

# Produmex Scan Fresh Installation

## Overview

This documentation describes the prerequisites, the technical background and the steps of performing a fresh installation of Produmex Scan.

## 1. Prerequisites

Supported database management systems:

- MSSQL Server 2012, 2014, 2016, 2017, 2019
- SAP HANA SPS11 or higher

Requirements for the machine where the Produmex Service Broker runs:

- Windows 2008 R2/Windows 7 or higher
- Administrator rights
- Installation of .NET 4.0 framework or higher
- Installation of SAP DI API (32/64-bit) depending on Service Broker version (32/64-bit)
- HANA Client (On HANA environment only)
- Installation of SAP Business One  
Note: Make sure that Crystal Reports engine is installed as part of the SBO installation.
- SBO client needed with Crystal Reports engine in case of printing through the Service Broker

Requirements for the machine where the Produmex add-on runs:

- Windows 2008 R2/Windows 7 or higher
- Administrator rights
- Installation of .NET 4.0 framework or higher
- HANA Client (On HANA environment only)
- Installation of SAP Business One  
Note: Make sure that Crystal Reports engine is installed as part of the SBO installation.

Requirements for Scan desktop client:

- .NET 3.5 framework

**Note: The TAB suffix on the device MUST be set to use the scanning function.**

For more information about hardware requirements and server sizing see [Produmex Scan - Server sizing](#).

### HANA database privileges

When using a HANA user other than SYSTEM, grant additional privileges to the user in addition to the standard privileges recommended by SAP.

You can set the proper privileges by executing the following SQL queries. Make sure you replace the user, the schemas and the password before executing the queries.

In the examples below, the user is DBUSER and the company schema is SCAN\_SBODEMOUS .

Creating a user:

```
CREATE USER DBUSER PASSWORD B1UserPwd NO FORCE_FIRST_PASSWORD_CHANGE;
```

SAP recommendations:

```
ALTER USER DBUSER DISABLE PASSWORD LIFETIME;  
GRANT AFLPM_CREATOR_ERASER_EXECUTE TO DBUSER WITH ADMIN OPTION;  
GRANT CONTENT_ADMIN TO DBUSER;  
GRANT CATALOG_READ, CREATE SCHEMA, ROLE ADMIN, USER ADMIN TO DBUSER WITH  
ADMIN OPTION;  
GRANT EXPORT, IMPORT, INIFILE ADMIN, LOG ADMIN TO DBUSER;  
GRANT CREATE ANY, SELECT ON SCHEMA SYSTEM TO DBUSER WITH GRANT OPTION;  
GRANT SELECT, EXECUTE, DELETE ON SCHEMA _SYS_REPO TO DBUSER WITH GRANT  
OPTION;  
GRANT SELECT, INSERT, DELETE, UPDATE, EXECUTE, CREATE ANY, DROP ON SCHEMA  
SBOCOMMON TO DBUSER WITH GRANT OPTION;  
GRANT SELECT, INSERT, DELETE, UPDATE, EXECUTE ON SCHEMA COMMON TO DBUSER  
WITH GRANT OPTION;
```

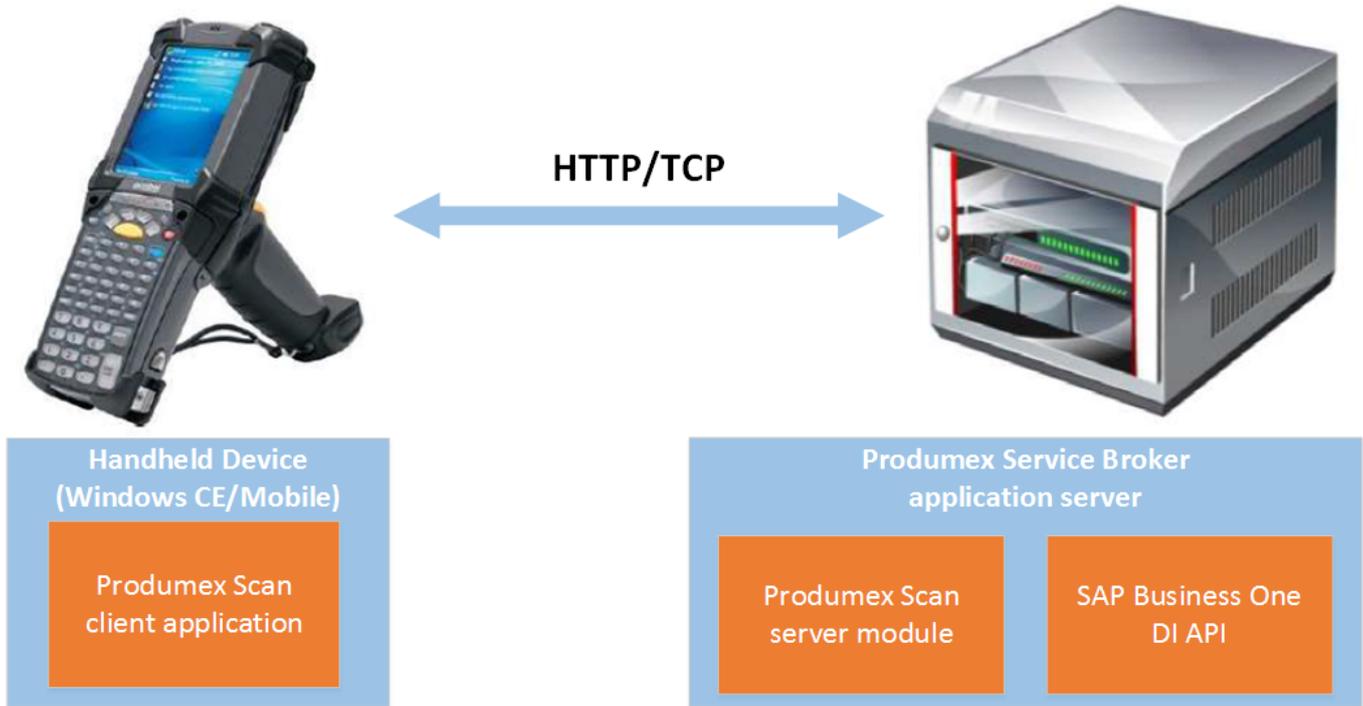
Additional privileges required for Produmex Scan:

```
GRANT SELECT, INSERT, DELETE, UPDATE, EXECUTE, CREATE ANY, DROP, ALTER,  
INDEX, TRIGGER, REFERENCES ON SCHEMA SCAN_SBODEMOUS TO DBUSER WITH GRANT  
OPTION;
```

## 2. Technical Background

Produmex Scan has three parts:

- The Produmex Scan Add-on
- The Service Broker and the Produmex Scan Module
- The Produmex Scan Client application



The **add-on** must be installed in SAP Business One. It is used mainly for set-up and administrative purposes and it does not need to be running for the mobile devices to work.

The **Service Broker** handles requests that come from the mobile application and processes them by using the SAP DI API (for example: based on the requests from the mobile device it creates a Goods Receipt PO or a Delivery).

The **client application** is used to enter data for the stock movements and send the data to the Service Broker. The client application can run natively on the mobile device, or on the server and can be accessed through remote desktop, depending on the network latency constraints or use case as described below.

## 2.1. Native client

The recommended way is to install Produmex Scan directly on the device where it can run as a native client. The Produmex Scan client application connects to the Service Broker by using HTTP/TCP protocols.

This connection method is recommended for on-premise use or Cloud environments where the connection between the client and the server is fast and optimized.

Layouts of possible scenarios:



## 2.2. Remote desktop

On Cloud environments where the network connection is slower, the traditional connection method might cause latency due to the number of messages sent by the Produmex Scan client. To improve the communication speed, it is recommended to run the application on a remote desktop. This way the client and the service broker communicates within the same network and the long-distance traffic decreases.

In this case the client application and the Service Broker run on the same server. The application can be reached through a remote desktop application from the handheld device.

The remote desktop connection method is only recommended in cloud environments where latency issues occur due to the slow connection between the client and the server.



For more information on how to set up Remote Desktop Connection see: [How to Set Up Remote Desktop Connection for Produmex Scan](#).

## 3. Performing a Fresh Installation

### 3.1. Download the Produmex Scan components

Download the correct version of the Produmex Scan components from [here](#). The necessary files are the following Zip files:

32 bit	64 bit
ProdumexScan_AddOnSetup_[version].x32.zip	ProdumexScan_AddOnSetup_[version].x64.zip
ProdumexScan_ClientWM6Setup_[version].x32.zip	ProdumexScan_ClientWM6Setup_[version].x64.zip
ProdumexScan_ServerSetup_[version].x32.zip	ProdumexScan_ServerSetup_[version].x64.zip
ProdumexServiceBrokerSetup_[version].x32.zip	ProdumexServiceBrokerSetup_[version].x64.zip
ProdumexScanAddOnSetup_[version]_lightweight.zip (for SAP Cloud)	

### 3.2. Install the Produmex Scan Add-on (on premise or in SAP Cloud)

This section describes the steps of installing the Produmex Scan add-on on premise (section [3.2.1](#)) and in SAP Cloud (section [3.2.2](#)).

