INSTALLATION ON WINDOWS

WRITE BACK EXTREME

Inhoudsopgave

1   Intro

This document describes the installation and configuration of the Write-Back-Extreme (WBE) extension as a web application on Windows.

You are free to choose your installation methods and types as long as, in the end, the WriteBackExtreme web application runs; Is accessible via an URL, like https://writeback.yourcompany.com, based on PHP 7.4+ and an updatable database of your choice.

As the WBE extension runs in a web server as a PHP web application, installing the most common web servers on Windows is explained below as a detailed example. See here for the installation & configuration on Linux.

Point of attention: Do not use passwords containing a period "." Since this might break connections and lead to unexpected results.

1.1   Skill level

To follow along, knowledge of installing the web server, and companion parts, of choice on Windows is required. If company standards apply for web server deployment, they can fit in on various aspects of the installation and configuration.

In this document, the installation based on the following web servers is described:
- IIS
- Apache2 web server, as part of the XAMPP package
- Nginx

1.2   Operating System

This manual is written for Windows Server 2016/2019.

Several components might need to access the Internet to complete the installation during the installation, like database drivers and web server components. It is recommended that the installing user account has access to the Internet from the Windows server during installation.

The installing user account might also need 'local administrator' permissions during the installation and configuration.

1.3   **Installation Checklist**

The marked ==yellow== fields are needed to complete the installation and configuration.

1.3.1   General / Admin account of the WBE backend application

Point of attention: Do not use passwords containing a period "." Since this might break connections and lead to unexpected results. Windows Server / Web server:

- Minimal Server Resources: 2 vCPU, 8Gb, 100Gb disk space, 100Mbps, or 1Gbps NIC Admin privileges to perform the installation.
- Firewall rules permit access on port 443 (HTTPS) and ports to the database servers. Both internal and external firewall appliances and built-in Windows-firewall as well.   The minimum version of PHP is 7.4.15.
- An x64 (64-bit) installation is preferred.
- PHP can be installed as a component of the web server or separately.

==Windows version:==
==Web server type:==
==PHP version:==

==Server Hostname :==
==Web Application URL:==
==Application port: 443 (HTTPS) or any other unused port (protocol will always be HTTPS)==

1.3.2   SSL certificates:
- A web domain (example: https://writeback.your-company.com)
- The use of HTTPS is <u>mandatory</u> in all environments. Therefore an SSL certificate is needed. And it has to cover the web domain/application URL. It can be a wildcard certificate ("*.yourcompany.com") or URL-specific (fi. "writeback.your-company.com"). Depending on the type of web server, the certificate file (.crt), the private key (.key), and certificate-chain files (often CAcert.crt) is needed to configure in NGINX / Apache Web server. A Windows certificate file (usually a .pfx file) is required for IIS. The .pfx must contain the private key as well.
- Domain needs to point to the web server through DNS (internal and external)
- https://writeback.your-company.com is pointing to the document-root location on the web server (using virtual hosts, for example)
- HTTPS is functioning on the above domain
- Be aware of stricter security policies of browsers nowadays concerning CORS policies, x-frame-headers, or CSP-headers.

1.3.3   Database platform:
Among others, the most used databases for the WriteBackExtreme extension on Windows are MySQL/MariaDB and MS-SQL server.

1.3.4   MySQL
- The minimum version of MySQL is 5.7
- MySQL is running

- MySQL root account and password (written down) to create an 'admin' account for the database to be used by WBE
- MySQL read-only user (test and access via Tableau to add data sources)
- You can connect to the MySQL database through the command line or PHPMyAdmin

1.3.5 Microsoft SQL Server
- Minimum version of MS SQL Server 2016
- MSSQL is running
- MSSQL db_owner user account and password (written down)
- MSSQL read-only user (on the same database)
- You can connect to the SQL server database MS SQL Management Studio

1.3.6 Customer configuration

The database 'admin' account must be able to create objects (tables/indexes) in a schema/database in the database platform:

Point of attention: Do not use passwords containing a period "." Since this might break connections and lead to unexpected results.

Database platform and version:
Admin Account (read/write/create):
Password:

Tableau desktop developers will use the read-only account to access the WriteBackExtreme information to incorporate that write-back information into a workbook dashboard. \

User Account (read-only):
Password:

1.4 Landscape overview

Although we focus on the WBE Extension installation, this picture shows the landscape overview.
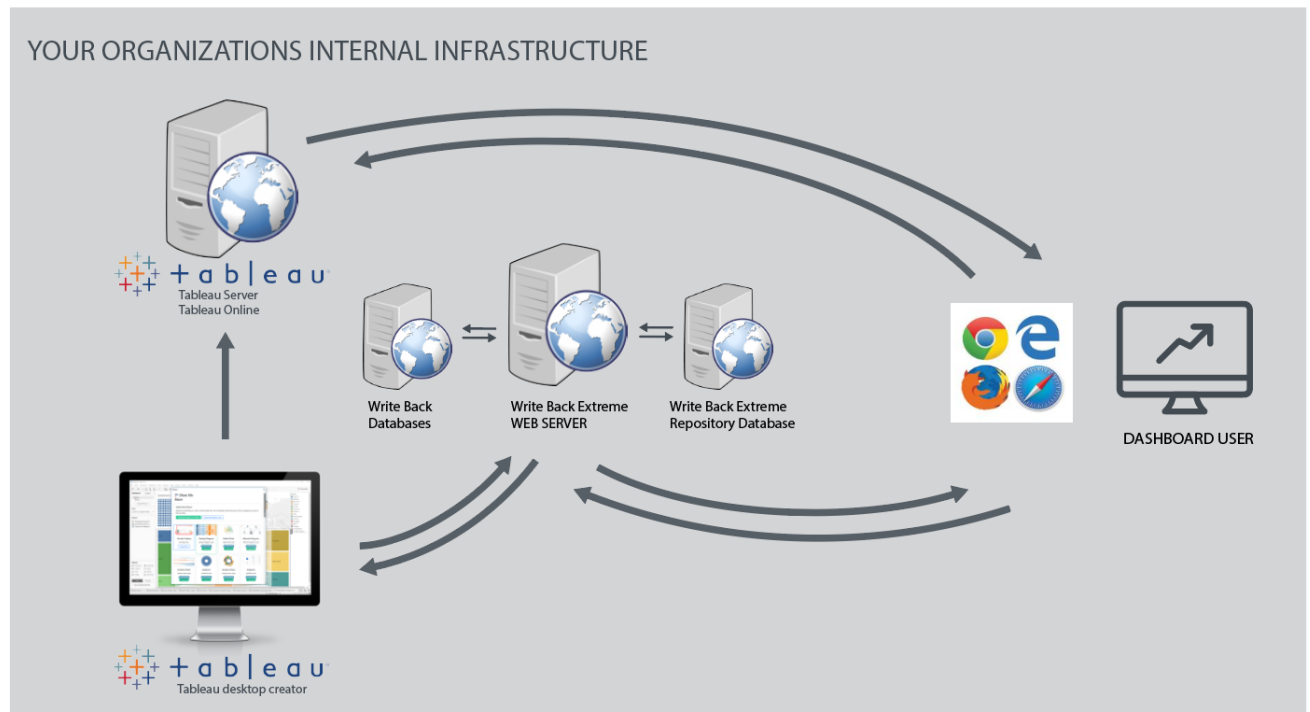
End-Users Browser: end-users will browse dashboards served by the Tableau Server. These dashboards might contain the WBE extension, displayed in an iframe of the Tableau dashboard. So, from the Tableau dashboard (-URL), the WBE extension (-URL) is accessed in an iframe.
Tableau Server: serves the tableau dashboards to the end-users' browsers.
Tableau Desktop (user): creates tableau dashboards which might include the WBE extension through a .trex file, and publish it to Tableau Server.
WBE extension: served by a separate web server on a different server than the Tableau Server (web) Application. The WBE extension has two end-points:
-    The extension itself on https://writeback.your-company.com/extension
-    The configuration backend on https://writeback.your-company.com/backend
WBE Repository database is a database for WBE's administration. But if you wish, you can use this database also as a Write-Back database.
Write-Back Database: the database(s) where schemas are created to write back the data entered through the WBE extension in the Tableau dashboard. There can be multiple databases to write back to, which can be different from the database platform (MySQL/MariaDB, MS-SQL, PostgreSQL, Snowflake, Teradata, etc.). A database-drivers must be configured in the 'php.ini' file for all used WBE database types.

