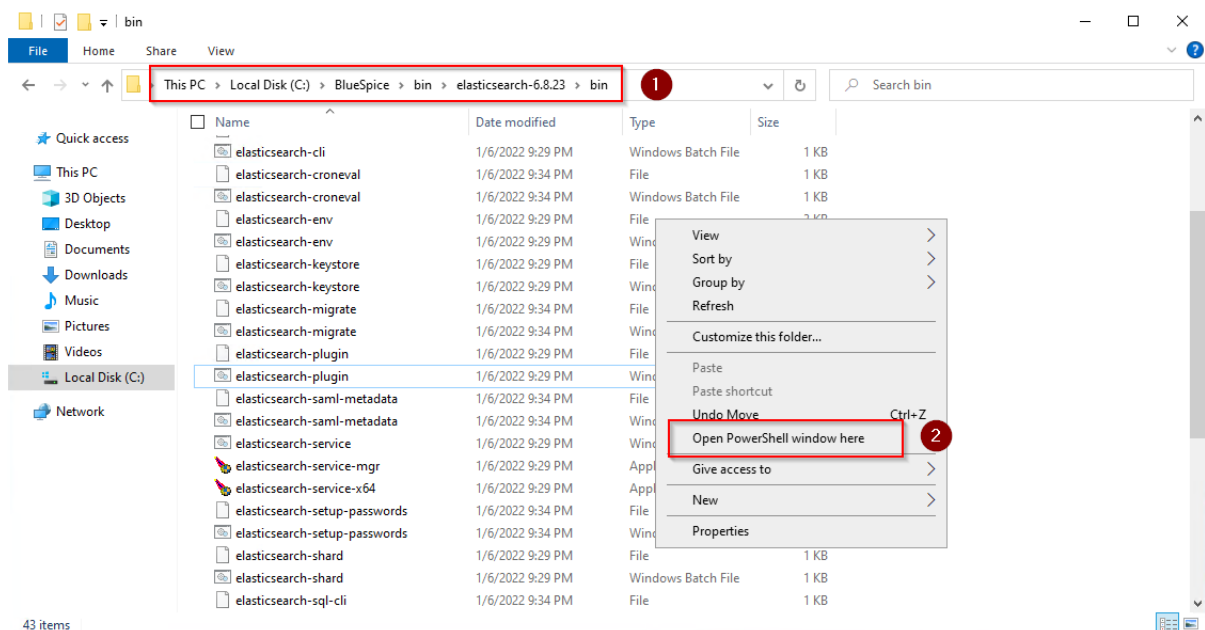
this reason, Elasticsearch is unpacked at this point in the folder C:\bluespice\bin\elasticsearch-6.8.23. If you have individual wishes, adjust these paths according to your own understanding.

## Installing the plugin ingest-attachment

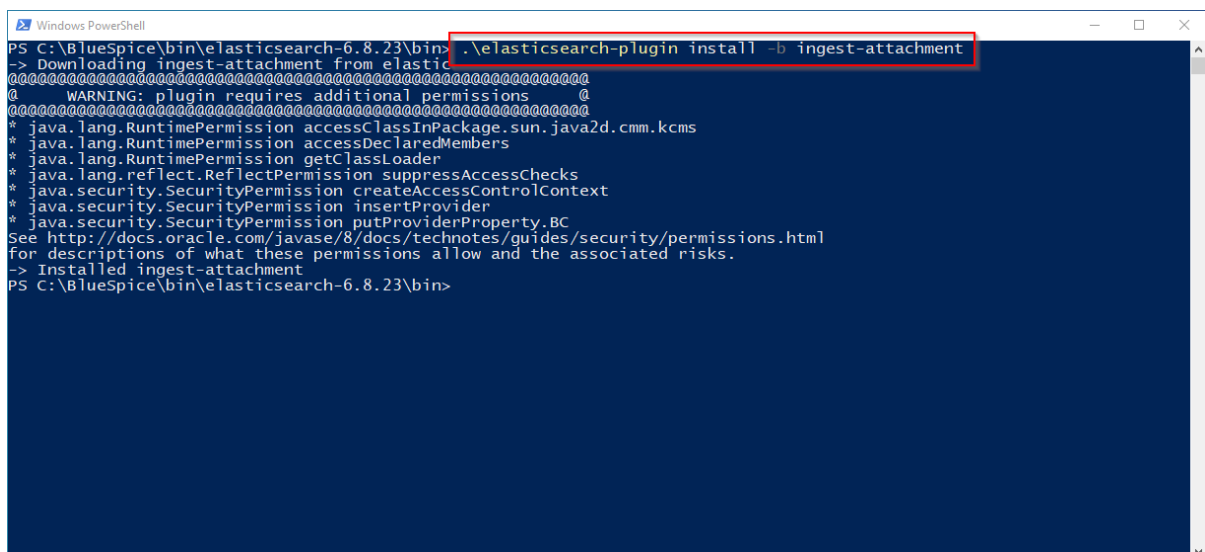
**Change** to the directory "C:\bluespice\bin\elasticsearch-6.8.23\bin" (1).

**Right-click** on a free area of the Explorer window with the Shift-key pressed.

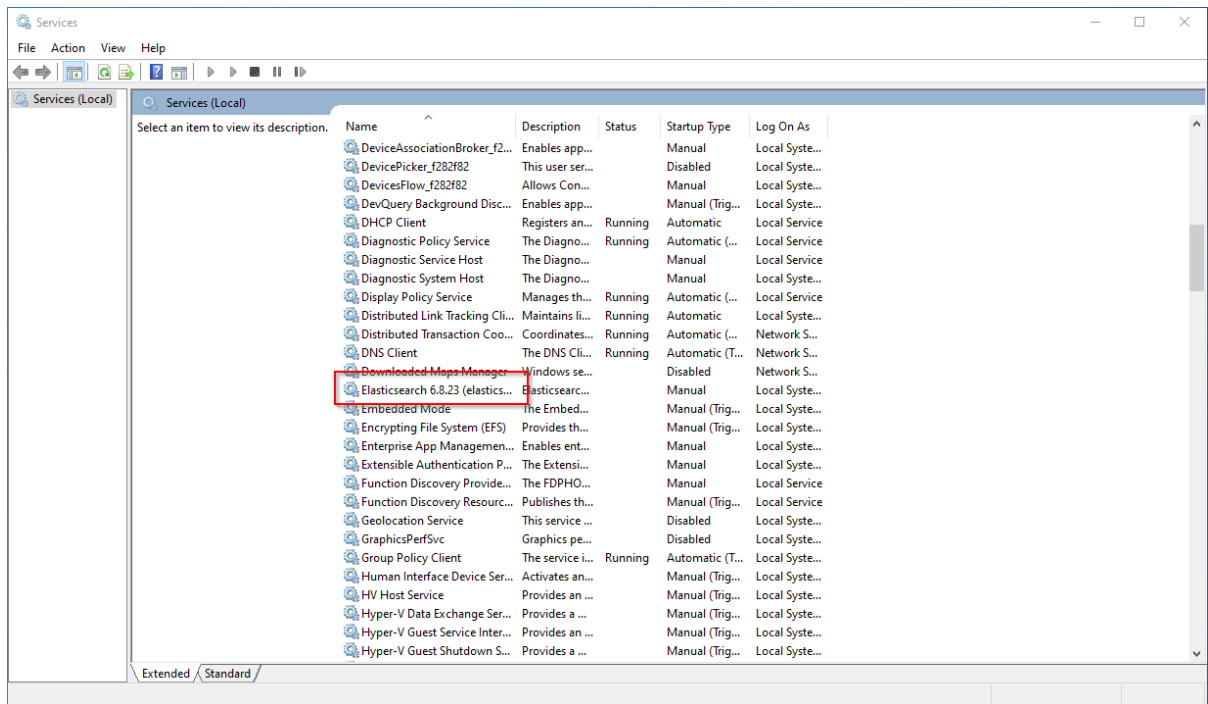
**Click** "Open PowerShell window here" (2):



**Execute** the command ". \elasticsearch-plugin install -b ingest-attachment":

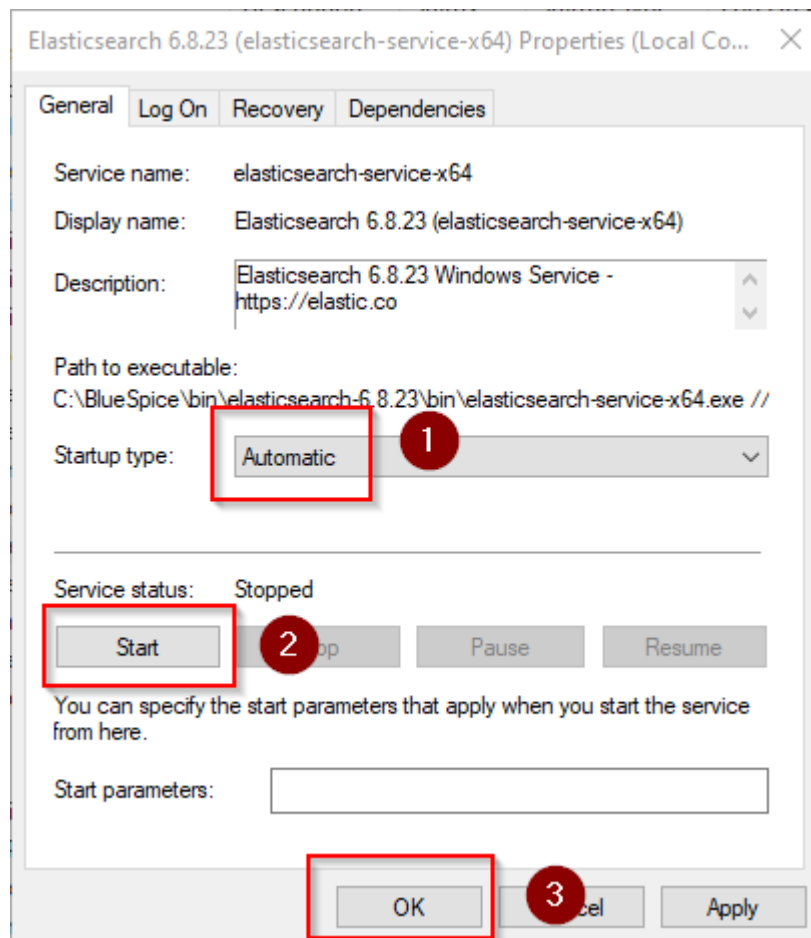






**Select** the startup type "Automatic" (1) and start the service (2).

**Click "OK"** (3) to close the window after the service is started:



## Next step

---

If you have successfully completed all of the above steps, proceed to the next step: [Python](#).

## Setup:Installation Guide/System Preparation/Windows/IIS-Webserver

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<a href="#">1 Introduction</a>	<a href="#">21</a>
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<a href="#">4 Next step</a>	<a href="#">26</a>





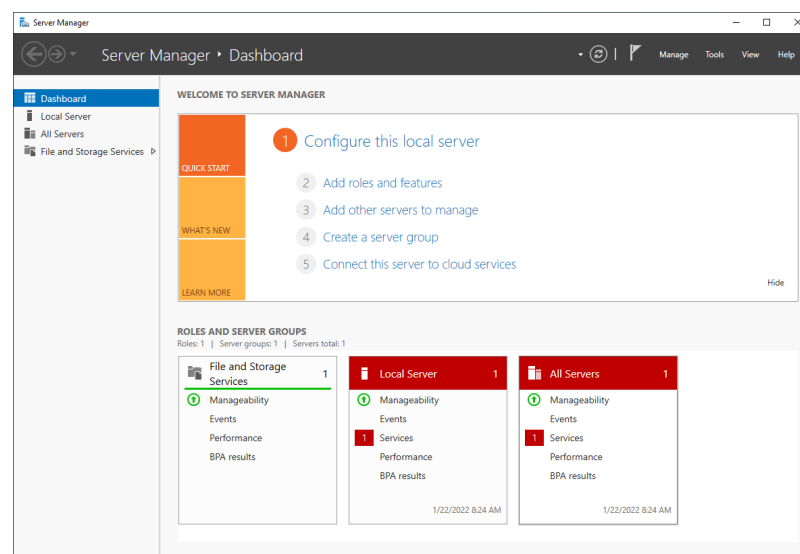
**The web server delivers your BlueSpice installation to the users' browsers. Without a web server, BlueSpice cannot be used. The steps listed here are required.**

## Introduction

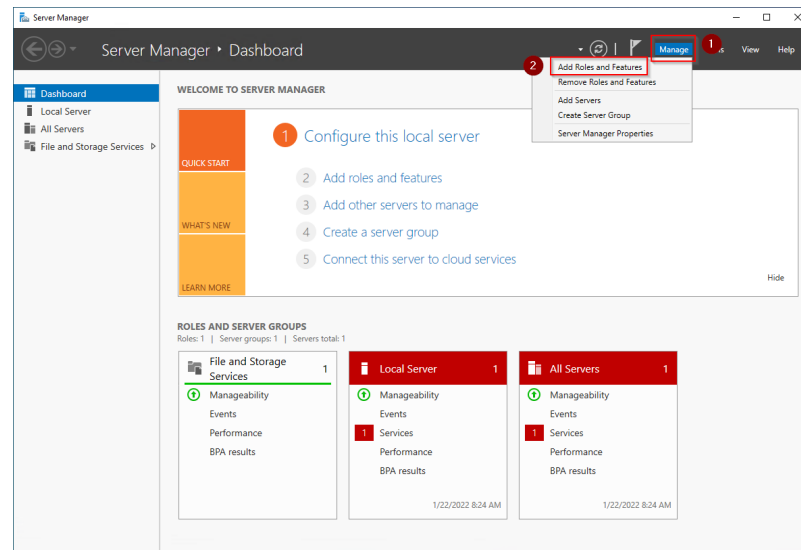
We recommend to use the most system-optimized software possible for a live operation of BlueSpice both under Linux and under Windows. For this reason, the documentation of an installation of Apache (XAMP) under Windows is omitted. This chapter lists the steps that are necessary to install the Microsoft IIS Web Server service on Windows Server >= 2016.

## Open the Server Manager and the Roles Manager

**Open** the Server Manager (like in the previous step). Unless otherwise configured, it starts automatically as soon as you log in to the server. Otherwise, you will find it in the start menu under the search term "Server Manager". You are now looking at the following view:



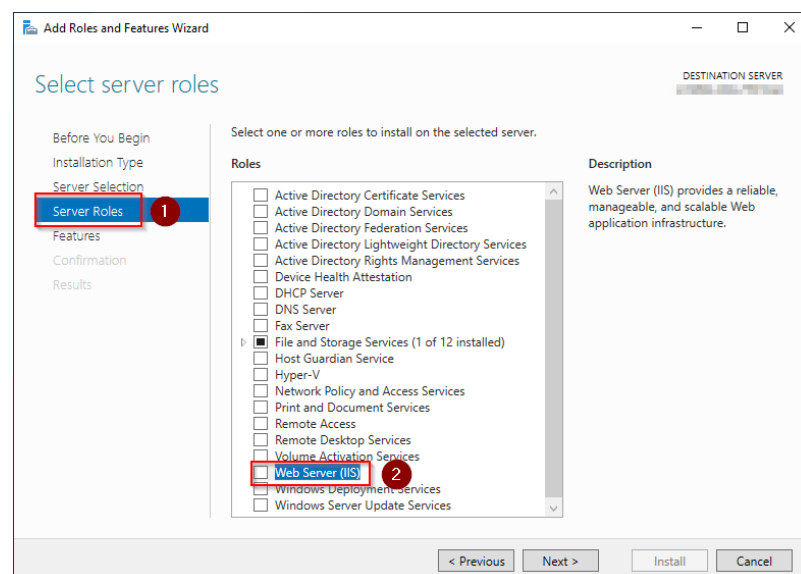
**Click "Manage" (1) and then click "Add Roles and Features" (2):**



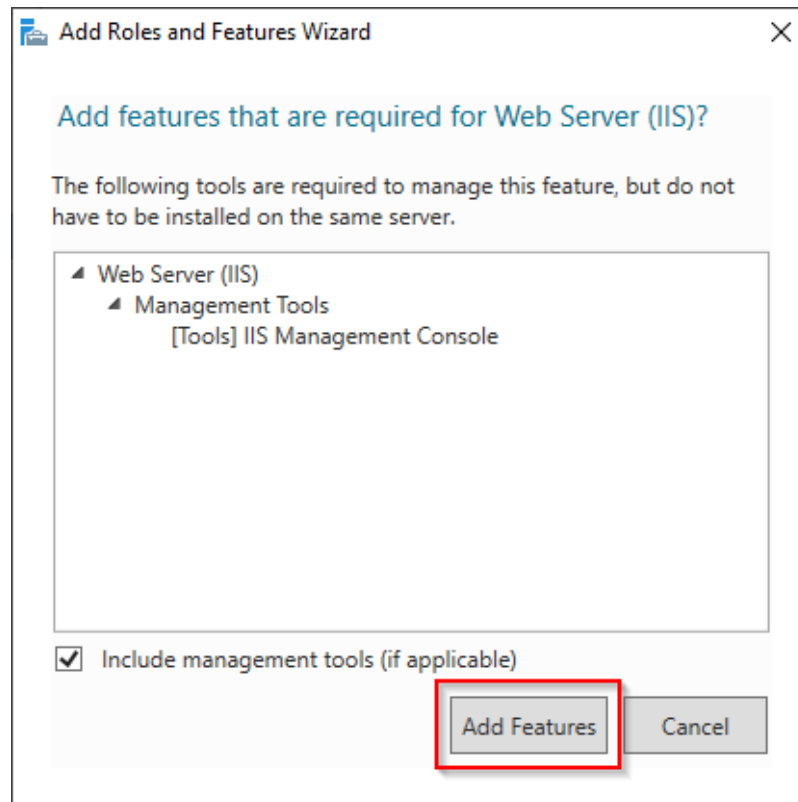
## Installation of IIS in the Roles Manager

Sie befinden sich jetzt im Roles manager.

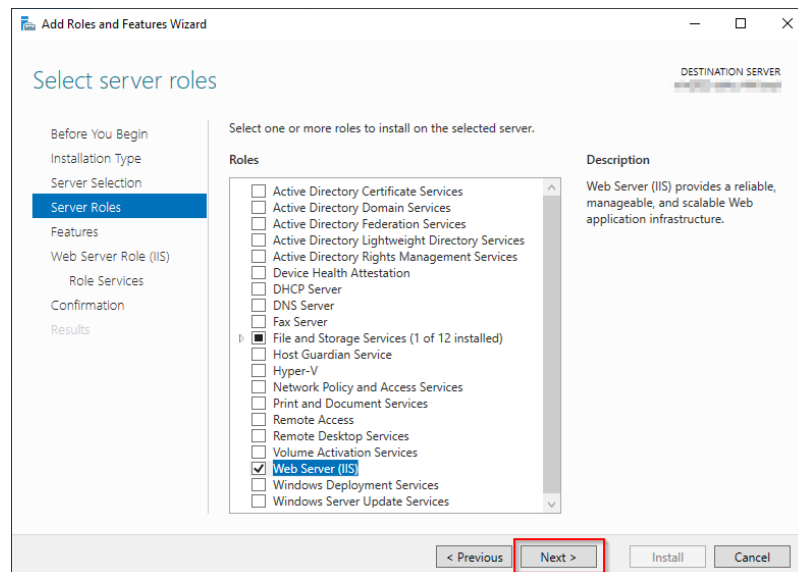
**Click** "Next >" until you reach the "Server Roles" area (1). There, you **activate** the role "Web Server (IIS)" (2):



**Click** "Add Features" in the resulting pop-up window:

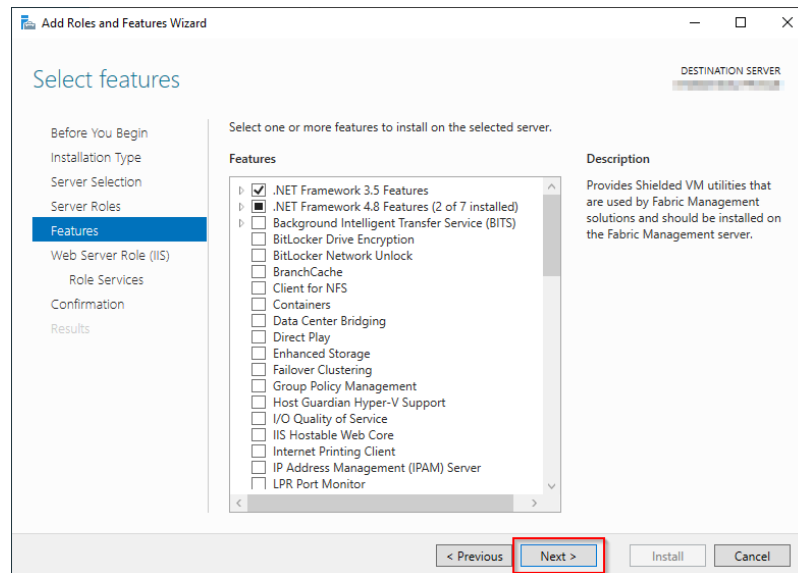


Click "Next >":



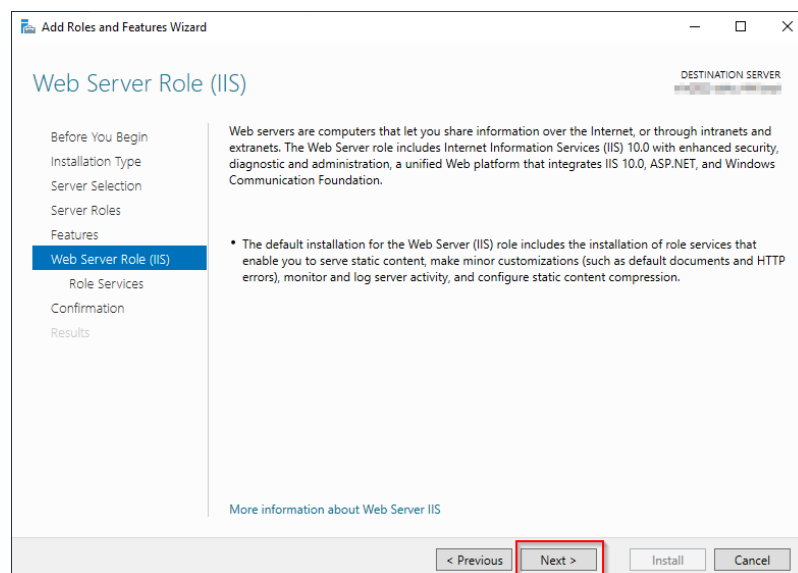
You are now in the section "Features".

Click "Next >":



You are now in the section "Web Server Role (IIS)".

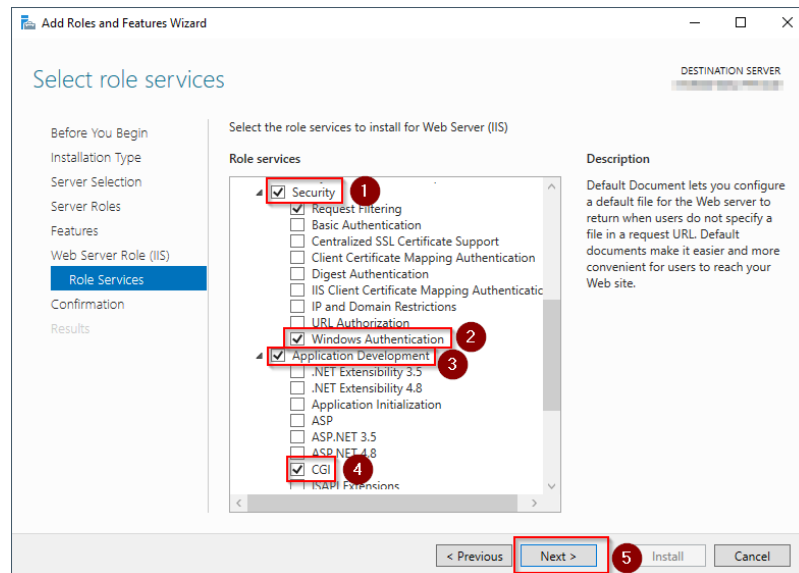
**Click "Next>":**



You are now in the section "Role services".

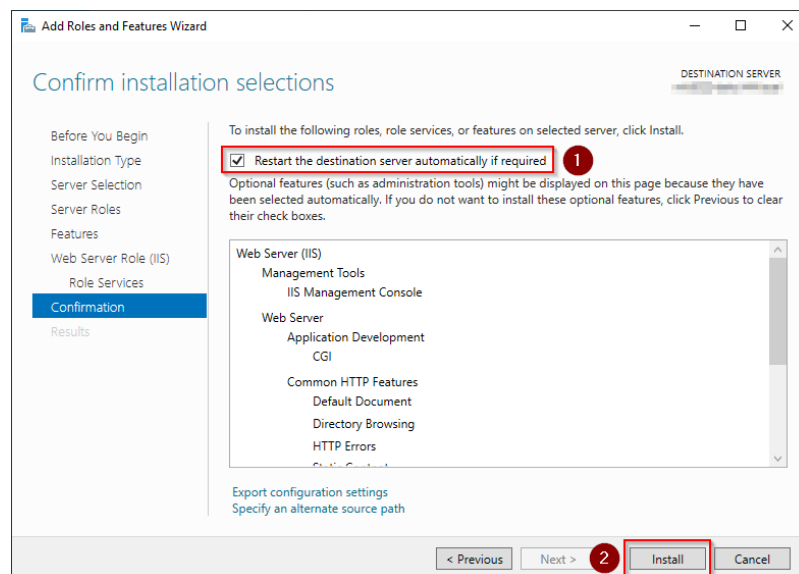
**Activate** the option "Windows-Authentication" (2) under "Security" (1) and the option "CGI" (4) under "Application development" (3).