#### 3.2.1. Install the add-on on premise

1. Extract the content of the ProdumexScan\_AddOnSetup\_[version].zip file on your local machine. The .zip file contains two files:

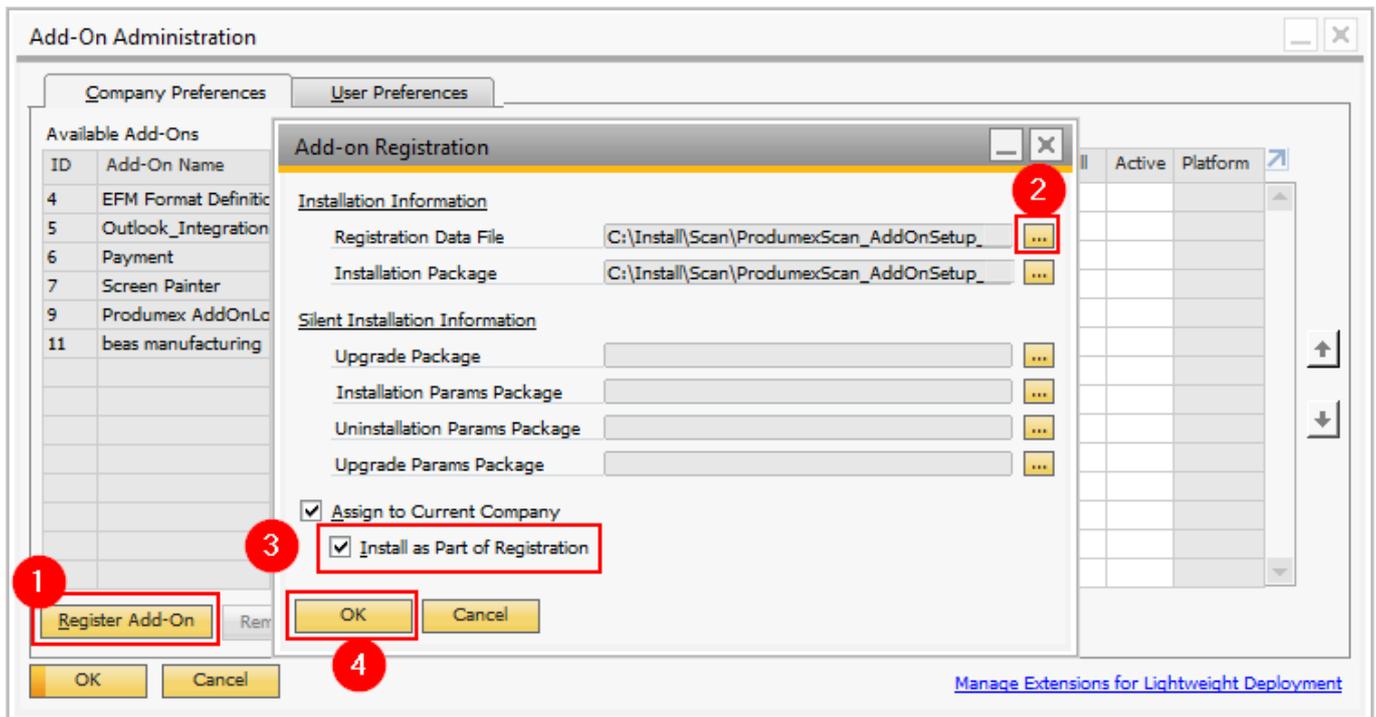
- BXMobileWH9Setup.ard
- BXMobileWH9Setup.exe

2. In SAP Business One go to Main menu > Administration > Add-Ons > Add-On Administration and click the Register Add-On button.

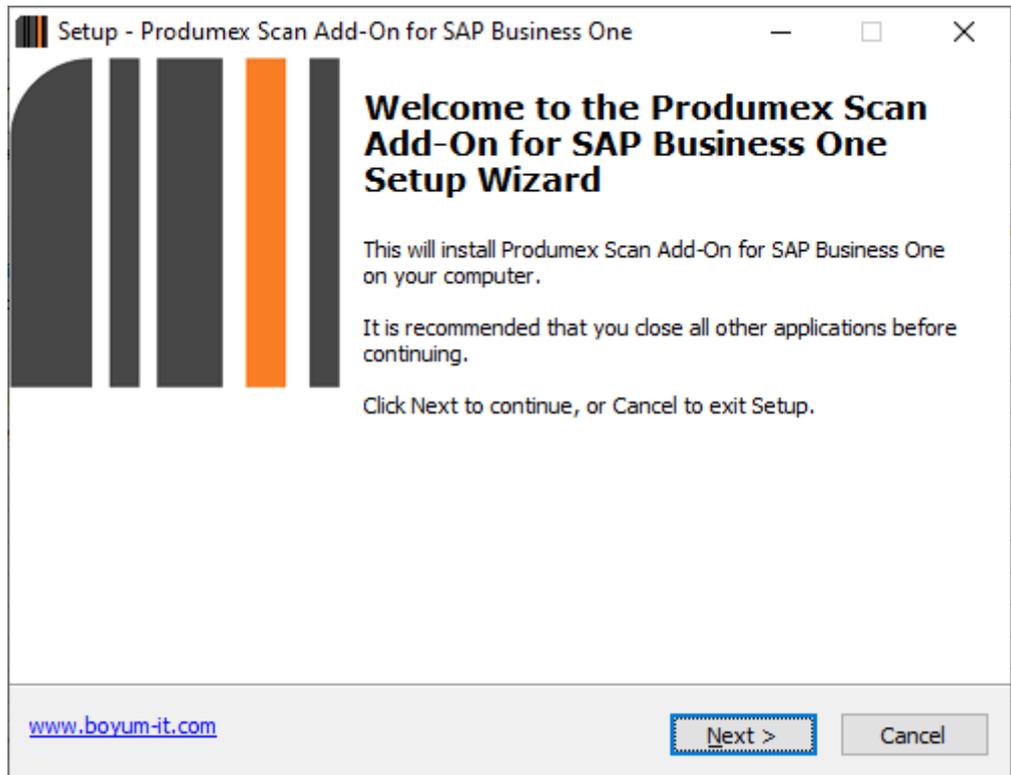
3. Click the '...' button of the Registration Data File and browse for the BXMobileWH9Setup.ard file. SAP Business One fills out the path to the .exe file automatically.

4. Select the *Install as Part of Registration* option and click OK.

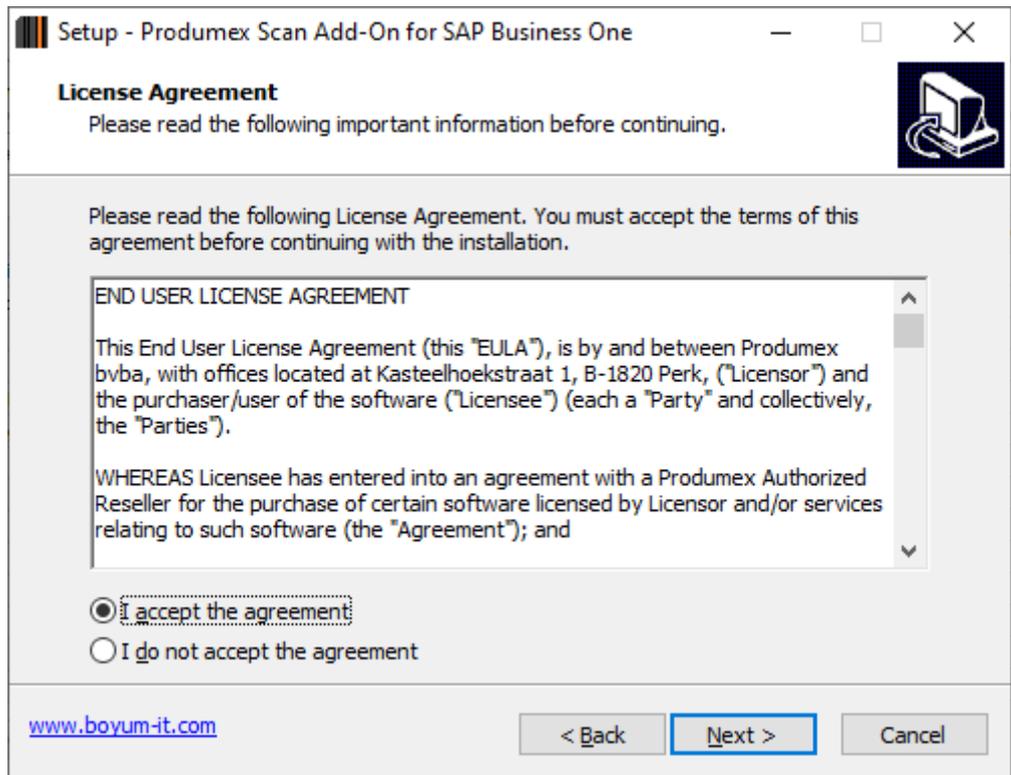
SAP Business One registers the add-on and starts the installation wizard.



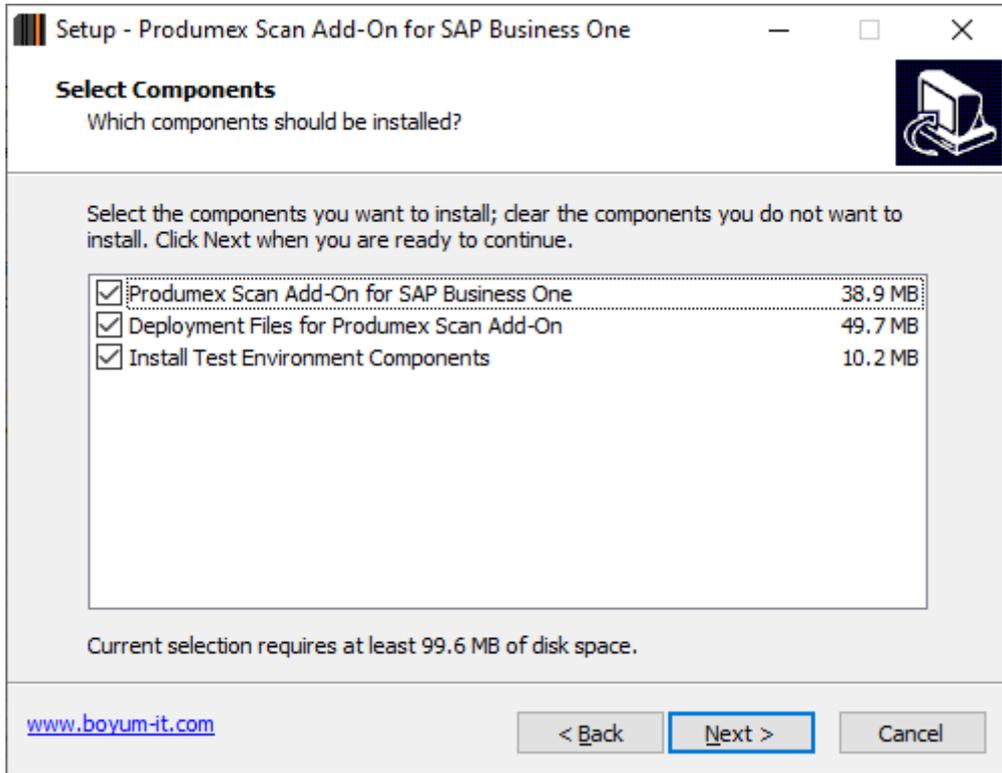
5. Click the Next button to start the installation.