1.4.1   Public Access

Public access from the Internet is possible for both Tableau Server and the WBE extension. Whereas Tableau Server has multiple user-authentication methods, such as local-user, Active-Directory, SAML, and Open-ID, WBE has no user-authentication mechanism.

The extension-API of Tableau does not support any authorization in the extension itself. To access the WBE extension from the Internet, you should deploy a reverse proxy in your DMZ before the WBE extension. It could prohibit unauthorized access by deploying a SingleSign-Authentication method supported by your company. (Strongly advised to use the same authentication method as Tableau Server for SSO).

For example, an [Azure Application Proxy](#) with Pre-Authentication enabled. In AWS, you can deploy a web application [proxy](#) for that. The reverse-proxy configuration is not part of this installation instruction and is best discussed with your cloud-platform team.

1.5   **Required**

Before starting the installation, here is a checklist of things you need:

a) Windows Server 2012 R2, 2016 or 2019 Standard Edition
b) WBE zip package or download link provided by AppsForTableau | Infotopics
c) Access to at least one (1) database platform through an account that is 'administrator' on an existing but empty schema/database
d) Firewalls rules applied to allow access to the WBE-extension-URL and database(s)
e) Administrator permissions during installation
f) Internet access during installation
g) Download links for your web server of choice and other web server components.
h) LICENSE file received from Apps4Tableau / Infotopics
i) SSL certificate, including the private key

2   Installing a web server

In this chapter, you can find three (3) installation & configuration examples.

• [IIS with PHP 7.4 and an MS-SQL server database](#)
• [Apache2 via XAMPP, with PHP and a MySQL/MariaDB database](#)
• [NGINX web server, with PHP and a PostgreSQL database](#)

We hope these examples provide enough details on installing and configuring WBE in your environment, even in a different combination of the web server and database platform.

2.1　Windows System Environment variable

We need to specify a Windows System Environment variable, 'BOX_REQUIREMENT_CHECKER', set to 0 (zero).

Type ⊞+R and enter 'sysdm.cpl'. Select the 'Advanced' tab and then the 'Environment Variables' button.
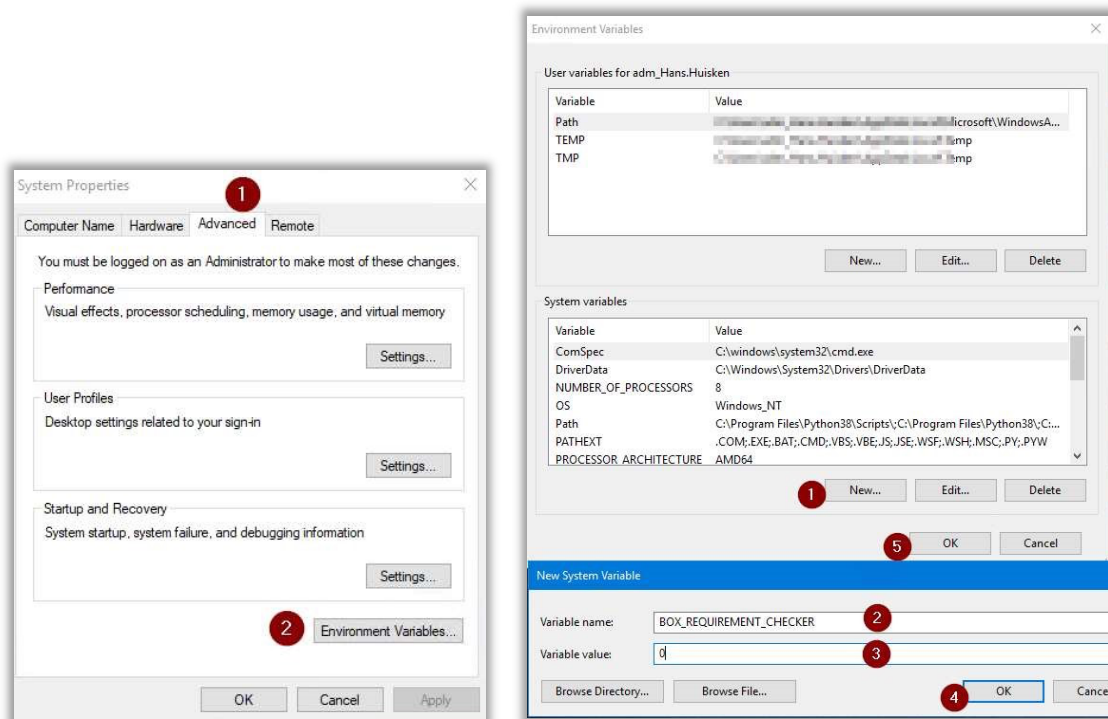
In the section 'System Variables', press 'New' and define the variable correspondingly.

To be sure the variable is applied and available system-wide, please reboot your Windows server. If you use Apache2 with XAMPP, you can reboot your server later.

2.2　Add URL to your DNS

Ask your IT DNS administrator to add the URL in your company's DNS with the IP address of your Windows server. And to the public 'internet' DNS if your Tableau Server and WBE extension are public-facing products.

Type 'nslookup writeback.your-company.com' in a dos-cmd-box, and it should be found and point to your Windows server's IP address.
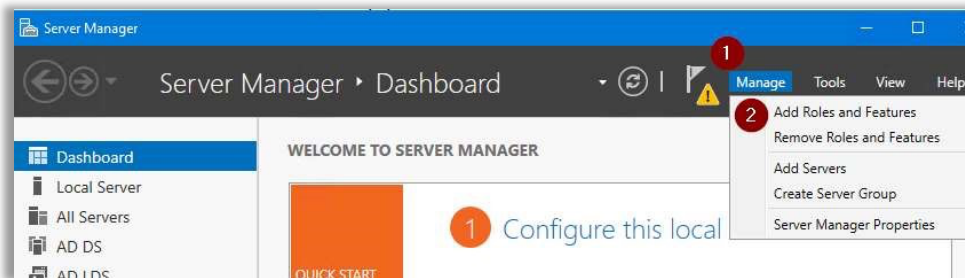
2.3 IIS with PHP 7.4 and an MS-SQL server database

