

WEBCON BPS
Installation guide



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1. Prerequisites

WEBCON BPS 2019 introduces several methods of installation that take into account different platforms and users' needs. The following document describes the most elaborate installation variant on Microsoft SharePoint.

1.1. Software.

- Windows Server 2012 R2 or higher.
- .NET Framework 4,7
- .NET Core Hosting Bundle 2.0.9
- Microsoft SharePoint Foundation 2013 or Microsoft SharePoint Server 2013/2016/2019.
- MS SQL Server 2012 or higher (full text search mode required).
- Active Directory environment.

1.2. Hardware.

1.2.1. Hardware scenarios

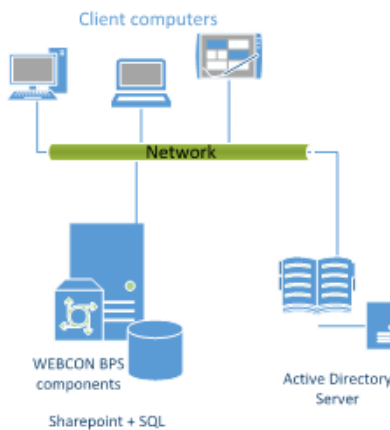
There are 3 basic scenarios in terms of WEBCON BPS' hardware requirements:

1. Minimum installation – for test, demo and small (up to 10 end users) production environments
2. Recommended installation – for production environments
3. Adding more servers, redundancy, etc.

1.2.2. Minimum requirements – „all-in-one installation”.

In case of minimal configuration for running WEBCON BPS, one may use a single machine with software given below:

- Windows Server 2012 R2 or newer
- SharePoint Foundation 2013
- SQL Server 2012 Express with Advanced Services (Full Search component is necessary)
- Configured Active Directory service



Pic 1. Diagram of „all-in-one” WEBCON BPS installation

Hardware requirements for such installation should correspond with hardware requirements for installation of SharePoint Foundation 2013 on a single server. Such requirements are shown in a table below (according to [requirements listed by Microsoft](#)):

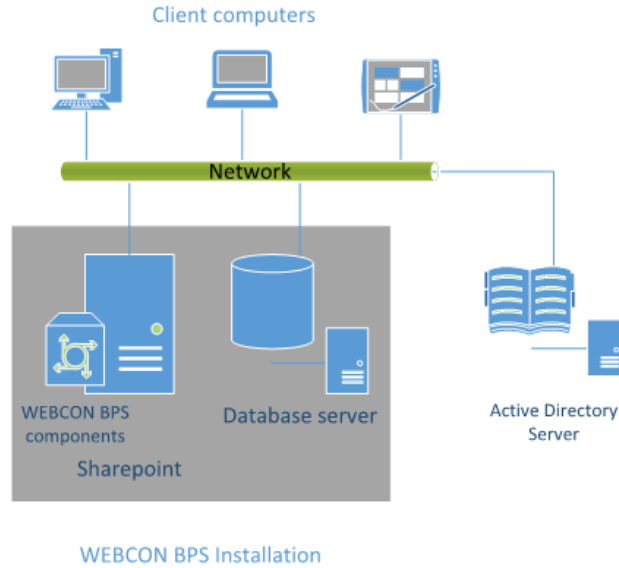
Installation scenario	Deployment time and scale	RAM	Processor	Hard Disk space
Single server with a built-in database or single server that uses SQL Server	Development or evaluation installation of SharePoint Server 2013 or SharePoint Foundation 2013 with the minimum recommended services for development environments.	8GB	64-bit, 4 cores	80 GB for system drive
Single server with a built-in database or single server that uses SQL Server	Development or evaluation installation of SharePoint Server 2013 or SharePoint Foundation 2013 running Visual Studio 2012 and the minimum recommended services for development environments.	10GB	64-bit, 4 cores	80 GB for system drive

It is recommended to use at least 12GB of RAM

Please note! It is possible to use **SQL Server Express 2012**, but the size of single database will be **limited to 10 GB**. Machine with given parameters, allows to run WEBCON BPS **only for tests or small production** installation operating **up to 10 end users**.

1.2.3. Recommended requirements.

Recommended requirements for WEBCON BPS assume two, separate servers for MS SQL and SharePoint. Take a look at the picture below:



Pic 2. Recommended configuration for WEBCON BPS installation

Tables below describe suggested parameters for both servers:

Database server

System	Database	Processor	RAM	Hard disk
Windows 2012 R2	SQL 2012 Server Standard	64-bit, 4 cores	32 GB (minimal); 1/3 of database size (optimal)	- Storage for system files (RAID1): 140GB - Fast HDD for tempdb database: 100GB - Fast HDD (RAID10) for data files (size depends on number of workflow elements): 200GB

SharePoint Foundation 2013 or SharePoint Server 2013/2016/2019

System	Processor	RAM	Hard disk
Windows 2012 R2	64-bit, 4 cores	8GB (minimal); 16GB (recommended)	Storage for system files (RAID1) 140G

Notes:

- SharePoint databases will reside on SQL Server
- All WEBCON BPS components will be installed on SharePoint server (except database).
- Full redundancy for each component (SQL Server, SharePoint, WEBCON BPS) can be applied. For details contact us directly.

1.3. Permissions:

- Separate account in Active Directory for the purpose of WEBCON BPS service needs to be created
- WEBCON BPS service account should be different than SharePoint and SQL account
- Installation account must have permissions of SharePoint farm administrator and also administrator of site collection on which WEBCON BPS will be installed
- Installation account must have db_owner permissions for configuration databases and SharePoint content
- Installation account must have sys_admin permissions for SQL Server where WEBCON BPS will be installed
- Installation account must have local admin permissions for machine on which WEBCON BPS will be installed
- MS SQL Service as well as SharePoint should work in context of a dedicated AD account

Notes:

- If SQL Server runs in Windows Authentication mode then account for application pool must have permissions to WEBCON BPS database
- SharePoint application pool must have permissions to SQL Server
- After installation, the site on which WEBCON BPS has been installed should be added to local intranet sites

2. Introduction

The Installer is a tool that facilitates the installation and implementation of products dedicated for Microsoft SharePoint.

This application has multiple uses, including:

- Verification of permissions and components needed to install WEBCON BPS,
- Installation of WEBCON BPS for SharePoint,
- Installation of WEBCON BPS for Windows (desktop application)
- Installation of other required components required for WEBCON BPS to run correctly,
- Migration of databases,
- License management.

3. Installation.

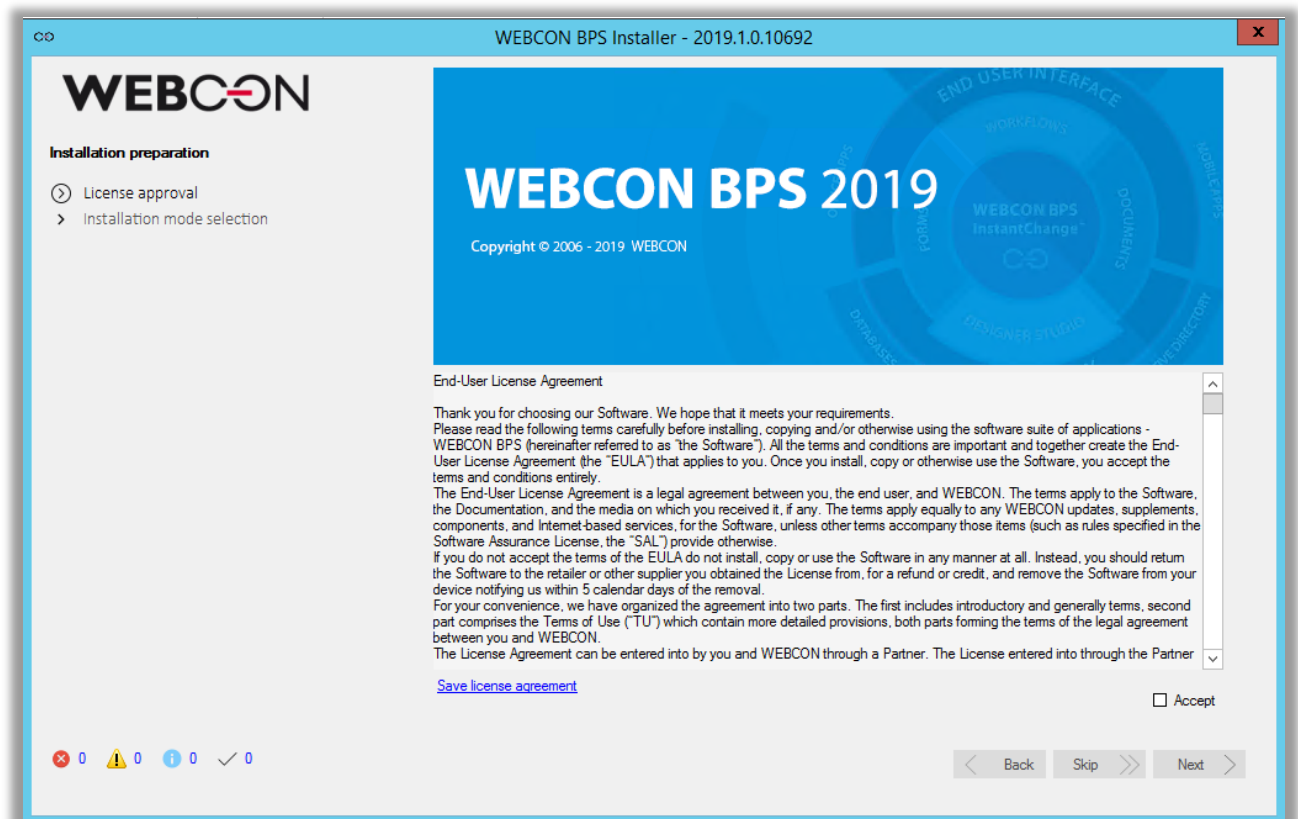
WEBCON BPS 2019 introduces several methods of installation that take into account different platforms and users' needs. The following description applies the most elaborate installation scenario on the Microsoft SharePoint platform.

3.1. Initialization.

After downloading and unpacking a demo version of WEBCON BPS, open folder and double click on setup.exe

3.2. License acceptance.

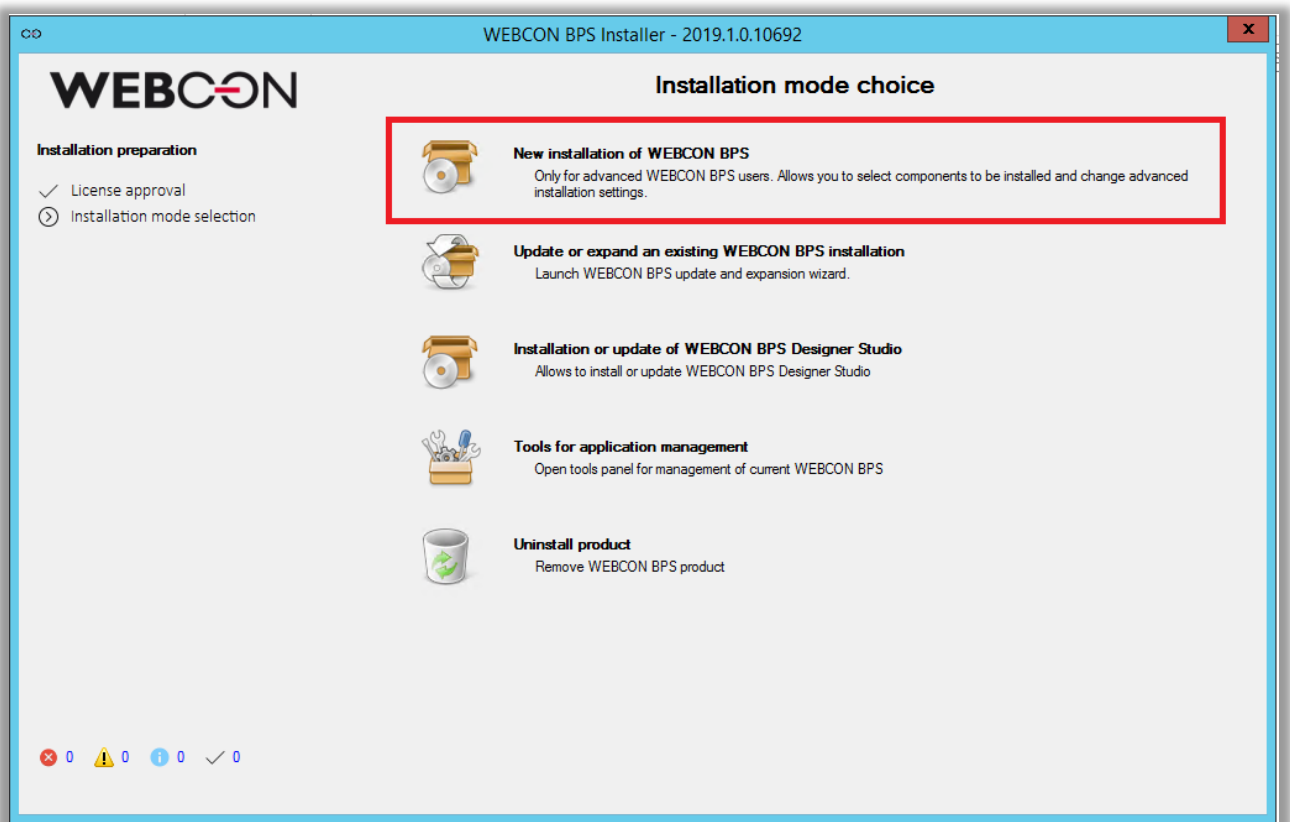
In order to begin installation, you have to accept End User License Agreement. To do so check 'Accept' and click 'Next'.