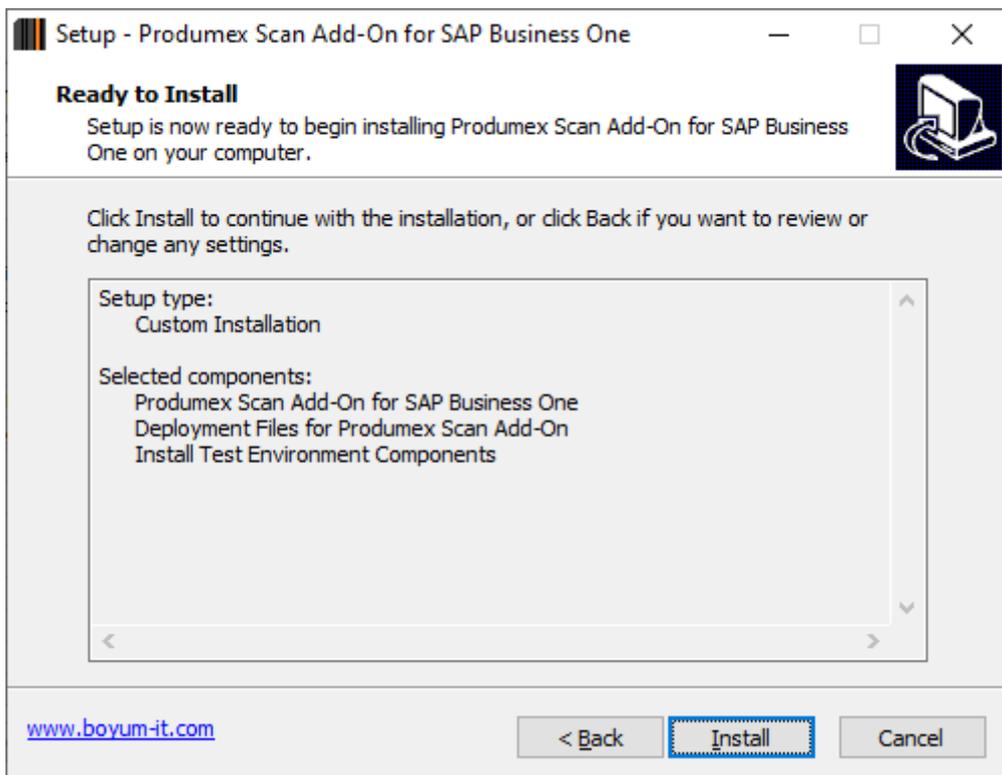
6. Accept the End-User License Agreement and click Next.



7. Make sure that all components are checked and there is enough disk space. Click Next.



8. Click the Install button to proceed with the installation.



9. If the installation process takes some time, SAP Business One asks if the installation has finished successfully. If the installation is successful, click the Yes button.



Note: If there has been an error during installation, the installation fails regardless of your answer.

10. On the Add-on Administration screen the add-on is displayed in the Company-Assigned Add-Ons grid. Make sure that the *Active* option is selected and change the Default Group from *Disabled* to *Manual* or *Automatic*.

- Automatic: The add-on is started each time you start SAP Business One.
- Manual: The add-on has to be started manually each time you start SAP Business One. It is recommended to use this option during the configuration phase.

11. Click the Update button to save the changes.



Continue with section [3.2.3. Run the Database Setup](#).

## 3.2.2. Install the add-on in SAP Cloud

### 3.2.2.1. Install the add-on on the Cloud Control Center

1. Create a Produmex sub folder within the folder that you have defined as the Extension Repository Path.
2. Upload the zip folder of the lightweight installer to this Produmex folder. Make sure that you do not unzip the file.
3. On the Cloud Control Center navigate to Landscape Management > Extensions.
4. Make sure that the installation file is listed on the Extensions grid and click the Synchronize All button to install the Produmex Scan add-on.
5. On the Confirmation form click Yes to confirm that you want to synchronize all extensions.



If the installation is successful, on the Synchronization Report form the status of Produmex Scan is *successful*. The installation zip is automatically moved to the Produmex Shared Repository folder.



### 3.2.2.2. Deploy the add-on to the Service Unit

When upgrading the add-on to a new product version in the future, make sure that the add-on is not running on any presentation server. If there is a running add-on, the upgrade will fail.

1. Navigate to Landscape Management > Service Units.

2. On the *Service Units* grid select the target service unit.
3. On the *Service Unit Details* grid go to the *Extensions* tab and click the *Deploy* button.
4. Follow the steps of the Extension Deployment Wizard. Select the Produmex Scan add-on at the *Select Extensions* step and finish the deployment.



### 3.2.2.3. Assign the add-on to the tenant(s)

When you upgrade to a new product version in the future, skip the steps of assigning the add-on to the tenant(s).

1. Go to Customer Management > Tenants.
2. Select the tenant on the *Tenants* grid.
3. On the *Tenant Details* grid navigate to the *Extensions* tab and click the *Assign* button.
4. Follow the steps of the Extension Assignment Wizard. In the *Select Extensions* step select the Produmex Scan add-on and finish the assignment.

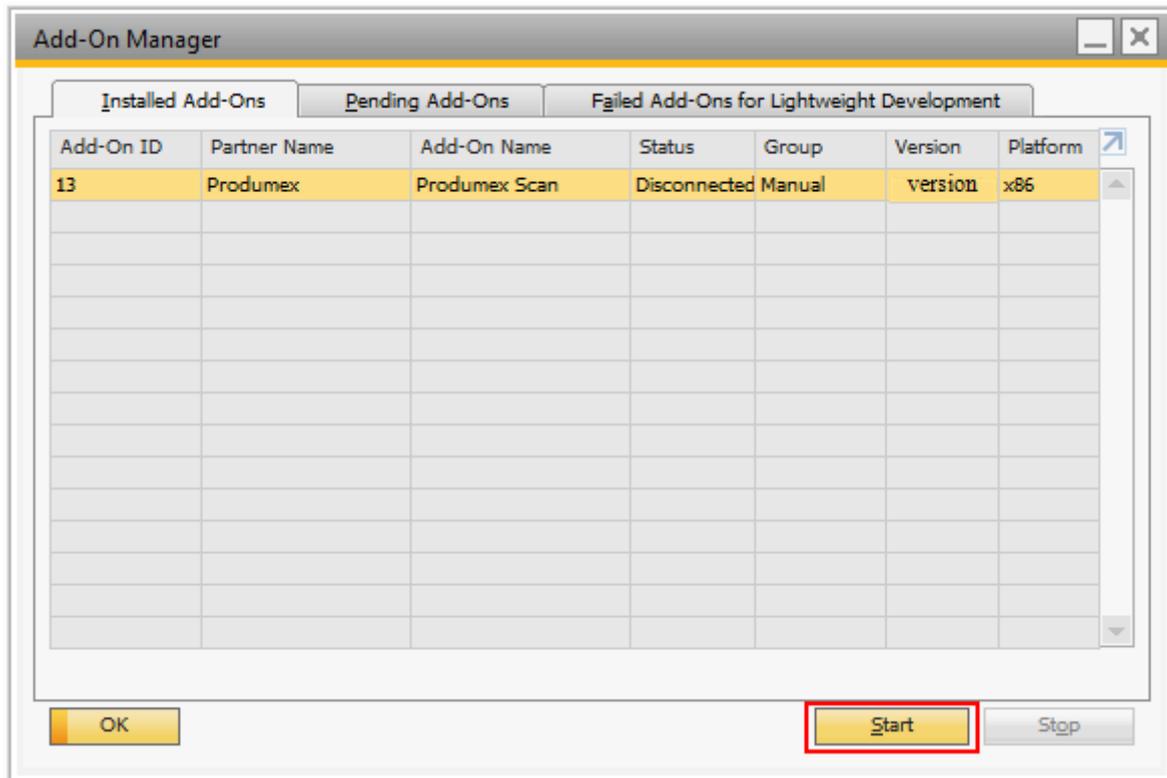


Continue with section [3.2.3. Run the Database Setup](#).

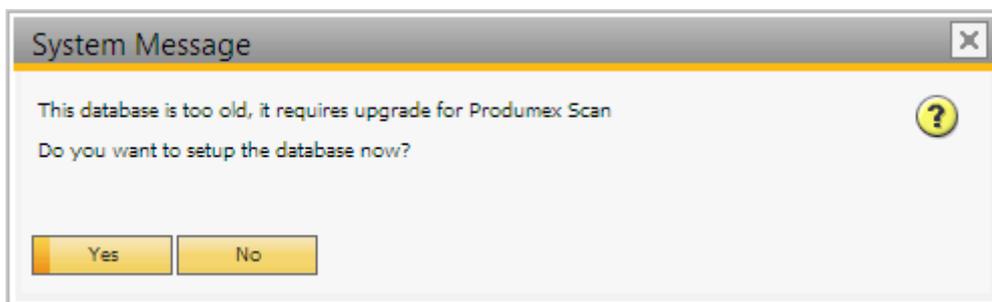
### 3.2.3. Run the Database Setup

To be able to run the DBSetup the SAP user must be a superuser.

1. In SAP Business One navigate to Administration > Add-Ons > Add-On Manager. Select the add-on and click *Start*.

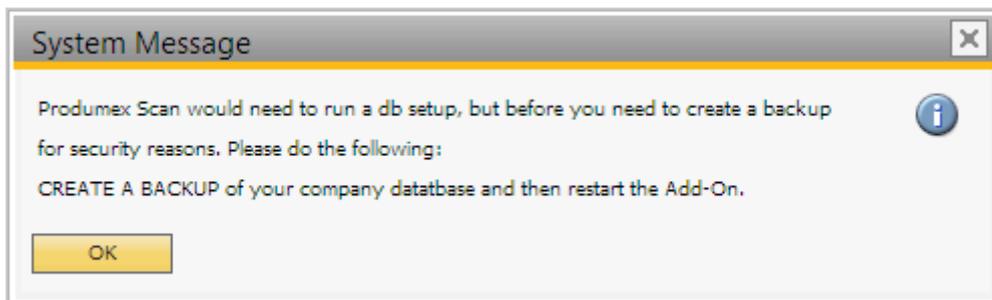


2. When the add-on is started for the first time after installation, it creates its own database tables and user defined fields. The add-on displays the following system message:

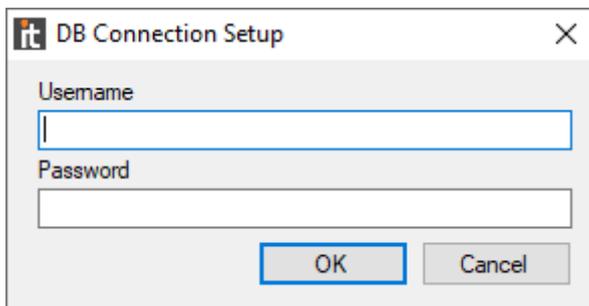


Click Yes to upgrade the database.