If you want to use IIS, follow this chapter, so this is not possible in combination with XAMPP.
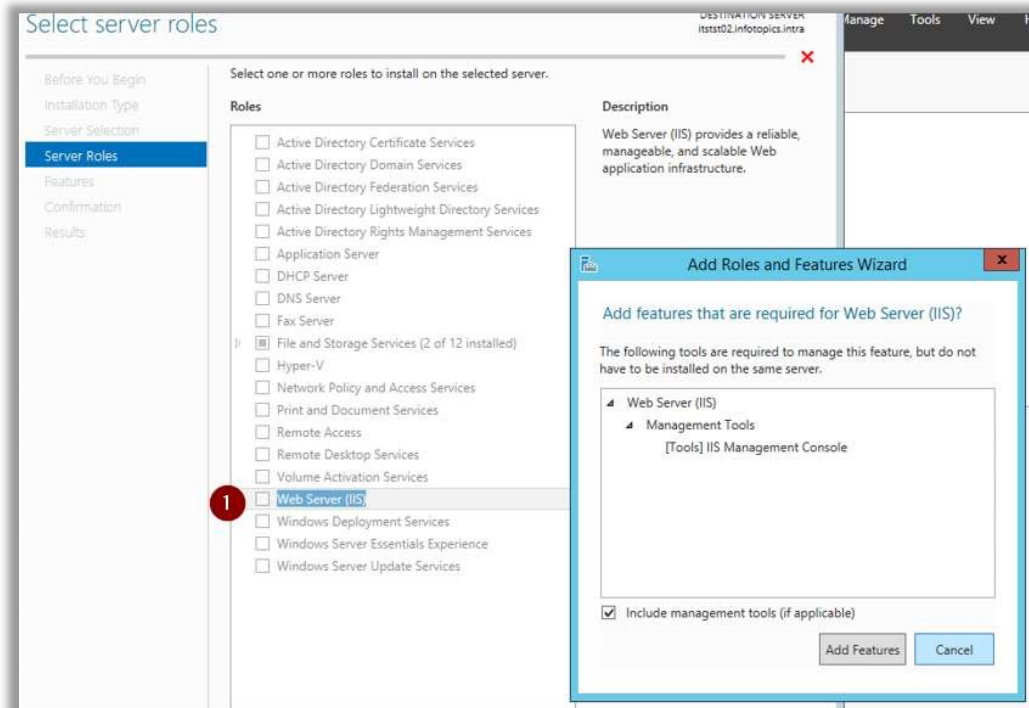

2.3.1 IIS install

In the 'Server Manager', click 'Manage' and choose 'Add Roles and Features.'

Be sure to select the Windows servers where you want to install IIS while clicking 'Next' to get to the 'Server Roles' page.

Only check the box in front of the IIS. (No other Role is selected). Wait until IIS is installed.

You can start the 'IIS Manager' via the 'Server Manager' --> 'Tools' button, the 'Windows Start' button ⊞ , or the 'Administrative Tools.'
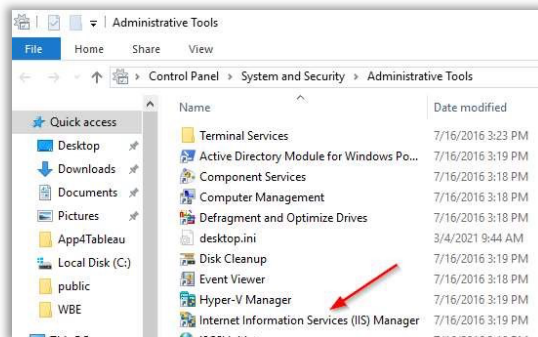
After 'IIS Manager' is started, a popup may appear to install the Web Platform Installer. Please install WPI for the next steps.
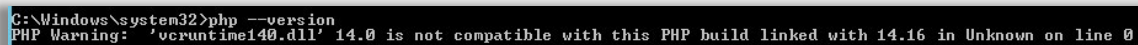
2.3.2   Add additional components

The Web Platform Installer is not available anymore. You need to collect the additional components manually:

- PHP 7.4.15 or higher (x64)
- Microsoft Drivers 5.8 (x64) for PHP 7.4 for SQL Server in IIS or
- Microsoft Drivers 5.9 (x64) for PHP 7.4 for SQL Server in IIS
- URL rewrite 2.1 (might be installed already)
- Application Request Routing 2.5 with KB2589179 (needed for URL Rewrite)
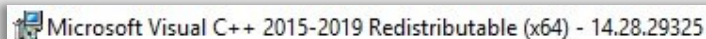- IIS: CGI (alternative via 'add Roles and Features' --> Web Server (IIS) --> Web Server-->

 *In more recent versions of WBE, we include the installation files for these packages. When you need help finding the packages: Contact support.

2.3.3   Check PHP version

Open a dos-cmd prompt (you will need it later, too; leave it open) and type the command:
>   php --version

In case of this error message like the above, install the 'Microsoft Visual C++ redistributable' version 2019 or newer.

Solve this error by installing Microsoft Visual C++ Redistributable for Visual Studio 2019 (VC_redist.x64.exe).

2.3.4   PHP configuration

In the dos-cmd, type the command:
>   where php

In the reported folder, you will find a file named 'php.ini.' Please make a copy of it to 'php.ini – original'.

Then edit the 'php.ini' file (with notepad++) and make the next changes:

post_max_size = 20M	(about line 694)
upload_max_filesize = 20M	(about line 844)

Error to console instead of a log file.

display_errors = On	(about line 482)
; error_log C:\Windows\Temp\PHP74x64_errors.log	(about line 1921; comment out by ';' in front)

At the bottom, add 'fileinfo' and 'sqlsrv' dll's to be loaded in the 'ExtensionList.'

```
[ExtensionList] ....
extension=php_fileinfo.dll
extension=php_pdo_sqlsrv_74_nts_x64.dll
extension=php_sqlsrv_74_nts_x64.dll
extension=php_pdo_pgsql.dll
extension=php_pgsql.dll
```

We need to enable some extensions. Uncomment them by removing the ';.' Do this for the following extensions :

```
extension=openssl
extension=zlib
extension=bcmath
extension=curl
extension=json
extension=bz2
extension=ctype
extension=fileinfo
extension=mbstring
extension=PDO
extension=tokenizer
extension=xml
```
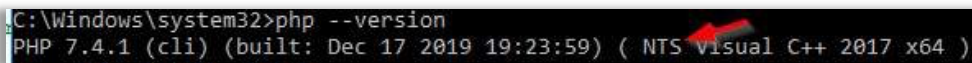
Both 'sqlsrv' dlls are there to load the ms-SQL server drivers in php. Ensure these are installed in the correct location (sub-folder 'ext' from the folder where the 'php.ini' file is found).

For example, when you find the 'php.ini' file in 'C:\Program Files\PHP\v7.4\', the dlls for database drivers (and other dll's) are installed/copied to 'C:\Program Files\PHP\v7.4\ext'.

The 'pgsql' dlls are for PostgreSQL (but might need to be downloaded and installed/copied to the PHP extension folder; see also later in the NGINX section).