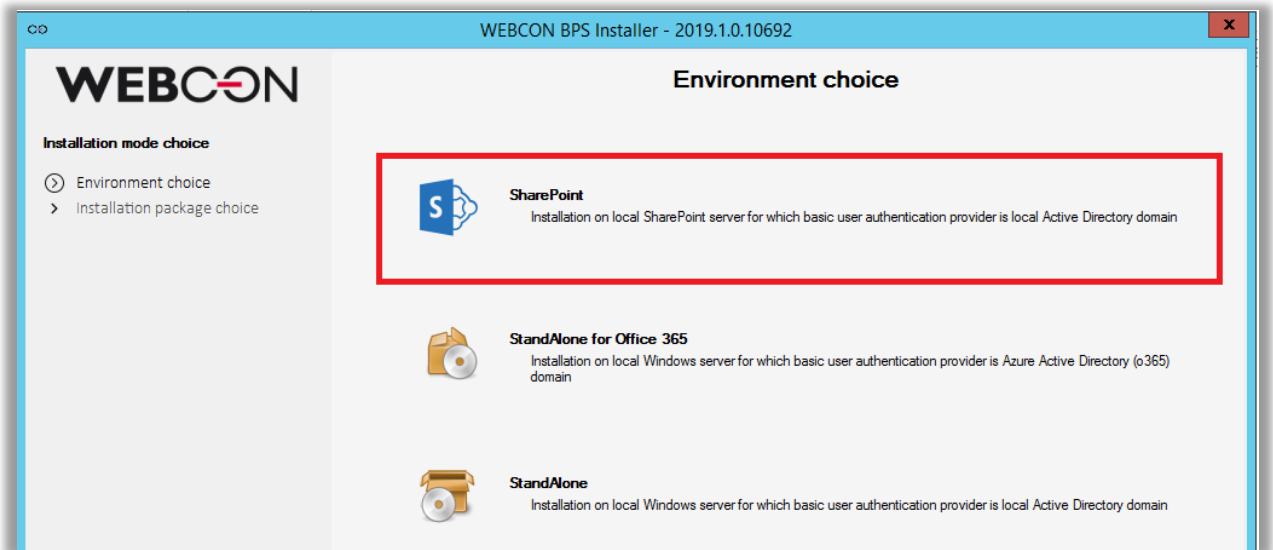
3.3. Installation mode choice

The WEBCON BPS system uses one shared installer for multiple purposes:

- Installing the system
- Upgrade to newer version and/or adding new features to the system
- Installing WEBCON BPS Designer Studio as an independent component
- Launching system conservation tools
- Uninstalling the product



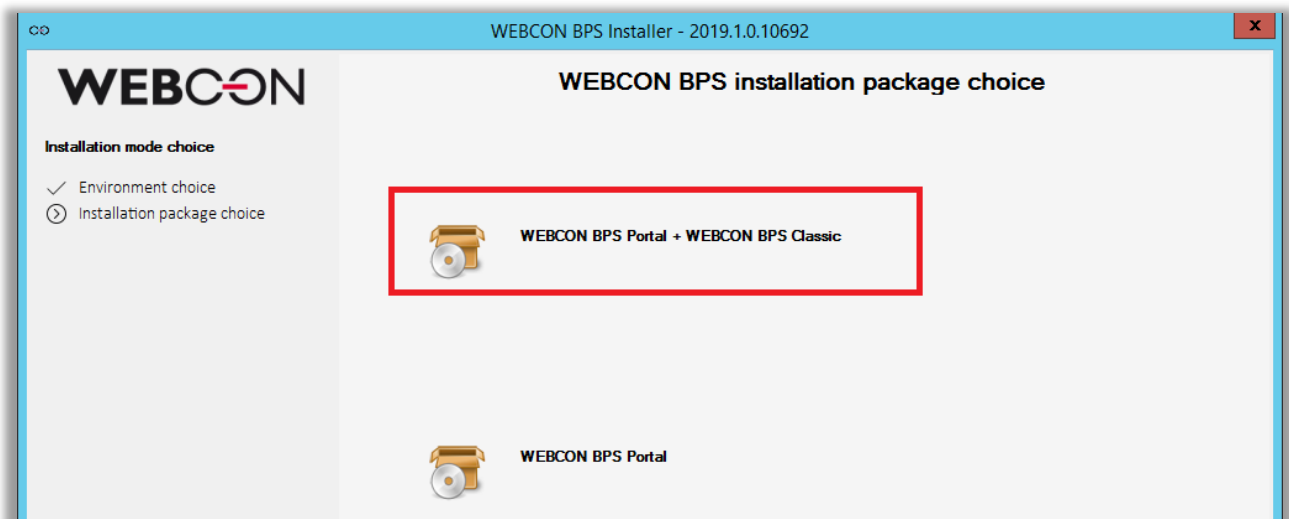
After selecting **New installation of WEBCON BPS**, a window will appear allowing you to select the type of environment on which the WEBCON BPS platform will be installed.



For this scenario, select **SharePoint**.

For the SharePoint platform, there are two possible types of installation depending on the desired component configuration on SharePoint sites.

The option: **WEBCON BPS Portal + WEBCON BPS Classic** will install the platform along with all new features related to the presentation layer introduced in WEBCON BPS 2019, as well as all features and functionalities from previous versions of the system (including classic Web Parts and the classic form). After Installing, the administrator of the WEBCON BPS platform may switch between different features at any moment.



3.4. System verification.

The installer will automatically check if your environment fulfills basic requirements.

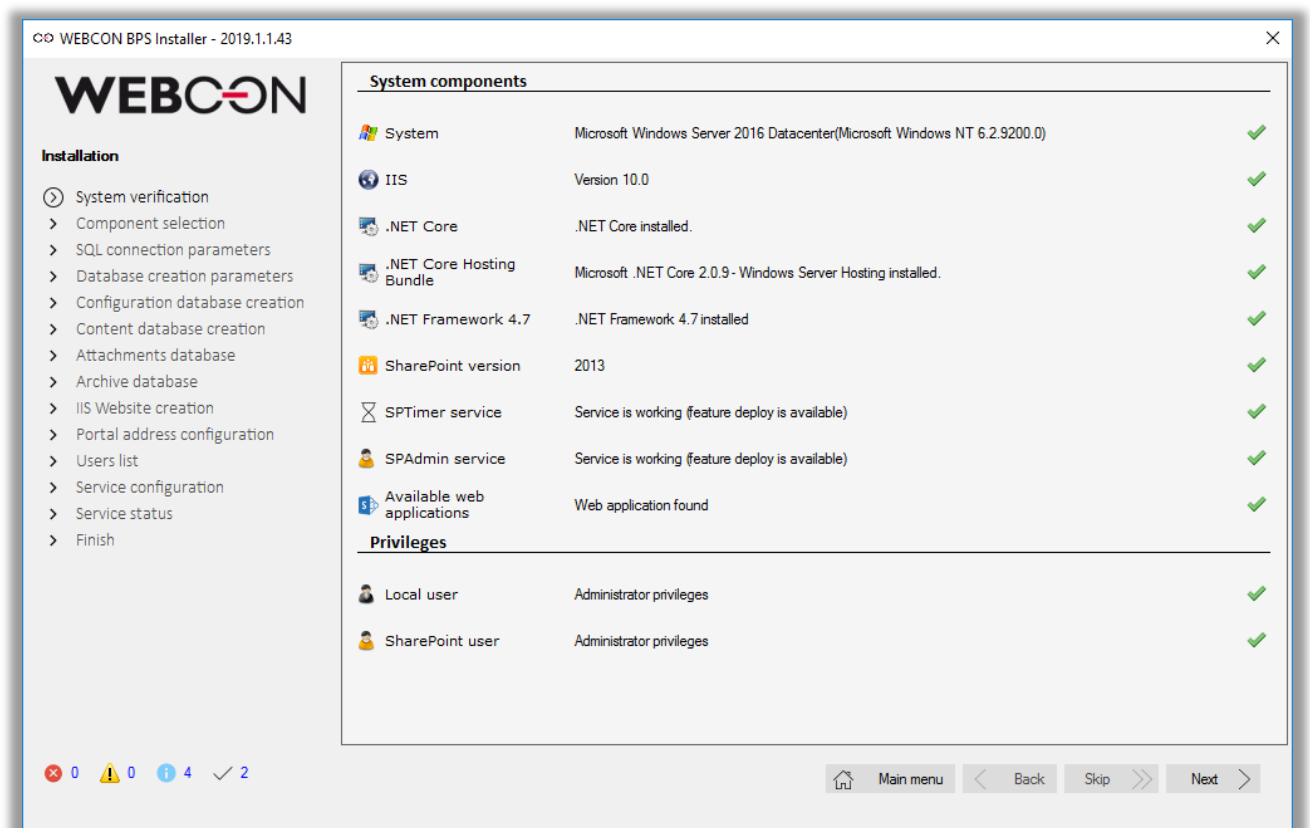


- you are good to go



- there were problems with verification. Check system's messages available on the bottom of the window (four icons indicating: error, warnings, information, successful steps)

If everything is in order, click Next.



System – Windows Server family operating system will suffice.

SharePoint version – Version of SharePoint installed on a server will be checked. For the verification to proceed correctly, the user running the installation must:

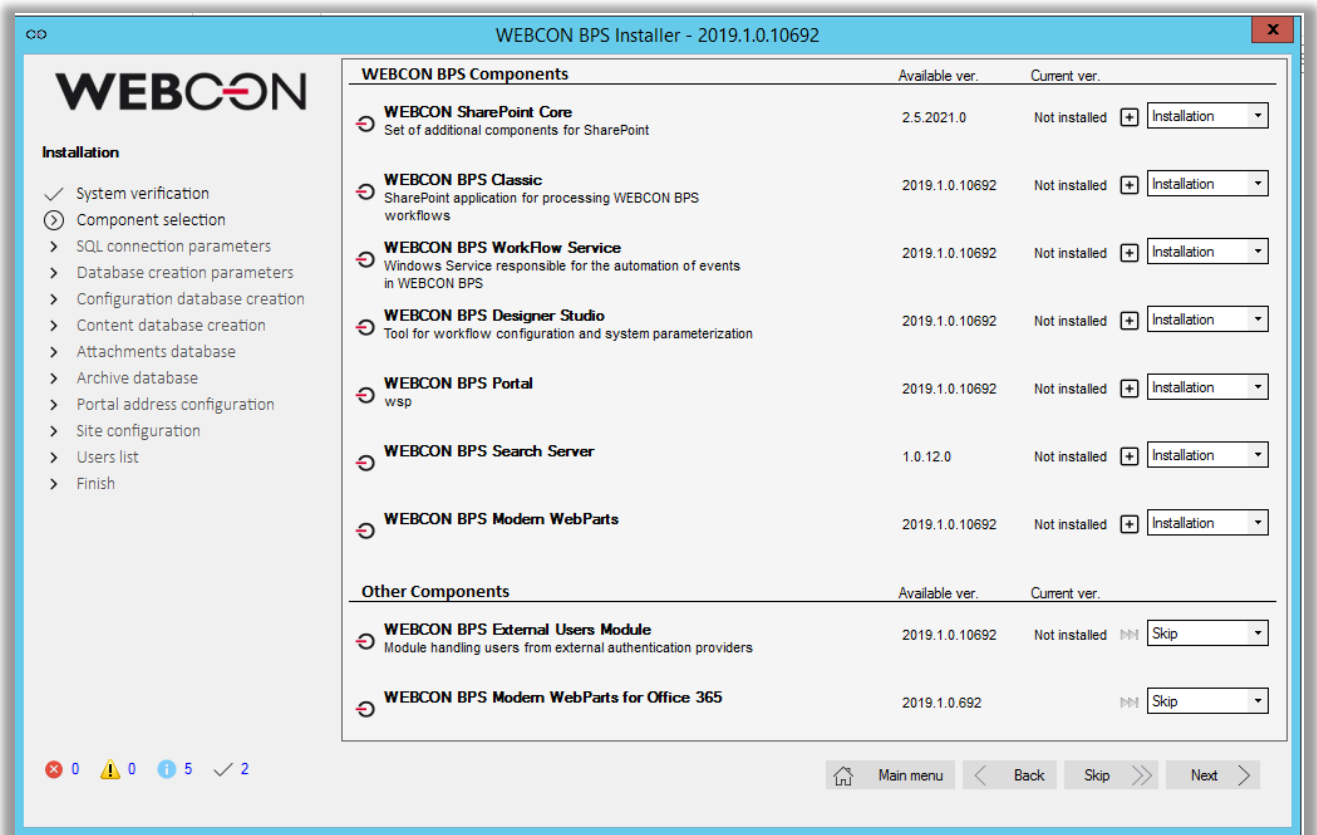
- be an administrator of a site collection
- have permissions to SharePoint configuration database.

SPTimer and SPAdmin services – In order to install SharePoint components, both SPTimer and SPAdmin services need to be running.

Local user – In order to install applications, local computer administrator privileges are required.

SharePoint user – Installation of SharePoint components can proceed only if currently logged in user is a site collection administrator and have access to SharePoint configuration database.

3.5. Components selection



The installer will suggest components which are essential to ten platform.

NOTE:

When installing on MS SharePoint 2016 or 2019 platforms, the **WEBCON BPS Modern WebParts** option will require the existence of a so-called **App Catalog** on the SharePoint server (according to Microsoft's instructions).