Note: On MSSQL, the system checks whether there is a backup created within an hour. If no such backup is detected, a warning message is displayed. Click OK and make sure that you create a backup of the database and restart the add-on.

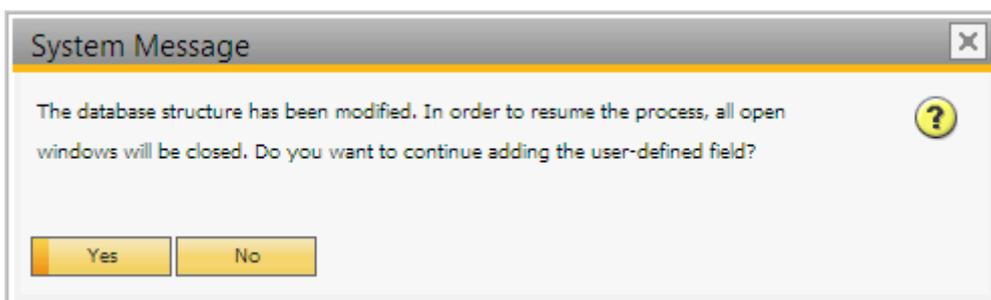


3. On the DB Connection Setup form enter the database username and the database password and click OK. When the DB Connection is set up, the system upgrades the database.



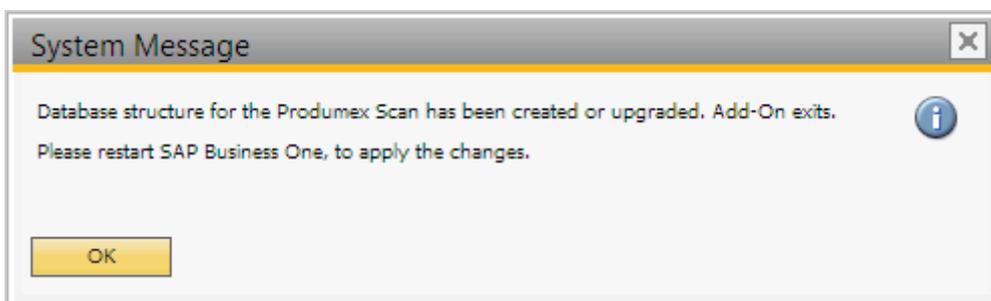
A progress bar is displayed and the system goes through the database setup process.

4. When the database structure has been modified, the following system message is displayed.



Click Yes to add the user-defined fields.

5. A system message is displayed about the modification of the database structure. Click OK.



6. The next system message informs you that the add-on is disconnected. Select option *Continue working without this Add-on*.



7. Restart the SAP Business One.

Continue with section [3.3. Install the Produmex Service Broker](#).

### 3.3. Install the Produmex Service Broker

Make sure that you do not run both the 32-bit version and the 64-bit version Service Broker on one environment. Only one service broker instance should be installed on a server at a time.

### Information

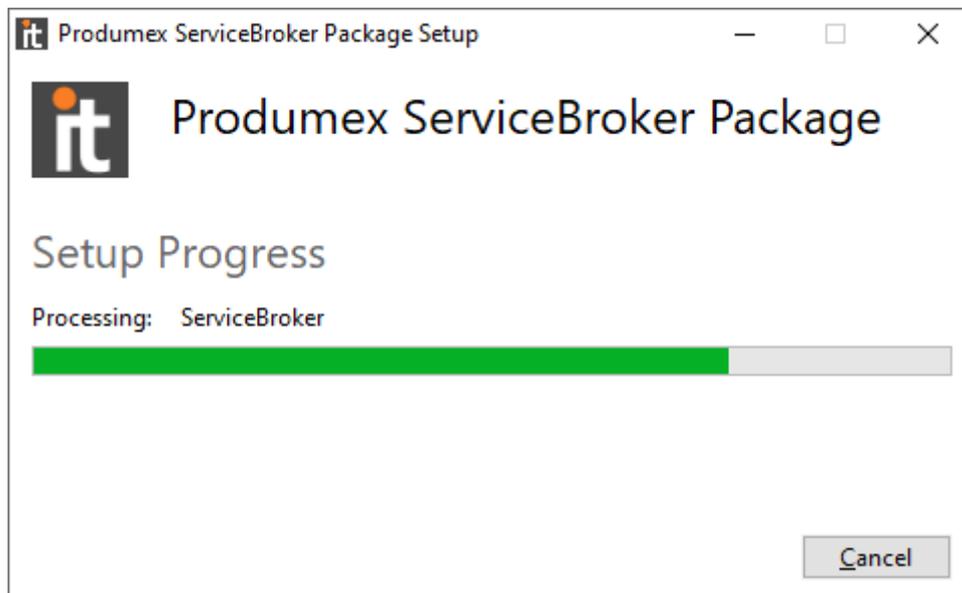
- The Service Broker establishes the connection between the company database/schema and the application on the mobile device. It queries the data from the database/schema, sends it to the mobile application, and it creates the SBO documents based on the requests from the mobile devices. The SBO documents are created with SAP DI API 32-bit version.
- The Service Broker can run as a service or from a command window. It creates threads for the different requests which are independent from each other, that is, if a thread has a problem, it can be closed and it does not influence the other threads.
- The Service Broker should be installed on the server which has access to the company database/schema.
- If the Service Broker does not run, the communication between the clients and the company database/schema is not possible.
- The Service Broker creates its log files at %ProgramData%\Boyum IT\Service Broker (for pre-2023.06 versions it is C:\ProgramData\BX\BX Service Broker\Log). By default, the ProgramData folder is hidden and you must enable the *Show hidden folders and files* setting in Windows Settings or enter it directly to the address bar in Windows Explorer:



1. Extract the ProdumexServiceBrokerSetup\_[version].zip file and run the BxServiceBroker.Setup.exe file.
2. Accept the License Agreement and click Install.



The setup process is started, it may take some time.



3. Configure the service settings on the Produmex Service Broker Config form as follows.

- **Service run as user:**

In the *Service run as user* field set the user to be assigned to the service broker service in Windows. This must be a user who has rights to write the event log and the program data directory where the logs are created. The service broker service will also make a connection to the company database/schema and the user must have rights for that as well.

Note: Local System users usually do not have the right to use printers, therefore, it is recommended to configure a Windows user.

- **Password:**

In the *Password* for user field provide the password for the user.

- **Service port:**

The default port for the communication between the service broker and the clients is 50231.

The installer will open the firewall for this port automatically, but if you change the port, you will have to change the firewall settings manually.

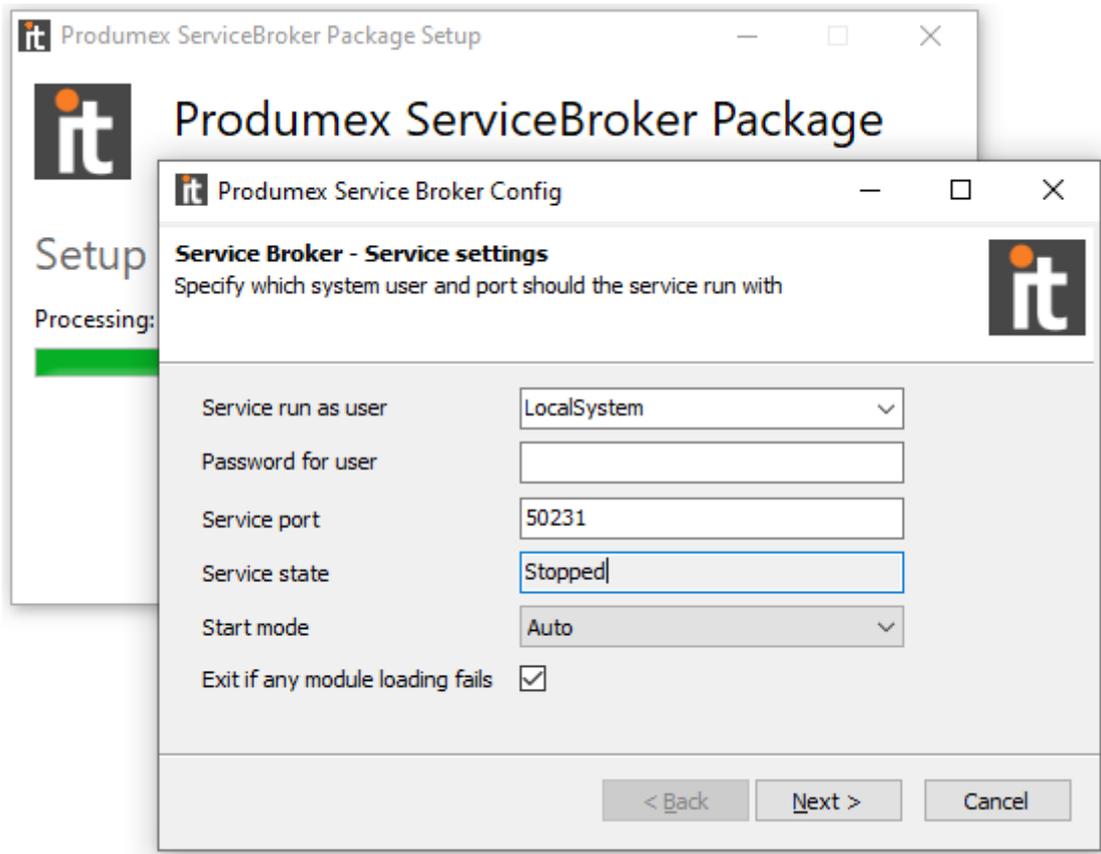
- **Start mode:**

In the *Start mode* drop-down menu set the start mode of the service to *Auto* or *Manual*. The recommended start mode is *Auto*.