**Click "Next >" (5):**

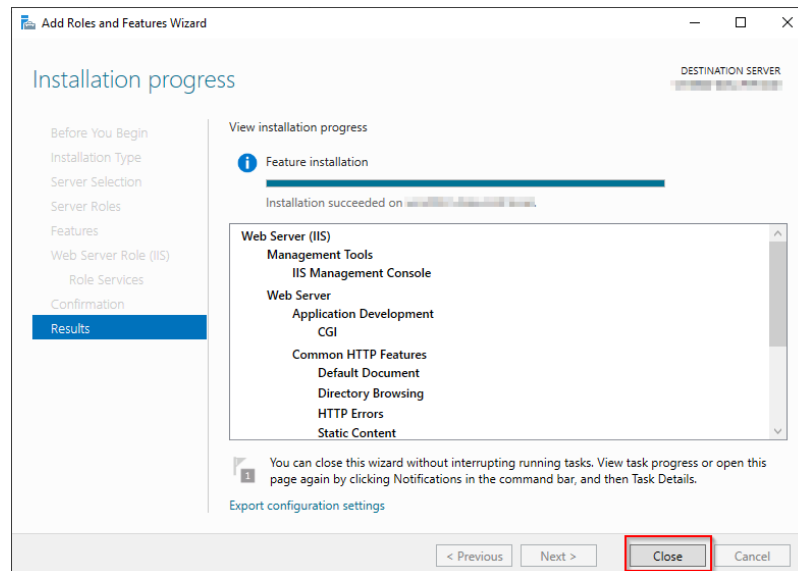


You are now in the "Confirmation" section.

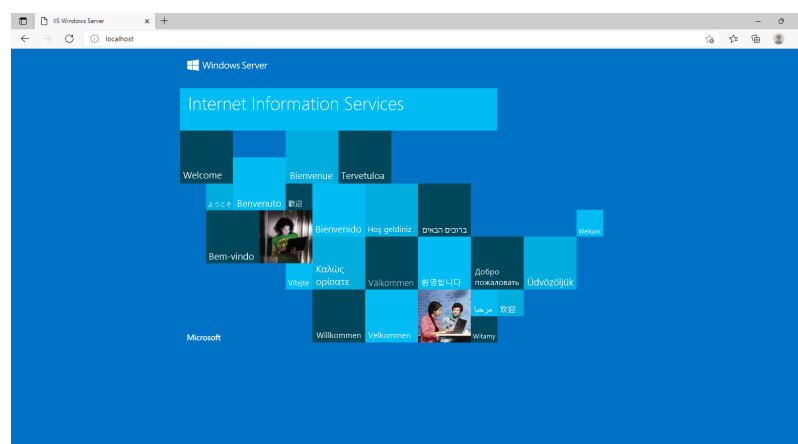
**Activate** the option "Restart the destination server automatically if required" (1) and **click** "Install" (2):



**Click** "Close" once the installation has been completed.



With the successful completion of all these steps, the IIS web server is now installed. Check the functionality by starting Internet Explorer on the server and calling the URL <http://localhost/>. If installed correctly, you will see the welcome page of the IIS Web server:



## Next step

If you have successfully completed all of the above steps, proceed to the next step: [urlrewrite](#).

## Setup:Installation Guide/System Preparation/Windows /Introduction

This documentation is as detailed as possible and illustrated with screenshots. It covers the recommended basic system configuration. Nevertheless, we assume that you already have previous knowledge of the installation and operation of Windows Server systems.

The prerequisite is an already installed Windows server starting at version 2016 without any additional software already installed.

In this documentation, Windows Server 2022 was used. With different versions, it is possible that you will notice slight differences in the installation interface.

The documentation also includes clearly marked infoboxes that inform you about whether particular installation steps are necessary and that provide any further information.

First start with setting the [system rights of the temporary Windows folder](#).

## MariaDB on Windows

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**BlueSpice stores your content in a database for which you need to install a corresponding server. The steps listed here are required.**



**Alternatively, you can also use MySQL at this point, but we recommend the MariaDB database server described as below.**

## Download



**The content of this section refers to external sources and is current at the time of writing this documentation. We cannot guarantee how long these sources will remain unchanged. Please let us know if you notice any discrepancies to the information provided here.**

**Open** the [official download page](#) (1) in your browser. If not everything is already filled out correctly, select the latest version of MariaDB (1), the Windows operating system (2), the architecture x86\_64 (3) and the MSI package (4).

**Click** on "Download" (5) and follow the further download instructions.

The screenshot shows the MariaDB Server download page. The page has a navigation bar with links: Download, Documentation, Contribute, Server Fest, Events, Sponsor, Blog, Planet MariaDB, and About. Below the navigation bar, there's a search bar and a 'Subscribe' button. The main content area is titled 'MariaDB Server' and includes a 'Download MariaDB Server' section with links to REST API, Release Schedule, Reporting Bugs, and View all releases for: MariaDB Server, MariaDB Galera, Connector/C, Connector/J, Connector/ODBC, Connector/Python, and Connector/Node.js. The download form has several dropdown menus: 'MariaDB Server Version' (set to 10.7.3), 'Operating System' (set to Windows), 'Architecture' (set to x86\_64), and 'Package Type' (set to MSI Package). There is also a 'Display older releases' checkbox and a 'Mirror' dropdown. A 'Download' button is at the bottom of the form. Red boxes and numbers 1 through 5 highlight the version, OS, architecture, package type, and the download button respectively.

Download | Documentation | Contribute | Server Fest | Events | Sponsor | Blog | Planet MariaDB | About

Latest MariaDB releases 10.8.2 (RC), 10.7.3, 10.6.7, 10.5.15, 10.4.24, 10.3.34, 10.2.43. [Vote on your current version.](#)

Search ...

MariaDB Foundation **MORE!** [SUBSCRIBE](#) to our YouTube channel

Download MariaDB Server  
REST API  
Release Schedule  
Reporting Bugs  
View all releases for:  
MariaDB Server  
MariaDB Galera  
Connector/C  
Connector/J  
Connector/ODBC  
Connector/Python  
Connector/Node.js

MariaDB Server | MariaDB Repositories | Connectors

This is a short term release with support lasting one year only. For production use we suggest the 10.6 release series.

MariaDB Server Version  
MariaDB Server 10.7.3 1

Display older releases: ☐

Operating System  
Windows 2

Architecture  
x86\_64 3

Package Type  
MSI Package 4

5 Download Mirror

Release date: 2022-02-13  
File name: mariadb-10.7.3-winx64.msi



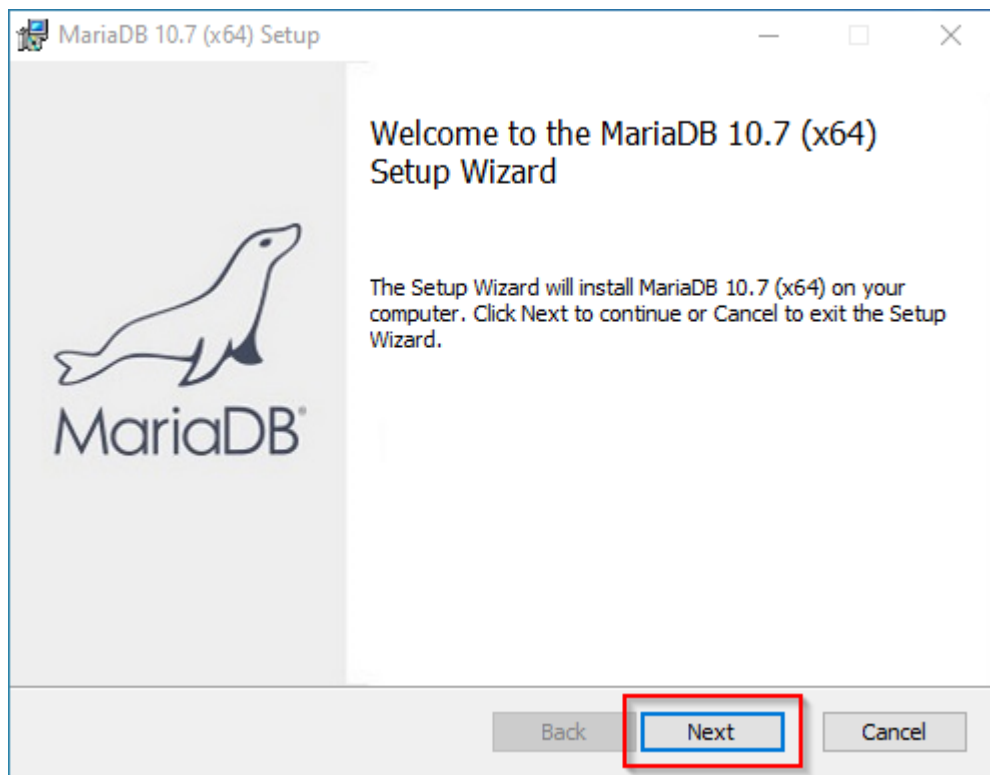


Im Folgenden wird die MariaDB-Version 10.7.3 verwendet und dient nur beispielhaft für die aktuellste Version 10.7.x, die Sie zum Zeitpunkt Ihrer Installation herunterladen können.

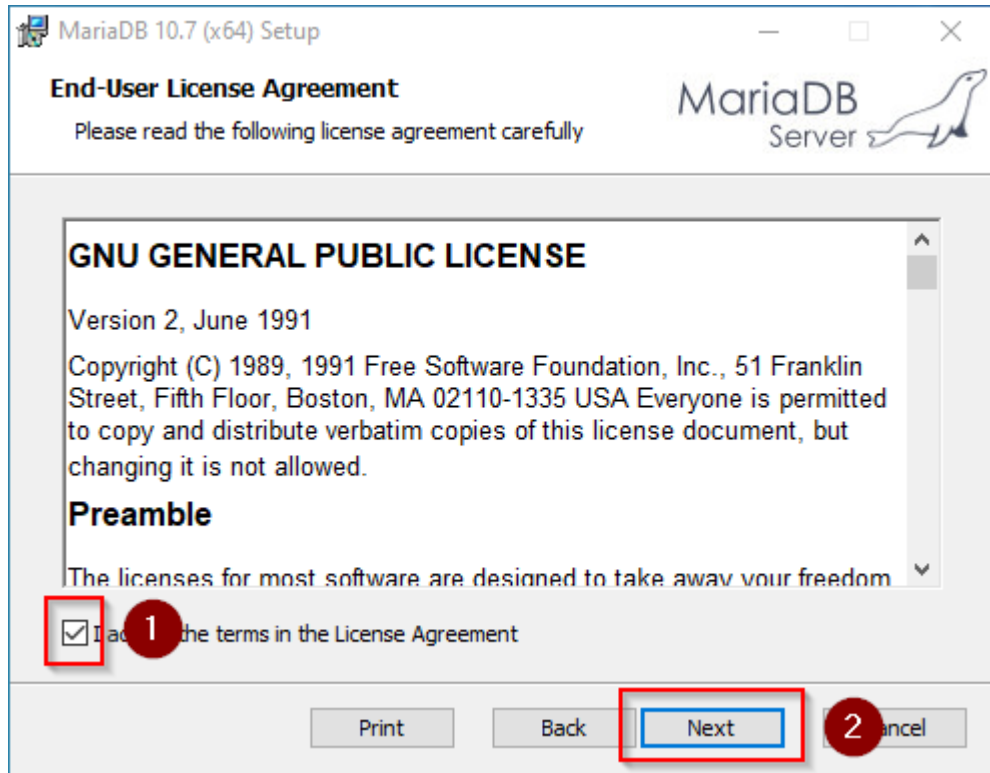
## Installation

**Open** the MSI file that you have just downloaded.

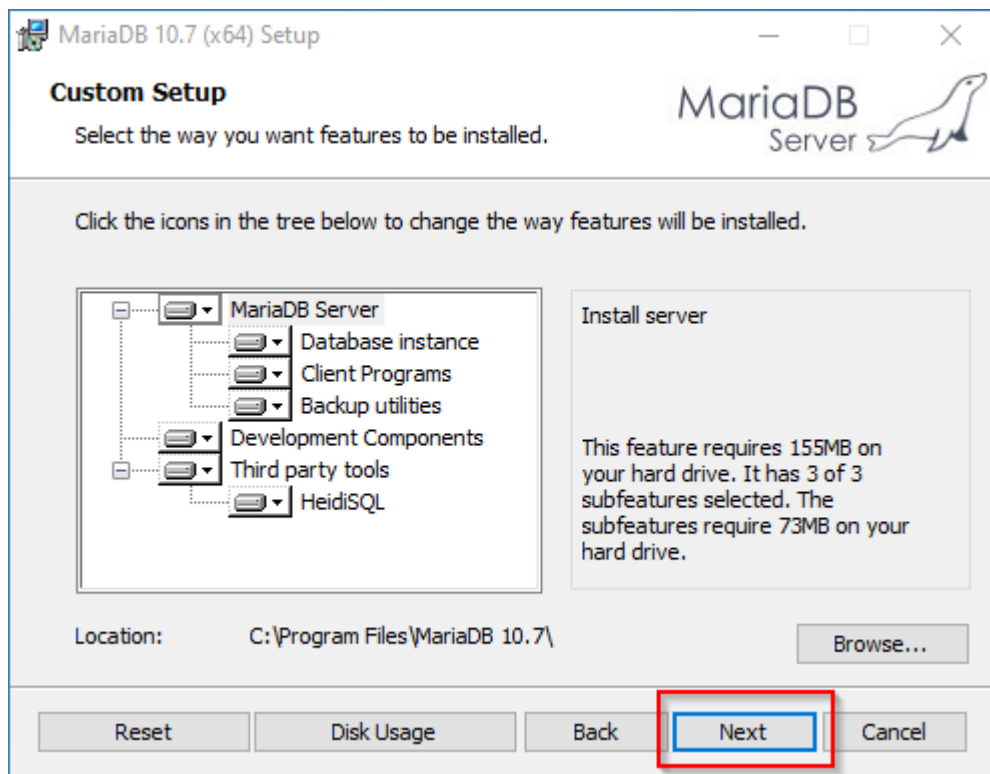
**Click** "Next" to start the installation:



**Confirm** the dieLicense Agreement (1) and **click** "Next" (2):



**Click** "Next" to confirm the installation setup:



**Enter** a new root password for the administrative ("root") user of the database server (1) and **click** "Next" (2):

User settings

Default instance properties

MariaDB 10.7 (x64) database configuration

MariaDB Server

☒ **Modify password for database user 'root'**

New root password:  Enter new root password

Confirm:  Repeat the password

☐ **Enable access from remote machines for 'root' user**

☐ **Use UTF8 as default server's character set**

**Data directory**

Click "Next" in the *Default instance properties* window:

Database settings

Default instance properties

MariaDB 10.7 (x64) database configuration

MariaDB Server

☒ **Install as service**

Service Name:

☒ **Enable networking**

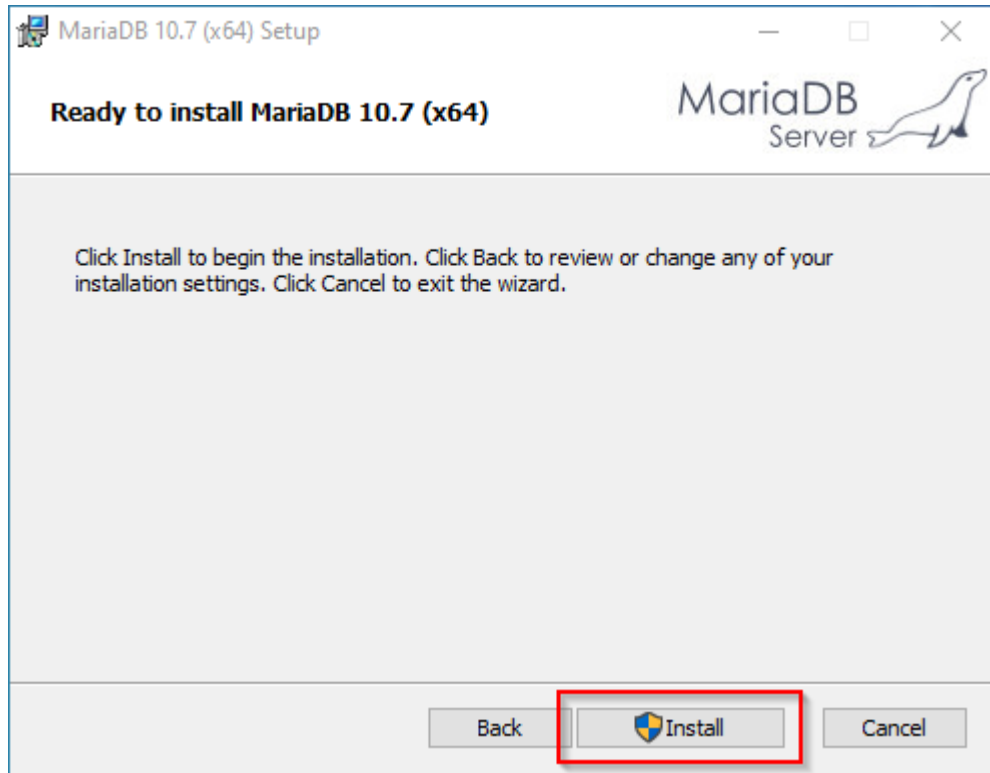
TCP port:

**InnoDB engine settings**

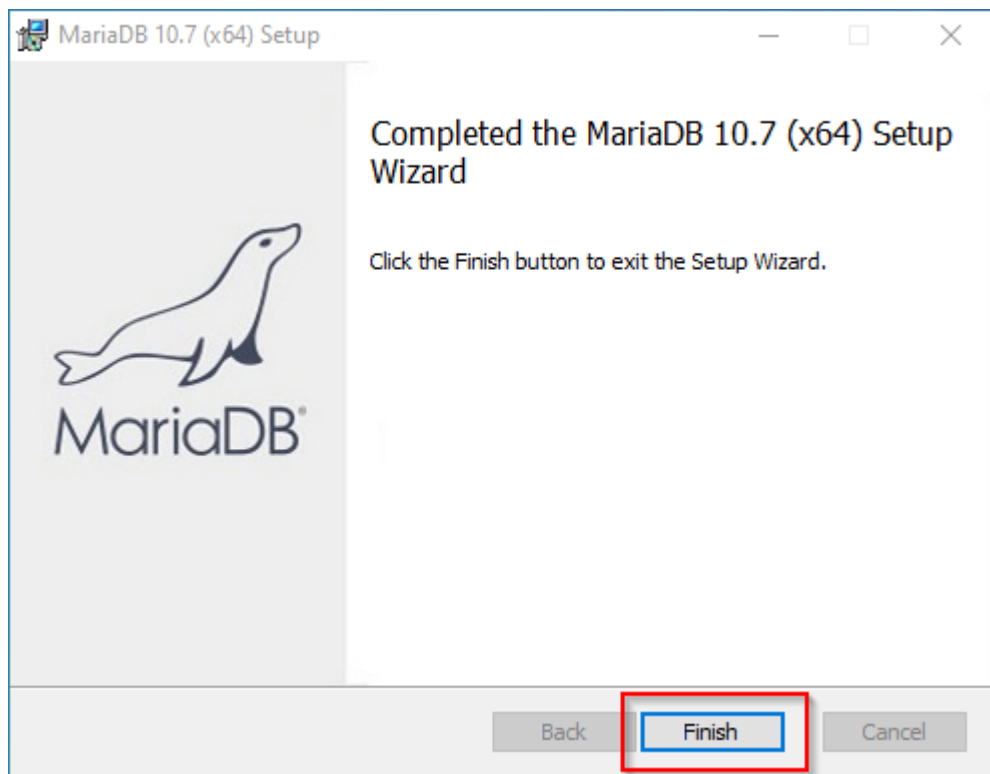
Buffer pool size:  MB

Page size:  KB

Click "Install" to start the installation:



**Click "Finish" after the installation to exit the setup:**



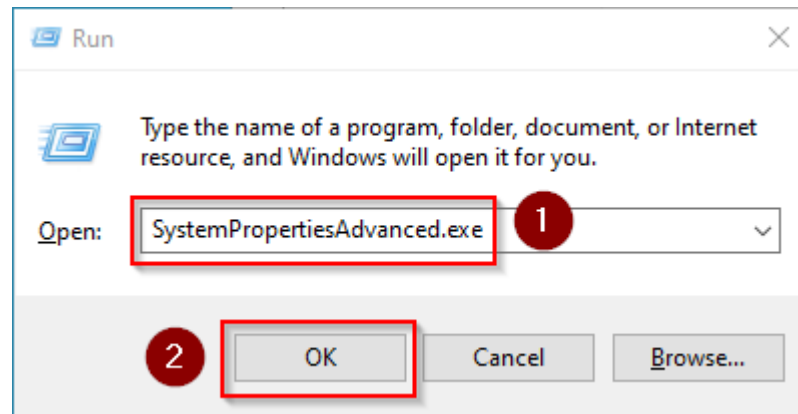
## Setting the environment variable

---

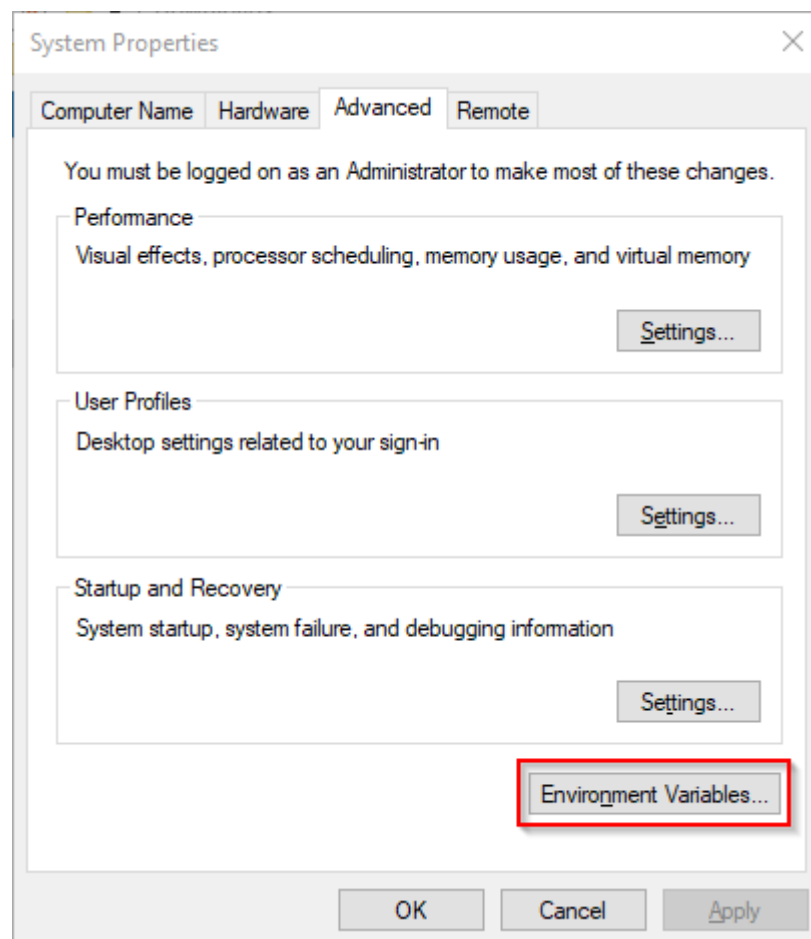
To be able to use MariaDB on the Windows command line without any problems, it is necessary to configure an environment variable in Windows. To do this, follow these steps:

**Enter** the key combination Windows+R.

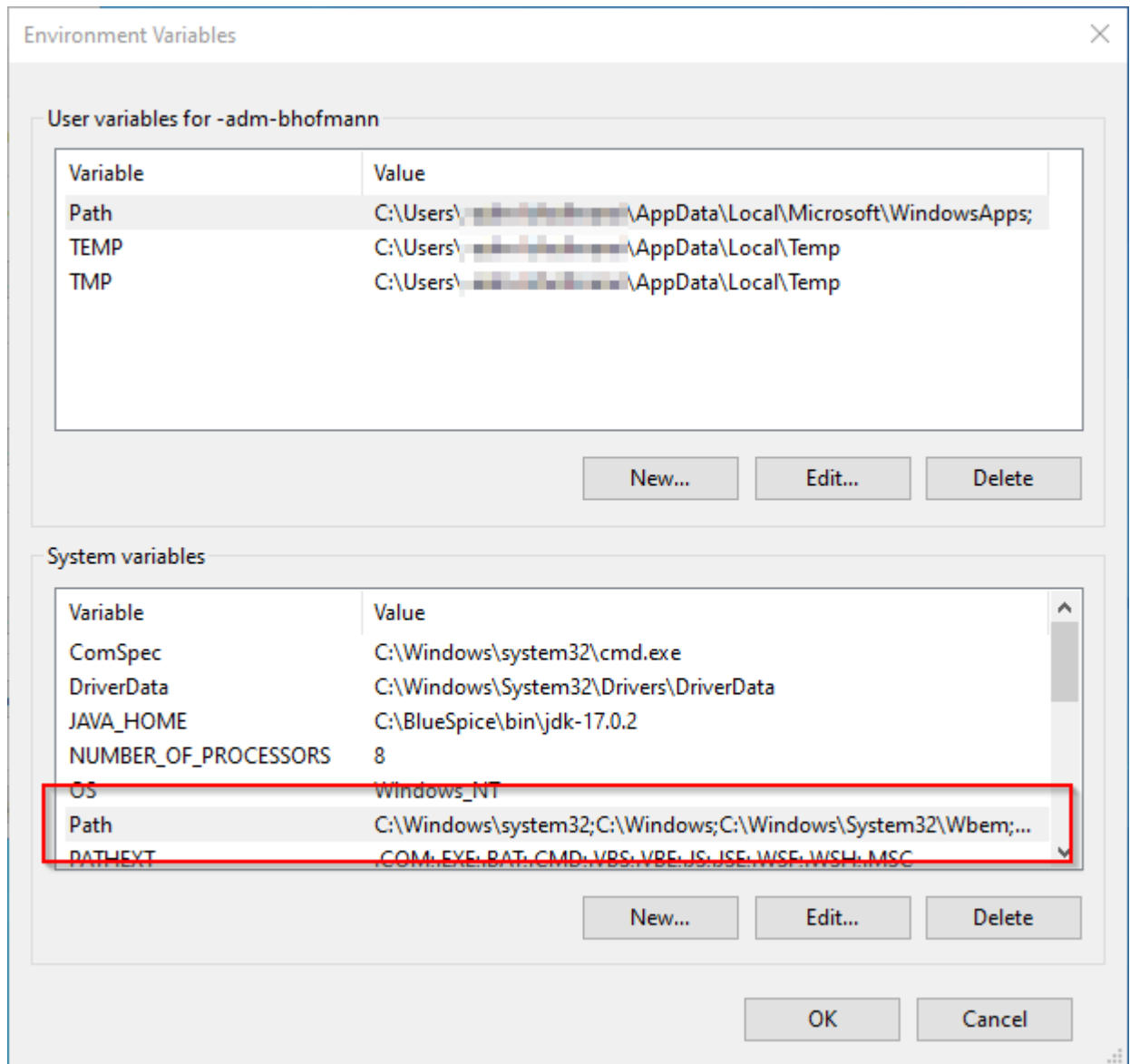
**Enter** "SystemPropertiesAdvanced.exe" (1) in the dialog window and **click** "OK" (2):