3.6. Component installation.

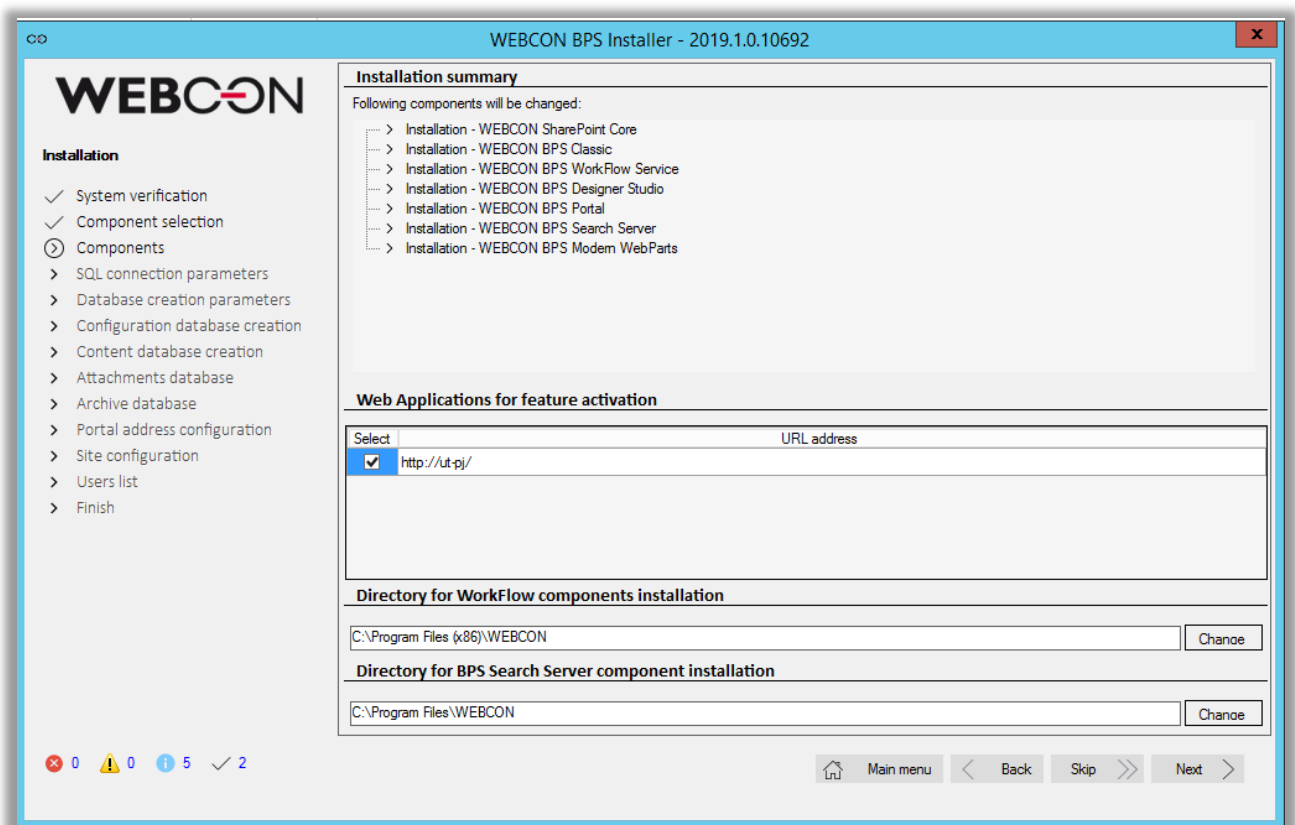
The next screen displays the component installation summary. The system will display a list of defined SharePoint Web Applications. This list is used for selecting Web Applications on which the WEBCON BPS feature will be activated.

The administrator may choose the installation catalog for elements of the WEBCON BPS platform as well as for the BPS search component.

NOTE:

The catalog in which the search tool for WEBCON BPS (BPS Search server) will be installed will also store search index files. Due to this, it should be located in a place which contains sufficient free space to store these search index files (roughly 20% of the volume of WEBCON BPS databases).

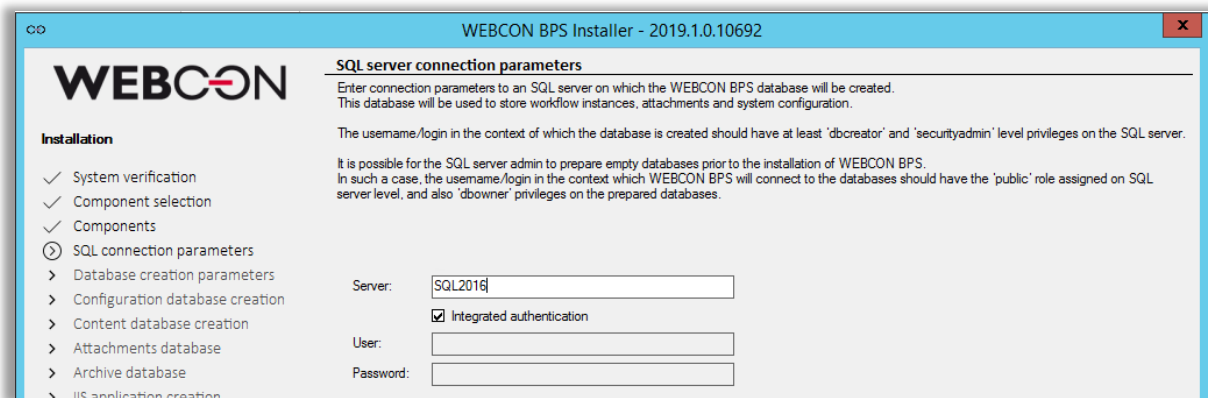
Select the desired items and click 'Next' to proceed.



3.7. SQL Connection parameters

Type an address of the server where WEBCON BPS will be installed. It is recommended to use integrated authentication. Click Next to proceed.

Please note: the provided user must have permissions to the SQL database.



3.8. Database creation parameters

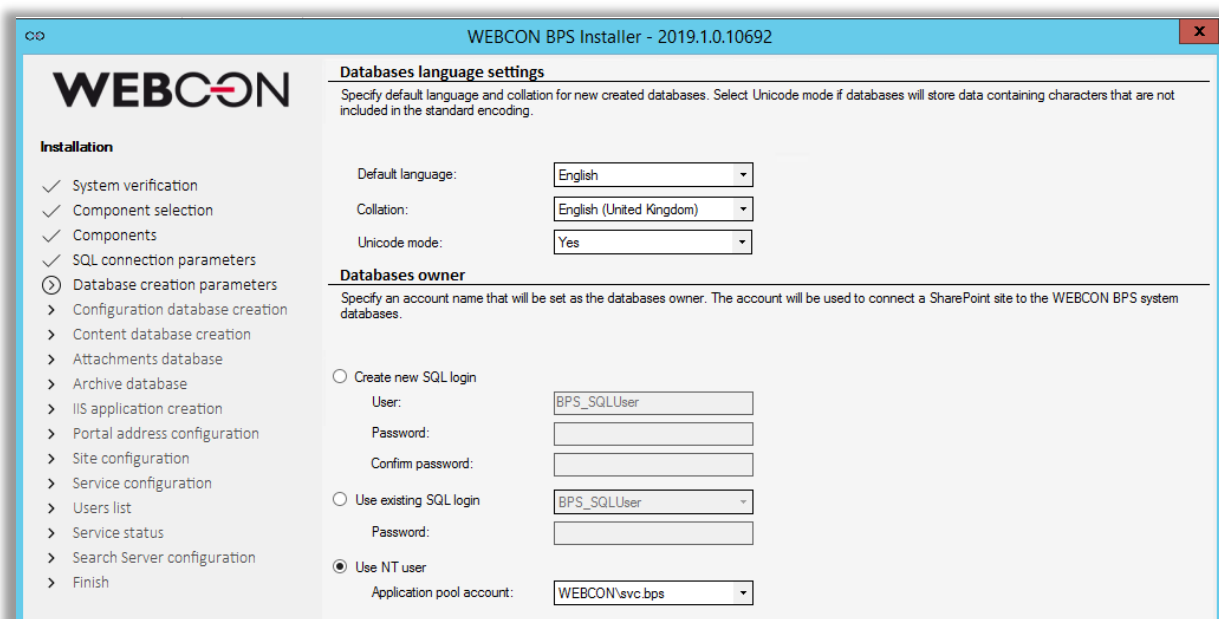
At this point it is possible to set the Unicode parameter to 'Yes' if SharePoint site needs to display some special characters like *Umlaut* for German language.

If new SQL user is created he will be granted database owner permissions.

In order to use SQL login, it is required to enable mix-mode on SQL server instance.

Selecting NT user as a database owner is possible only if there is application pool account available to select.

Click 'Next' in order to proceed.

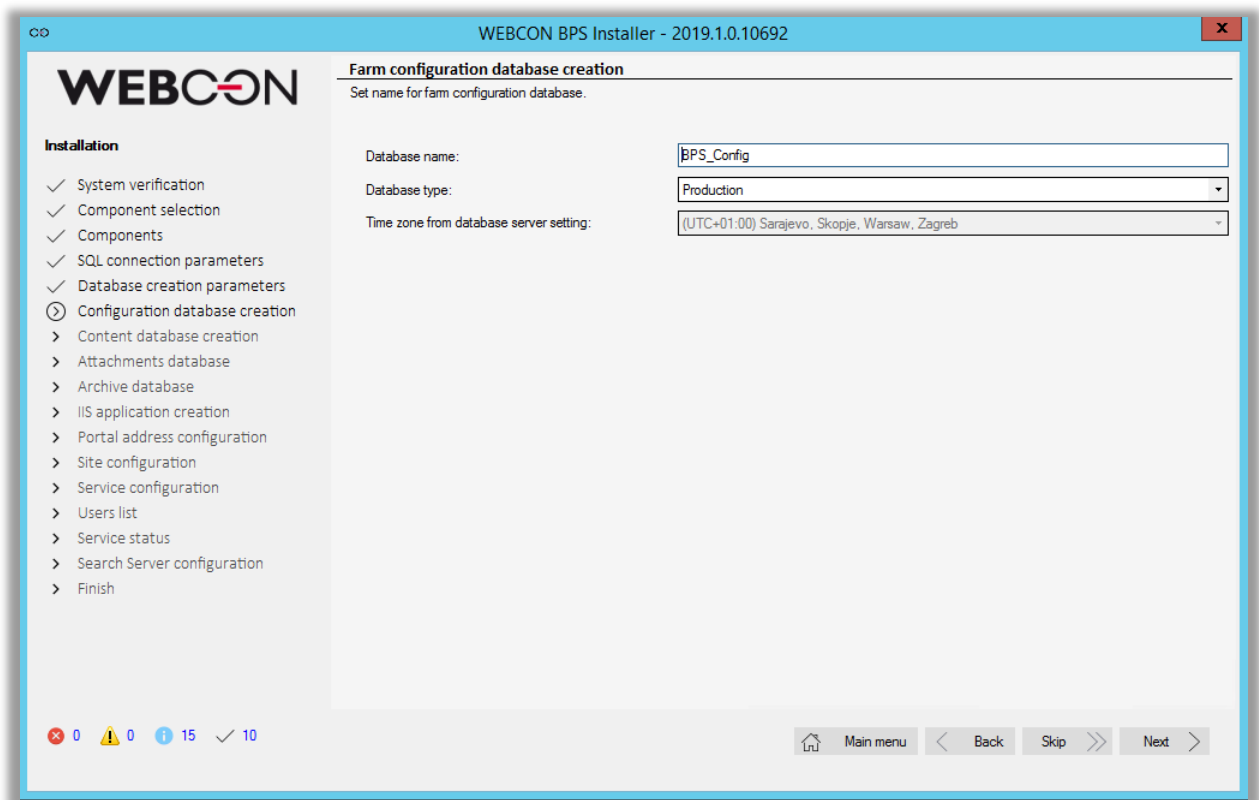


3.9. Configuration database creation

Database creation is divided into three steps. First, the user creates a configuration database and choose a database type.

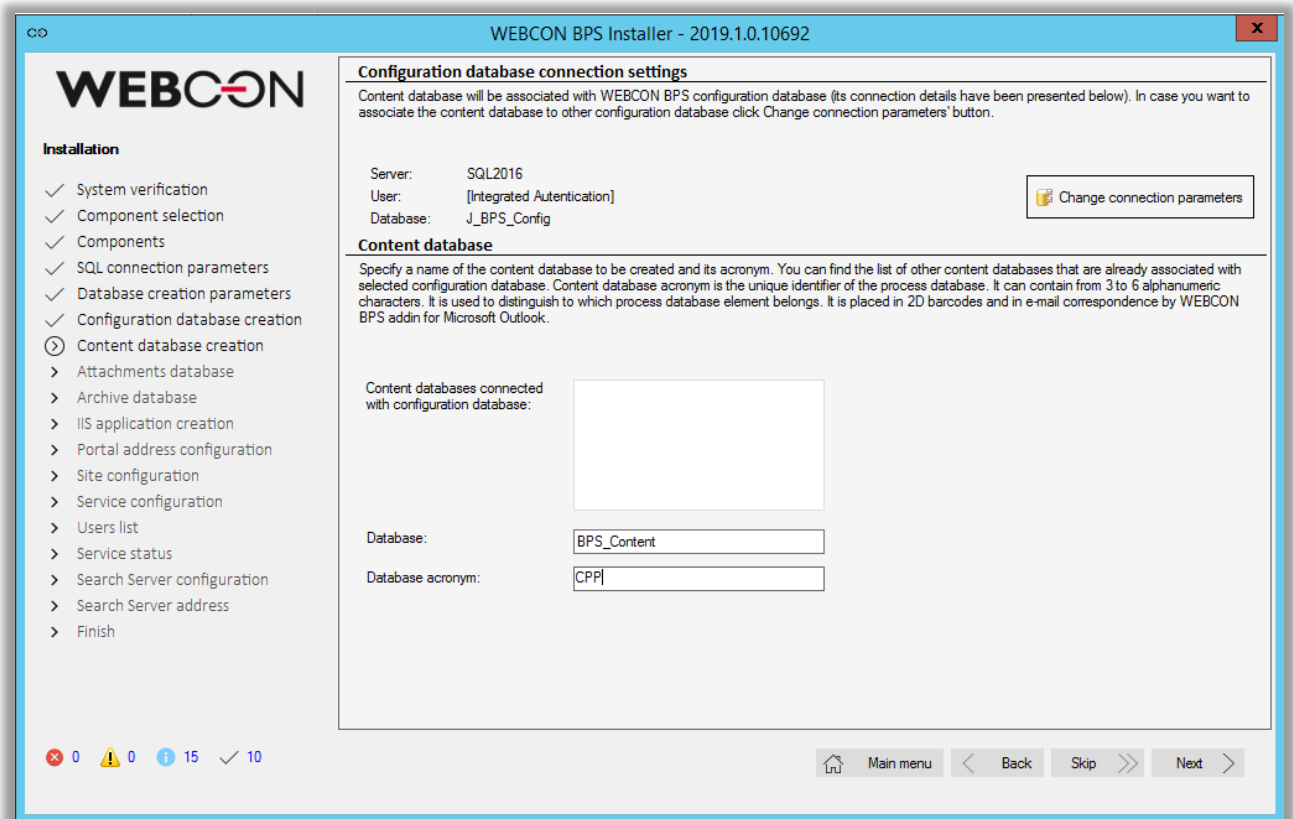
The time zone selector is inactive by default, and shows database time zone. If the installer is unable to automatically find the time zone, the user will be able to select appropriate time zone manually.