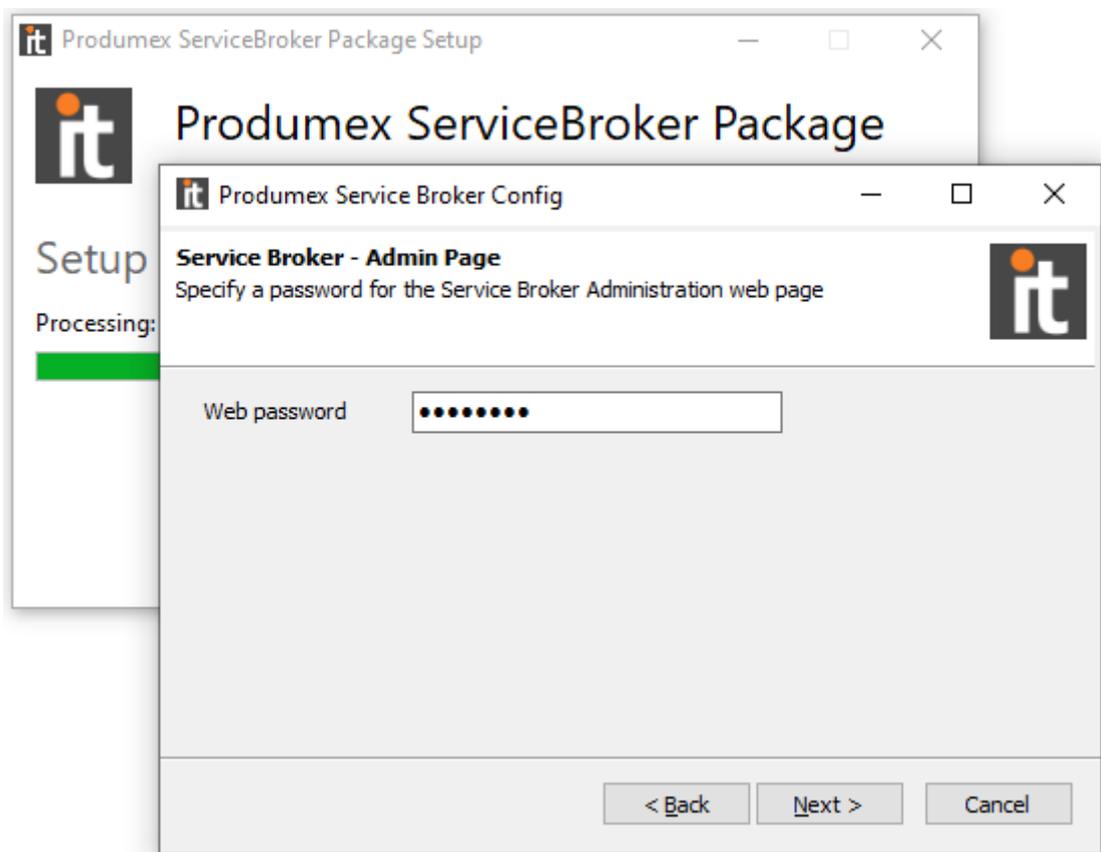
- **Exit if any module loading fails:**

The option is selected by default and if a module cannot be loaded, the Service Broker will not run.

- Click Next.



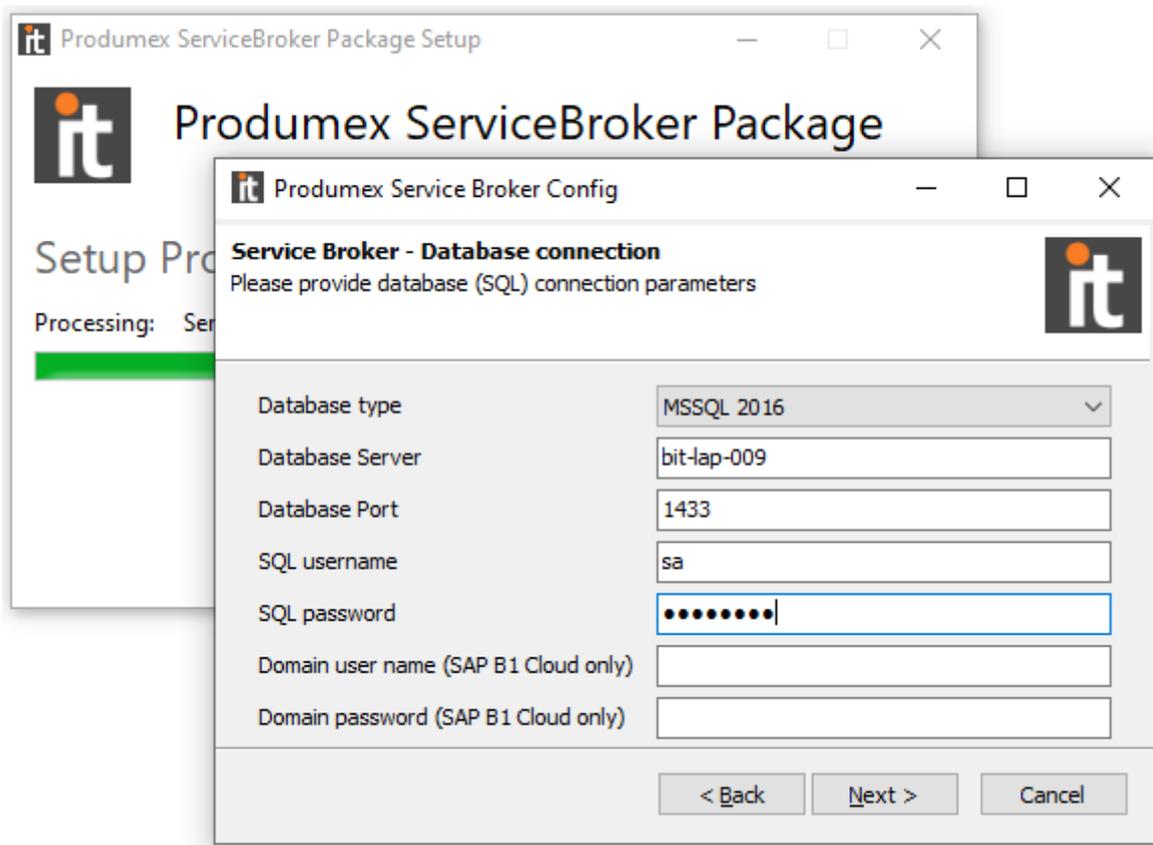
4. On the Admin Page form specify a password for the Service Broker Administration web page in the *Web password* field and click Next.



5. On the Database connection form provide the connection data to the database server that has

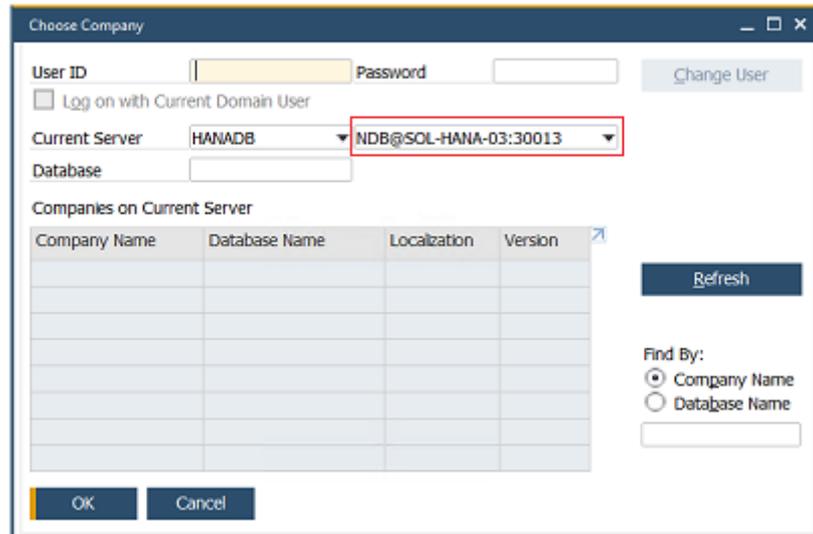
access to the company database/schema as follows.

- Select the database type from the Database type drop-down menu.
- **MSSQL**
  - **Database Server:**  
Enter the name or the IP address of the database server to the field. If you have a named instance, you have to enter the name of the server and the named instance as well (for example SERVER\NAMEDINSTANCE).
  - **Database Port:**  
Enter the database port on which the application can connect to the server. The default port is 1433.
  - **SQL username:**  
Enter the name of the database user to the field. The default user is sa.
  - **SQL password:**  
Enter the password of the database user to the field.
  - When working on SAP B1 Cloud, add the domain user name to the **Domain user name** field and enter the password to the **Domain password** field. *Note: Domain user details are not stored on Produmex side. They are only required so that user databases can be accessed by Produmex. Your Domain user details are the ones set for the cloud (for designated databases), by its operator.*
  - Click Next and continue with step 6 in this section.

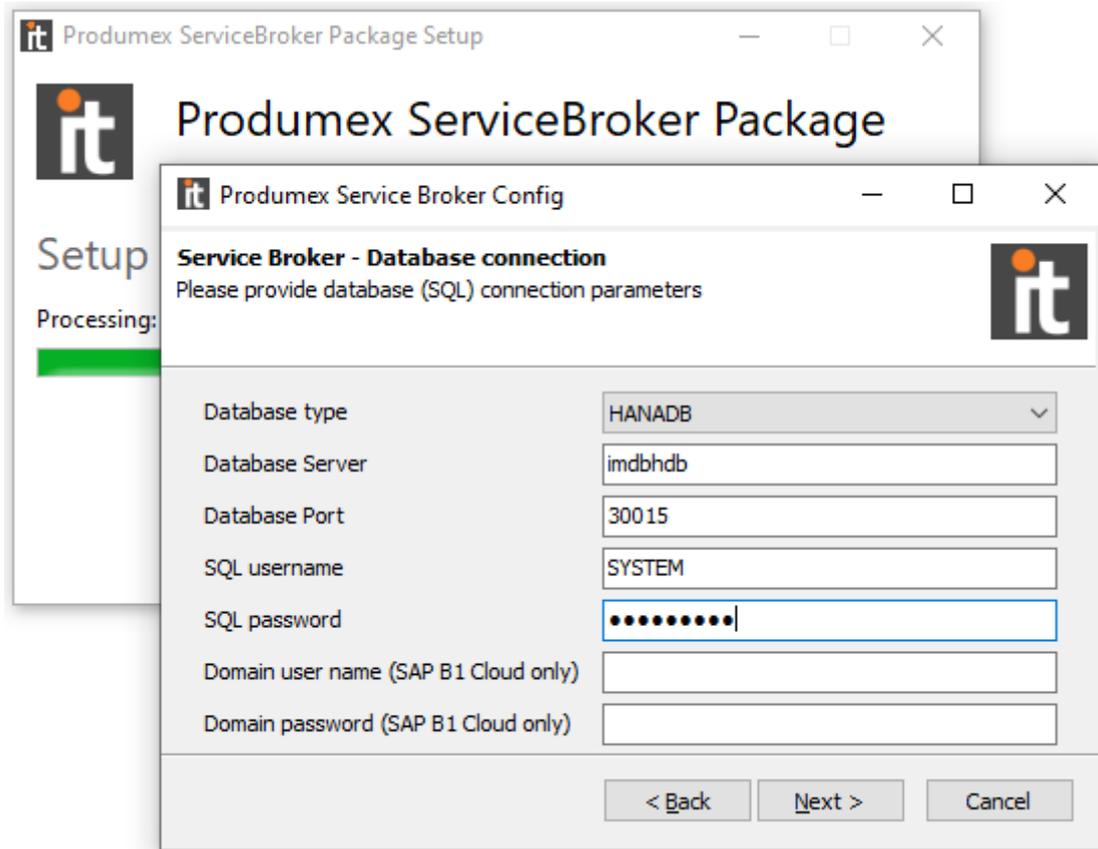


- **HANA**
  - **Database Server:** The database server name must be added with the exact same format as it was added during the installation of the SAP Business One client.
    - **Single-Database:** Enter the name or the IP address of the database server to the field.