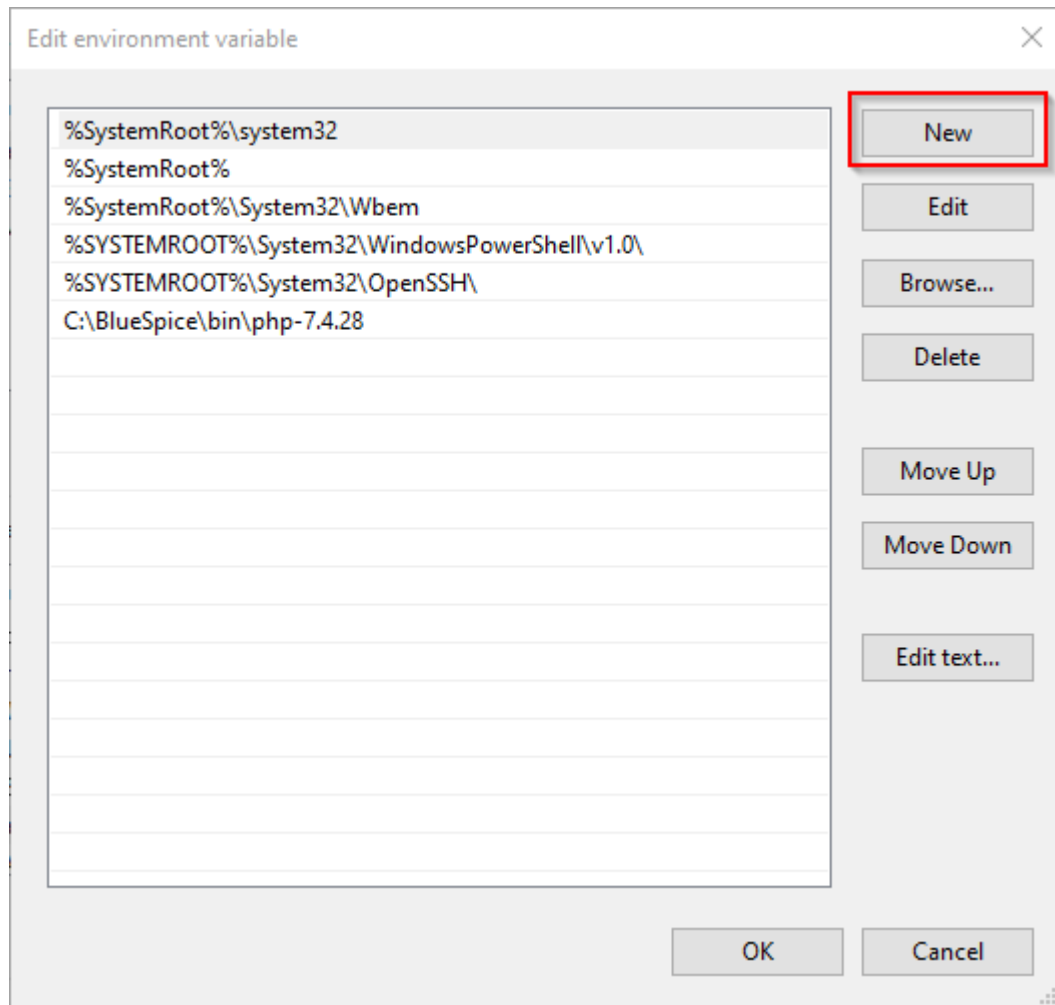
**Click** "Environment Variables...":



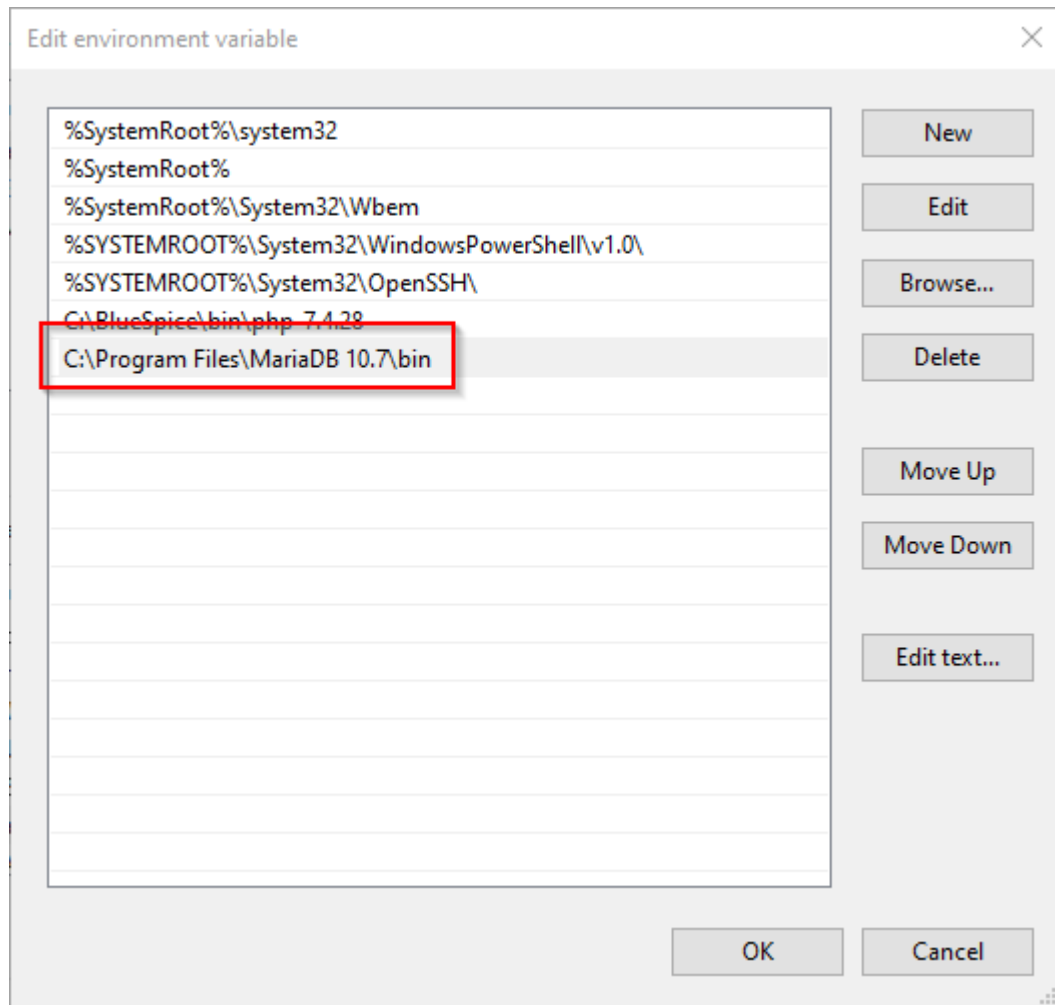
**Double-click** the entry "Path" in the section "System variables":



**Click "New":**



**Add** the path to your MariaDB installation, which includes among otehers the file *mysql.exe*. By default, this is the path `C:\Program Files\MariaDB 10.7\bin`



**Close** all newly opened windows one after the other by clicking "OK".

## Next step

If you have successfully completed all of the above steps, proceed to the next step: [OpenJDK](#)

## Setup:Installation Guide/System Preparation/Windows /Microsoft Visual C++ Redistributable

### Contents

1 Download .....	37
2 Installation .....	37
3 Next step .....	37





**The installation of Visual C ++ Redistributable for Visual Studio 2015 is required to run PHP in version 7.x on Windows. The steps listed here are required.**

## Download

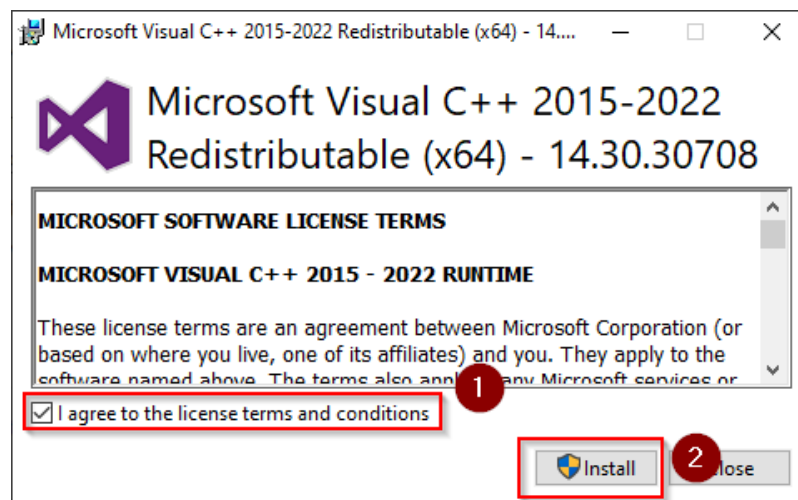


**The content of this section refers to external sources and is current at the time of writing this documentation. We cannot guarantee how long these sources will remain unchanged. Please let us know if you notice any discrepancies to the information provided here.**

According to Microsoft, the corresponding installation package is available under a permanent [download link](#) (documentation at Microsoft). Download this setup package.

## Installation

**Open** the Setup, **confirm** the "license terms and conditions" (1) and **click** "Install" (2):



## Next step

If you have successfully completed all of the above steps, go to the next step: [PHP Manager](#).

# OpenJDK on Windows

## Contents

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3 Setting the environment variable .....	40
4 Next step .....	42



OpenJDK is a prerequisite for operating the Extended Search and the PDF export. The steps listed here are therefore optional and only required if you want to use one or more of these services in your BlueSpice installation.



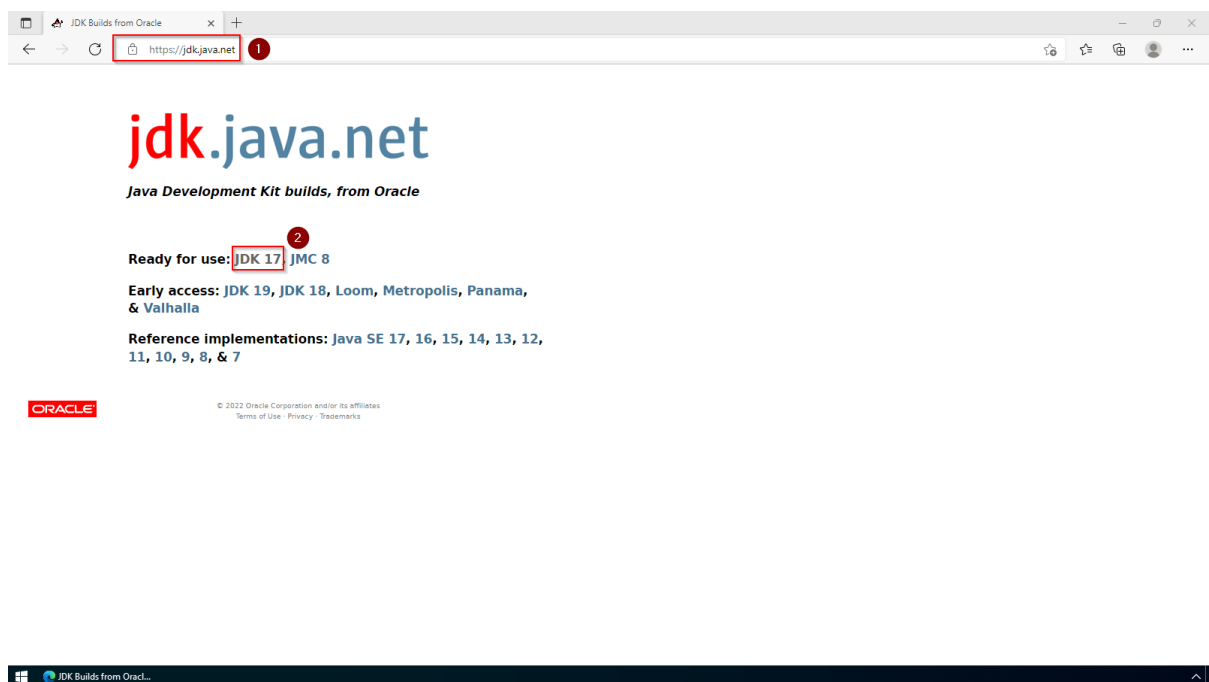
In the following documentation, we work with OpenJDK in version 17.0.2, the current version at the time of writing. You can also use other versions as long as they meet the system requirements we have published. Please note that you then have to adjust the information in this documentation accordingly.

## Download

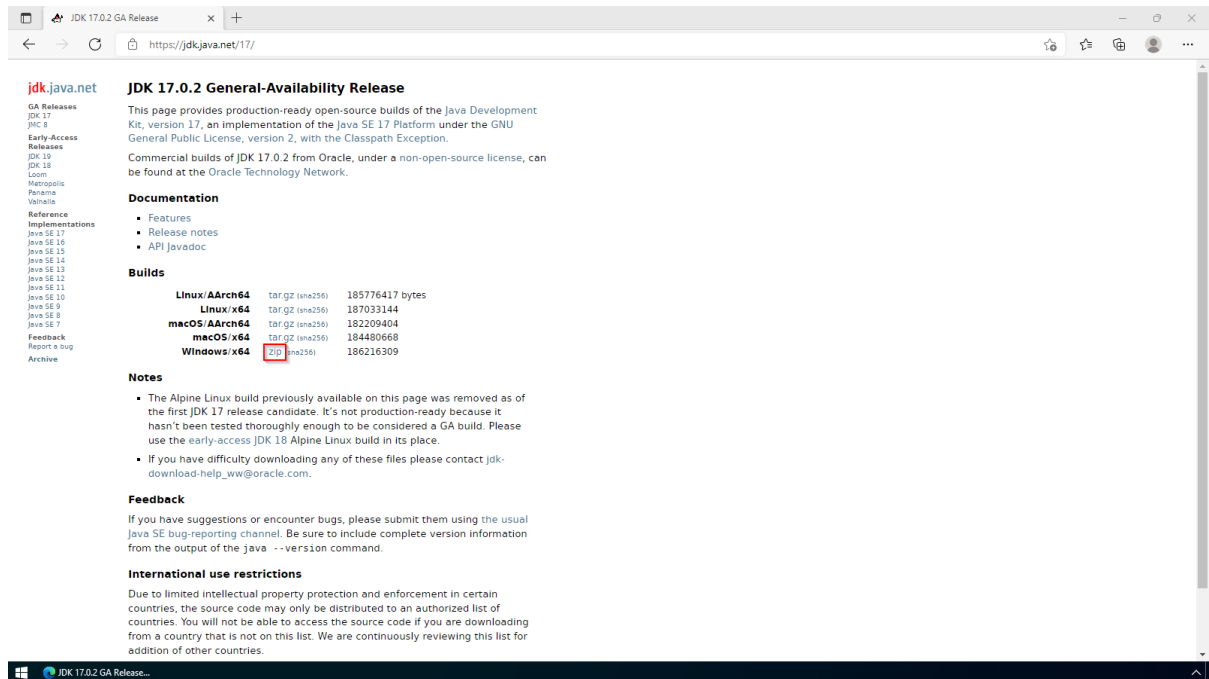


The content of this section refers to external sources and is current at the time of writing this documentation. We cannot guarantee how long these sources will remain unchanged. Please let us know if you notice any discrepancies to the information provided here.

Open the [official website at java.net](https://jdk.java.net) (1) and **click** "JDK 17" (2):



**Download** the ZIP archive for Windows:



## Unpacking the ZIP archive



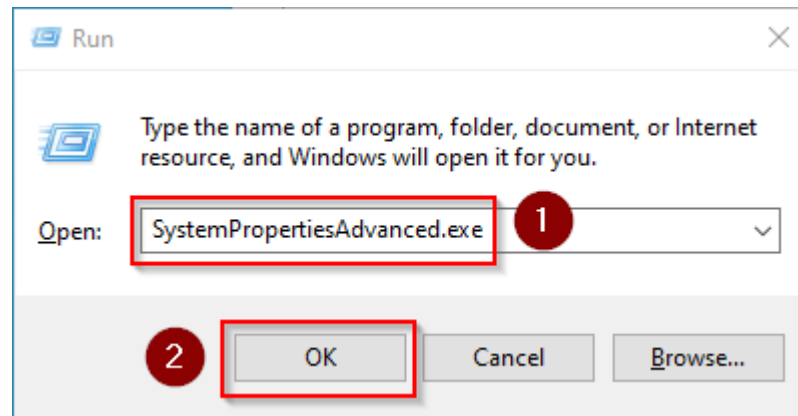
**This documentation is based on the [folder structure recommended by us](#). If you want to adjust this individually, you have to adjust the paths yourself according to your own level of knowledge.**

Unpack the downloaded ZIP archive to `C:\BlueSpice\bin`. The file structure `C:\BlueSpice\bin\jdk-17.0.2` should be the result.

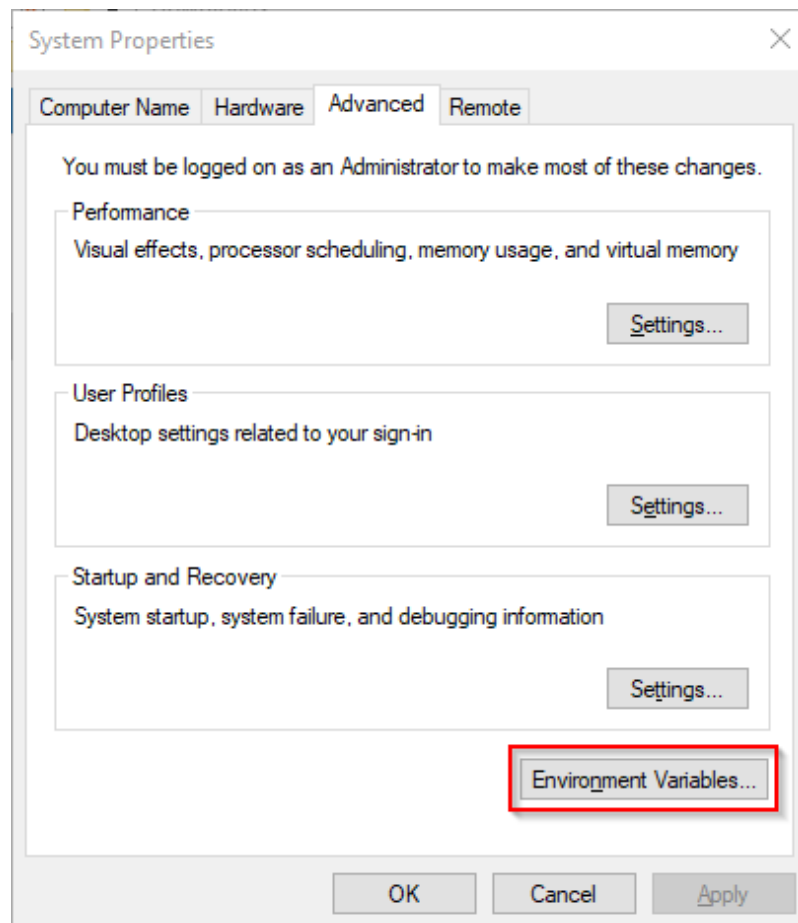
## Setting the environment variable

**Enter** the key combination Windows+R.

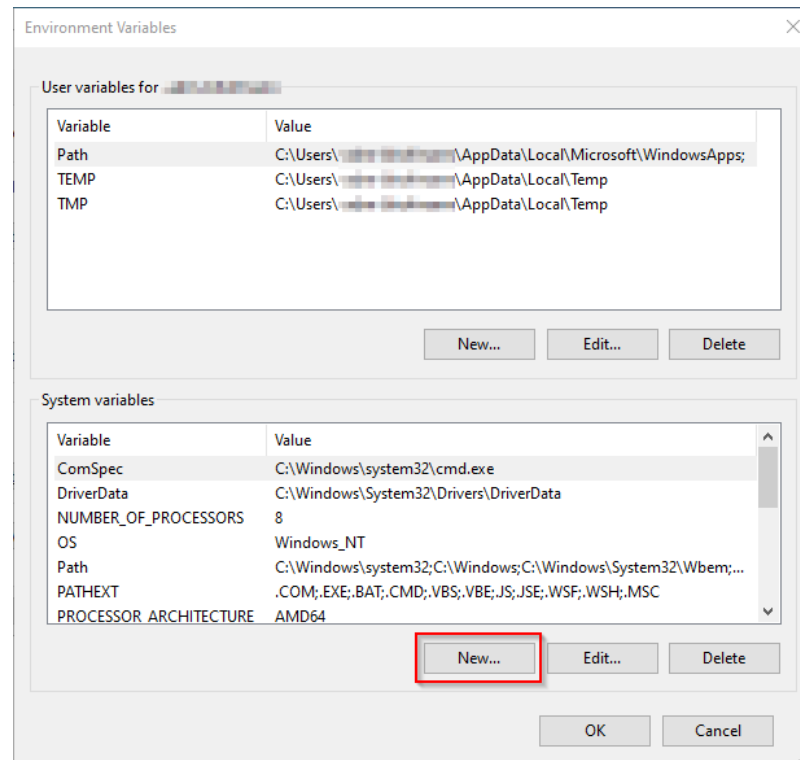
**Enter** "SystemPropertiesAdvanced.exe" (1) in the dialog window and **click** "OK" (2):



**Click "Environment Variables...":**



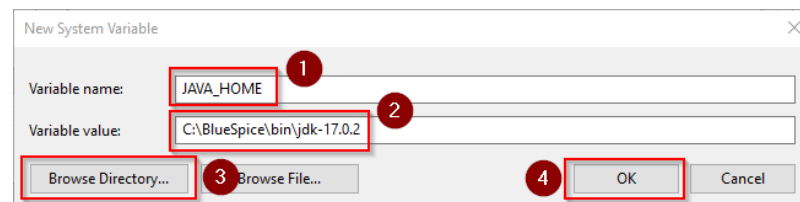
**Click "New...":**



**Set** the variable name to "JAVA\_HOME" (1), and the variable value to the directory of your OpenJDK installation that you just copied to *C:\bluespice\bin* (2).

You can use the "Browse directory" button (3) for that.

**Click** "OK" (4):



**Close** all newly opened windows one after the other by clicking "OK".

## Next step

If you have successfully completed all of the above steps, proceed to the next step: [Apache Tomcat](#).

## Setup:Installation Guide/System Preparation/Windows /OpenSearch



OpenSearch is available from BlueSpice 4.4. Earlier versions of BlueSpice 4 support [Elasticsearch](#).

### Installation

Follow the official installation instructions on [opensearch.org](https://opensearch.org/docs/latest/install-and-configure/install-opensearch/windows/). Example for Debian:

<https://opensearch.org/docs/latest/install-and-configure/install-opensearch/windows/>

### Plugin installation

You also need the plugin *ingest-attachment*. Install it as described here:

<https://opensearch.org/docs/latest/install-and-configure/plugins/>

### Next step

If you have completed all steps successfully, you can proceed to the next step "[Python](#)".

## Setup:Installation Guide/System Preparation/Windows/PHP

### Contents

1 Download .....	44
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4 Checking the environment variable .....	49
5 Configuring IIS for PHP .....	50
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The source code of BlueSpice is based on the scripting language "PHP". It must be installed on your server in order to operate BlueSpice. The steps listed here are required.



PHP is not installed with a "classic installation package" but the sources are downloaded and integrated into IIS via the **PHP Manager** that you installed in the previous step.

## Download

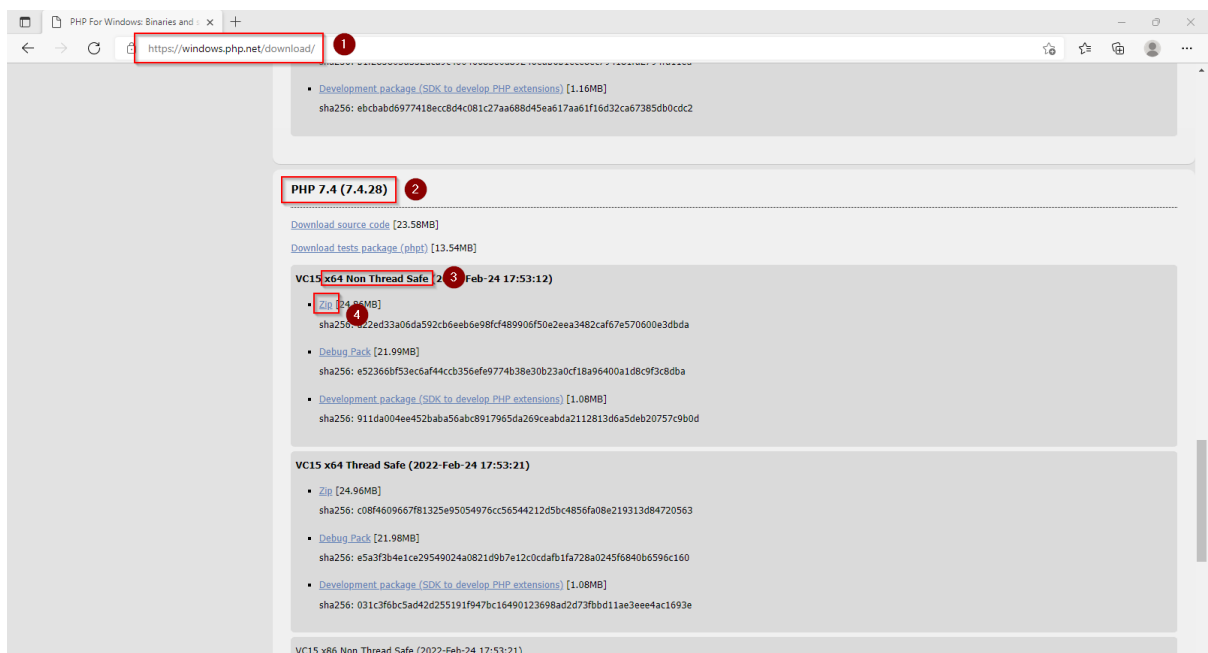


The content of this section refers to external sources. We cannot guarantee how long these sources will remain unchanged. Please let us know if you notice any discrepancies to the information provided here.