By default, the configuration database is named BPS_Config.



3.10. Content database creation

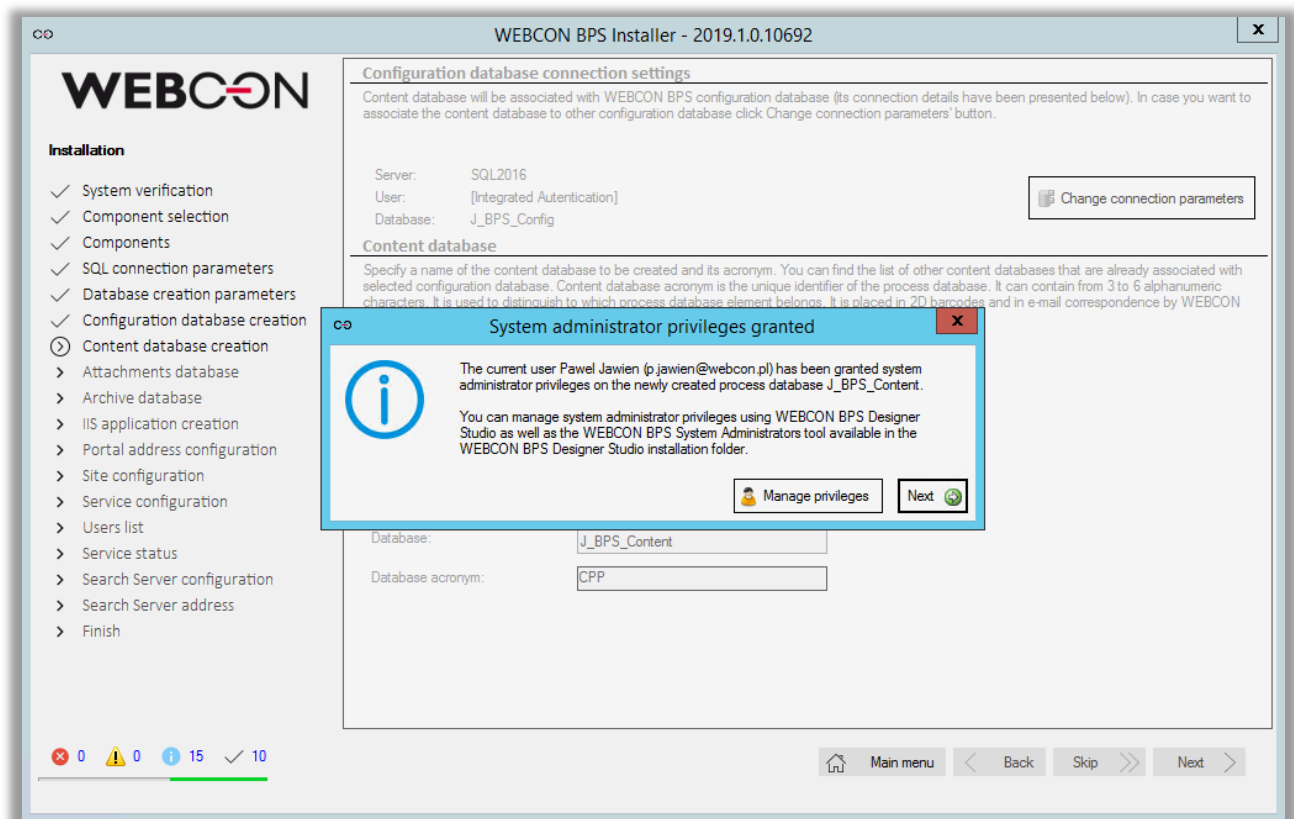
At this point, the user creates a new content database. There's also a list of all content databases already associated with configuration database available. After specifying database name (by default BPS_Content) and its acronym, click "Next" to proceed with installation.



3.11. Administrator privileges for the WEBCON BPS platform

After creating the main content database for WEBCON BPS, the installer can be used to assign which users will have administrator privileges in the WEBCON BPS platform.

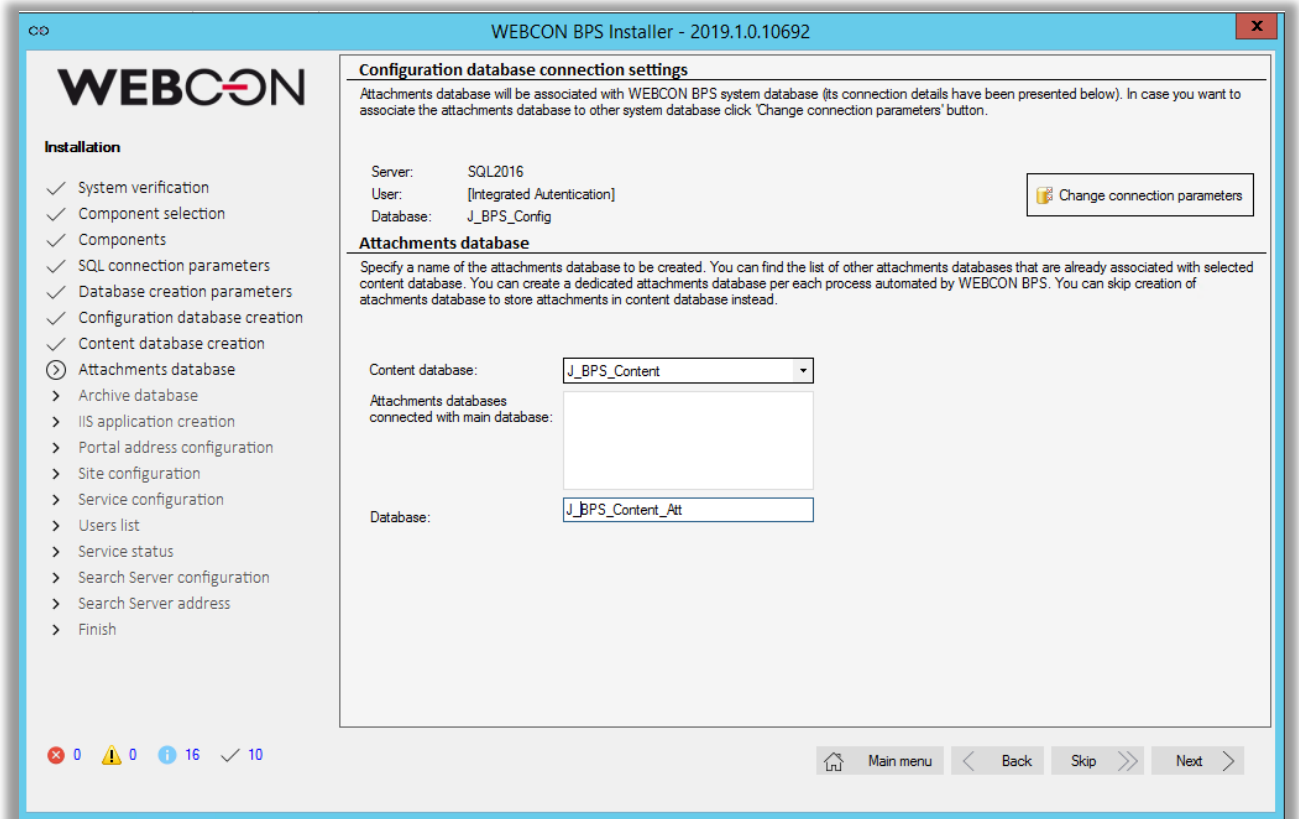
The user currently running the installer will be automatically added to the group of WEBCON BPS platform administrators.



Privileges can be managed after completing the installation directly in WEBCON BPS Designer Studio.

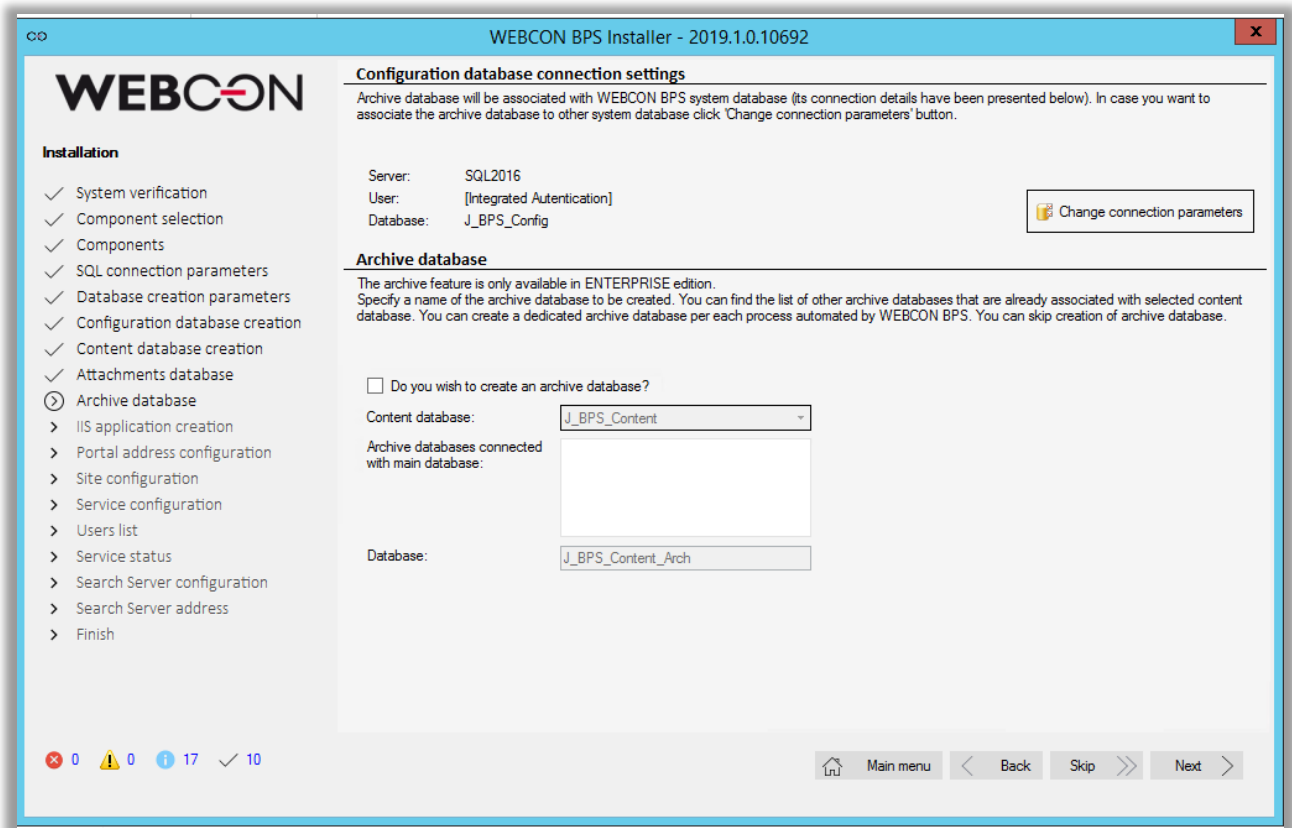
3.12. Attachment database

Just like with content database creation, it is possible to create new attachments database and see a list of ones already associated with content database.



3.13. Archive database

Starting with WEBCON BPS 2016, it is possible to transfer archival data from the main database to a dedicated archive database. The installer may be used to create as many archive databases as necessary.

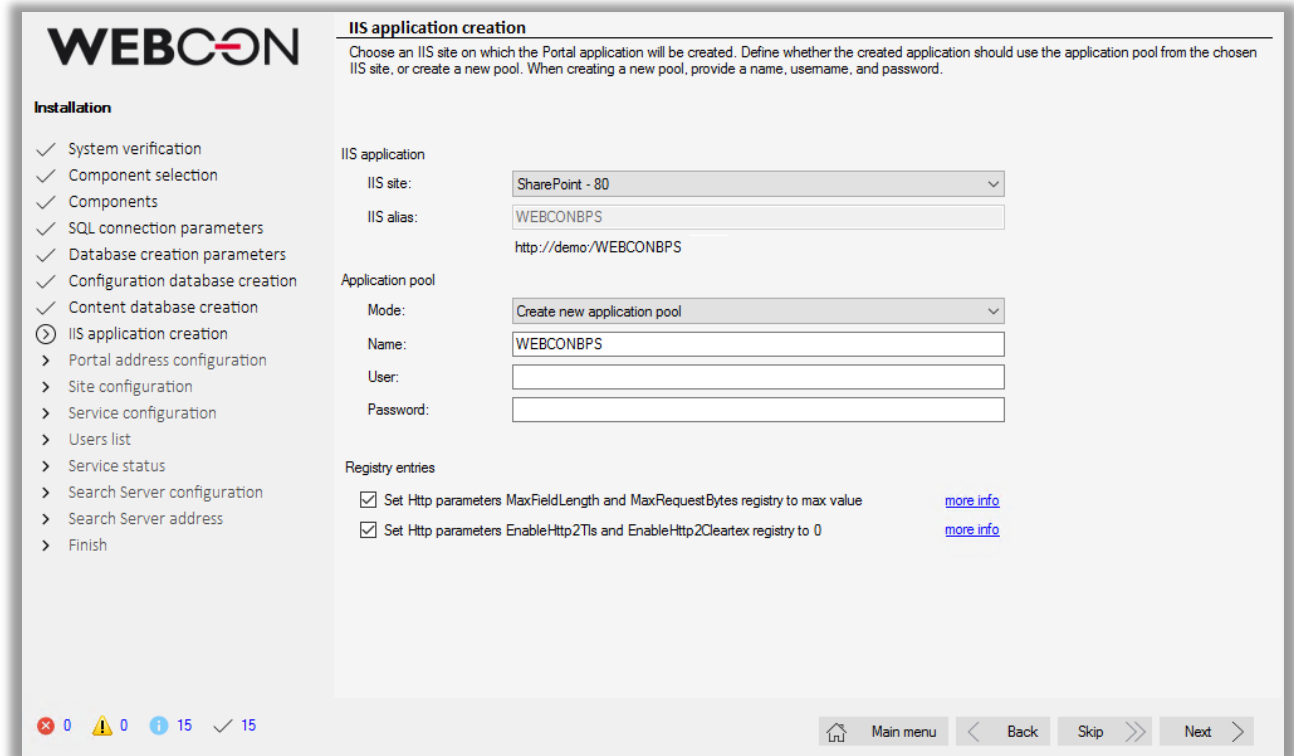


3.14. WEBCON BPS Portal installation – IIS application creation

WEBCON BPS 2019 introduces a new feature: WEBCON BPS Portal.