- **Multi-Database:** The DATABASENAME parameter must be used: DBA@< >. Example:



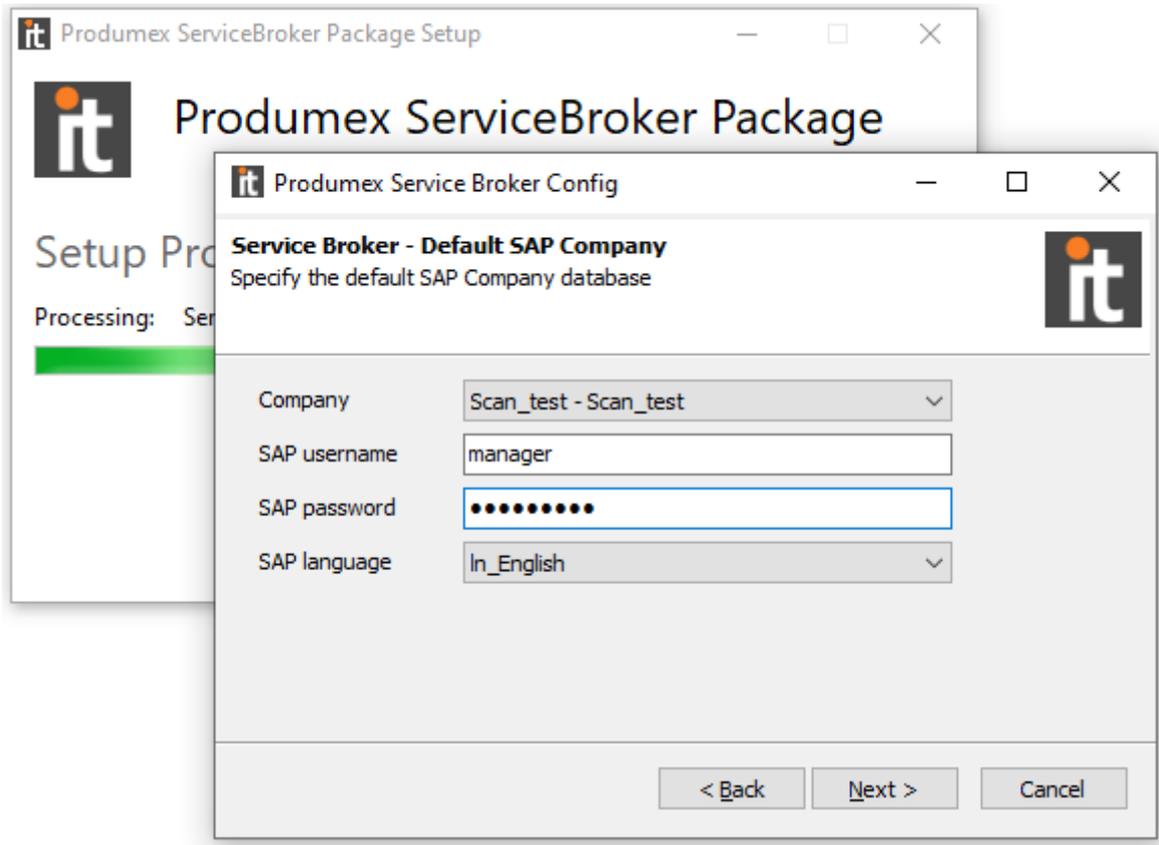
- **Database Port:** Enter the database port on which the application can connect to the server.
  - **Single-Database:** The default port is 30015.
  - **Multi-Database:** The default port is 30013.
- **SQL username:** Enter the name of the schema user to the field. The default user is SYSTEM. It is recommended to install the Service Broker with the SYSTEM user.
- **SQL password:** Enter the password of the database user to the field.
- When working on SAP B1 Cloud, add the domain username to the **Domain user name** field and enter the password to the **Domain password** field. *Note: Domain user details are not stored on Produmex side. They are only required so that user databases can be accessed by Produmex. Your Domain user details are the ones set for the cloud (for designated databases), by its operator.*
- Click Next.



6. Set up the company database/schema on the Default SAP Company form as follows.

- **Company:** In the Company drop-down menu select your company.
- **SAP username field:** Enter an SAP user here which has at least an indirect access license as of SBO 9.2. PL08.
- **SAP password:** Enter the password of the SAP user.
- Select the language in the **SAP language** drop-down menu.
- Click Next.

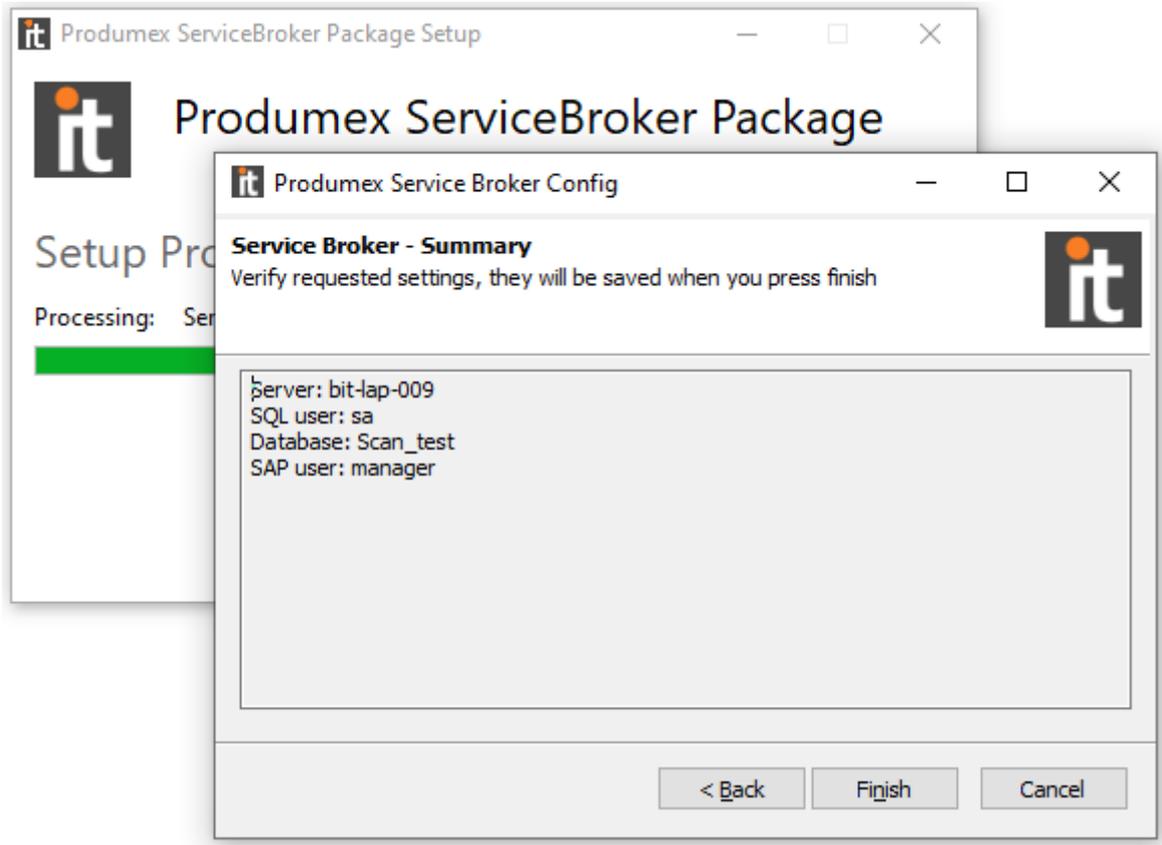
Note: Only one company can be set up with this step. If you have more than one database/schema, you can add them in the Produmex Service Manager after finishing the installation (see documentation [here](#)).



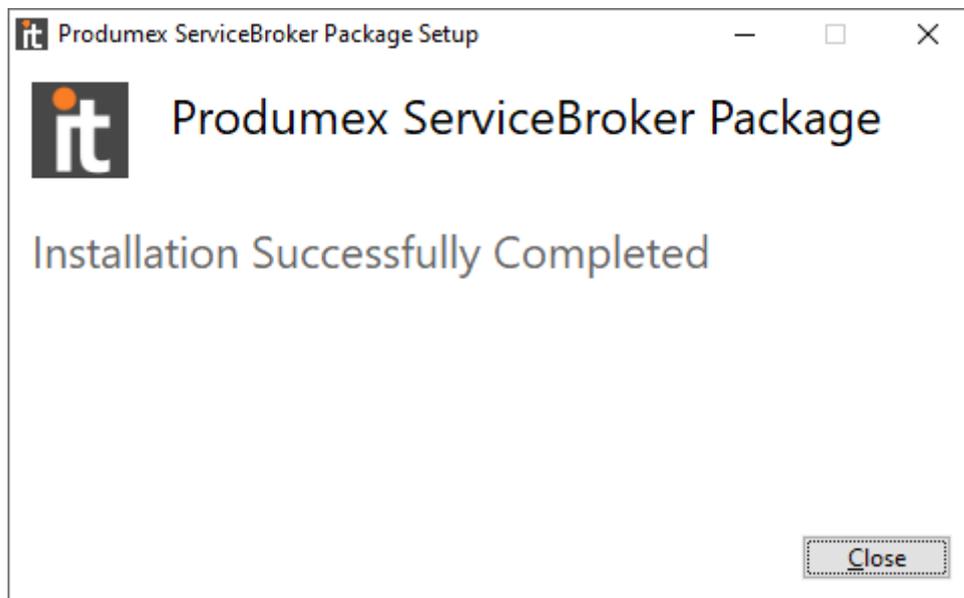
7. Simply click Next as setting the WMS Location is not required for installing Scan. This setting is used for configuring the Prodimex WMS WebAPI and only used during WMS installations.