The PHP version in this instruction serves only as an example.

**Open** the [official download page for Windows auf php.net](https://windows.php.net/download/) (1).

**Find** a [currently supported version](#) (2) 64-bit Non Thread Safe (3) and **download** it (4):





**Follow** the download instructions.

## Unpacking the ZIP archive

**Unpack** the ZIP archive that you just downloaded into a useful system path on your hard drive.



**This documentation assumes the [recommended folder structure](#).**

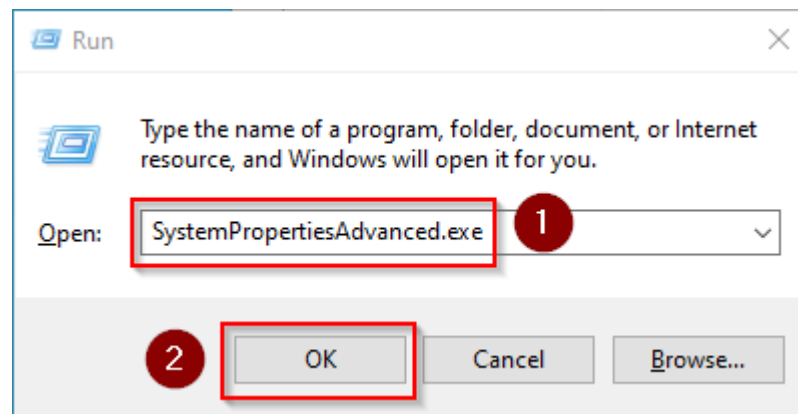
For this reason PHP will be unpacked into the folder C:\bluespice\bin\php-<version>. If you have a different folder structure, you must adapt these paths accordingly.

## Setting the environment variable

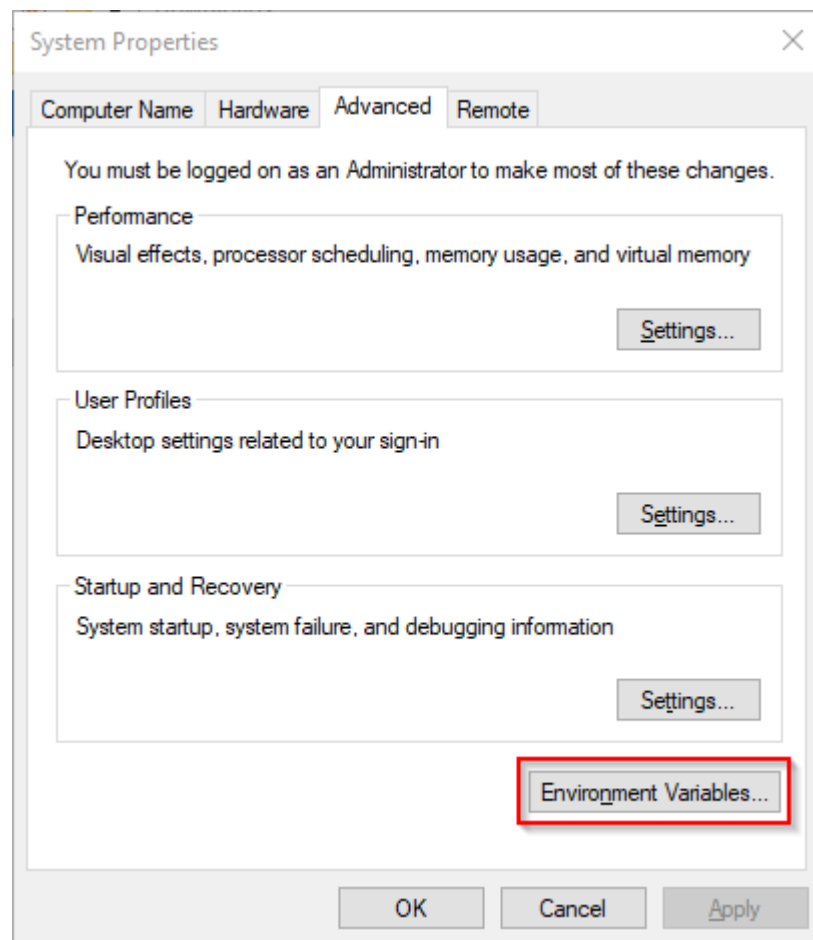
To use PHP easily on the command line of Windows, it is necessary to configure an environment variable in Windows. Perform the following steps:

**Enter** the key combination Windows+R.

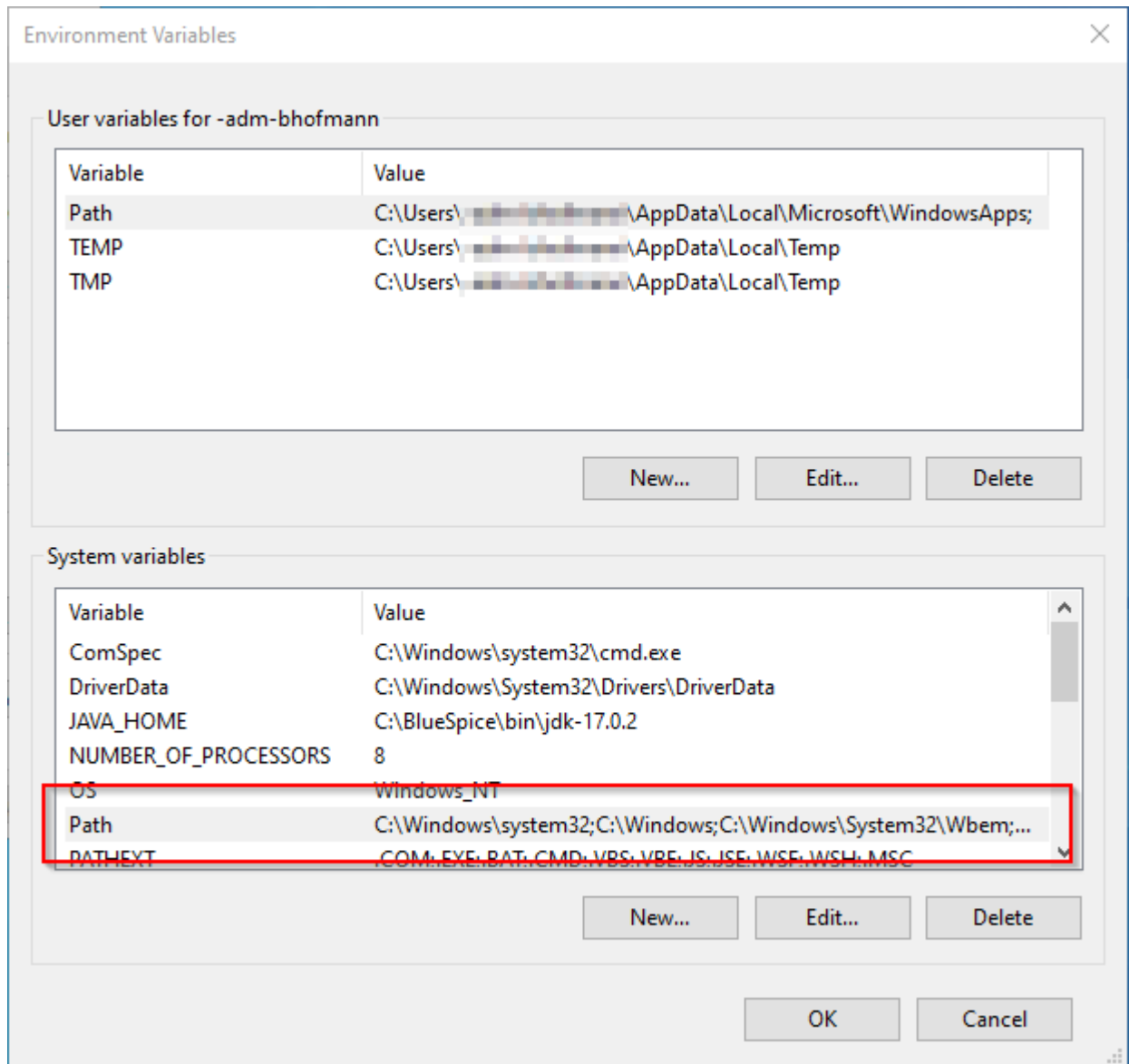
**Enter** "SystemPropertiesAdvanced.exe" (1) in the dialog window and **click** "OK" (2):



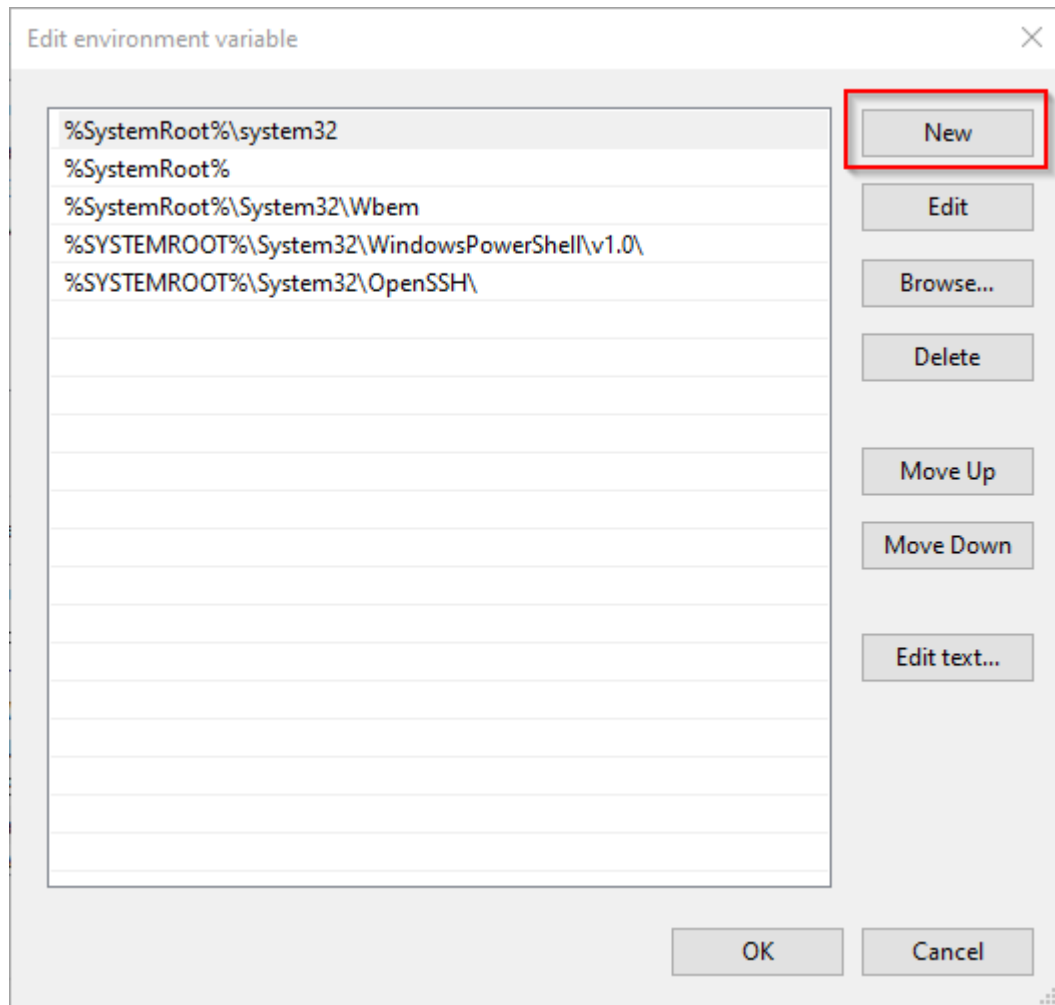
**Click** "Environment Variables...":



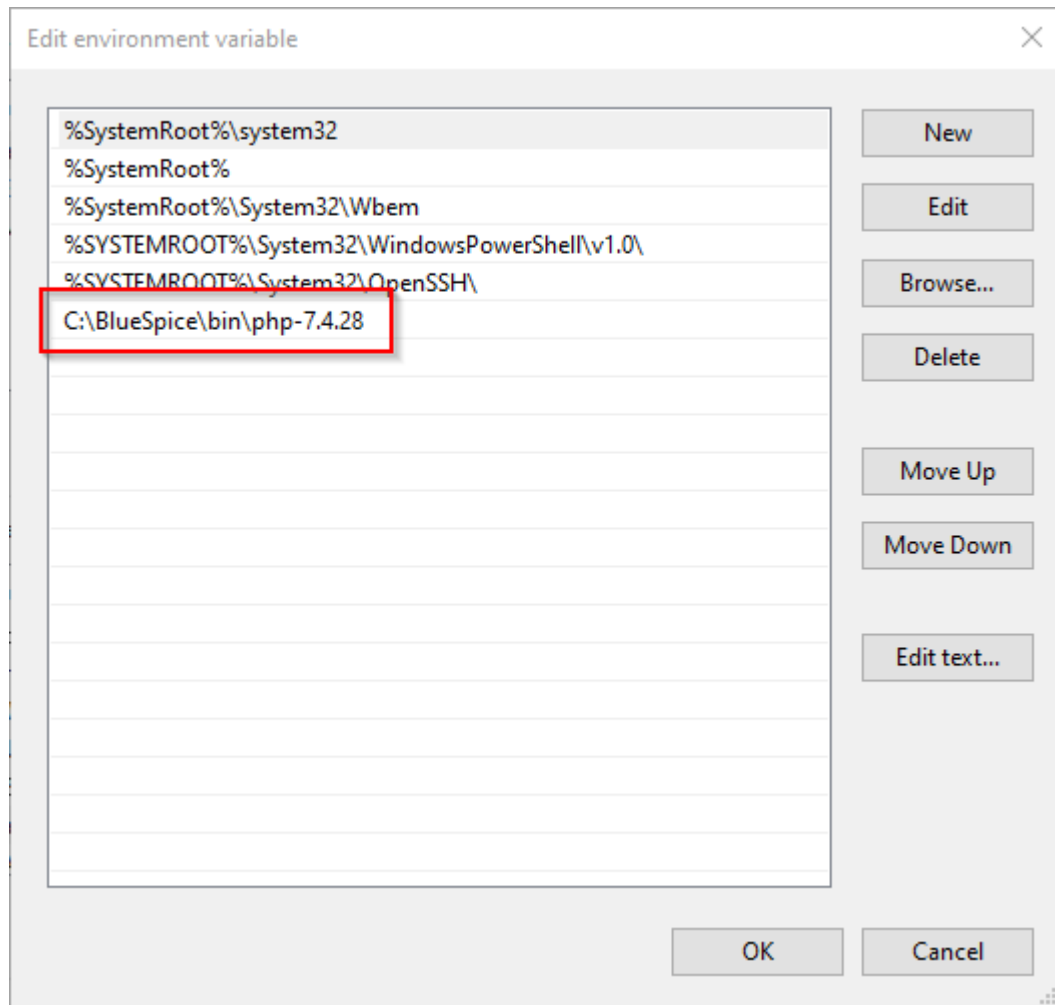
**Double-click** the entry "Path" in the section "System variables":



Click "New":



**Add** the path to your unpacked PHP version, which contains the php.exe file:



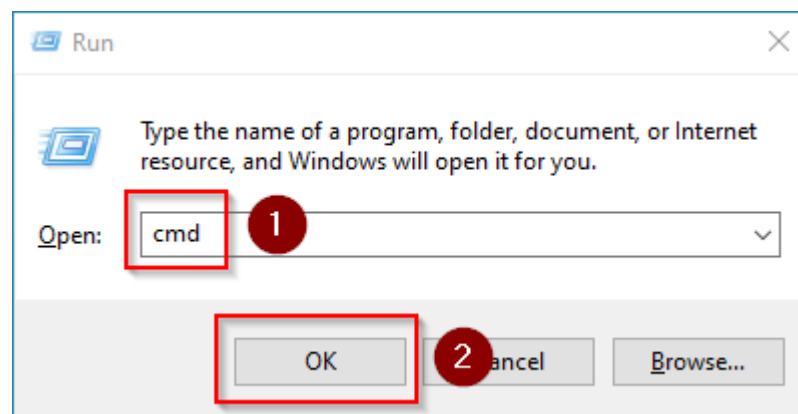
**Close** all newly opened windows one after the other by clicking "OK".

## Checking the environment variable

To make sure the environment variable is set correctly, perform the following steps:

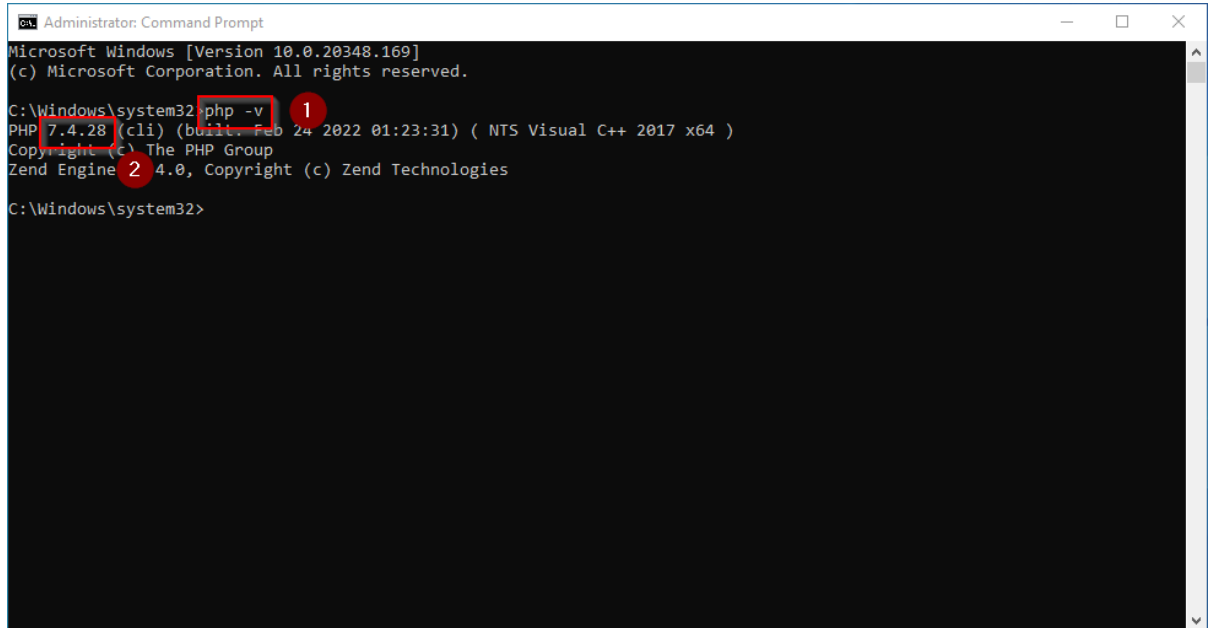
**Enter** the key combination Windows+R.

**Enter** "cmd" (1) in the dialog window and **click** "OK" (2):



The command prompt opens.

Type "php -v" (1) and **press** the *Enter* key. The found PHP version will be displayed (2).



```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.20348.169]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\system32 php -v 1
PHP 7.4.28 (cli) (built: Feb 24 2022 01:23:31) ( NTS Visual C++ 2017 x64 )
Copyright (c) The PHP Group
Zend Engine 2 4.0, Copyright (c) Zend Technologies

C:\Windows\system32>
```

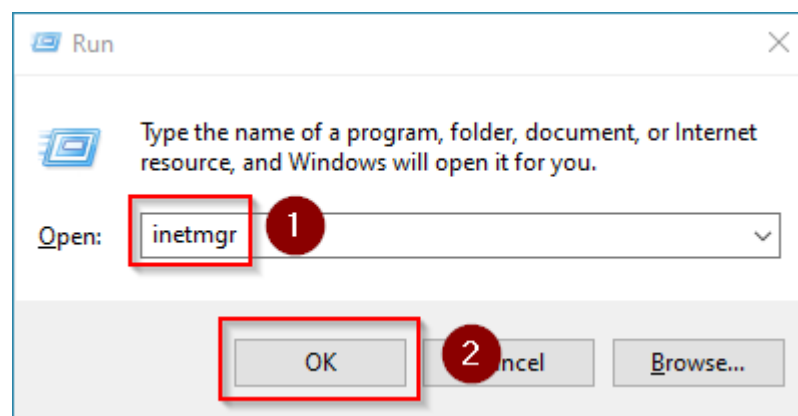
If this is not the case, then the path to the php.exe file in the environment variables was specified incorrectly.

## Configuring IIS for PHP

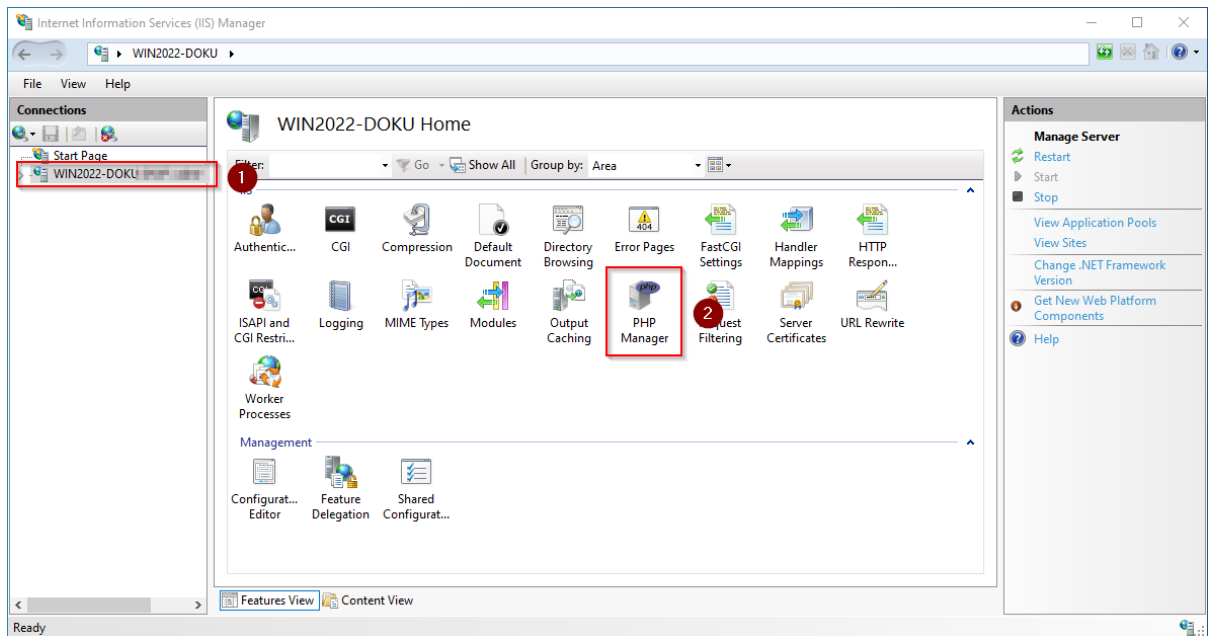
In the following steps, PHP will be included in IIS and IIS will be configured to provide a working basic setup:

**Press** the key combination Windows+R to call up IIS Manager.

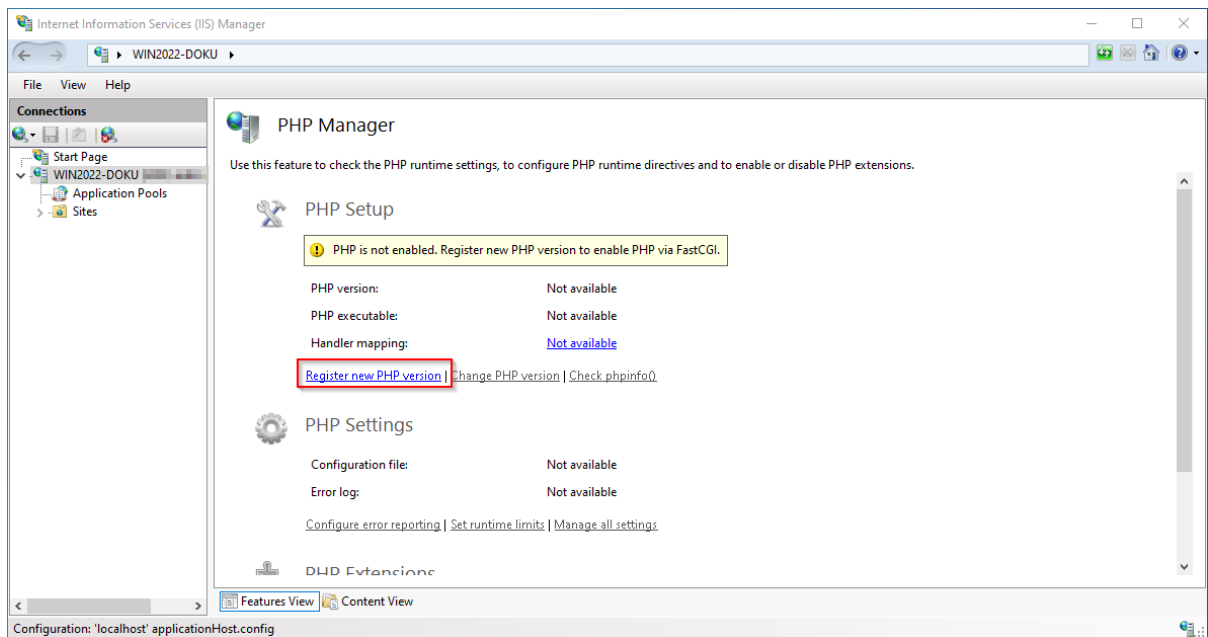
**Enter** "inetmgr" (1) in the dialog window and **click** "OK" (2):