2.3.5   PHP: TS or NTS database drivers?

Some database drivers come in two (2) different types: TS and NTS. TS means Thread-Secure, and NTS means Non-Thread-Secure. It depends on the version of PHP and which type you need to use.
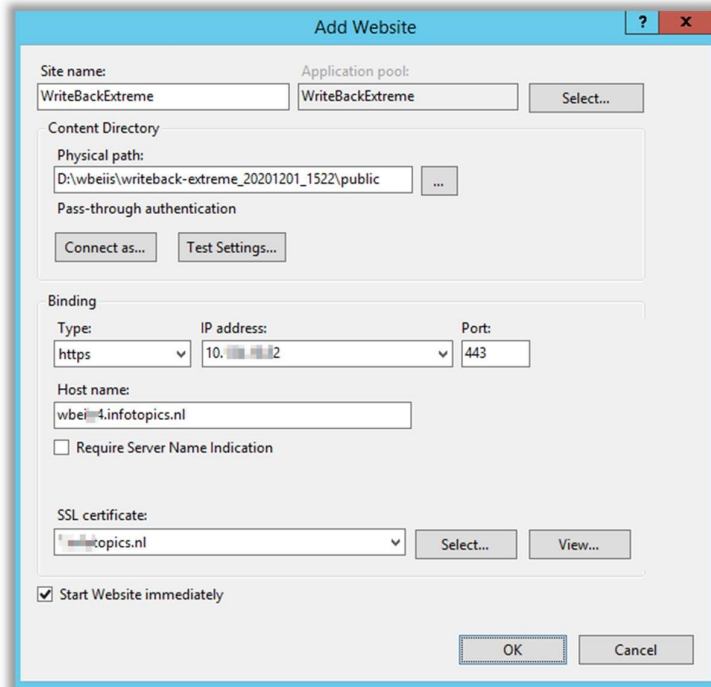
```
C:\Windows\system32>php --version
PHP 7.4.1 (cli) (built: Dec 17 2019 19:23:59) ( NTS Visual C++ 2017 x64 )
```

In this case, an 'NTS' version of database drivers must be specified in the 'php.ini' file.

2.3.6   IIS: Create a site for WBE

In 'IIS Manager', create a site for the WBE web application.

First, specify a site name.

Then the physical path, where we located the source files of WBE. Please note that '\public' is at the end of the path.

Then specify the binding info. The hostname is your web domain URL. And select the corresponding SSL certificate.

The SSL certificate should be installed upfront into the Windows certificate store. (double click the .pfx file and choose 'install' in the 'computer account' or 'local machine'; not 'current user'!).

2.3.7 Unzip the WBE extension zip file to the desired web-root location

Copy the downloaded or received WBE zip file to a TEMP folder. And unzip it there. You can download the latest version of WriteBackExtreme from your Enterprise Portal: https://my-appsfortableau.infotopics.com/.

Copy the unzipped files and folders from the unzip to the specified folder in the site binding. But one (1) folder above '…\public'.

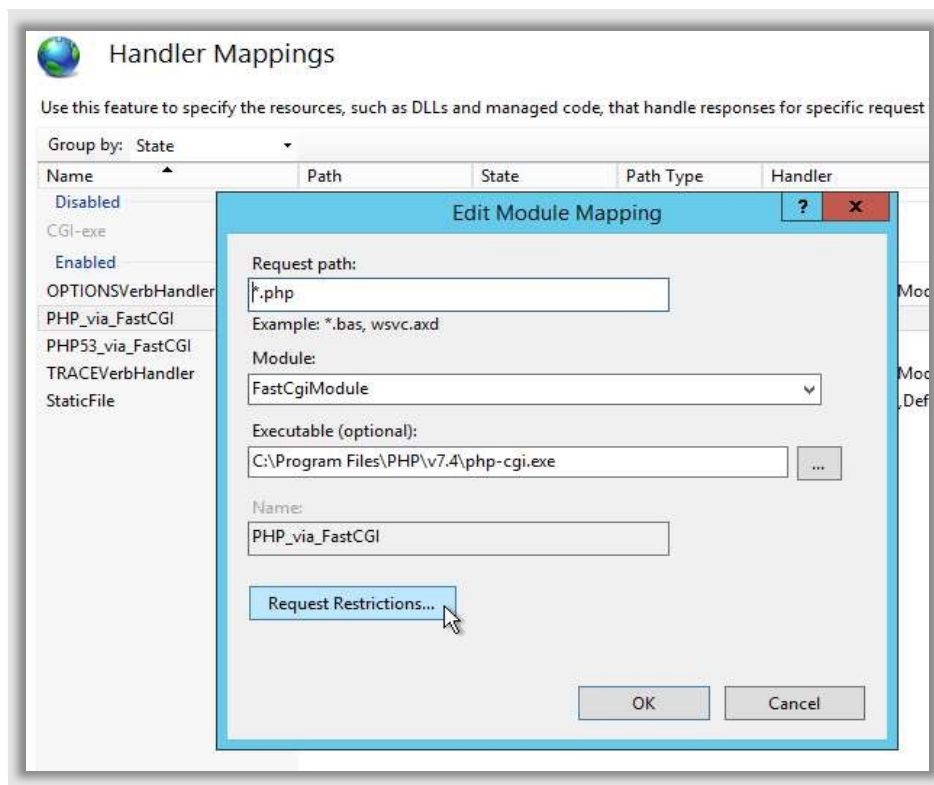Using the example, then place the unzipped files in 'C:\xampp\htdocs\writebackextreme'.

2.3.8 Enable the DELETE and PUT methods in IIS

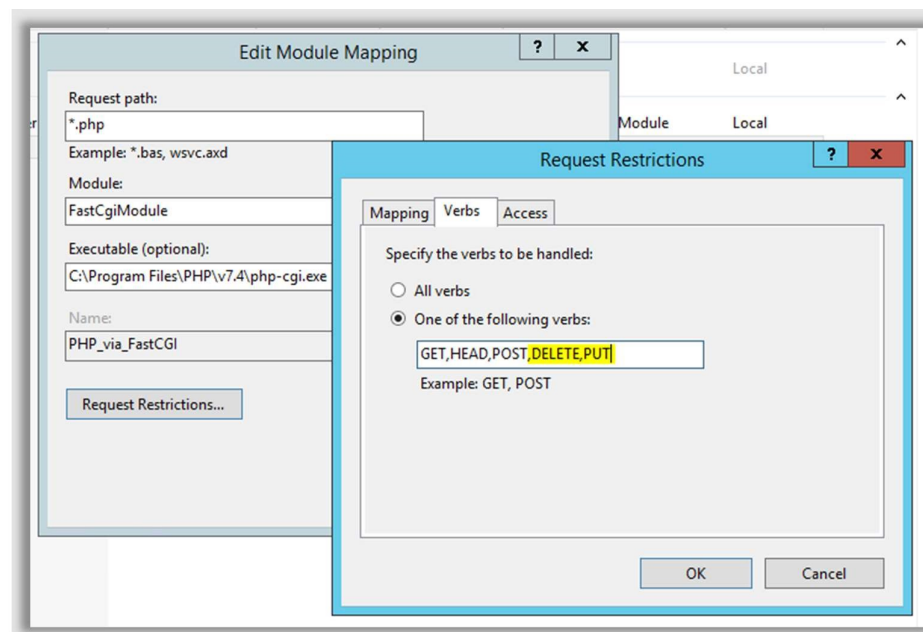(in future releases, this step will be obsolete)

Configuring the WBE website for the DELETE and PUT methods is relatively easy. Select the WBE site in IIS and double-click 'Handler Mappings'.
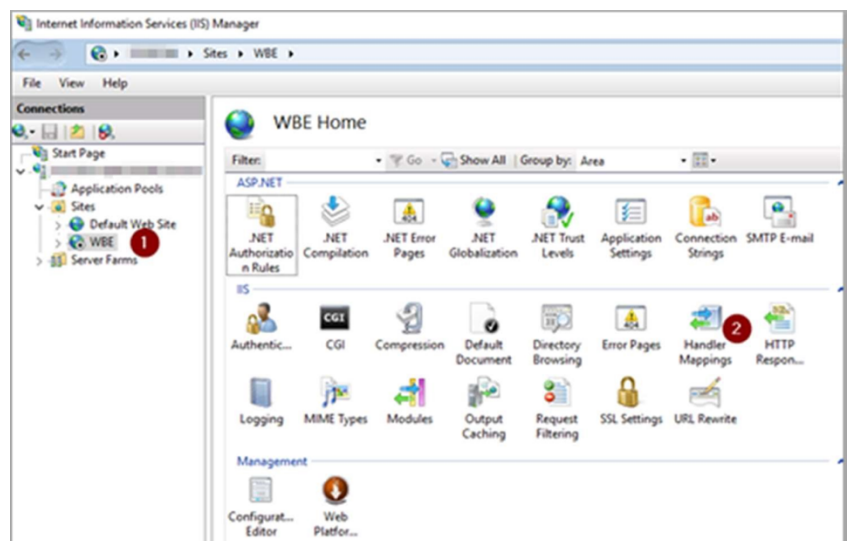
Then select 'PHP_via_FastCGI'.