8. The system displays a summary about your settings. If a setting needs to be changed, click Back and modify the necessary setting. If the data is correct, click Finish.

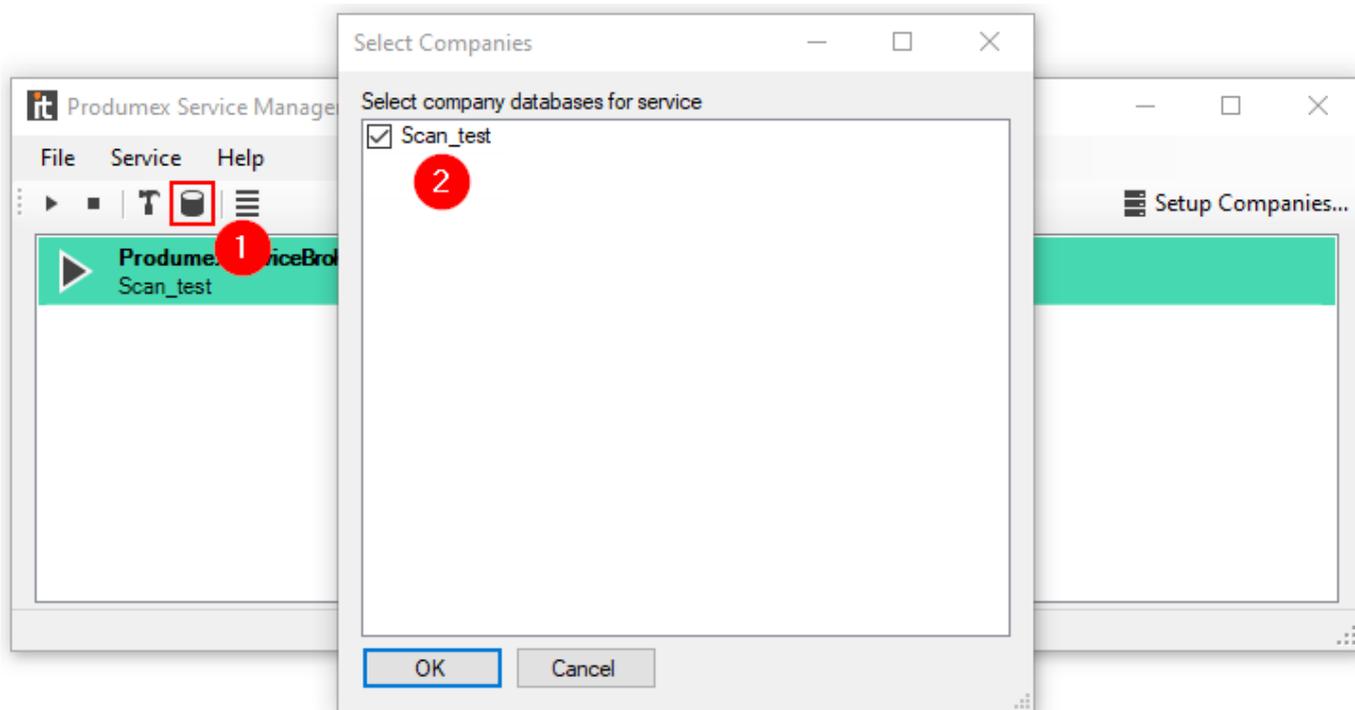


9. The installation is finished. Click Close.



10. Open the Produmex Service Manager. It is automatically installed with the Service Broker.

11. Click the Companies button and on the Select Companies form select your company database. Click OK.



**Tip: Configure dependency from the SBO Server Tools service on an MSSQL system**

If the server where Produmex Service Broker runs needs to be restarted frequently, it is recommended to configure dependency from the SBO Server Tools service.

When Produmex Service Broker starts, it tries to connect to the SAP environment. If the connection fails, Produmex Service Broker will not start. If the Produmex Service Broker is dependent on the SBO Server Tools service, it starts and connect to the SAP environment when the SBO Server Tools service is started as well.

Note: Make sure you do not set the dependency on HANA environments. The Produmex Service Broker is a Windows service, SAP HANA and Produmex Service Broker are running on separate servers. To avoid this issue, make sure that the HANA server is already running when you restart the server of the Service Broker.

To configure the dependency proceed as follows.

1. Open the Command Prompt window and enter the following:

```
C:\>sc config BXServiceBroker depend=B1ServerTools
```



2. Open the Services app, right-click on the Produmex Service Broker and select Properties. On the Dependencies tab you can see that the dependency is successfully added:

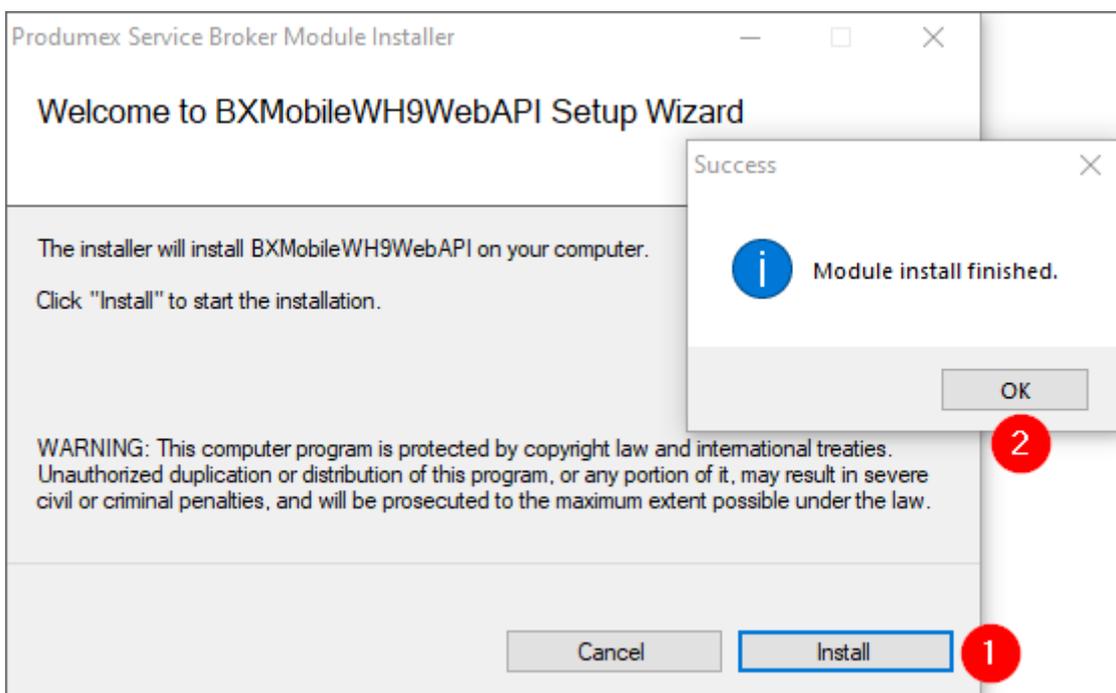


Continue with section [3.4.Install the Produmex Scan Server Module](#).

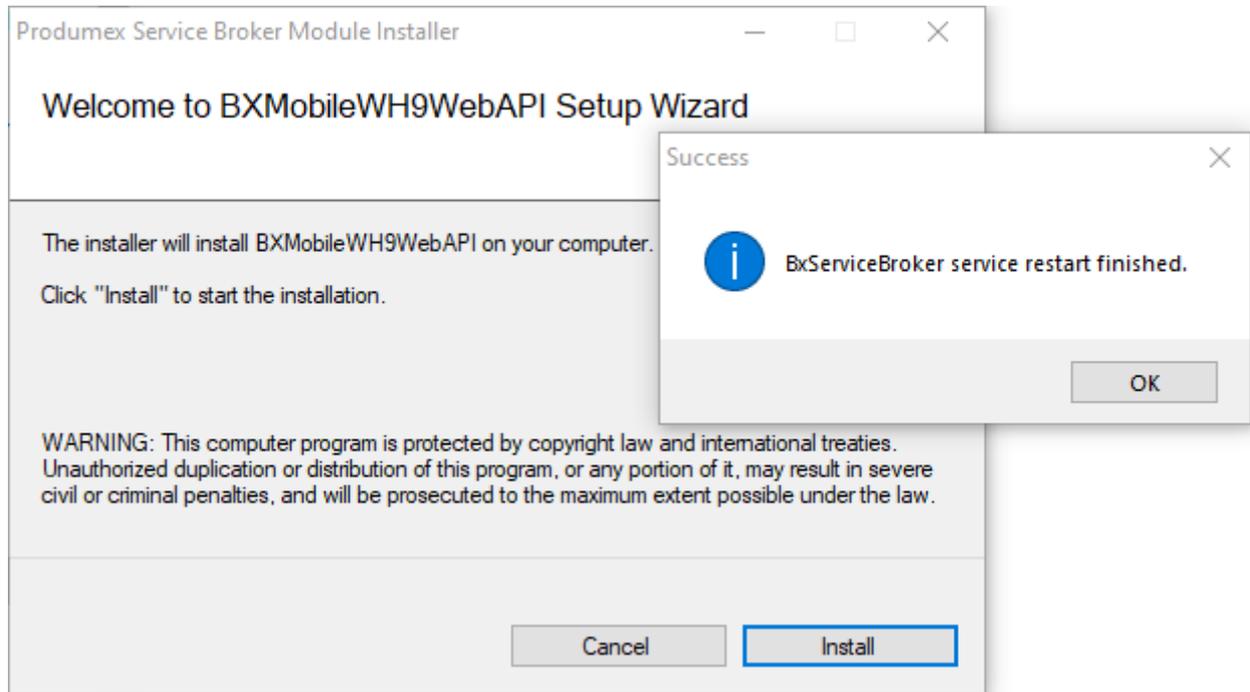
### 3.4. Install the Produmex Scan Server Module

The Produmex Service Broker works together with different Produmex add-ons and it uses the dlls of the given add-on. Install the dlls with the Produmex Service Broker Module Installer as follows.

1. Extract the ProdumexScan\_ServerSetup\_[version].x32.zip file and run the BXMobileWH9WebAPI\_[version]\_setup file.
2. Click Install on the Produmex Service Broker Module Installer and when the installation is finished, click OK on the Success form.



3. The system restarts the Service Broker. Click OK on the Success form.



Note: The add-on and the server dlls must be for the same version. If you use different versions, error messages may be displayed. Start the installer and it will automatically copy the dlls. Then restart the Service Broker.