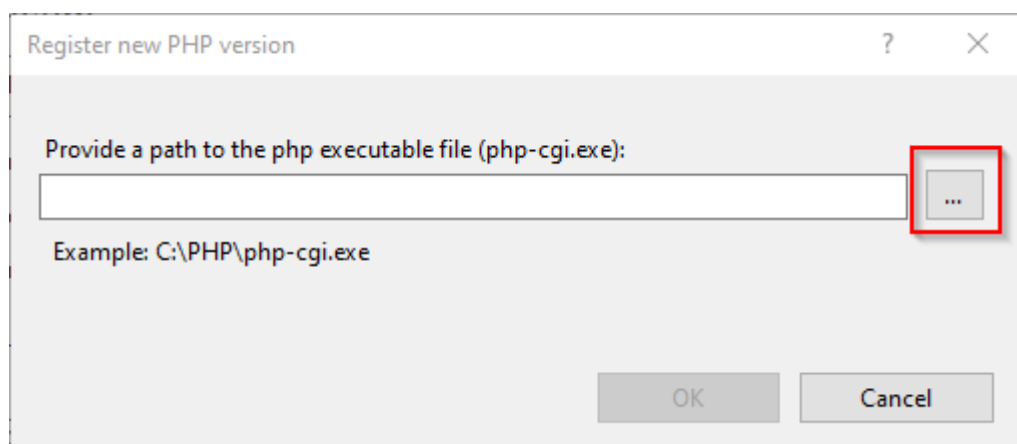
**Select** your server name (1) in the left pane and then **double-click** "PHP Manager" (2):



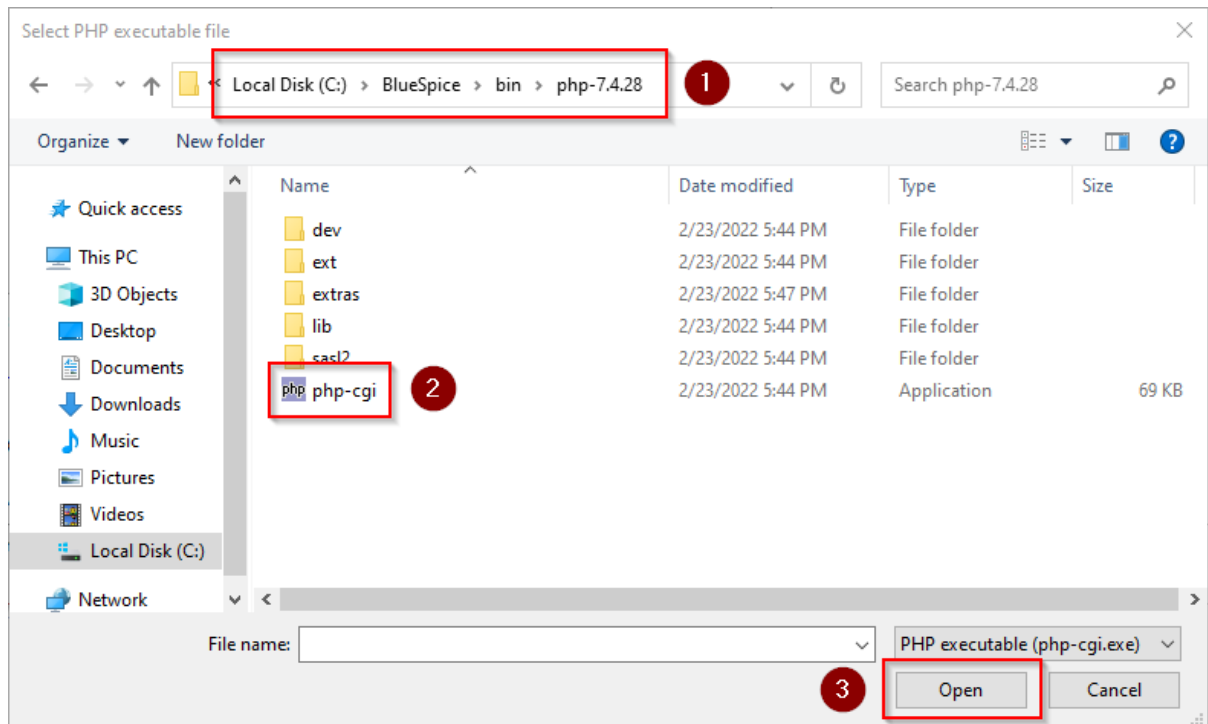
**Click "Register new PHP version":**



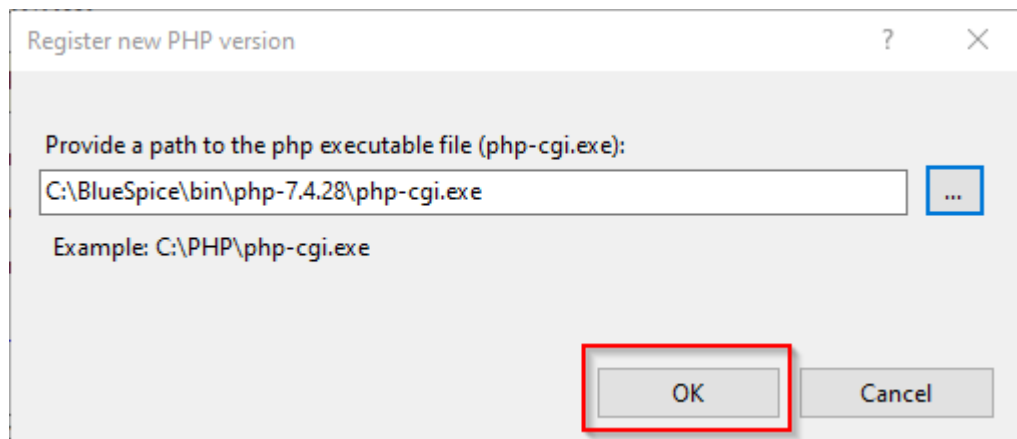
**Select the browse "(...)" button in the next window:**



**Change** to the path to which you previously unzipped PHP (1), **mark** the "php-cgi.exe" (2) and **click** "Open" (3):

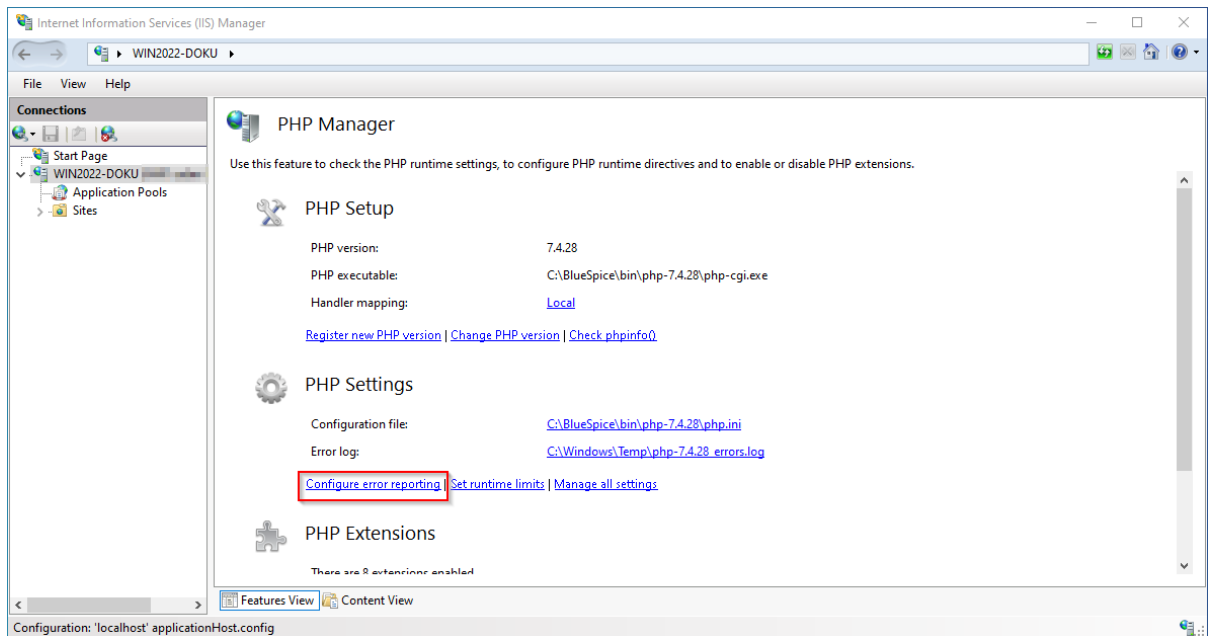


**Click** "OK":

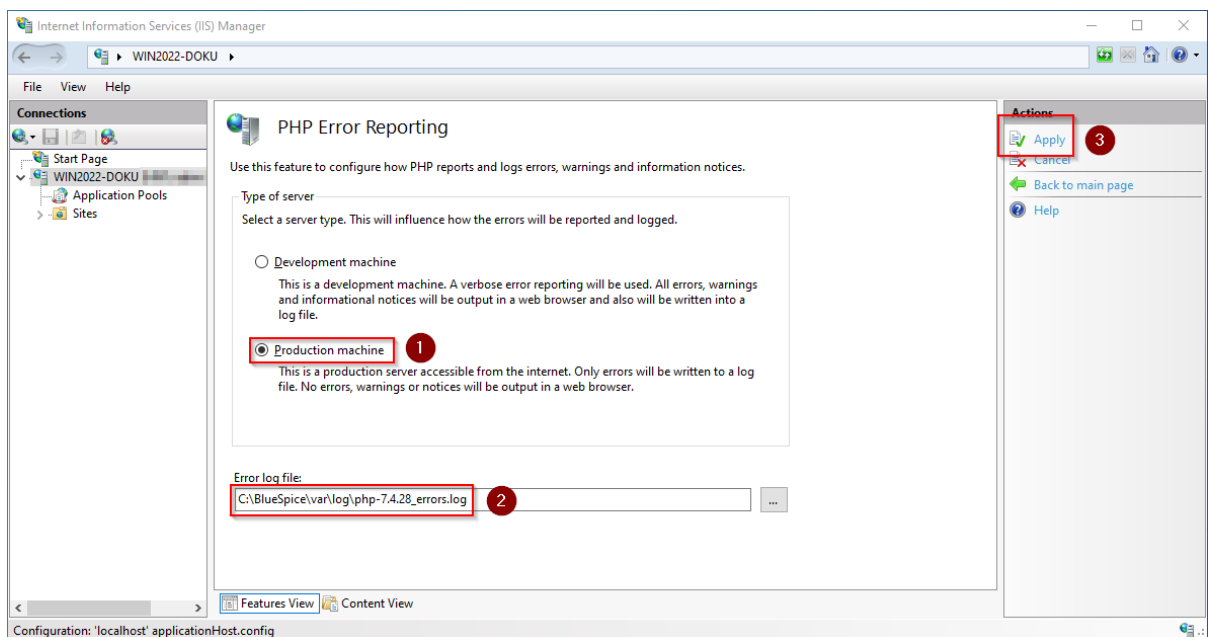


**Click** "Configure error reporting":



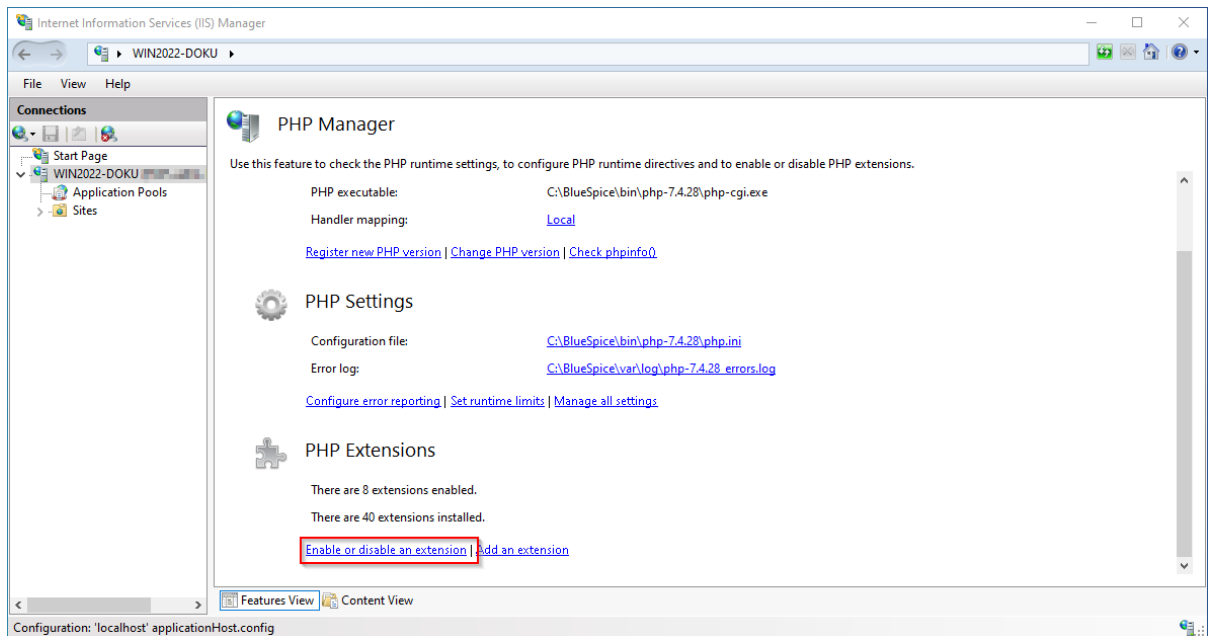


**Select** the item "Production machine" (1) and **enter** a path and a file of your choice where PHP should save its log (2). **Click** "Apply" (3):

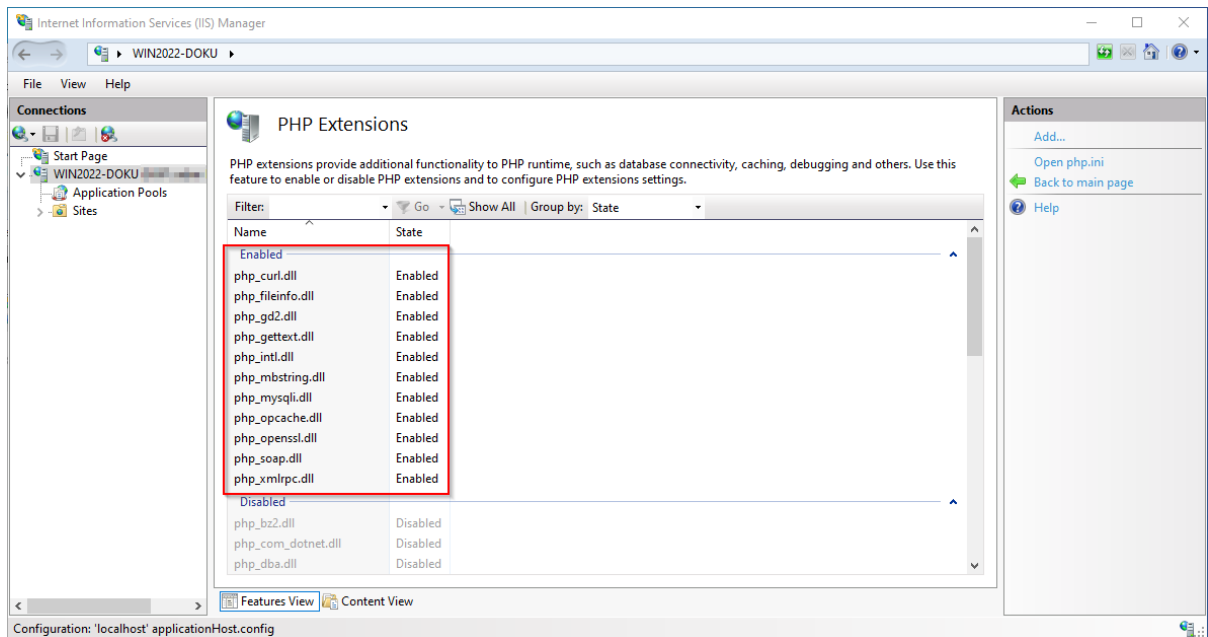


**This documentation assumes the recommended folder structure. If the path you specify here does not yet exist, please create it before clicking "Apply".**

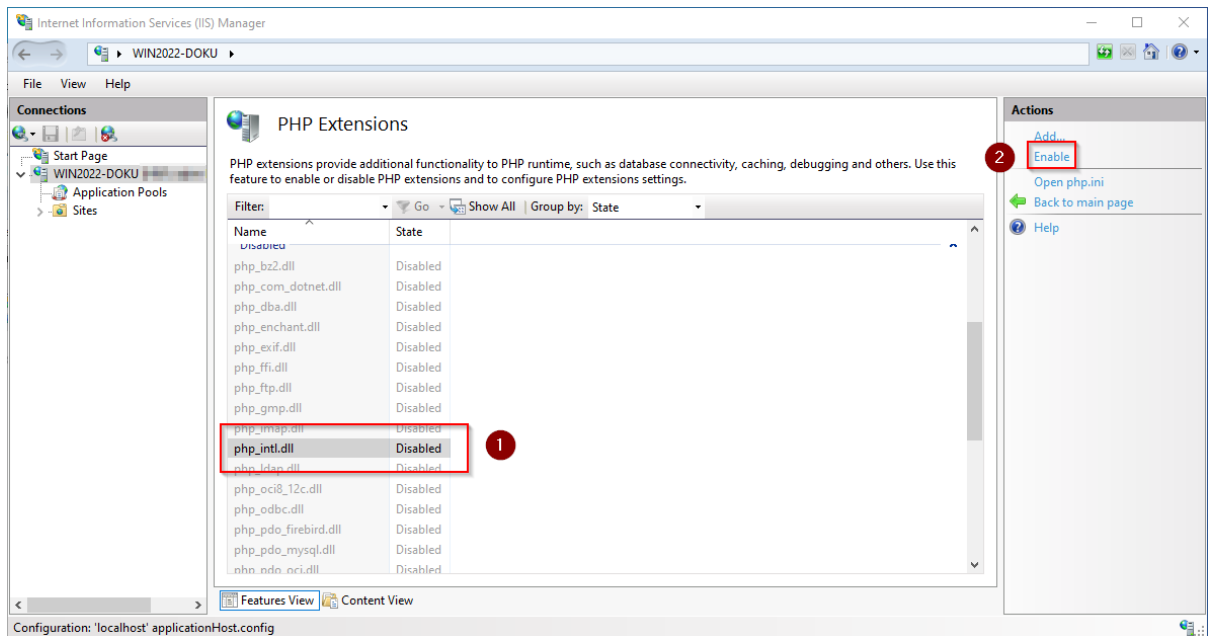
**Click** "Enable or disable an extension" in the main window:



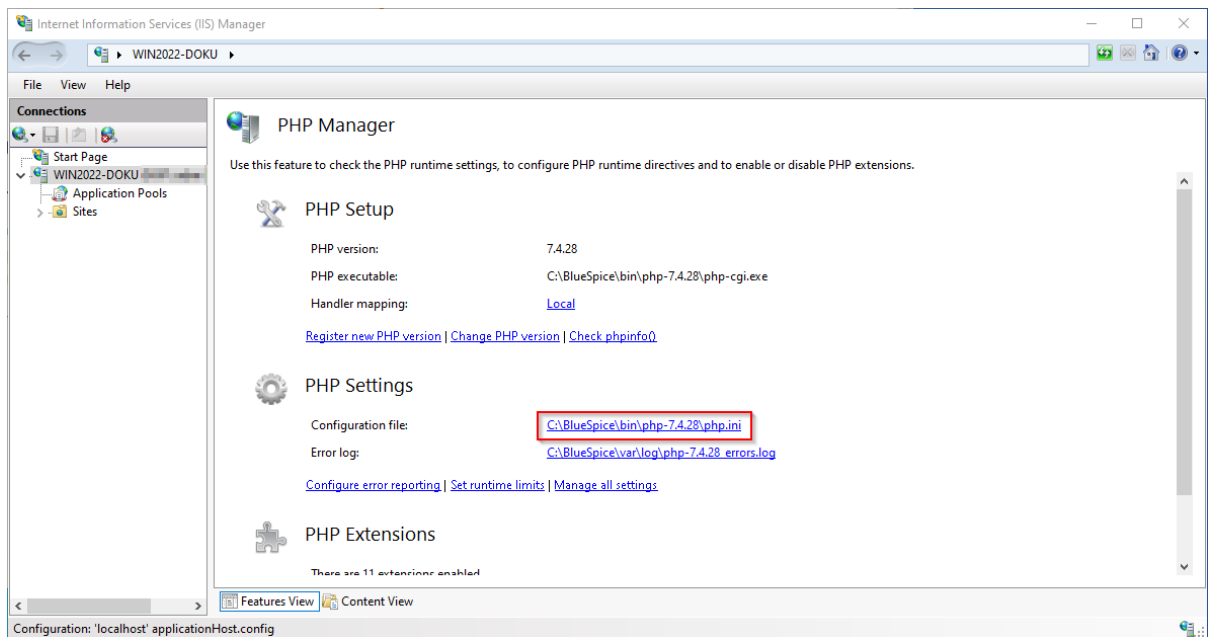
Make sure that the following extensions are activated:



To activate an extension, find it in the "Disabled" extensions (1) and **click** "Enable" (2):



Open the configuration file *php.ini*:



Replace the line `extension=php_opcache.dll` with `zend_extension=php_opcache.dll` :



```
*php - Notepad
File Edit Format View Help
extension=php_curl.dll
[PHP_GD2]
extension=php_gd2.dll
[PHP_GETTEXT]
extension=php_gettext.dll
[PHP_MYSQLI]
extension=php_mysqli.dll
[PHP_MBSTRING]
extension=php_mbstring.dll
[PHP_OPENSSL]
extension=php_openssl.dll
[PHP_SOAP]
extension=php_soap.dll
[PHP_XMLRPC]
extension=php_xmlrpc.dll
[PHP_FILEINFO]
extension=php_fileinfo.dll
[PHP_OPCACHE]
zend_extension=php_opcache.dll
[PHP_INTL]
extension=php_intl.dll

Ln 1978, Col 31    100%    Windows (CRLF)    UTF-8
```

**Change** the following options to the values below:

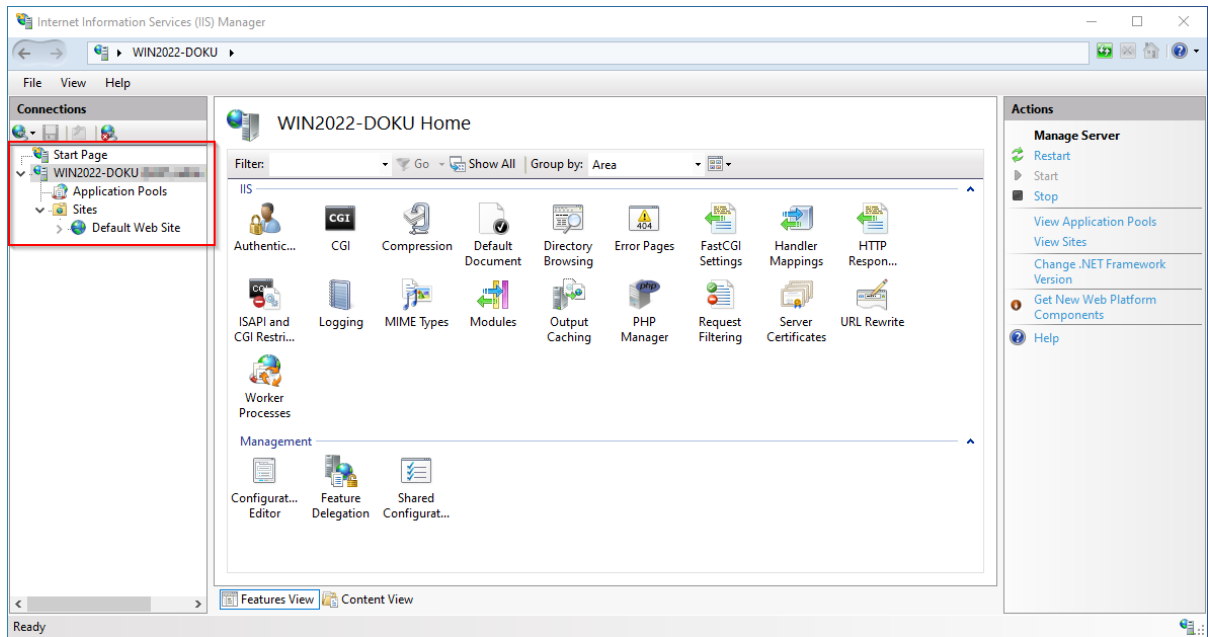
Name	Wert	Kommentar
date.timezone	"Europe/Berlin"	Select the appropriate <a href="#">time zone</a> for you. Uncomment the entry
max_execution_time	600	
post_max_size	1024M	
upload_max_filesize	1024M	
opcache.enable	1	Uncomment the entry
opcache.enable_cli	0	Uncomment the entry
opcache.memory_consumption	512	Uncomment the entry
opcache.max_accelerated_files	1000000	Uncomment the entry
opcache.validate_timestamps	1	Uncomment the entry
opcache.revalidate_freq	2	Uncomment the entry
opcache.optimization_level	0x7FFF9FFF	Uncomment the entry
opcache.blacklist_filename	C:\bluespice\etc\opcache.blacklist	Uncomment the entry
zlib.output_compression	On	
zlib.output_compression_level	9	Uncomment the entry

**Save** and close the file.

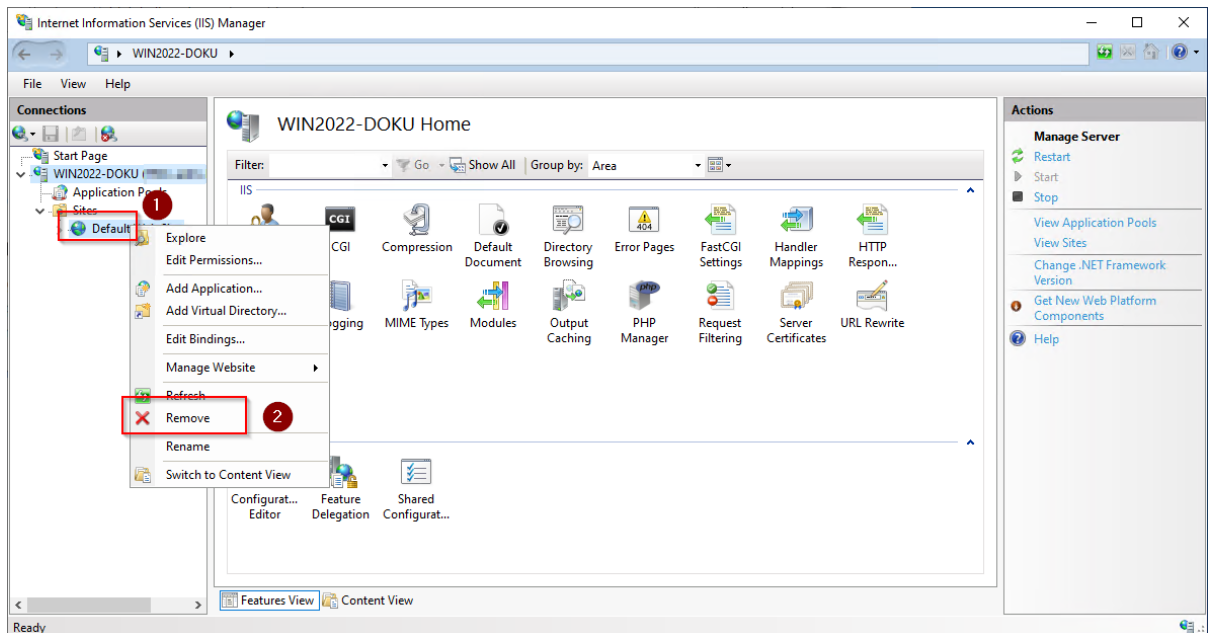
**Create** the folder `C:\bluespice\etc`.