In order to use Portal, it is necessary to create an additional application on the IIS server in the Microsoft SharePoint Web Application.

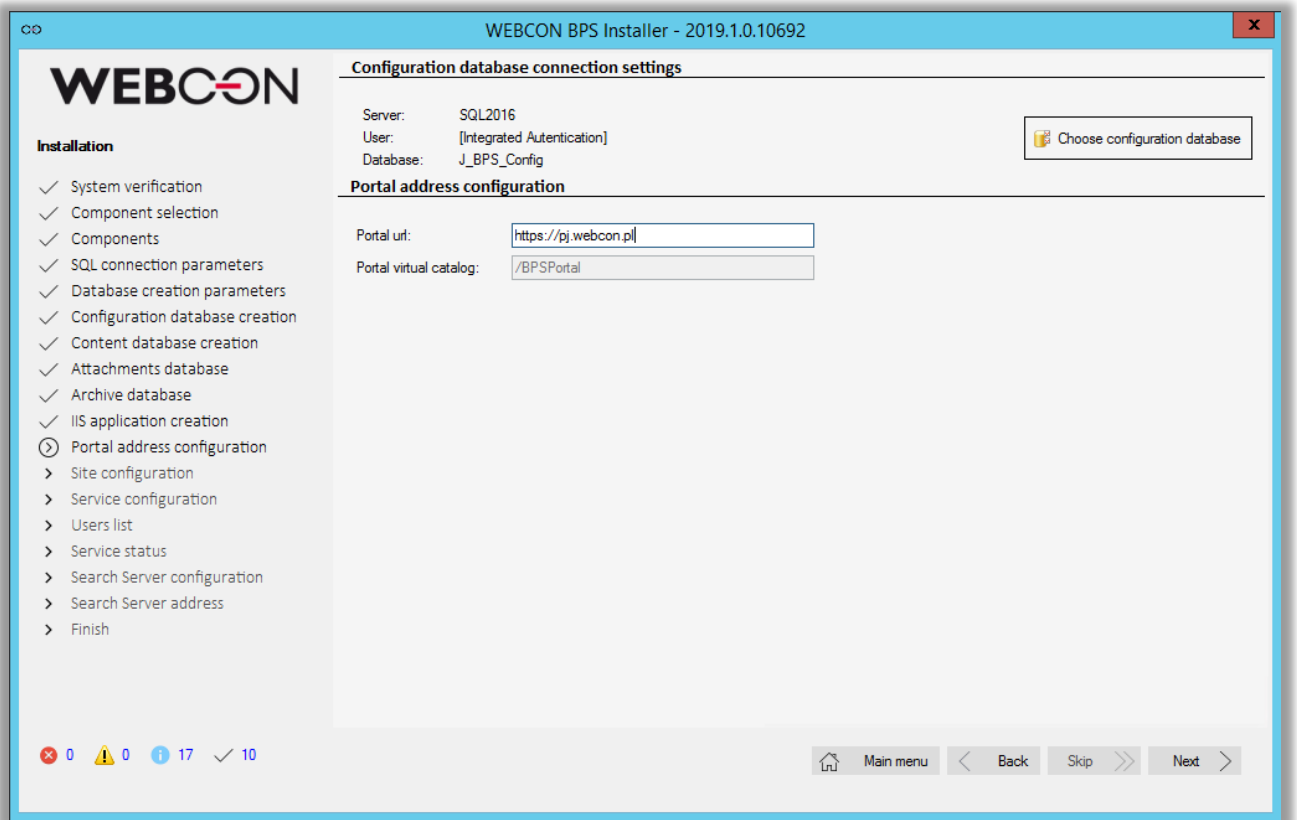
The administrator has to create a dedicated application pool for WEBCON BPS Portal.



3.15. WEBCON BPS Portal Installation – Portal address configuration

In this step, it is possible to define the URL address under which WEBCON BPS Portal will be available.

It is recommended to use fully qualified domain names (FQDN).



3.16. Site configuration

It is recommended to create a new site for WEBCON BPS. By default, the system will create a new site called 'BPS' belonging to the root site.

There are two methods of configuring the connection to the content database:

1. SQL Authentication (SQL Login)
2. NT Authentication (Integrated security)

In the first case, to connect to system elements (Designer Studio, Site part), the SQL account must have Database Owner permissions on configuration and content databases.

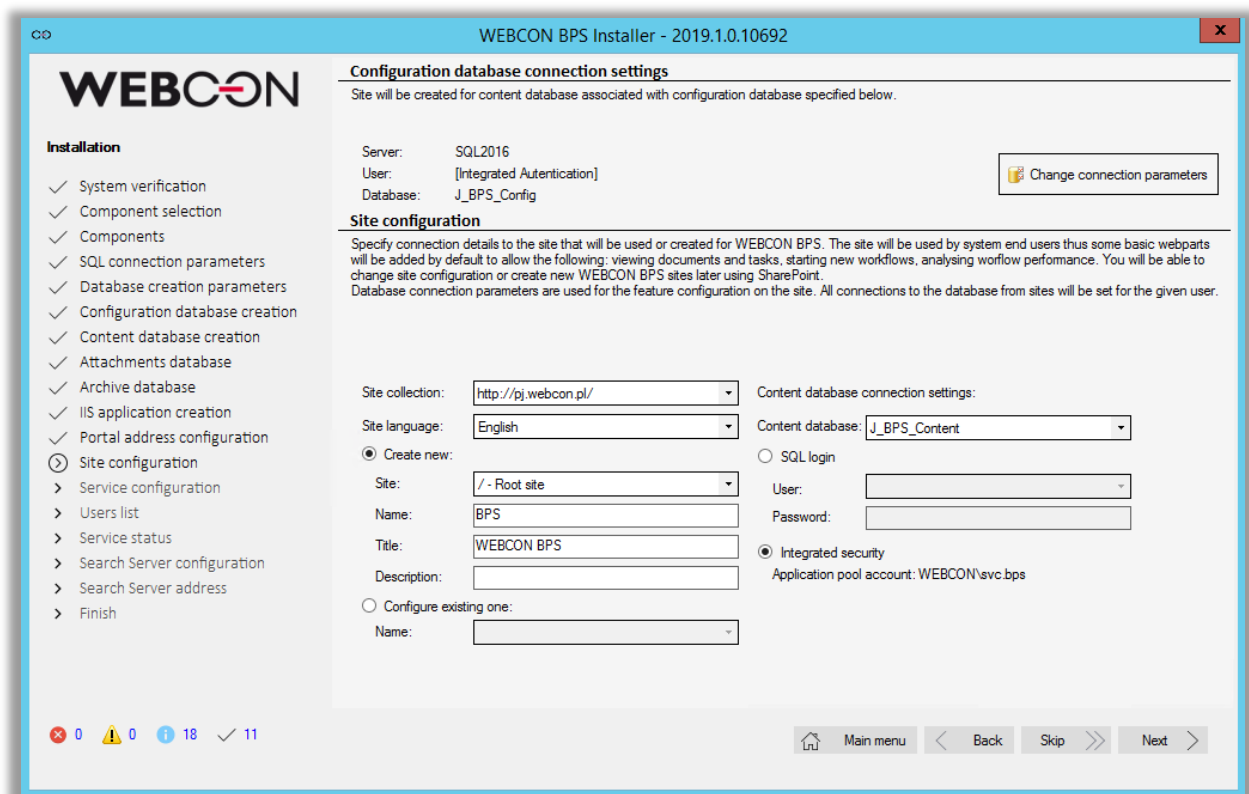
In the second case (integrated security), the SharePoint part works in the context of the application pool account, and Designer Studio works in a context of the currently logged user.

NOTE: The service always uses the provided service account to connect with BPS databases.

All accounts (including the service account) need to have Database Owner permissions on both configuration and content databases. This means that Database Owner permissions are required for:

1. SQL account and Service account in the first scenario (SQL Authentication)
2. Application Pool account, Current user, and Service account in the second scenario (NT Authentication)

Click next to proceed to the next step.



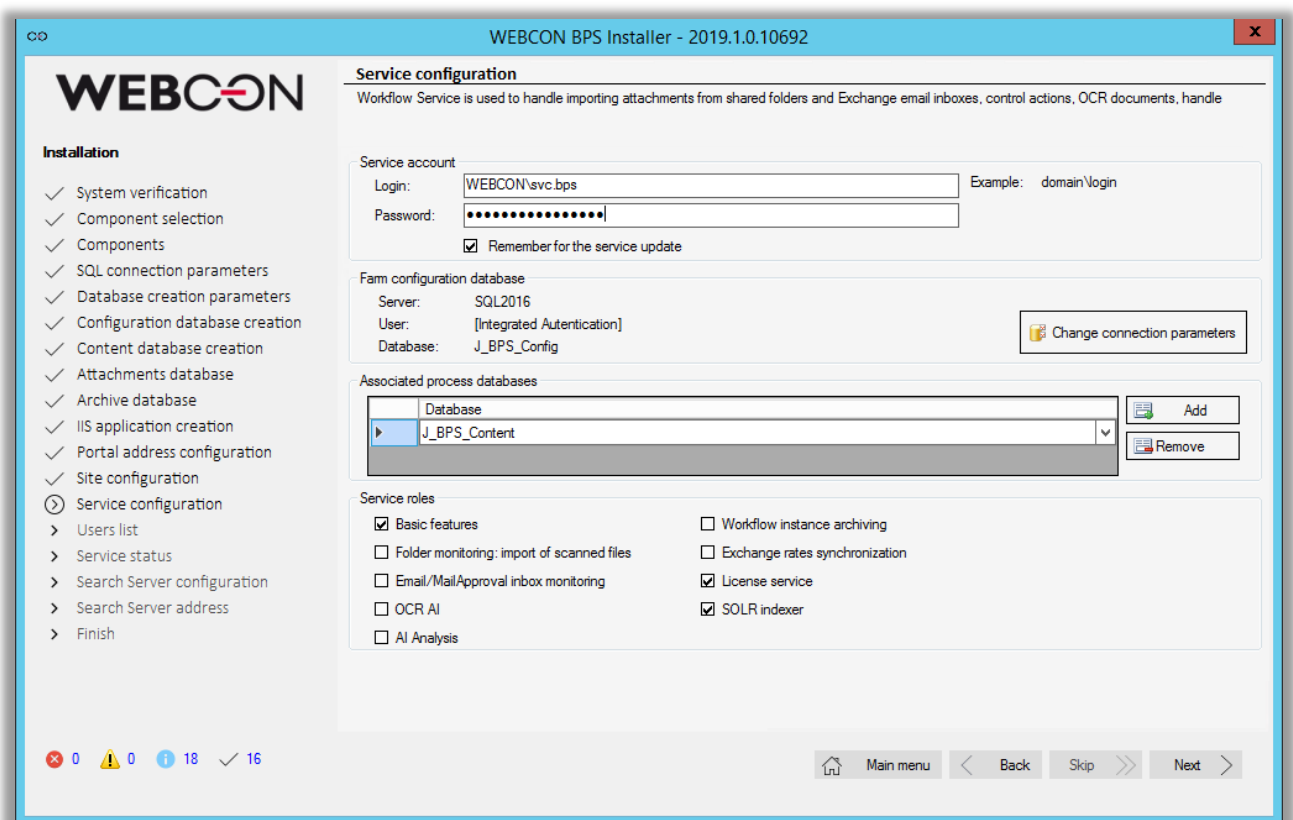
3.17. Service configuration

At service configuration step, it is required to enter login and password of an existing domain user in order to handle services such as: OCR, Exchange, Barcodes, controls etc.

Check “Remember for service update” in order to save time in the future and have those information filled in automatically during the system update.

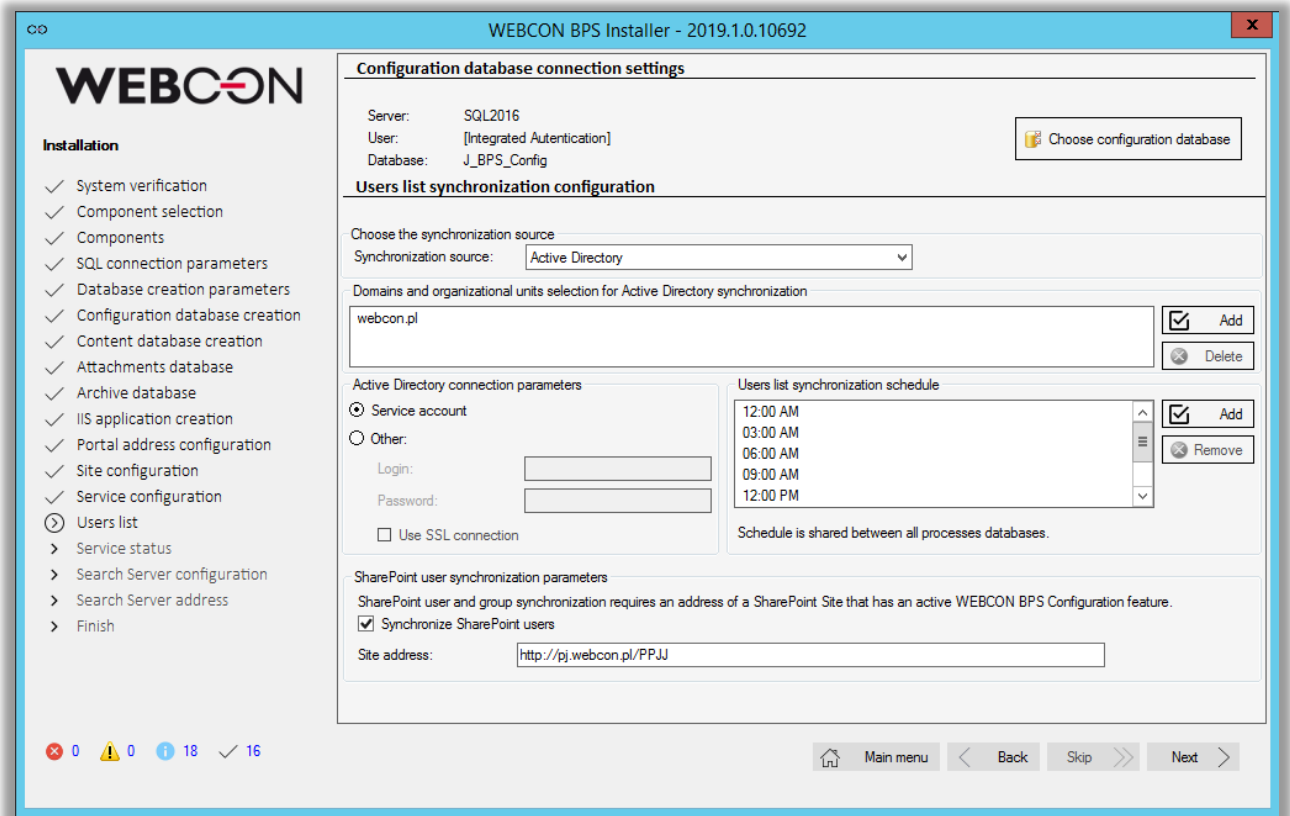
Installation allows to specify service roles during installation. By default only basic features, License service and SOLR Reindexer (search).