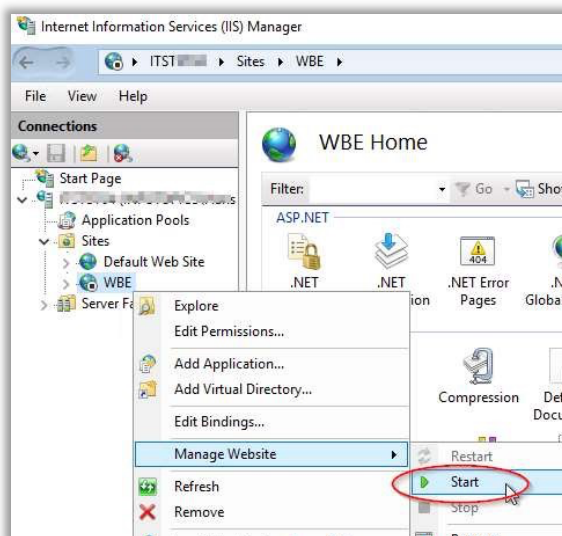Click 'Request Restrictions' and the 'Verbs' tab. Add ',DELETE,PUT' as highlighted. **Do not use spaces here.**

When trying to save the changes, please enclose the exe-pathname for php with double quotes (as highlighted below).
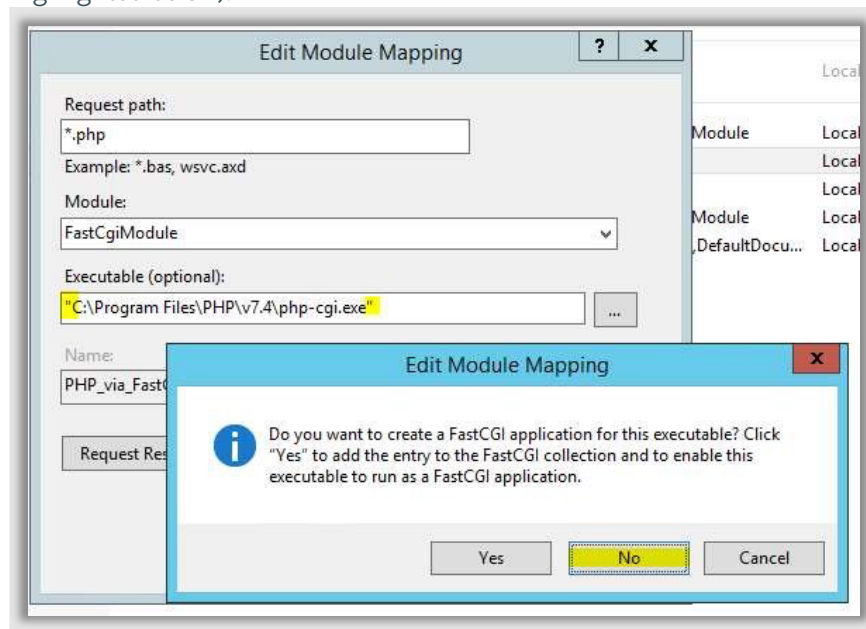
Right-click the WBE site to select 'Manage Website' and start the site.

Now you are ready to configure the WBE Extension. Click here to go to the Installation WBE Extension page.

2.4   **Apache2 via XAMPP**

If you want to use XAMPP, follow this chapter, so this is not possible in combination with ISS.

2.4.1   Download and install XAMPP (Apache2, MySql, PHP)
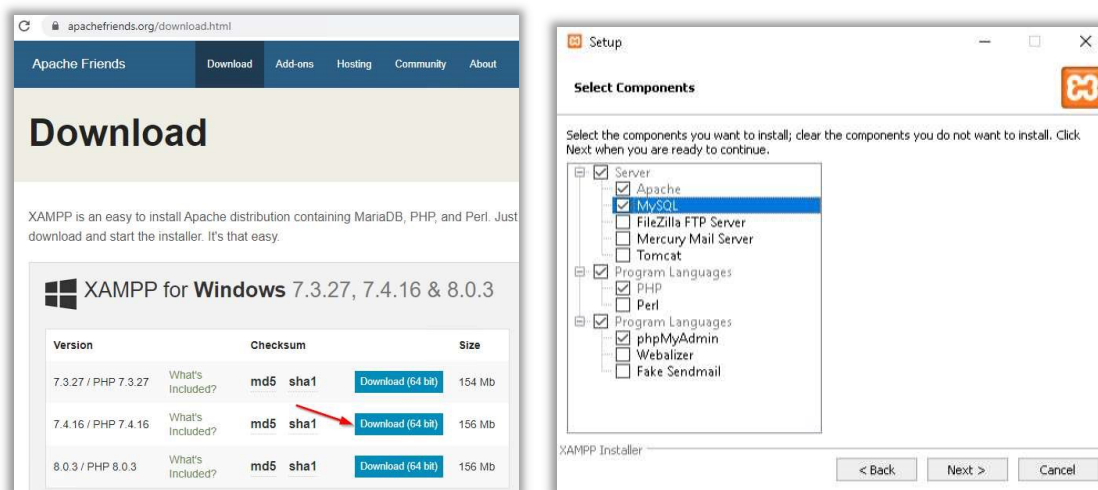
Download the XAMPP installer onto your server and run 'as administrator'.
Select 'Apache', 'MySQL', 'PHP', and 'phpMyAdmin' to install.
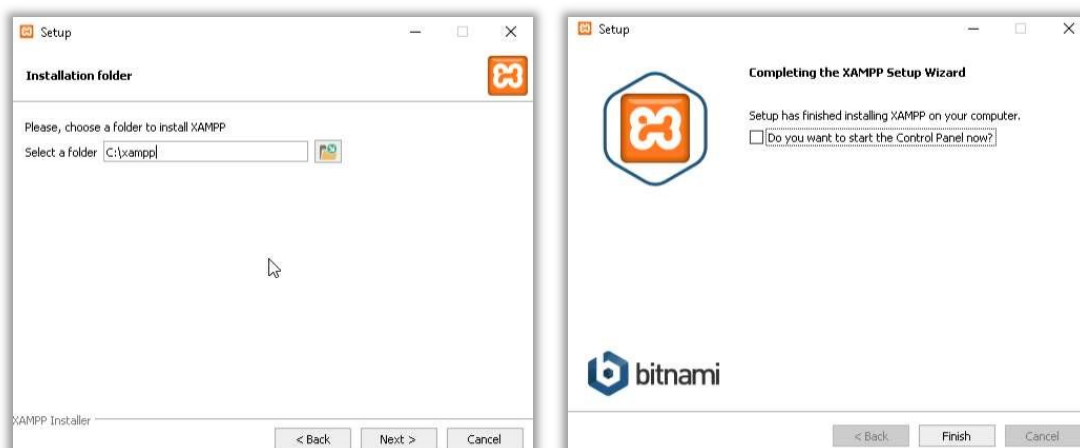
Select your installation folder and installation language (English), but un-check the 'start the Control Panel' at the end of the installation. The control panel should be started by running 'C:\xampp\xampp-control.exe' as an administrator.