**Create** a text file named `opcache.blacklist` content `C:\bluespice\var\www\w\extensions\BlueSpiceFoundation\config\*`

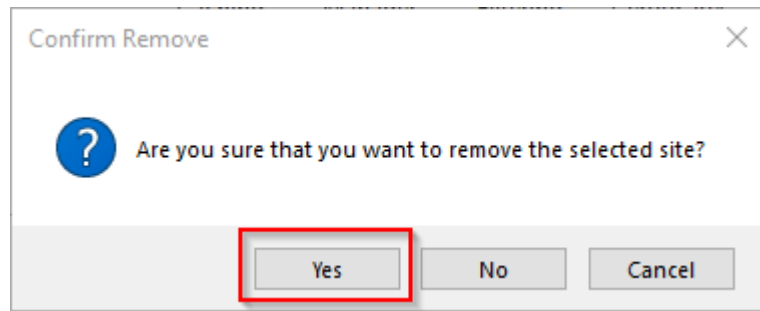
**Expand** the tree in the left pane of the IIS Manager until the "Default Web Site" becomes visible:



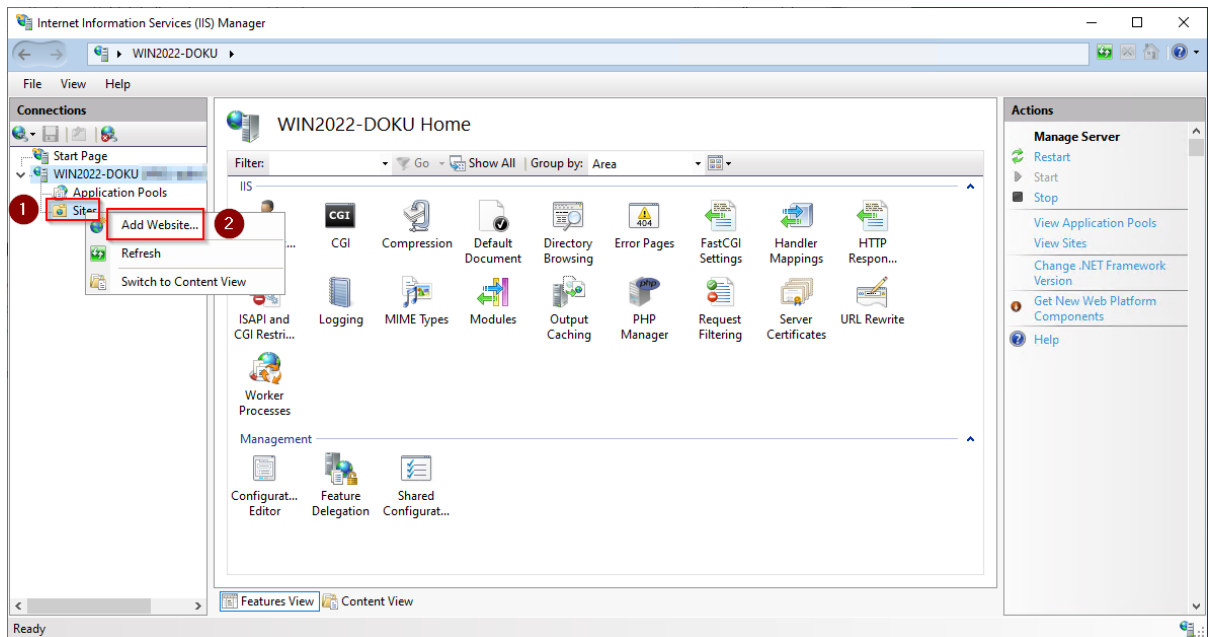
**Right-click** (1) and then **click** "Remove" (2):



**Confirm** the following dialog with "Yes":



**Right-click** "Sites" (1) and **click** "Add Website" (2):



**Enter** the site name "BlueSpice" (1) and **select** the path on your server where your BlueSpice installation will be located later (2).

**Click** "OK" (3):

**Add Website**

Site name:  Application pool:

Content Directory

Physical path:

Pass-through authentication

Binding

Type:  IP address:  Port:

Host name:

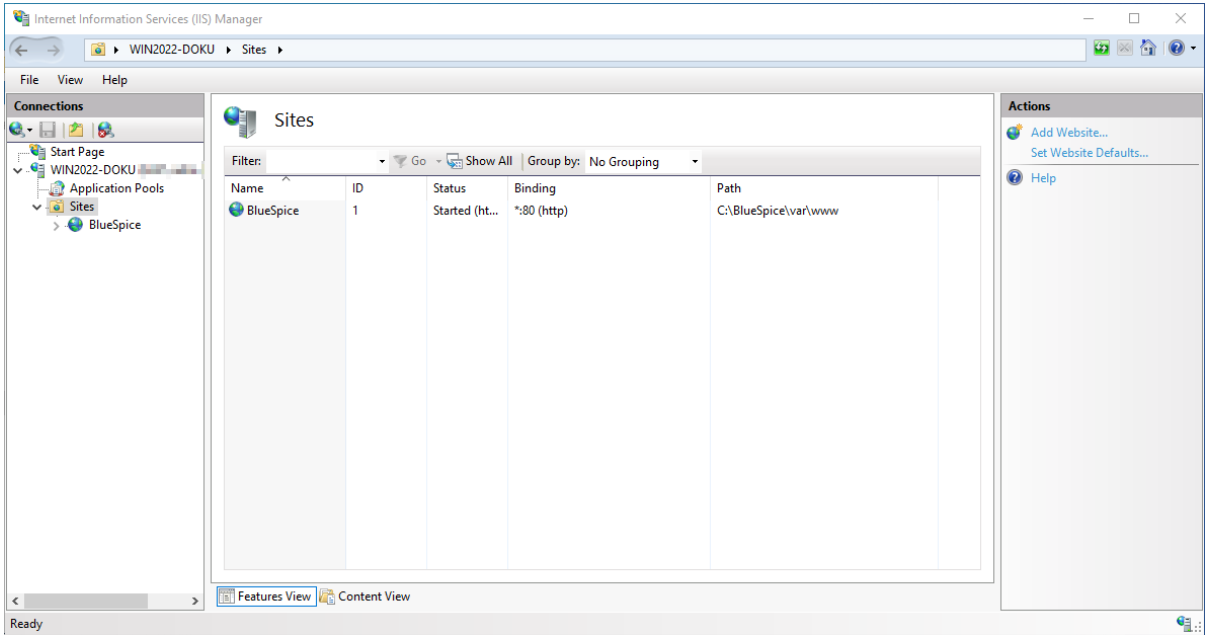
Example: www.contoso.com or marketing.contoso.com

☒ Start Website immediately



**This documentation assumes the [recommended folder structure](#). If the path you specify here does not yet exist, please create it before clicking "OK".**

The site is now listed in the IIS overview page:



Next step

If you have successfully completed all of the above steps, proceed to the next step: [MariaDB](#).

Setup:Installation Guide/System Preparation/Windows/PHP  
Manager

Contents

1	<a href="#">Download</a>	61
2	<a href="#">Installation</a>	62
3	<a href="#">Next step</a>	63





**PHP Manager conveniently integrates PHP into your IIS installation. The steps listed here are required.**

## Download



**The content of this section refers to external sources and is current at the time of writing this documentation. We cannot guarantee how long these sources will remain unchanged. Please let us know if you notice any discrepancies to the information provided here.**

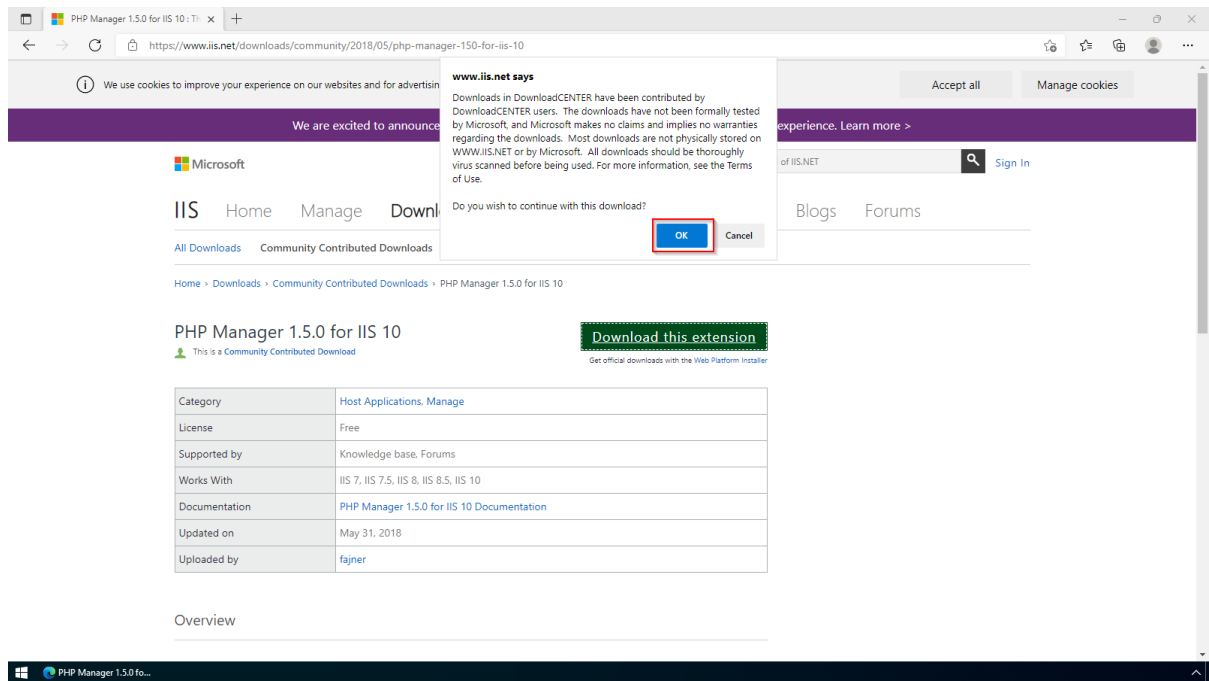
Open the [official website at iis.net](https://www.iis.net) (1) and click "Download this extension" (2).

The screenshot shows the IIS.NET website. The address bar contains the URL <https://www.iis.net/downloads/community/2018/05/php-manager-150-for-iis-10>, which is highlighted with a red box and a red circle with the number 1. The page title is "PHP Manager 1.5.0 for IIS 10". Below the title, there is a green button labeled "Download this extension" with a red circle and the number 2 next to it. Below the button, there is a table with the following information:

Category	Host Applications, Manage
License	Free
Supported by	Knowledge base, Forums
Works With	IIS 7, IIS 7.5, IIS 8, IIS 8.5, IIS 10
Documentation	<a href="#">PHP Manager 1.5.0 for IIS 10 Documentation</a>
Updated on	May 31, 2018
Uploaded by	fajner

Below the table, there is a section titled "Overview".

Click "OK" after reading the disclaimer:

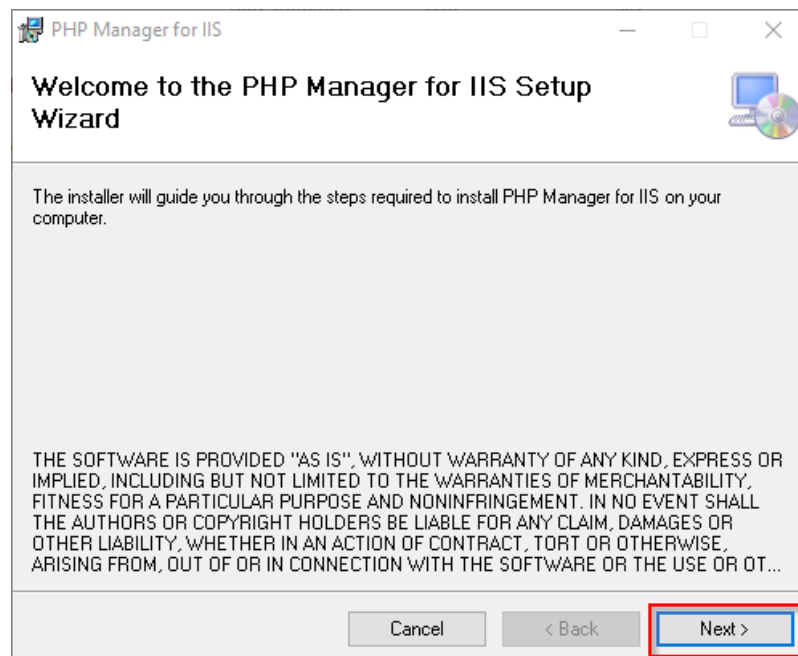


**Follow** the download instructions of your browser.

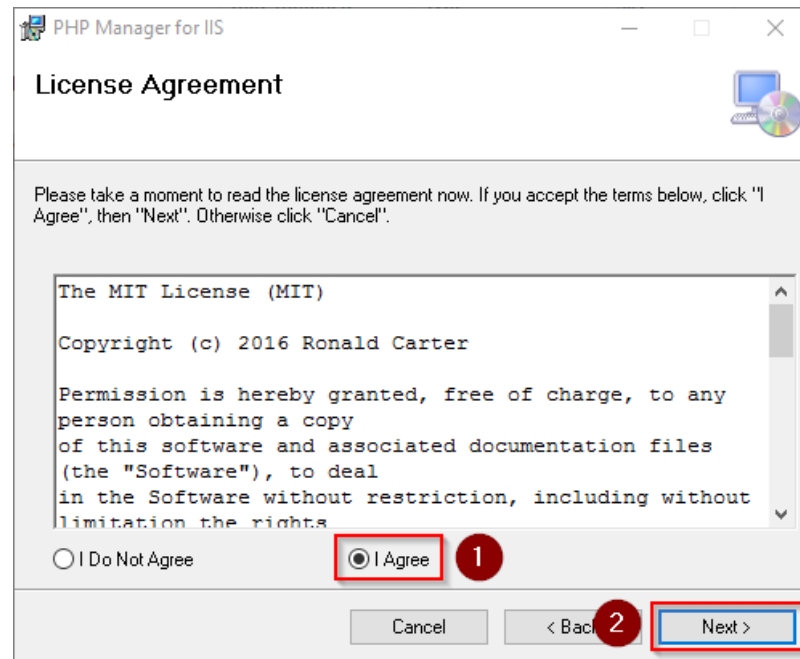
## Installation

Open the installation file which you have just downloaded.

**Click** "Next >" to start the installation:

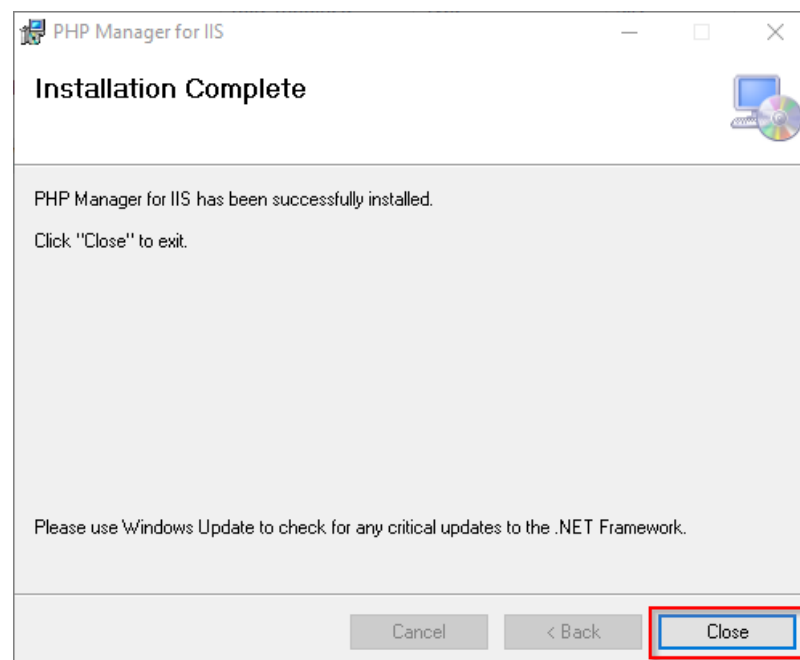


**Select** "I agree" (1) in the License Agreement and **click** "Next >" (2):



The installation is now executed and completed without further confirmation.

**Close** the setup program when finished:



## Next step

If you have successfully completed all of the above steps, go to the next step: [PHP](#).

Setup:Installation Guide/System Preparation/Windows/Python

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3 Installing Pygmentize .....	68
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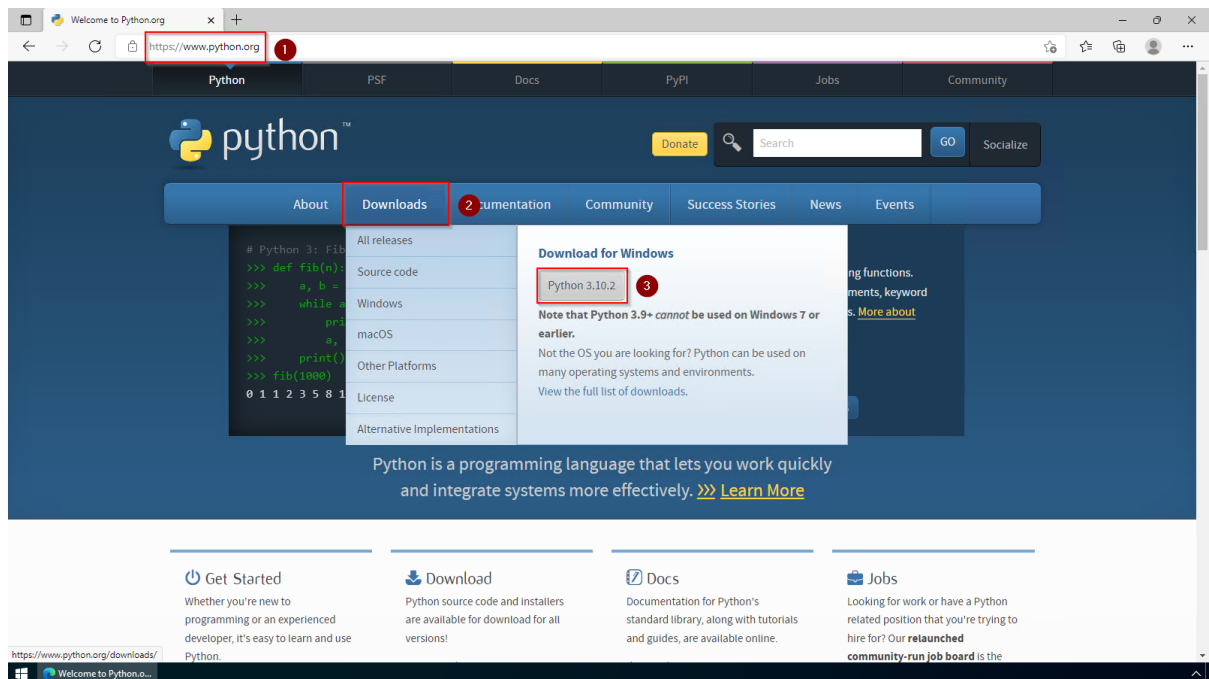
Python with the Pygmentize extension is required for rendering the MediaWiki extension **SyntaxHighlight**, which is part of BlueSpice. If you do not need the functionality, the installation of Python is not relevant for the installation and operation of BlueSpice.

## Download



The content of this section refers to external sources and is current at the time of writing this documentation. We cannot guarantee how long these sources will remain unchanged. Please let us know if you notice any discrepancies to the information provided here.

Download Python directly at [python.org](https://www.python.org).



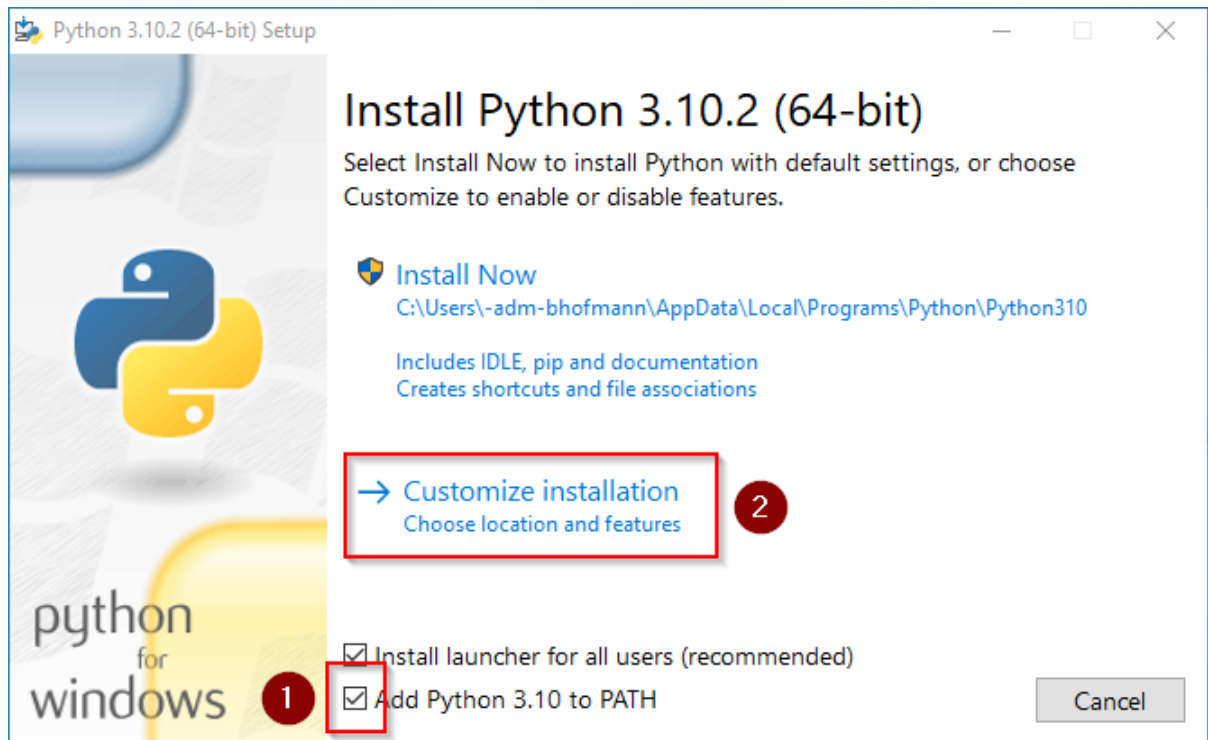
In the following, Python in version 3.10.2 is used and only serves as an example for the most current version that you can download at the time of your installation.

## Installation

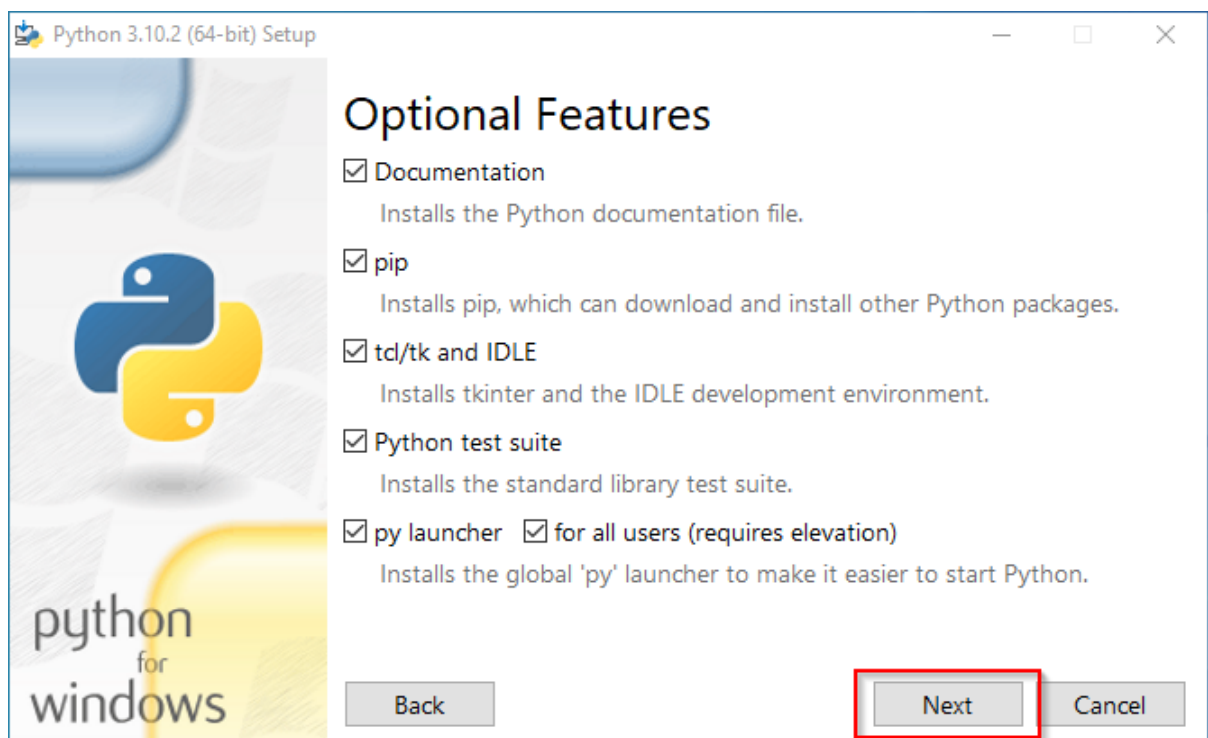
**Open** the file that you have just downloaded.