It is also possible to set appropriate WEBCON BPS content databases on which service will be run.

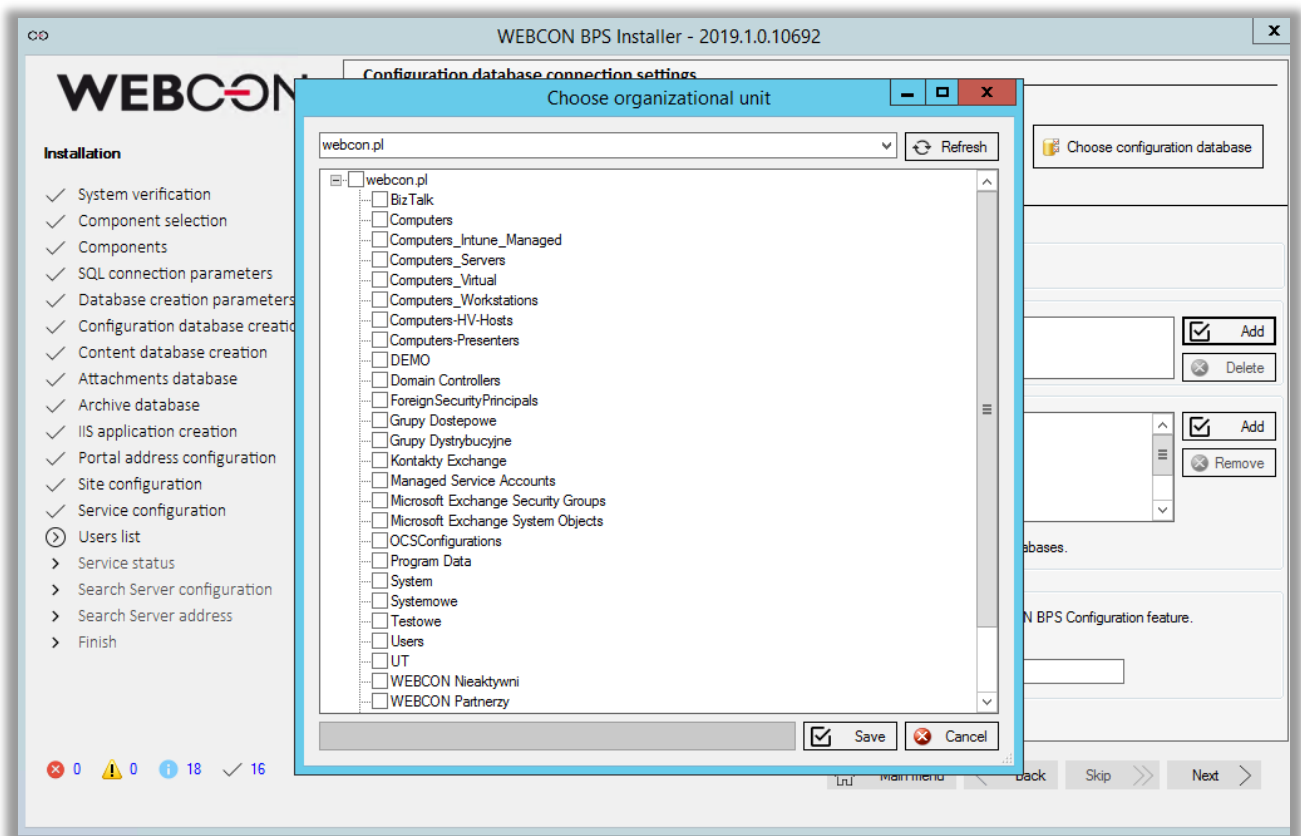


3.18. Users list synchronization configuration

WEBCON BPS synchronizes certain user data from Active Directory domain(s) in order to increase efficiency with which the system references the AD.



Select one or multiple domains from which user data will be synchronized. It is possible to select the entire domain (root) or only specific Organization Units (OU).

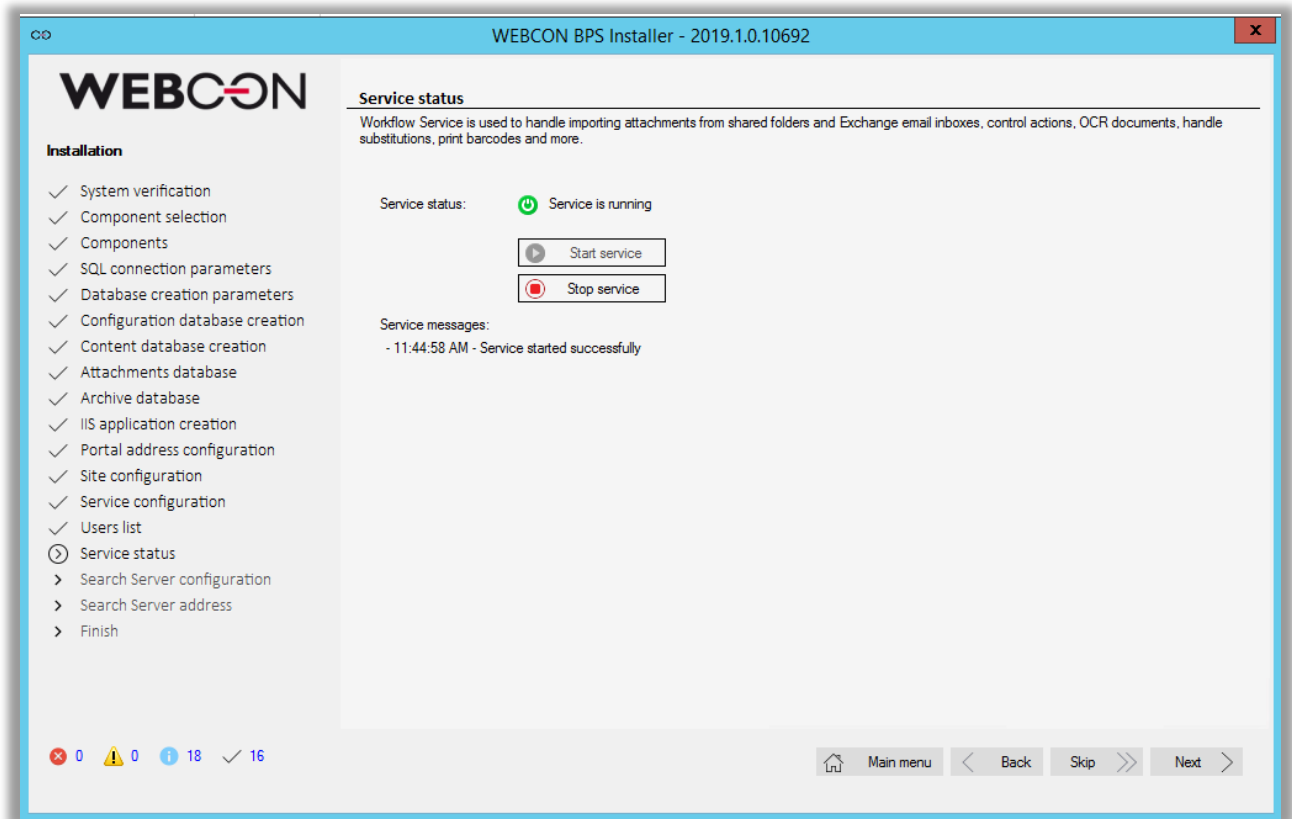


By default, the WEBCON BPS system will attempt to access user data from the Active Directory via the provided WEBCON BPS service account. If the service account in question does not possess the required privileges, it will be necessary to provide an alternative account, which the system will be able to access data in the specified domains/organization units.

It is also necessary to set up a schedule for future synchronizations with the Active Directory.

3.19. Service status.

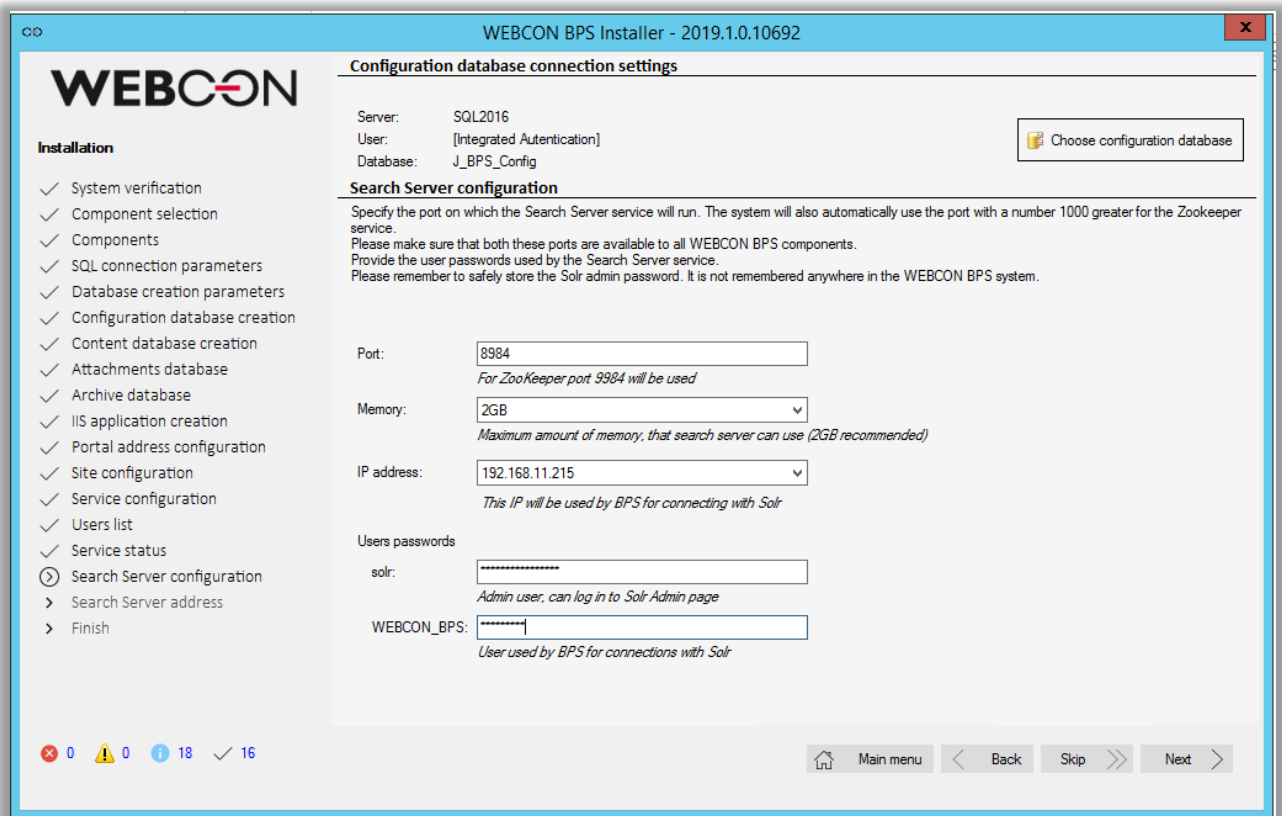
Initially, after the installation service will be inactive. You can start it manually by clicking 'Start service' or click Next, which will achieve the same result and also to go to the next step automatically.