2.4.2 XAMPP configuration

First, click the 'Config' button to adjust a few settings, like your favorite editor (notepad++) and ports for Apache and MySQL. Preferable for Apache are ports 80 (HTTP) and 443 (HTTPS). The standard port for MySQL is 3306. You can check with the 'Netstat' button to see if these ports are available.

If you change the default HTTP port (from 80 to 81), please edit the
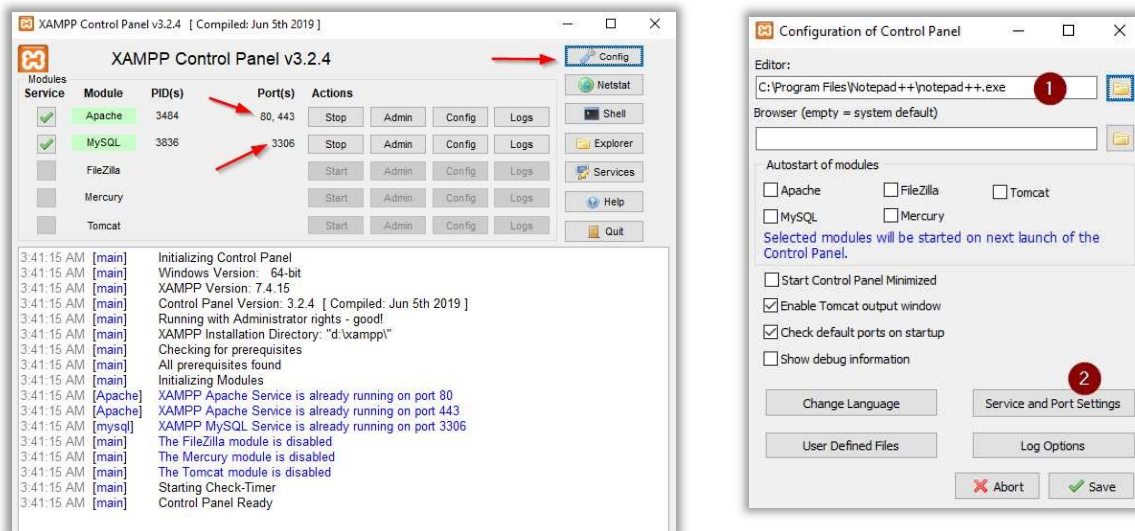'C:\xampp\apache\conf\httpd.conf' file and change the lines (about 60 and 228):
    Listen 81
    ServerName localhost:81

If you want/need to change the default HTTPS port (from 443 to 8443, for example), edit the file
'C:\xampp\apache\conf\extra\http-ssl.conf'. (You might want to save a copy before editing the file). And change lines (about line numbers 36, 121, and125)
    Listen 8443
    <VirtualHost _default_:8443>
    Servername localhost:8443
You might also want to adjust the SSL certificate files as shown later in the 'http-vhosts.conf' file. And change the Servername correspondingly.

To add the WBE web application URL to the XAMPP/Apache2 configuration, edit the file
'C:\xampp\apache\conf\extra\httpd-vhosts.conf'. Again, you might want to save a copy before editing. And add the following lines:

```
##<VirtualHost writeback.your-company.com:443>
<VirtualHost *:443>
                    ##ServerName writeback.your-company.com:443
                    ServerName writeback.your-company.com
                    DocumentRoot "c:/xampp/htdocs/writebackextreme/public"
                    <Directory  "c:/xampp/htdocs/writebackextreme/">
                            Options Indexes FollowSymLinks MultiViews
                            AllowOverride All
                            Require all granted
                    </Directory>

                    ServerAdmin admin@example.com
                    ErrorLog "c:/xampp/apache/logs/error_wbe.log"
                    TransferLog "c:/xampp/apache/logs/access_wbe.log"

                    SSLEngine on
                    SSLOptions +ExportCertData +StrictRequire +OptRenegotiate +StdEnvVars

                    SSLCertificateFile "c:/xampp/apache/conf/ssl.crt/writeback_yourcompany_com.crt"
                    SSLCertificateKeyFile "c:/xampp/apache/conf/ssl.key/writeback_yourcompany_com.key"
                    SSLCertificateChainFile "c:/xampp/apache/conf/ssl.crt/CACert.crt"
</VirtualHost>
```

Change the URL 'writeback.your-company.com' to the desired URL. Depending on the installation folder (folder 'C:\xampp' or D:\xampp), set the location of the files and folders accordingly.

Adjust the SSL certificates file accordingly. Suppose the SSL certificate is installed in your Windows Certificate Store (hopefully with the private key). In that case, you can use a free utility like 'DigiCertUtil' to export the SSL certificate to the files needed for Apache and place them in the corresponding folders.

## 2.4.3   Unzip the WBE extension zip file to the desired web-root location

Copy the downloaded or received WBE zip file to a TEMP folder. And unzip it there. You can download the latest version of WriteBackExtreme from your Enterprise Portal: https://my.appsfortableau.com.

Copy the unzipped files and folders from the unzip to the specified folder in the site binding. But one (1) folder above '…\public'.
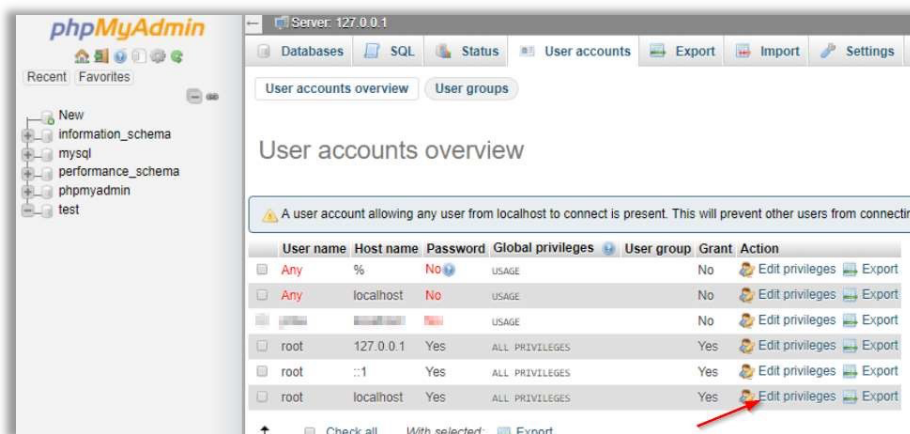
Using the example, then place the unzipped files in 'C:\xampp\htdocs\writebackextreme'.

2.4.4 Configure MySQL

First, start MySQL and Apache.
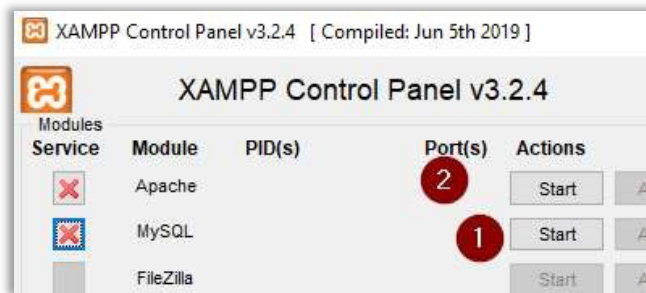
And access https://localhost/phpmyadmin from a browser on the server. You will be automatically logged in as 'root' to MySQL (root is the administrator user of MySQL). And first, we want to set a password for this 'root' account in MySQL.