**Select** both checkboxes (1).

**Click** "Customize installation" (2):

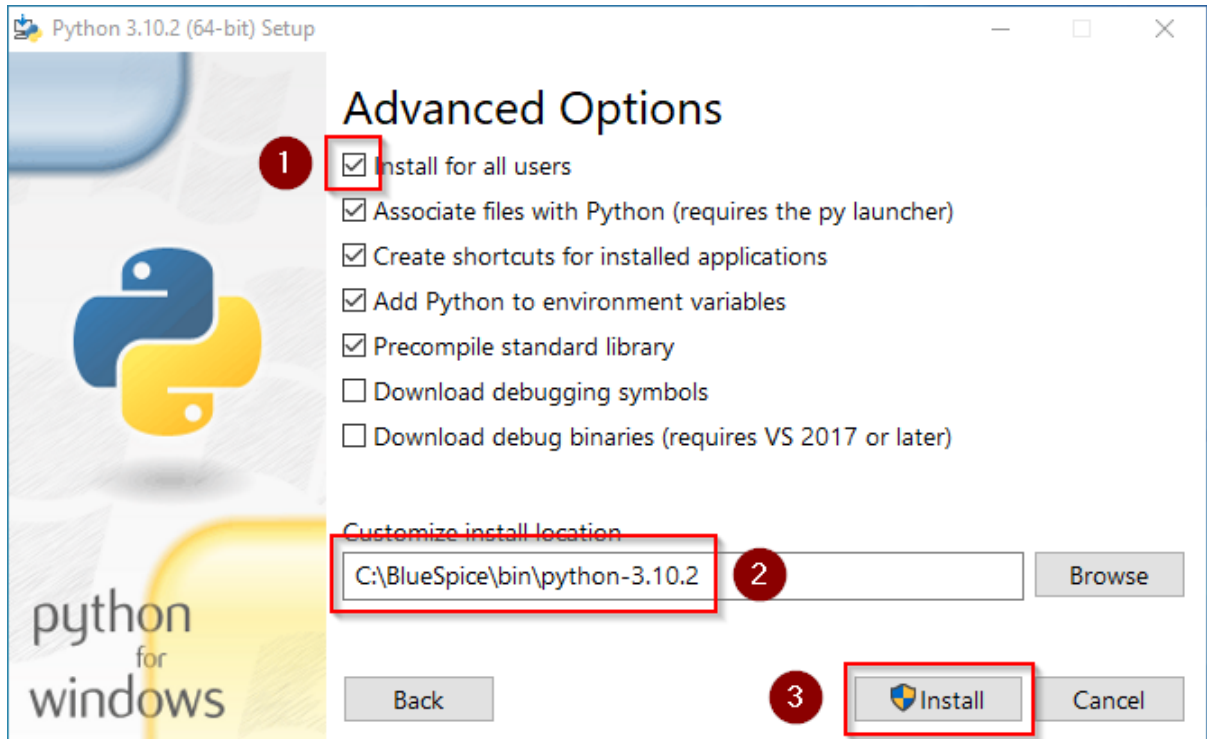


**Click** "Next" in the Optional Features window.



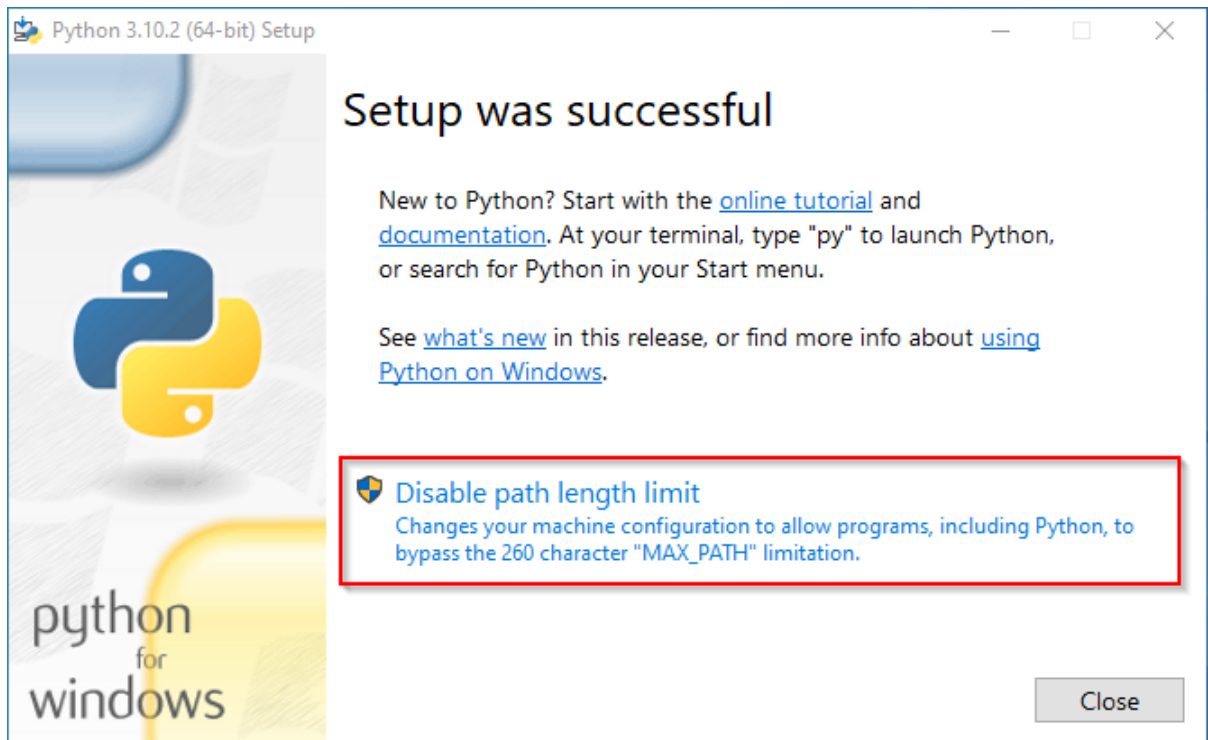
Make sure to install Python for all users (1) . Choose an appropriate path, if possible without spaces and special characters (2)

**Click** "Install" to start the installation (3).

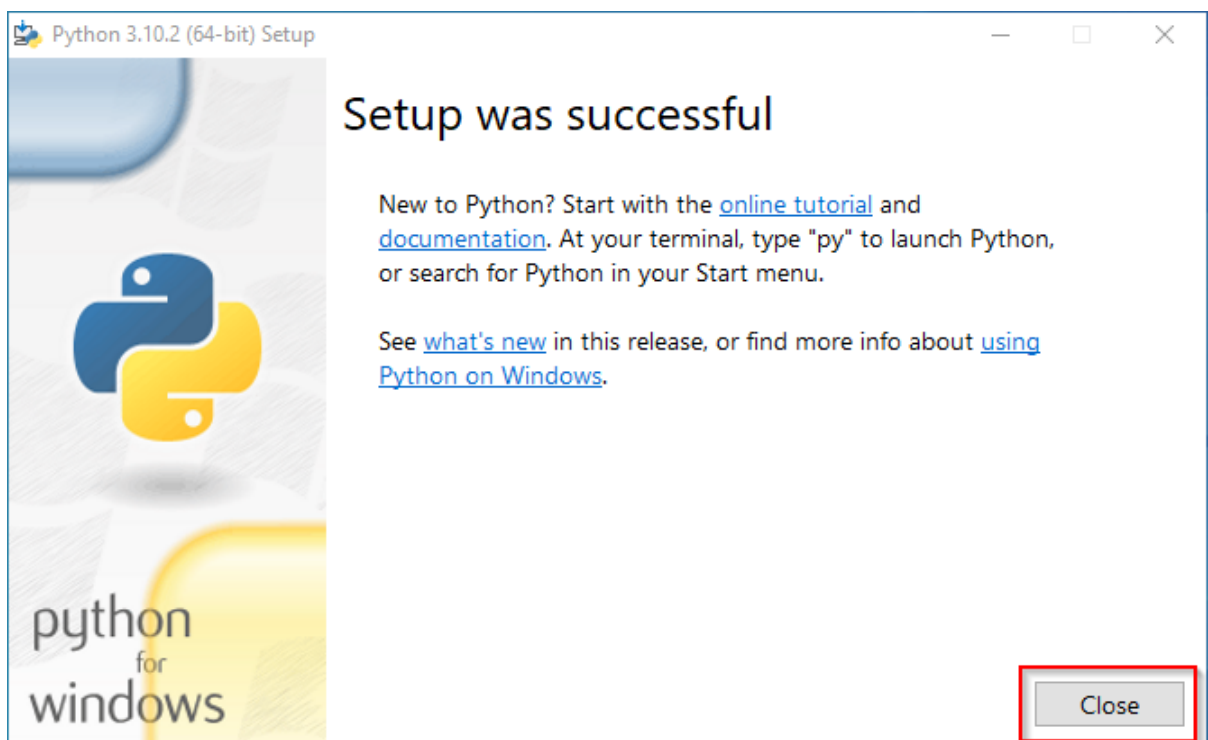


**This documentation assumes the [folder structure recommended by us](#). For this reason, Python is unpacked at this point in the folder C:\bluespice\bin\python-3.10.2. If you have individual wishes, adjust these paths according to your own understanding.**

**Deactivate** the limitation of the path length to 260 characters after the installation:



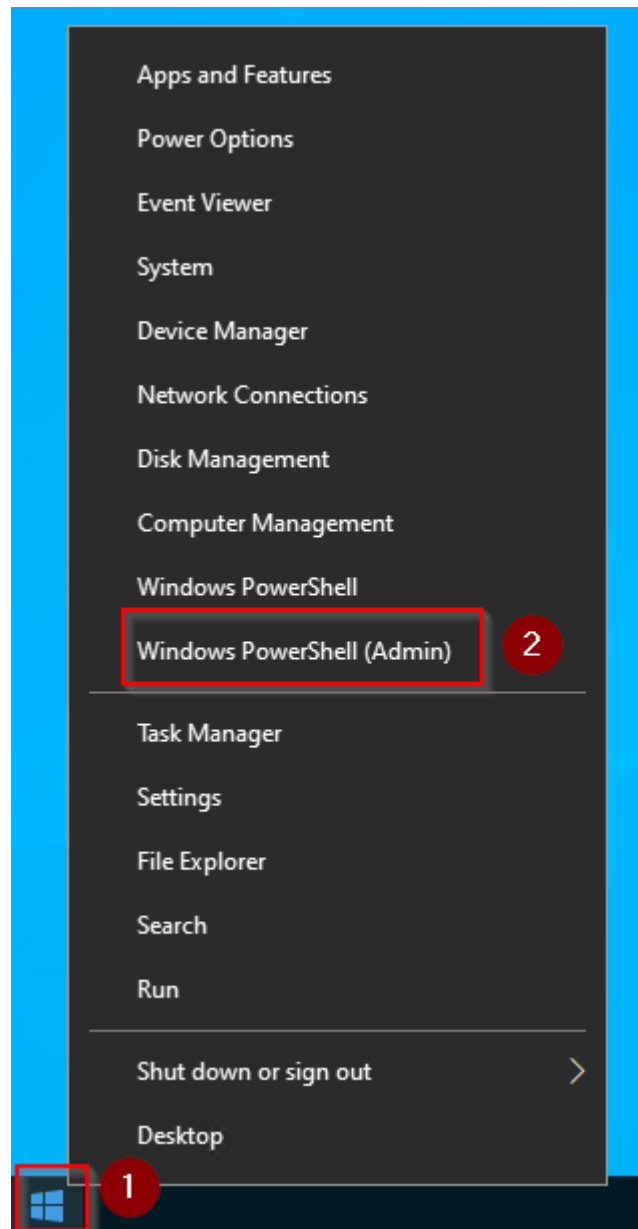
Click "Close" to finish the installation.



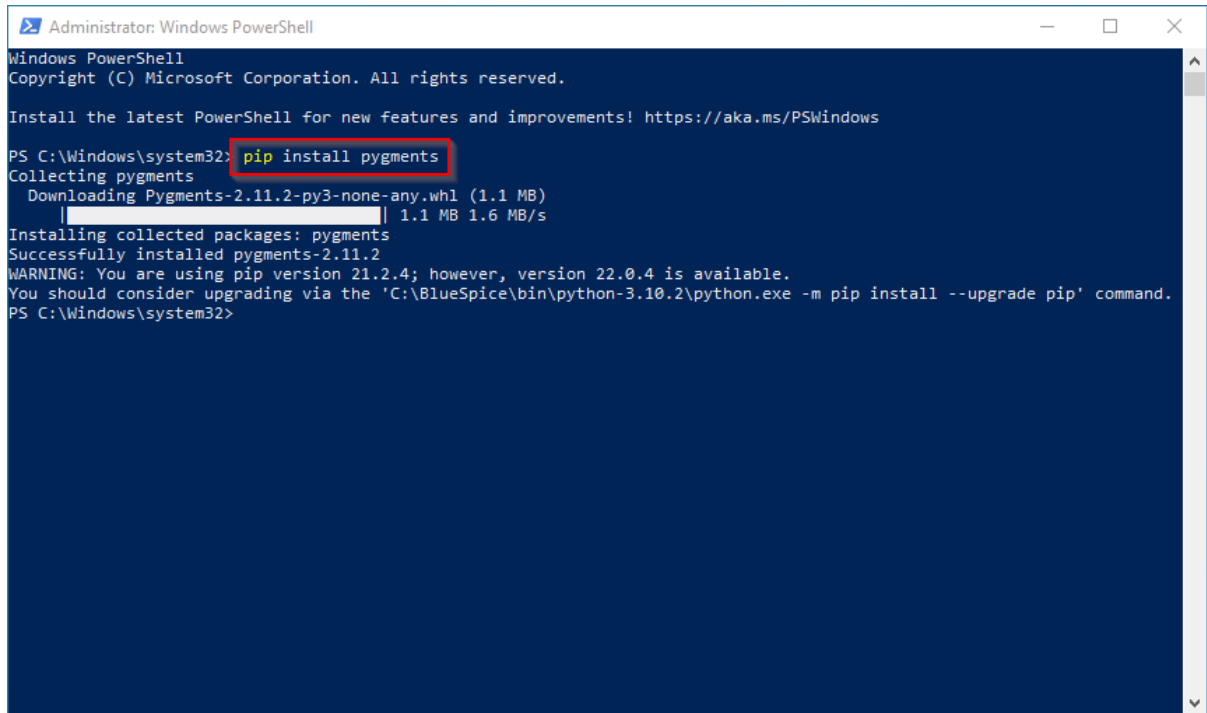
## Installing Pygmentize

**Open** the PowerShell (the command prompt in older Windows versions). To do this, **right-click** "Start" (1) and select "Command Prompt (Administrator)" (2):





Geben Sie den Befehl "pip install pygments" ein und warten Sie, bis der folgende Prozess



```
Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Windows\system32> pip install pygments
Collecting pygments
  Downloading Pygments-2.11.2-py3-none-any.whl (1.1 MB)
    | 1.1 MB 1.6 MB/s
Installing collected packages: pygments
Successfully installed pygments-2.11.2
WARNING: You are using pip version 21.2.4; however, version 22.0.4 is available.
You should consider upgrading via the 'C:\BlueSpice\bin\python-3.10.2\python.exe -m pip install --upgrade pip' command.
PS C:\Windows\system32>
```

## Completion

---

Your Windows server is now fully prepared for the actual installation of BlueSpice.

## Setup:Installation Guide/System Preparation/Windows /Setting the system rights of the temporary Windows folder

### Contents

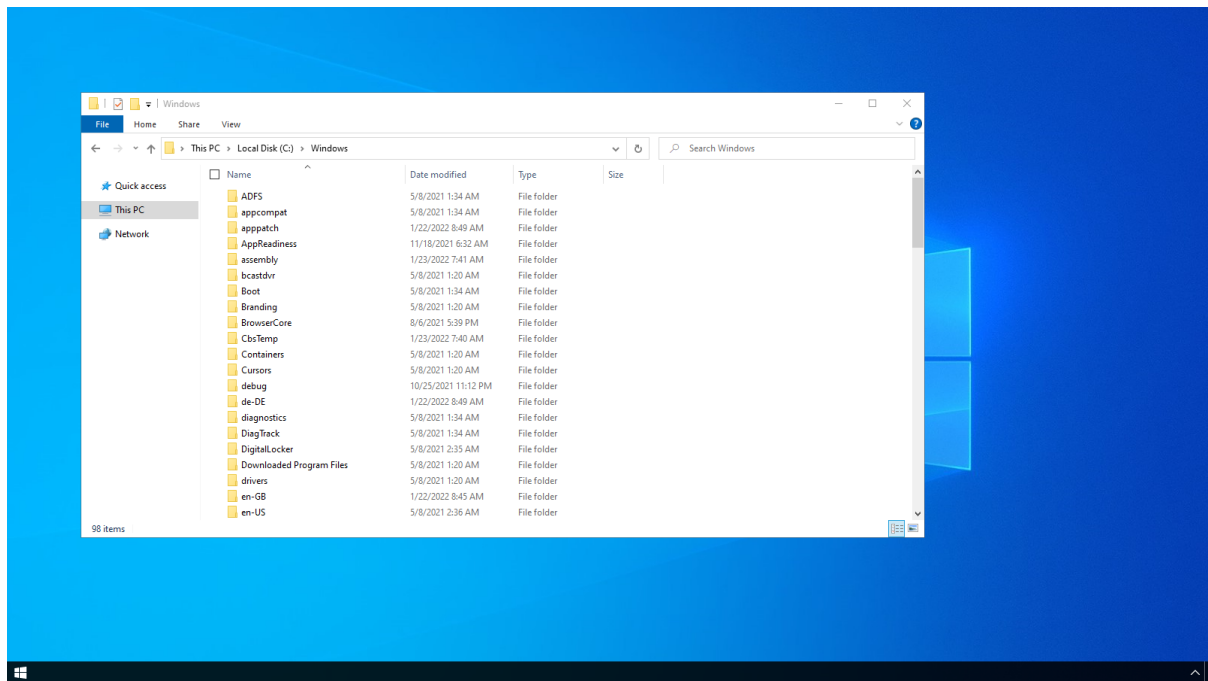
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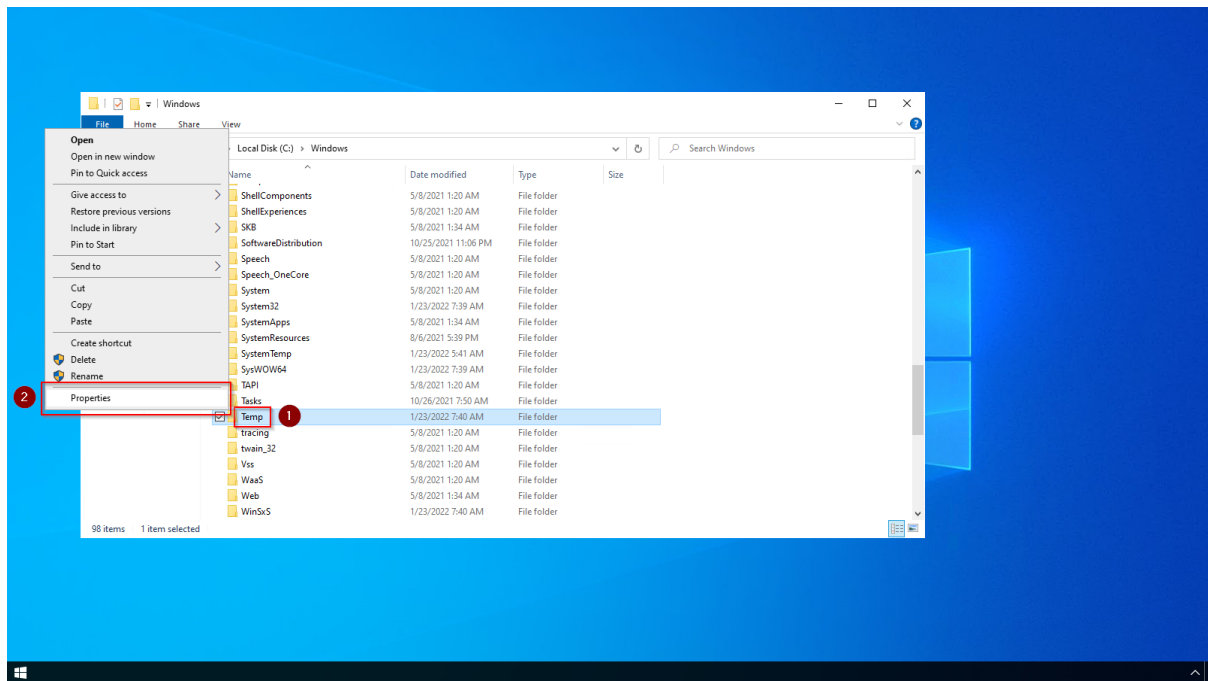
**Various applications require rights to write to the C:\Windows\Temp folder. These are not set as needed by default. In order to be able to carry out all further steps smoothly and also to be able to operate BlueSpice, you must first set these rights.**

## Procedure

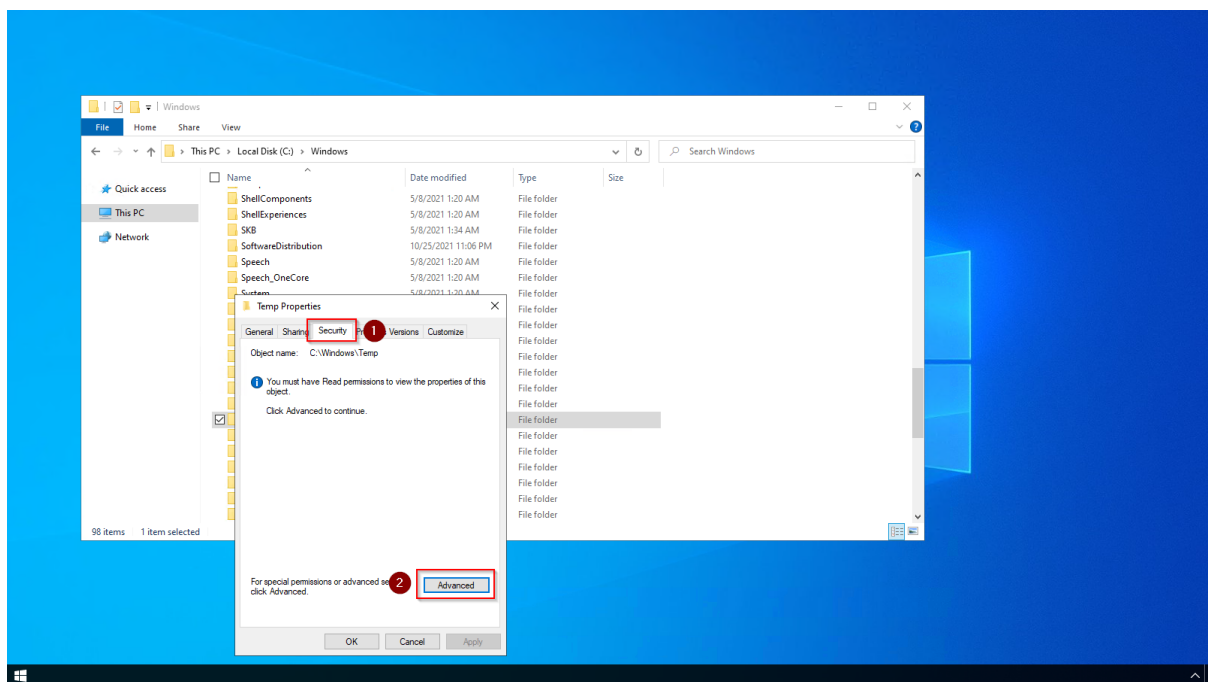
**Open** Windows Explorer:



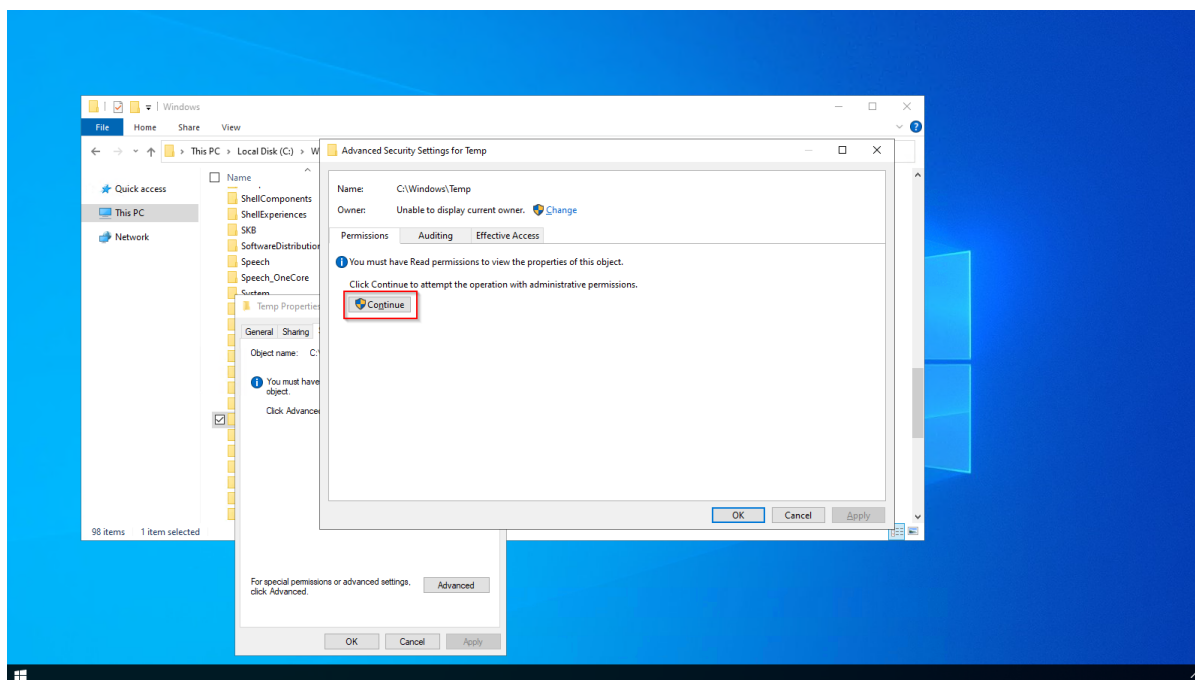
**Right-click** on the folder "Temp" (1) and open the "Properties" (2):



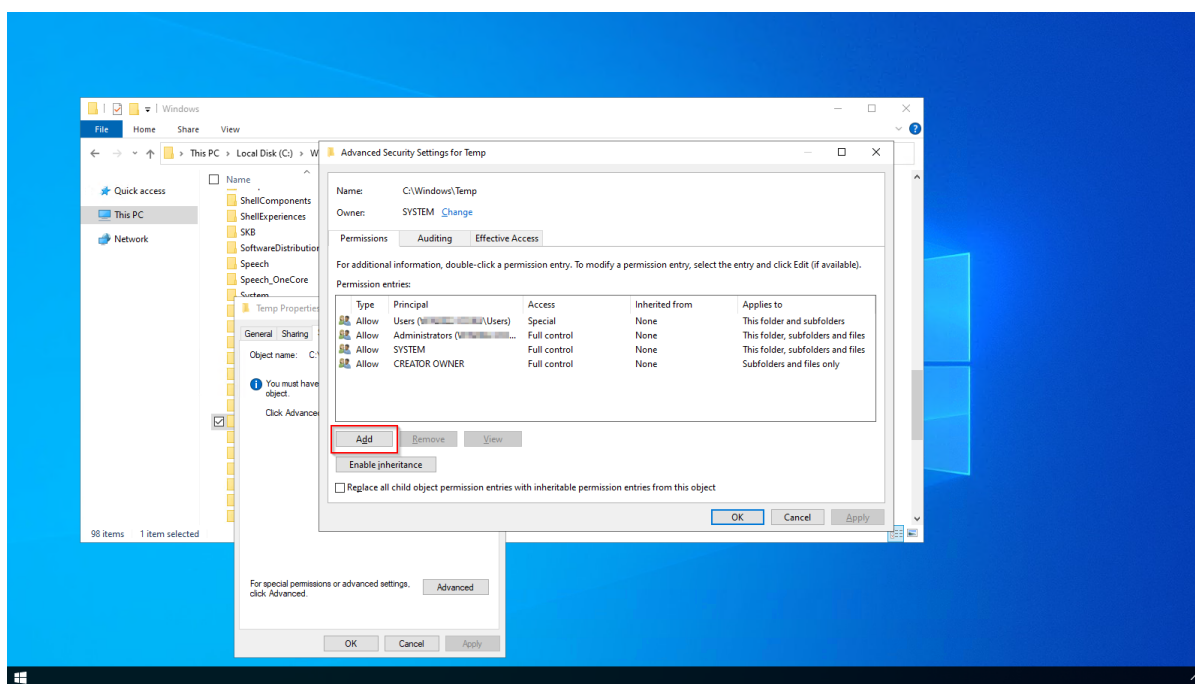
**Select** the tab "Security" (1) and **click** "Advanced" (2):



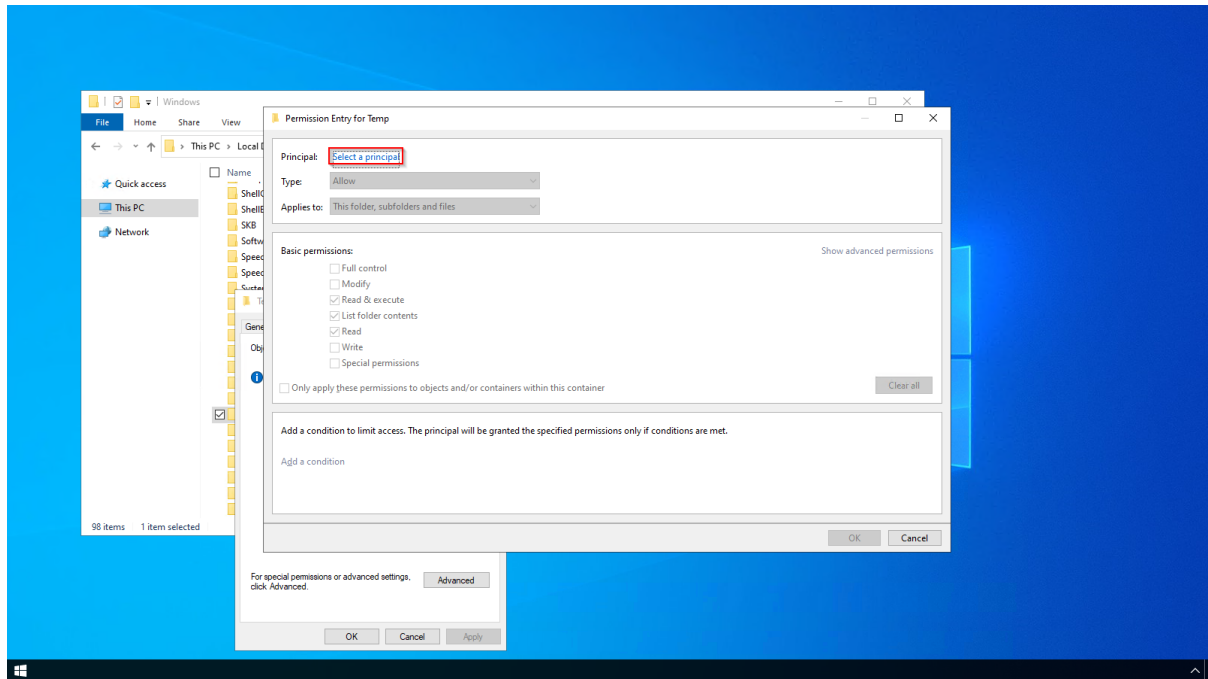
**Click** "Continue":



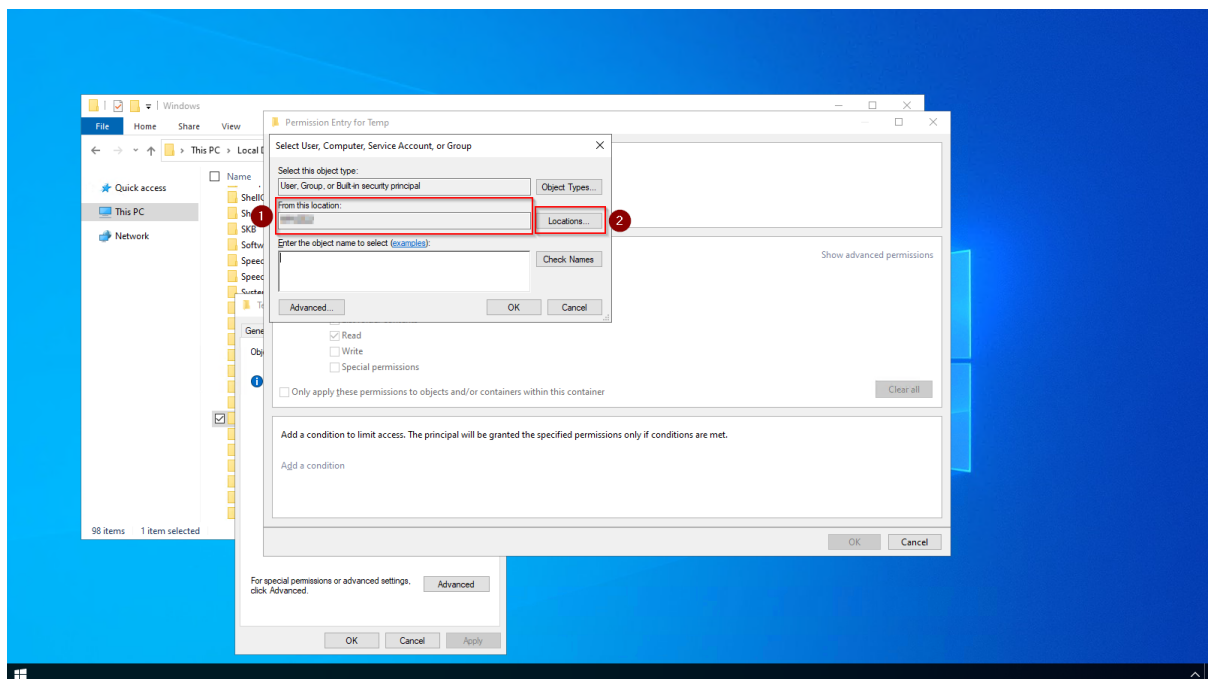
**Click "Advanced":**



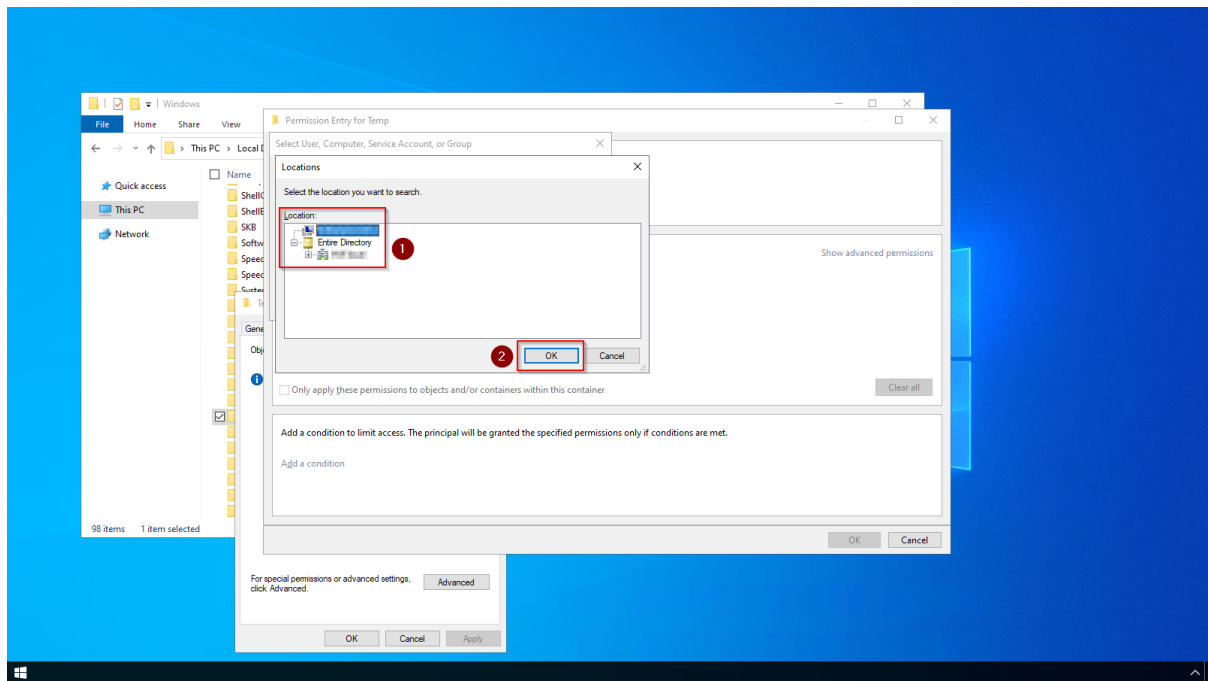
**Click "Select a principal":**



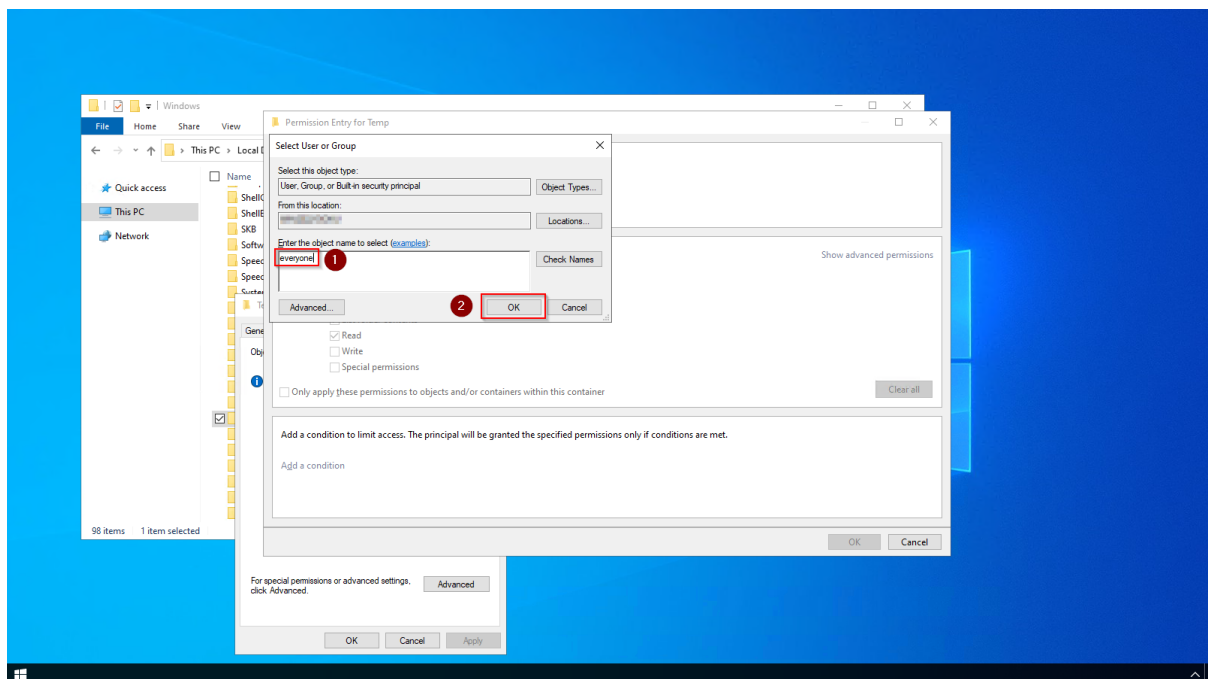
**Ensure** that your local machine is selected in the field "From this location" (1). If this is not the case, **open** "Locations..." (2):



**Choose** the top path in the list (1) and close the dialog window (2):

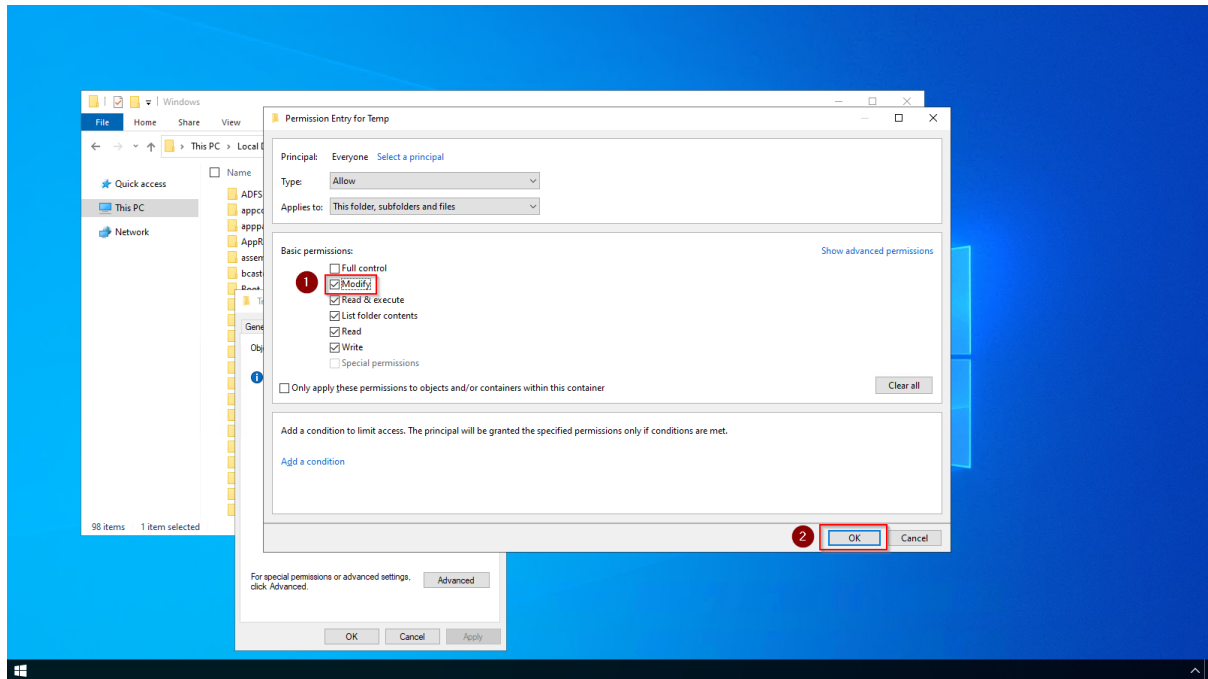


**Enter** the user name "everyone" in the free-text field (1) of the window "Select User or Group".  
**Confirm** with "OK" (2).



**Activate** the "Modify" checkbox (1) for basic permissions in the "Permission Entry for Temp" window and **click** "OK". (2):





**Close** all further dialog windows with "OK" or "Yes".

The rights for the temporary Windows folder are now set up correctly.

## Next step

If you have successfully completed all of the above steps, proceed to the next step: [.NET Framework 3.5](#).

## Setup:Installation Guide/System Preparation/Windows /Vorwort

Redirect to:

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

## Setup:Installation Guide/System Preparation/Windows /urlrewrite



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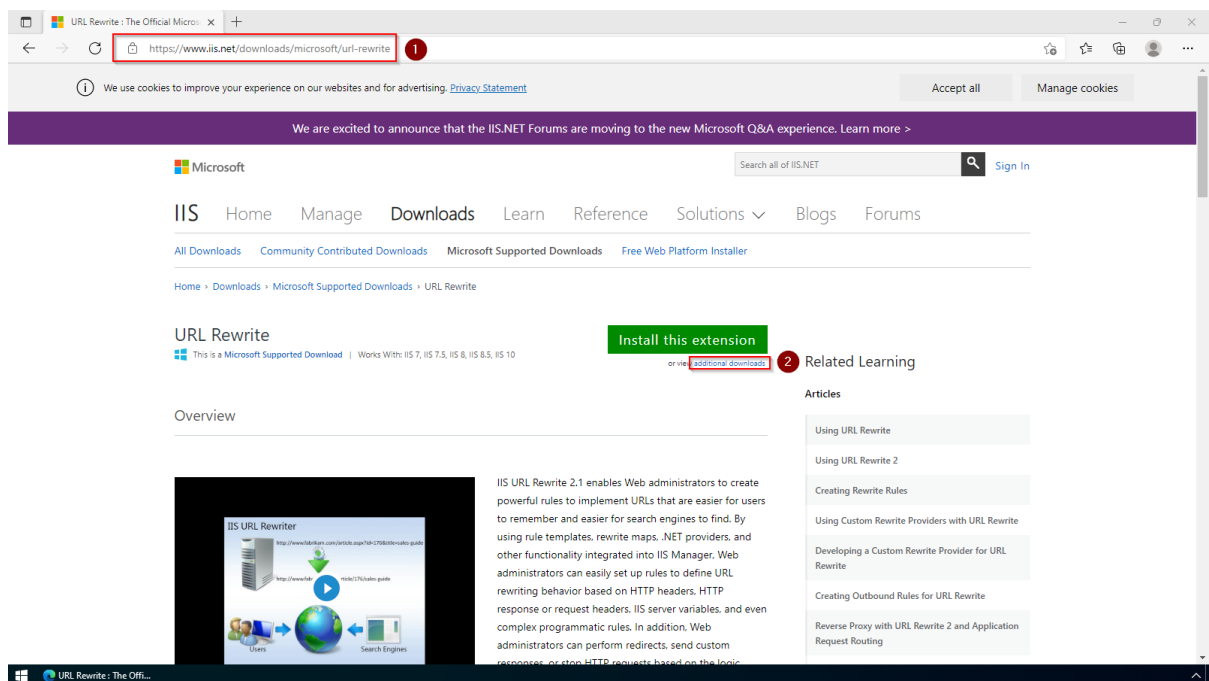
The "urlrewrite" module for IIS is only necessary if you want to configure redirection rules in your web server. If you want a setup which is recommended by us and also according to the recommendations of the Wiki Media Foundation, this step is required.

## Download

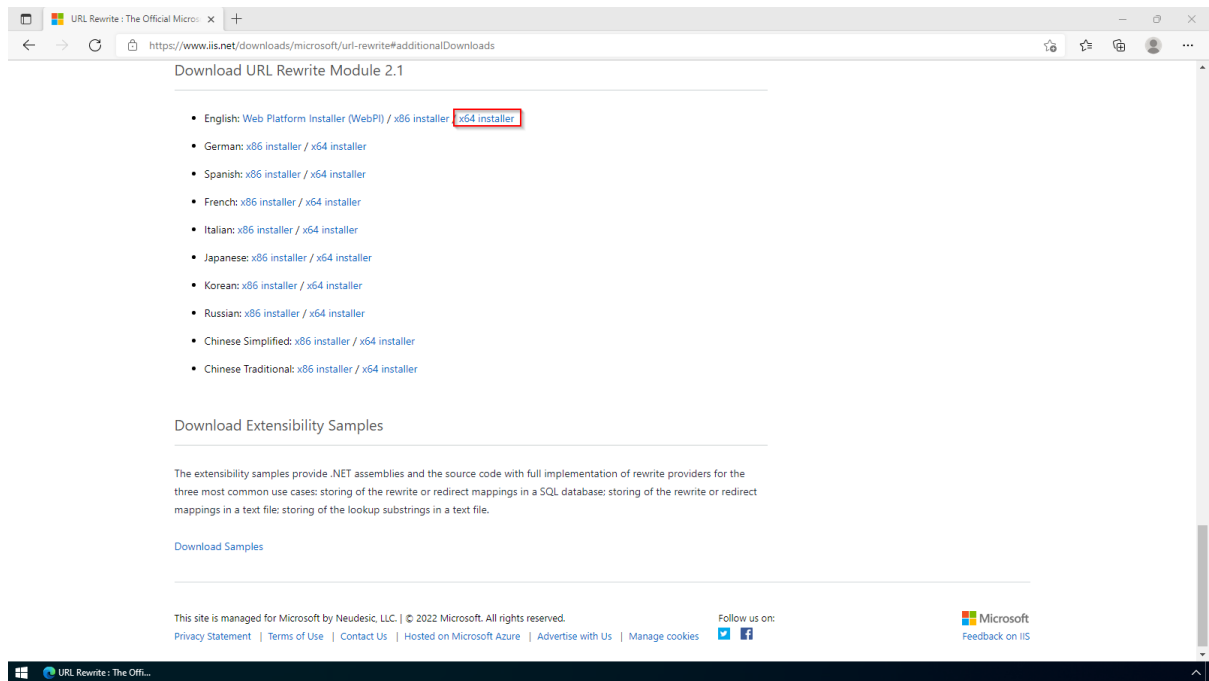


The content of this section refers to external sources and is current at the time of writing this documentation. We cannot guarantee how long these sources will remain unchanged. Please let us know if you notice any discrepancies to the information provided here.

Open the [official website at iis.net](https://www.iis.net) (1) and click "additional downloads" (2):

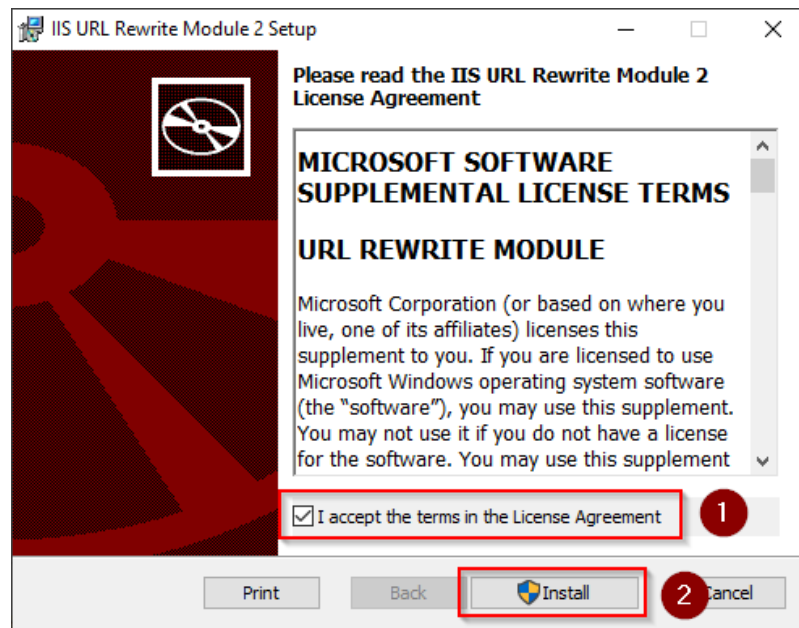


Download the "x64 installer" in your language:



## Installation

**Open** the Setup window, **accept** the License Agreement (1) and **click** "Install" (2):



## Next step

If you have successfully completed all of the above steps, go to the next step: [Microsoft Visual C++ Redistributable](#).