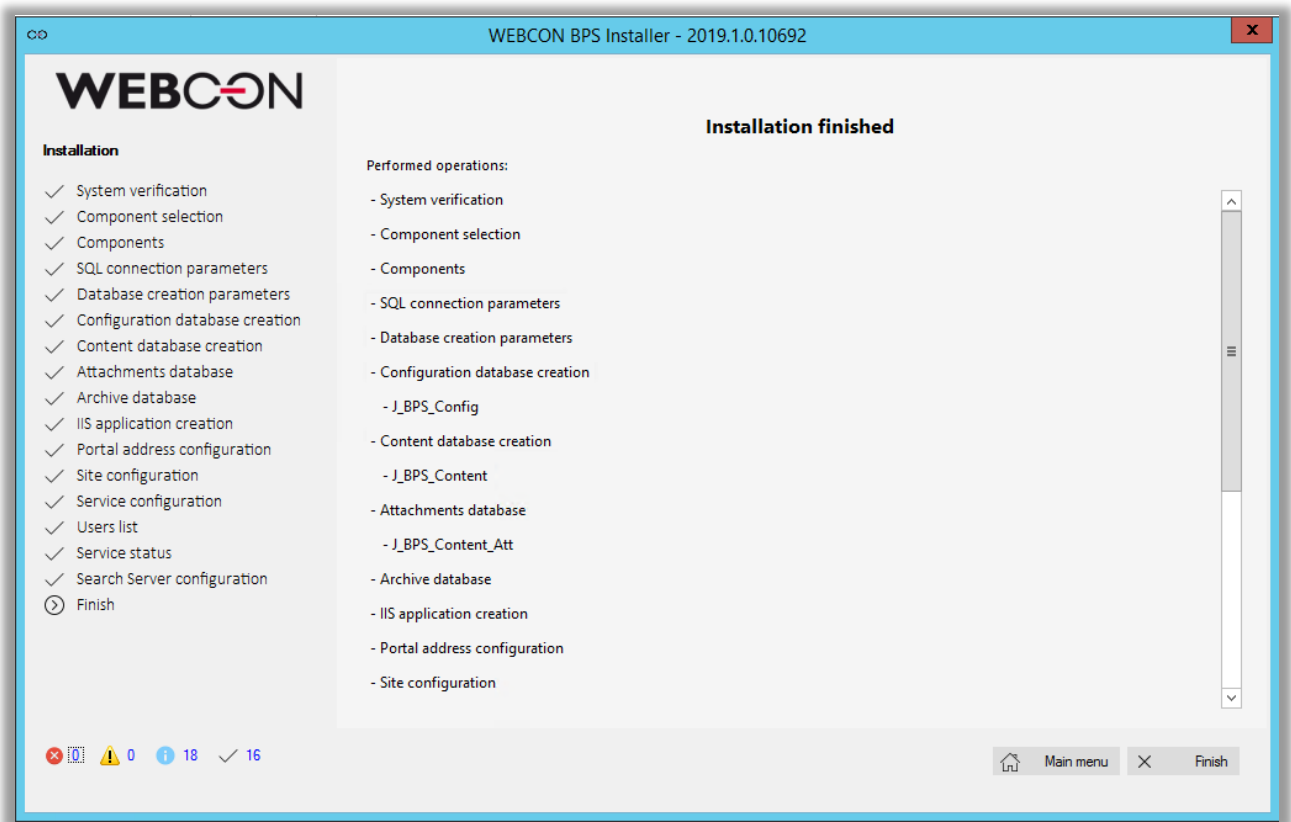
3.20. Search server installation

WEBCON BPS 2019 introduced a new search engine. The administrator may provide a dedicated port for the search engine, they may also specify an amount of RAM that will be used by the service.

Finally, the administrator may set a password for both the administrative user of the search engine (login: solr), and for the user in the context of which the search engine will index the databases (login: WEBCON_BPS).



3.21. Installation finished

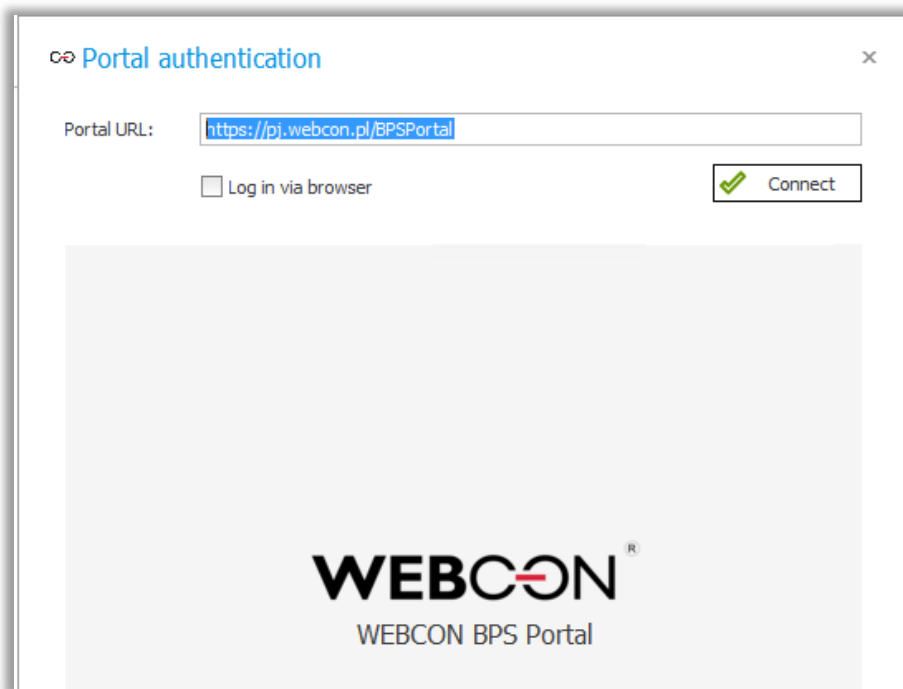


4. First launch of WEBCON BPS Designer Studio

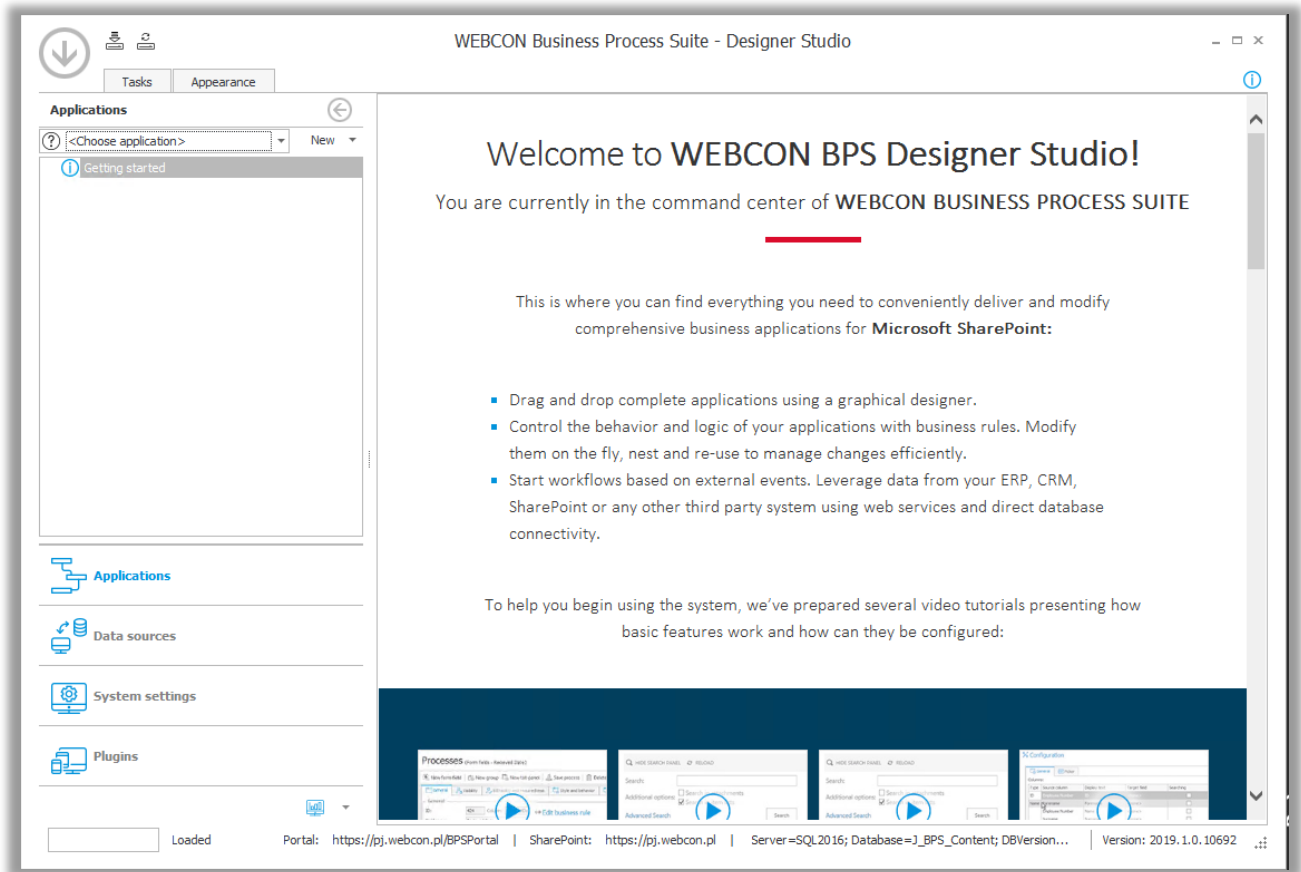
Once the installation process is complete, you may launch the tool that will be used to manage all aspects of the WEBCON BPS platform – WEBCON BPS Designer Studio.



After launching the program, an authentication window will appear where you will need to provide the WEBCON BPS Portal address defined during the installation process.



Once successfully logged in, you are able to begin using WEBCON BPS!



5. License activation

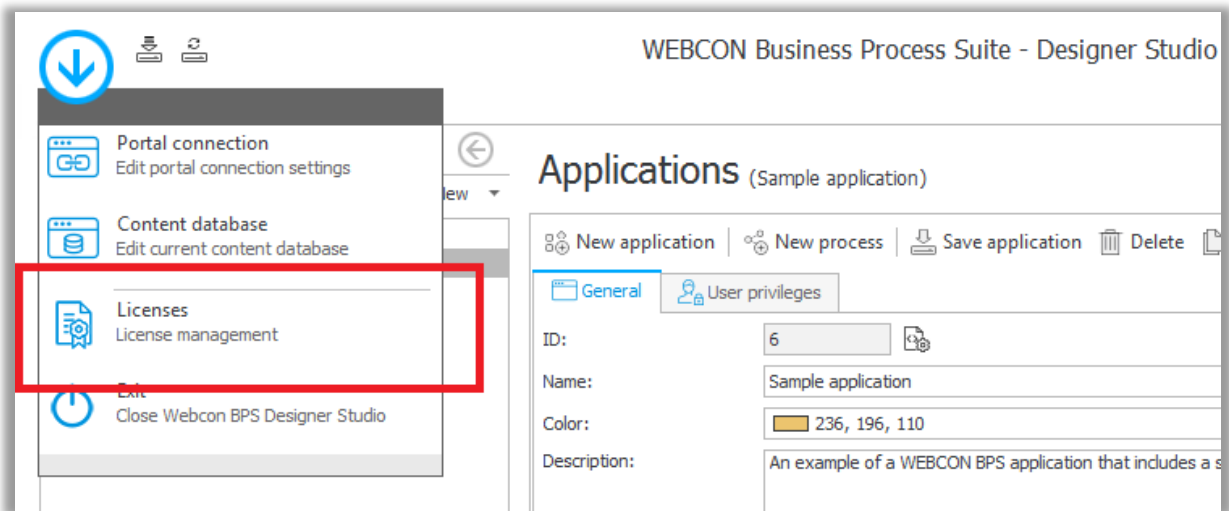
Right after installation, the WEBCON BPS platform will operate in DEMO mode (full features, limited by 90 day period).

In order to switch from DEMO to production mode, activate the license obtained when purchasing the product.

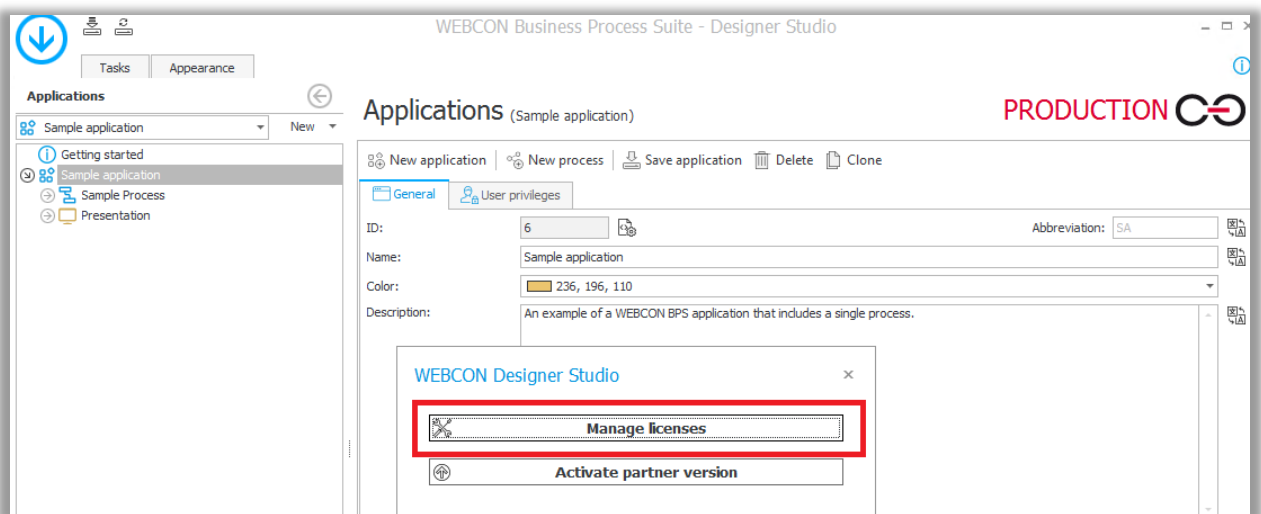
License activation is possible in WEBCON BPS Designer Studio, as well as in the installer.

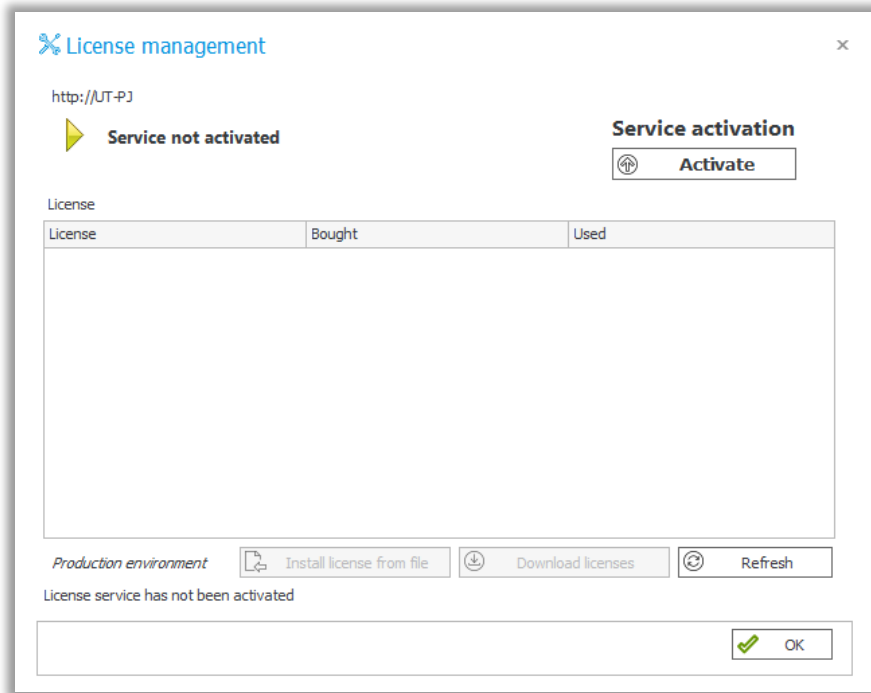
5.1. License activation in WEBCON BPS Designer Studio

In WEBCON BPS Designer Studio, click on the blue arrow in the top left corner, and select **Licenses**.