Select the 'User Accounts' tab and click the 'edit privileges' button for 'root' on the 'localhost'.

Point of attention: Do not use passwords containing a period "." Since this might break connections and lead to unexpected results.

Then click the 'Change Password' button and specify a new password. Store this password in your password safe. It will not be used often.

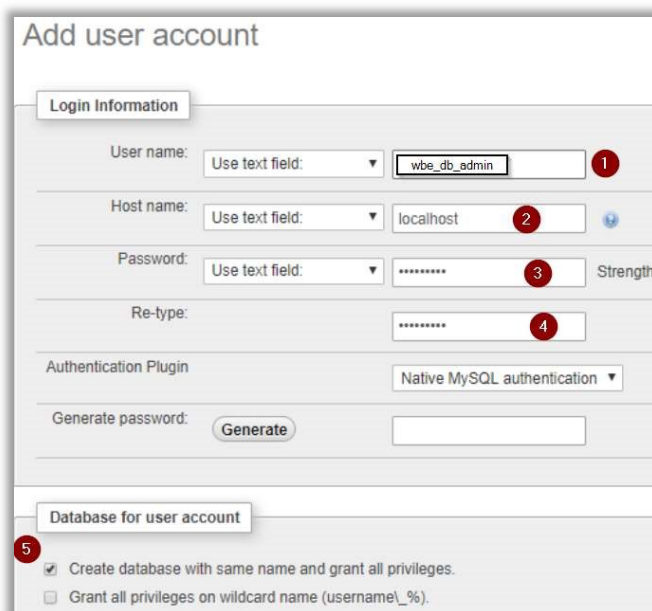The following change is to edit the file 'C:\xampp\phpMyAdmin\config.inc.php'

```
/* Authentication type and info */
$cfg['Servers'][$i]['auth_type'] = 'cookie';
$cfg['Servers'][$i]['user'] = 'root';
$cfg['Servers'][$i]['password'] = '';
$cfg['Servers'][$i]['extension'] = 'mysqli';
$cfg['Servers'][$i]['AllowNoPassword'] = false;
$cfg['Lang'] = '';
```

And change the 'auth_type' and 'AllowNoPassWord' accordingly.

Please verify if you can still login into phpMyAdmin as 'root' with the new password.
And while logged in, select the tab 'User Accounts' again. And click 'Add User Account' to create the WBE database-admin account and database for the writeback repository.

Point of attention: Do not use passwords containing a period "." Since this might break connections and lead to unexpected results.

The wbe database admin account.

Localhost means this admin account can only log in from within the server.

Set a strong password. Also, store this in your password vault.

Finally, create a database with the same name as the account name and grant all privileges. If you want a different name for the database, you can make them separately.

In the same way, you can create a 'wbe_reader' account and assign only 'select' privileges to this account on the writeback database if used for writing back (not for the wbe-repository).
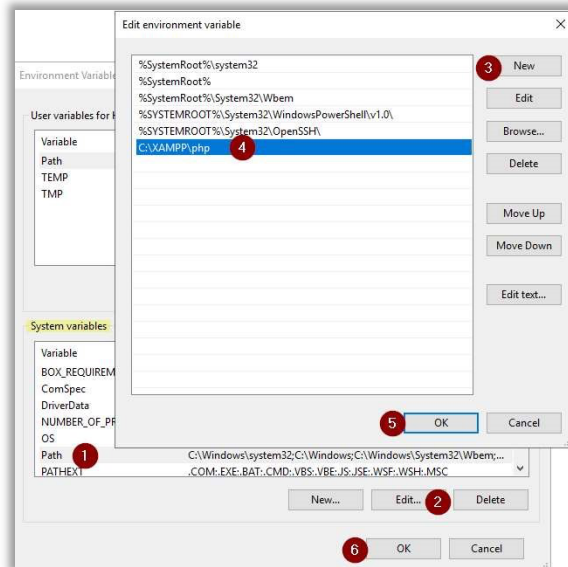
2.4.5 PHP Configuration

In a dos-cmd-box, type the command:

`where php`

If PHP is not found, you might want to add it to the PATH environment variable by:

`set PATH=C:\xampp\php;%PATH%`

Or add 'C:\xampp\php' to the system environment path variable PATH. See above how to set a System Environment variable.

A server reboot might be required after changing the PATH system variable.

In the folder 'C:\xampp\php', you will find a file named 'php.ini'. Please make a copy of it before editing.

Then edit 'php.ini' file (with notepad++) and make the next changes:

post_max_size = 20M   upload_max_filesize = 20M

Console error instead of a log file.

display_errors = On
; error_log C:\Windows\Temp\PHP74x64_errors.log   (comment out by ';' in front)

At the bottom, add 'fileinfo' and 'sqlsrv' dlls to be loaded (about line 935):

extension=fileinfo   (might already be activated) extension=intl
extension=pdo_mysql   (might already be activated)
extension=pdo_sqlsrv_74_ts_x64
extension=sqlsrv_74_ts_x64
extension=pdo_pgsql   (might already be activated)
extension=pgsql   (might already be activated)

Both 'sqlsrv' dlls are there to load the ms-SQL server drivers in php. These are installed on the correct location by the WPI-installer (sub-folder 'ext' from the folder where the 'php.ini' file is found. Eg, 'C:\xampp\php\ext').

The 'pgsql' dlls are for PostgreSQL (but might need to be downloaded and installed/copied to the PHP extension folder; see also later in the NGINX section).

2.4.6   PHP: TS or NTS database drivers?

Some database drivers come in two (2) different types: TS and NTS. TS means Thread-Secure, and NTS means Non-Thread-Secure. It depends on the version of PHP and which type you need to use.

In this case 'ZTS' version, you have to specify the TS-version of database drivers in the 'php.ini' file.

2.5   **Start Apache & MySQL at server boot**

To start Apache and MySQL at server startup, stop both and press the 'red-cross' button in front of them. This will activate a Windows service to launch them automatically after boot.
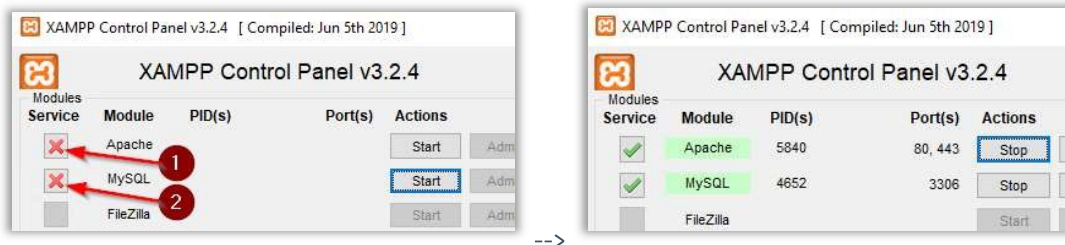
Now you are ready to configure the WBE Extension.

3 Installation WBE Extension

3.1   Preparation

The downloaded zip file contains the following files:
- *wbe-core.phar* – WriteBackExtreme compiled source file.
- *install.bat* - Run some steps to set up the WriteBackExtreme.
- *update.bat* - For updating in the future.
- *wbe-core.bat* - Uses the "cached" PHP variable path to execute the command: `/path/to/php.exe wbe-core.phar` command.

3.2   Copy your license into the LICENSE file

First, type the following two commands in a dos-cmd-box: where '*C:\wbeiis\wbe2*' is WBE-root-folder where you copied the WBE unzipped folders and files.

Copy your license (file) to the WBE project folder, to '*C:\wbeiis\wbe2\LICENSE*' (without an extension like '*.txt*')

You can download your license from https://my-appsfortableau.infotopics.com.