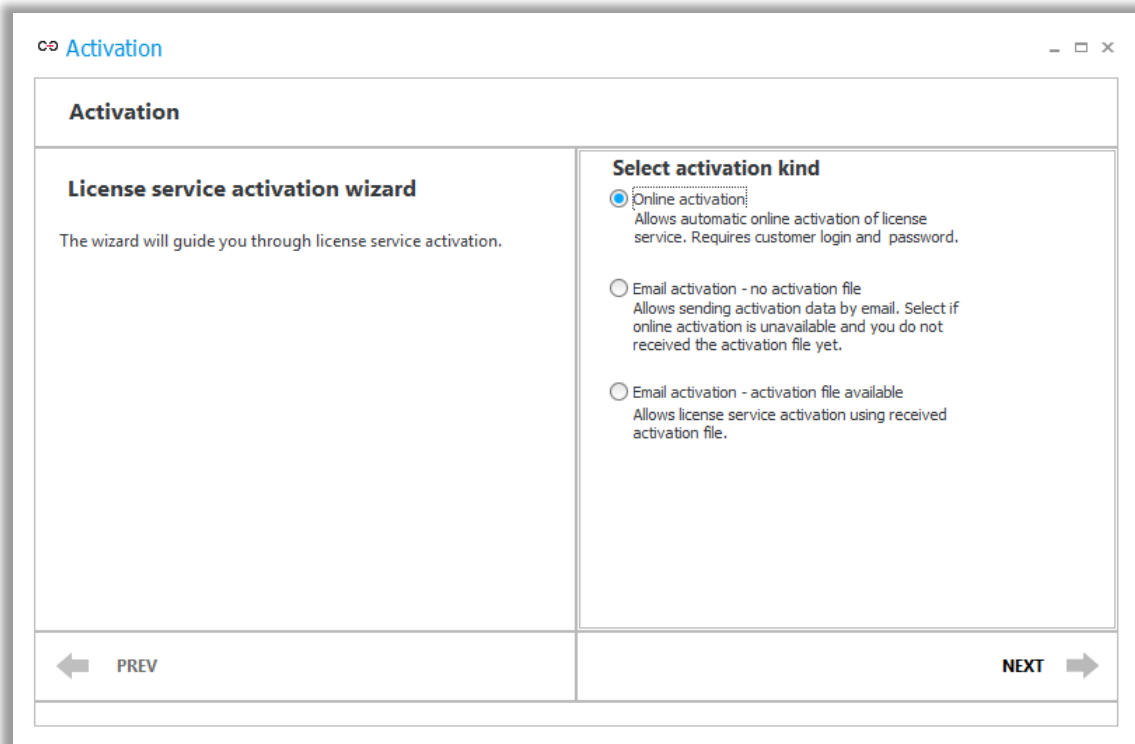


Then use the **Manage licenses** button.





Next, click on the **Activate** button to open the **License service activation wizard**, which will guide you through the activation process. If the server on which WEBCON BPS components were installed has direct access to the internet, it is best to use the **Online activation** mode.



To activate, simply enter the activation login and password that you received.

Activation

Step 1 of 2 - Online activation

Online activation

Online activation uses outbound connection with address <https://licence.public.webcon.pl> using port 443. If this connection is blocked and there is no possibility of unblocking it, please return to first step and choose "Email activation". To activate, please type the provided customer login and password and click "Activate" button.

Login

Password

Activate

← PREV

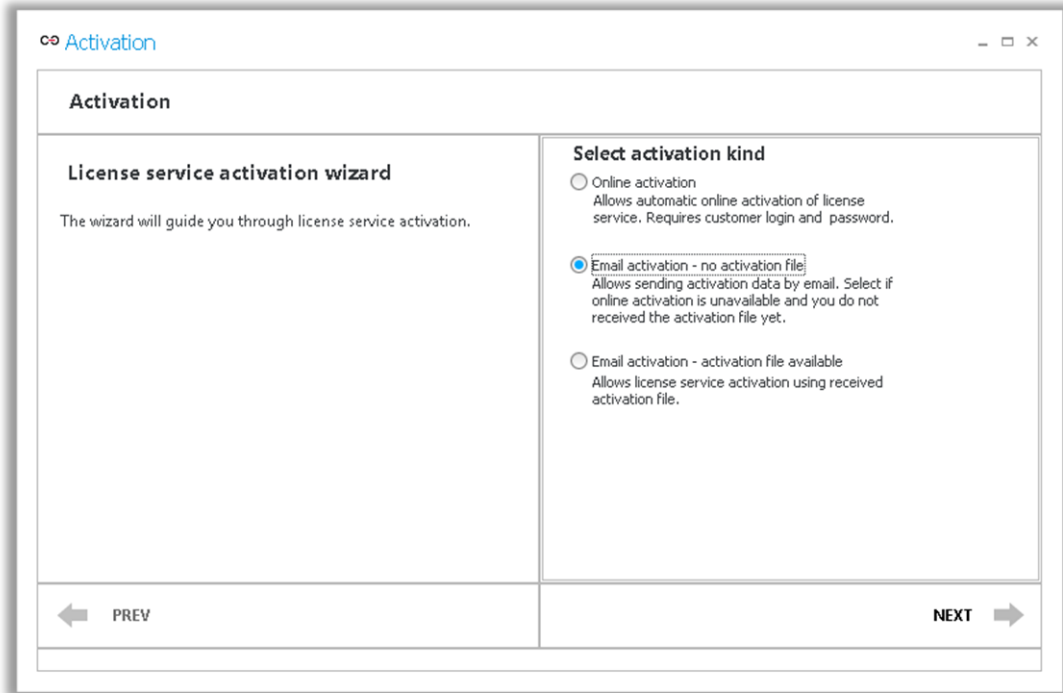
NEXT →

If internet access is not available, you may use the offline activation mode – the License service activation wizard will guide you through these additional steps.

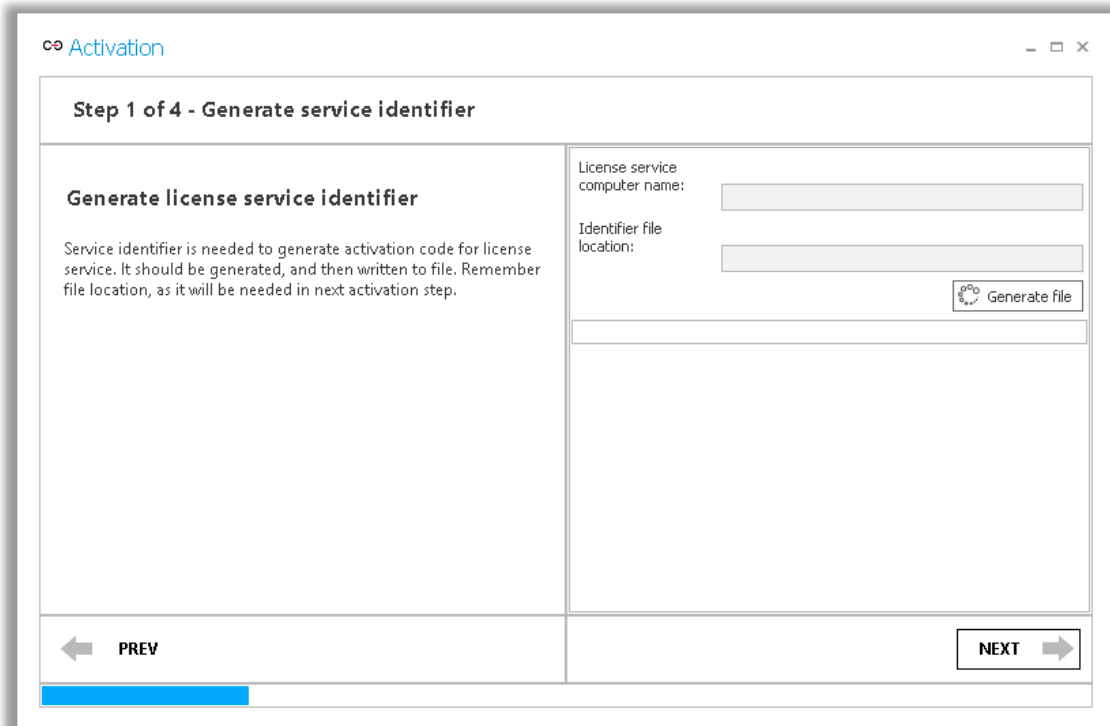
5.1.1. Offline license activation

The offline activation process consists of 2 steps. First, you must generate a **Service license identifier** file and send it to WEBCON. Then, in response, you will receive two files: Activation file and a License package file which are used to activate your licenses.

Step 1 – To begin offline activation, open **License management**, click **Activate** and select “E-mail activation – no activation file”.

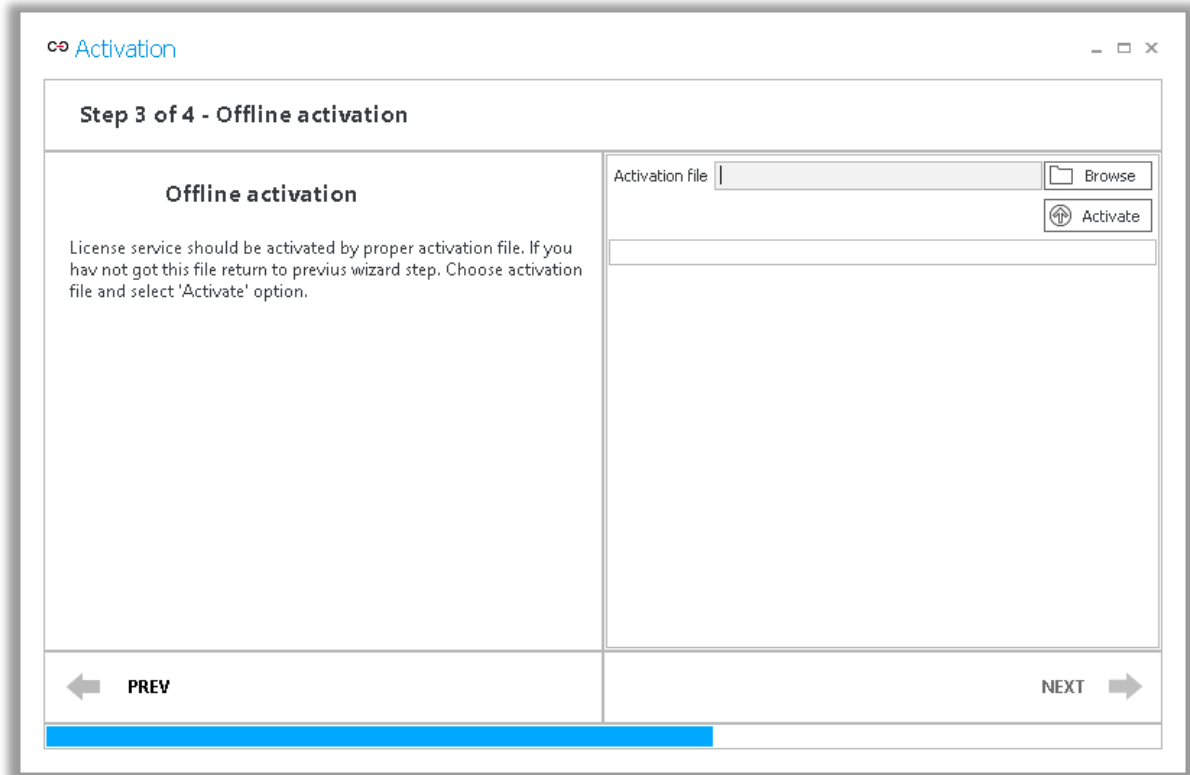


Click **Generate file** and save it to your computer. Continue with the activation wizard, the file will be sent to WEBCON.

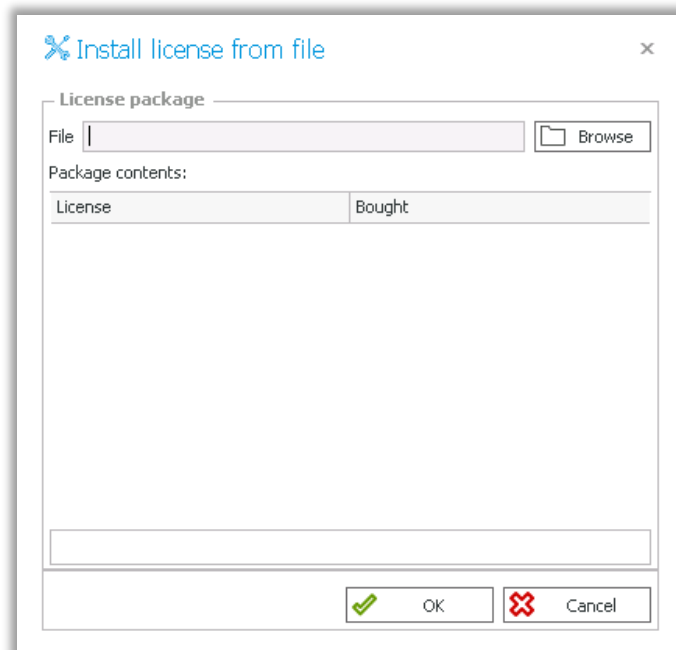


Step 2 – In response you should receive two files: Activation file and a License package file. In **License management**, click **Activate**, and select “E-mail activation – activation file available”.

Continue with the activation wizard and enter the path to the Activation file.



Next, back in **License management**, this time click **Install license from file**, and enter the path to the second file you received from WEBCON – the License package file. Click **OK**.





Thank you for choosing WEBCON BPS, we hope that our system will meet all your business needs.
Feel free to contact us at office@webcon.com should you have any questions about WEBCON BPS.

Have a nice day!