3.3   Are ALL files ready?

Run the `DIR` command to show all files to ensure we have everything. Verify that all files listed before are in the WBE project folder with the `LICENSE` file.

3.4   Install WriteBackExtreme

Now you can run `install.bat,` and it will ask you to enter the full path to the `php.exe` or drag/drop the `php.exe` within this dos-cmd-box window to set the path automatically. Press *enter* when the full path is visible to continue. Follow the steps from the installation. Now you should have configured the correct database driver and database credentials. Read about environment variables in *3.5 Environment Variables* and proceed with this step.

Check if everything shows up fine in the *app:status* command:

```
php.exe wbe-core.phar app:status
# or
wbe-core.bat app:status
```

3.5   Environment variables

Environment variables allow the application to environment-specific and confidential variables (e.g., database credentials).

Define your WBE repository database connection details:

```
.env

 1   APP_NAME="AppsforTableau | WriteBack extension"
 2
 3   DB_CONNECTION=sqlsrv-default
 4   DB_DRIVER=sqlsrv
 5   DB_HOST=your-sql-server-hostname-or-IP-address
 6   DB_PORT=1433
 7   DB_DATABASE=your-wbe-database-name
 8   DB_USERNAME=writeback-database-account
 9   DB_PASSWORD=database-account-password
10
```

Specify your DB_HOST
DB_PORT is default 1433 for SQL-server
Specify your DB_DATABASE

Specify your web-admin database account and the corresponding password.

If the password contains any special character (good practice), use double quotes around it.
DB_Password="de4%3kfri5&"

---> *This must be a SQL-srv account, not a Windows-authenticated (AD) account! Save the edited file.*

Point of attention: Do not use passwords containing a period "." Since this might break connections and lead to unexpected results.

3.6   Test the WBE extension

The URL https://writeback.your-company.com should show the WBE logo.
The URL https://writeback.your-company.com/info should show the phpinfo page. Please mark the folder mentions by 'sys_temp_dir', 'session.save_path', and 'upload_tmp_dir' for later use.
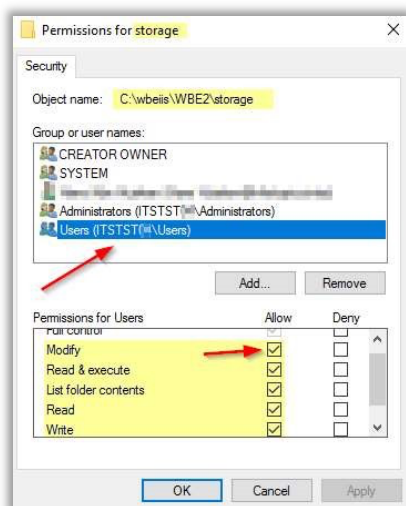
3.7 Folder-permissions

The WBE extension needs writing permissions for several folders.

Which folders need to be writeable for the WBE application?
- <WBE-root-folder>\storage
- <WBE-root-folder>\migration
- <php:sys_temp_dir>   (if specified)
- <php-info:session.save_path>
- <php-info:upload_tmp_dir>
- Windows TEMP folder (dos-cmd-box: echo %TEMP%)

Uplift security settings for group 'Users' of this folder to 'Modify' permissions. Right-click the folder and select the 'properties'.
Then select the 'security' tab and select 'Edit'.

Uplift the security settings on the folder 'storage' and 'migrations' for the group 'Users' to 'Modify' Permissions. If these folders do not yet exist, you can create them with lowercase names.

3.8   Final Result

The result is to have two (2) URLs available. One for the extension itself when it's accessed via the Tableau dashboard to run the WriteBackExtreme extension as you configured it.
The URL https://writeback.your-company.com/extension, when accessed directly from a browser, only shows a loading screen.
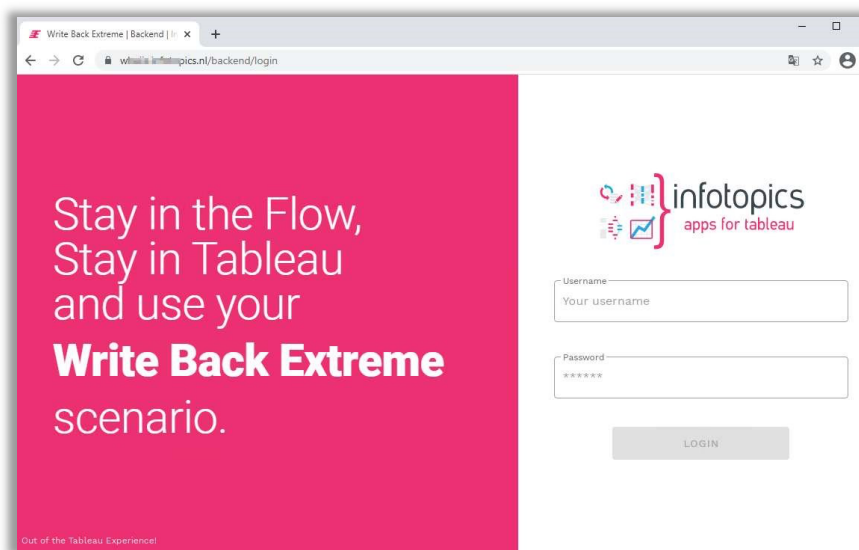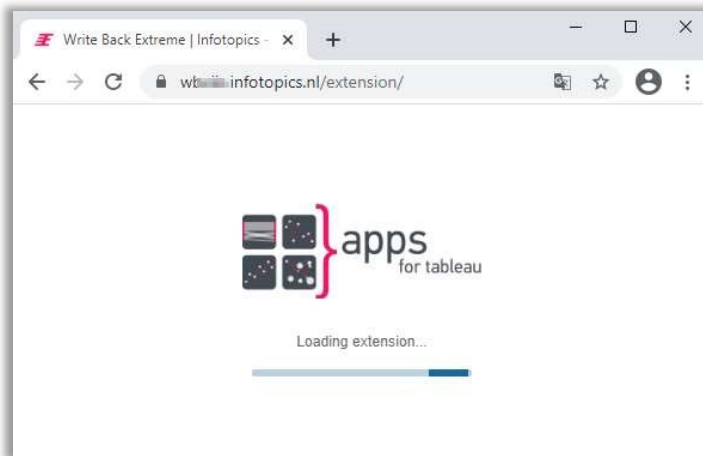
The configuration backend can be accessed via

https://writeback.your-company.com/backend

Specify the admin user account and password to enter the backend configuration part of your Write-Back-Extreme extension.

For more info, see the User Manual on how to set up your Write-Back-Extreme scenario to use inside Tableau Desktop and Tableau Server.

4   Troubleshooting

4.1   Database connection issues

Try using other tools to be sure the database is accessible from the server running WBE to check for any connectivity issues.

Point of attention: Do not use passwords containing a period "." Since this might break connections and lead to unexpected results.

4.2   Error during backend configuration

When accessing the backend configuration of WBE and errors pop up. Try to reproduce the error while in browser-debug mode (F12) and check for messages on the 'network' and 'console' tabs to find any common issues.

4.3   PHP related

Open a dos-cmd-box (⊞+R and 'cmd') to find if and where 'php.exe' can be found:
        C:\> where php

To find the version of php:
        C:\> php --version

4.4   Logfiles location

The WBE extension logfiles are located at:
        C:\wbeiis\wbe2\storage\logs
Apache2/XAMPP has logfiles created at:
        <xampp-install-path>\apache\logs
Look for 'access' and 'error' log files in particular.