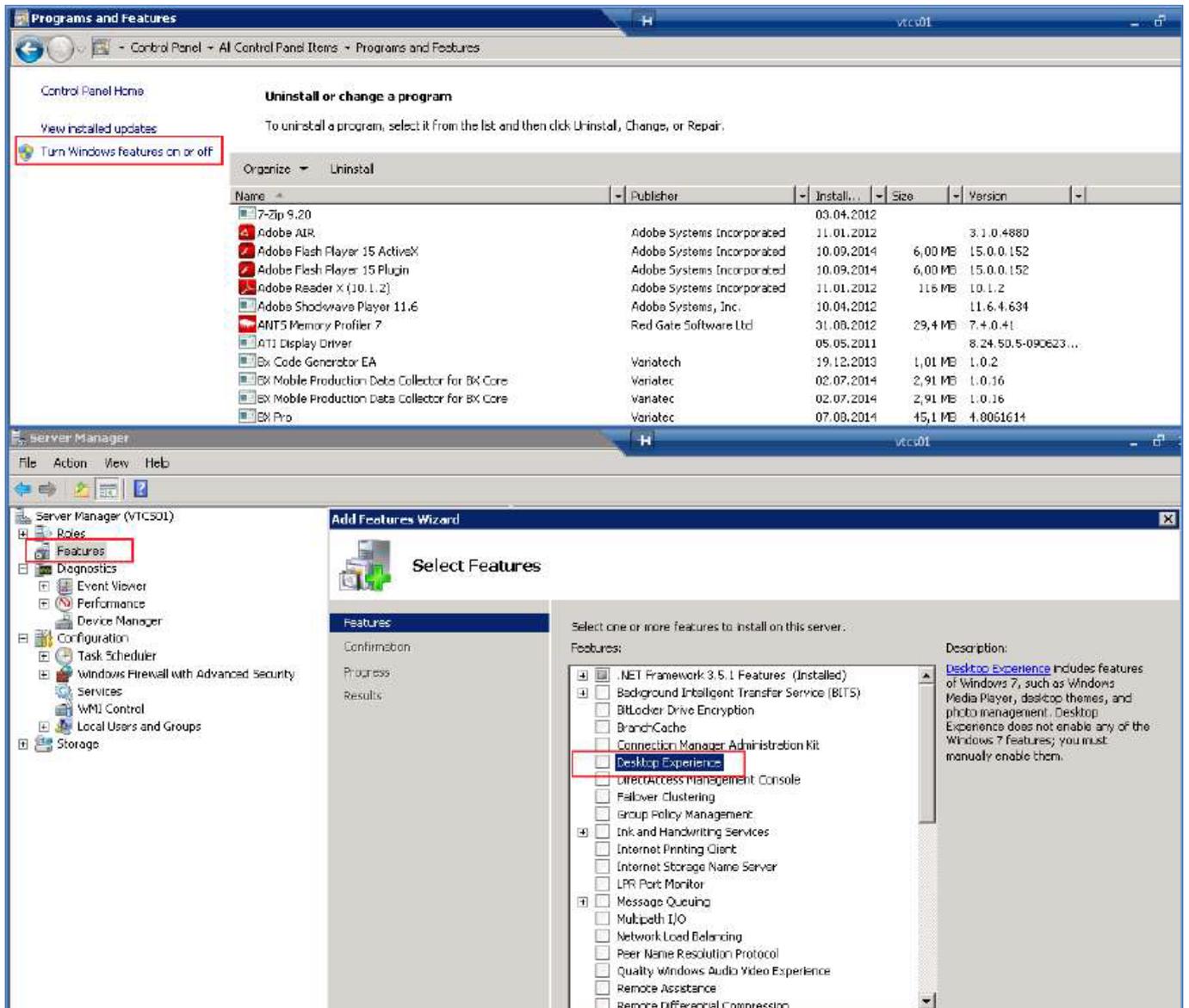
Continue with section [3.5. Install the Prozumex Scan Client application on a mobile device.](#)

### 3.5. Install the Prozumex Scan Client Application on a mobile device

(Note: 'mobile device' not to be confused with Android. For the Android install see 3.5.3.)

#### 3.5.1. Prerequisites

- Install the Microsoft .NET Compact 3.5 framework on all the mobile devices where the application will be used. For more information about hardware requirements and recommendations see: [General requirements for handheld devices.](#)
- If you have a server operating system (for example Microsoft Windows Server 2003), navigate to Control Panel > Programs and Features > Turn Windows Features On or Off and turn on the Windows Desktop Experience component.



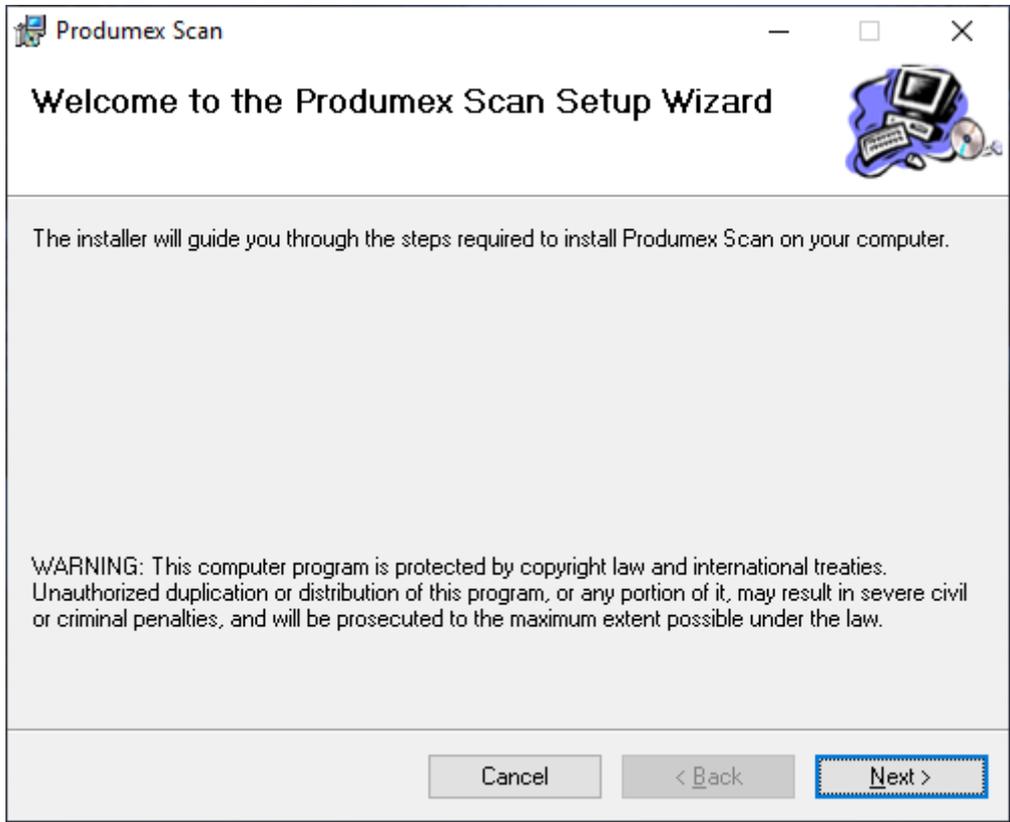
- Install the Windows Mobile Device Center 6.1 driver:
  - 32 bit
  - 64 bit

If the driver is missing, you will get a message during installation that active sync is needed.

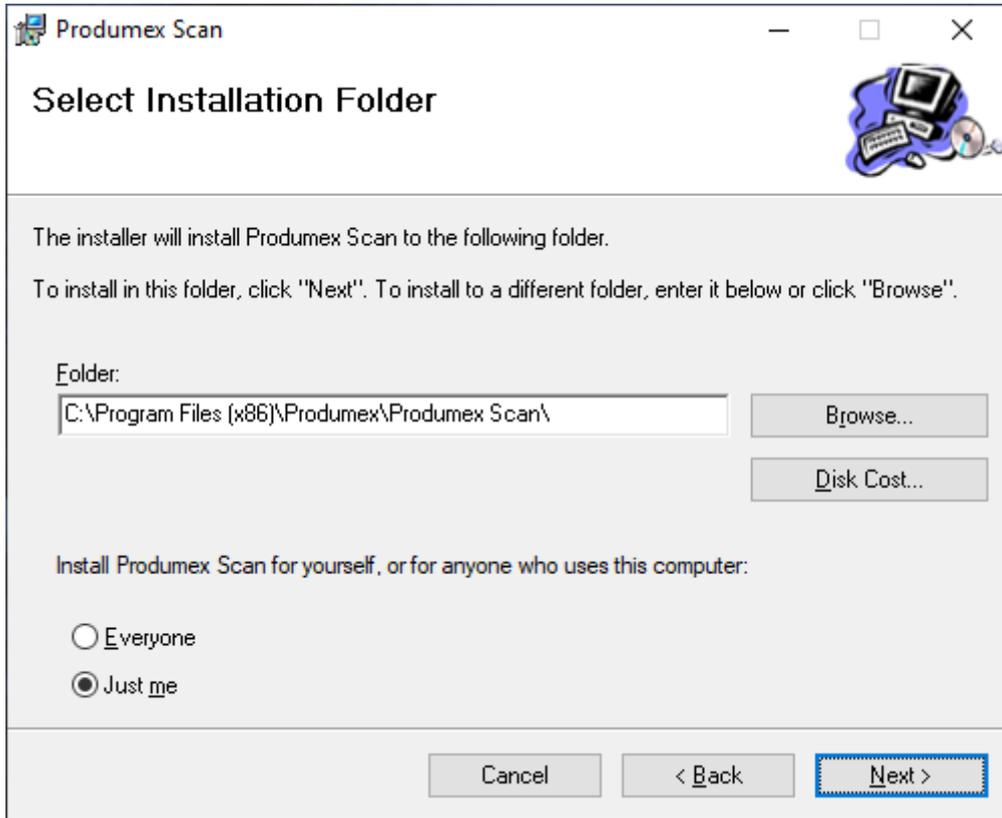
- The 64-bit package can be downloaded from here: <http://download.microsoft.com/download/0/4/3/0432540e-2d1a-415d-9c9da9963e43503e/drvup-date-amd64.exe>
- For 32-bit systems with Windows 8 or 8.1, it is enough to run a Windows update, download all updates and reboot the computer.
- For Windows 8 and 8.1 operating systems, you may also need to install the Microsoft active sync component.  
 Note: This step is not needed for the non-server operating systems.

### 3.5.2. Install the Client application

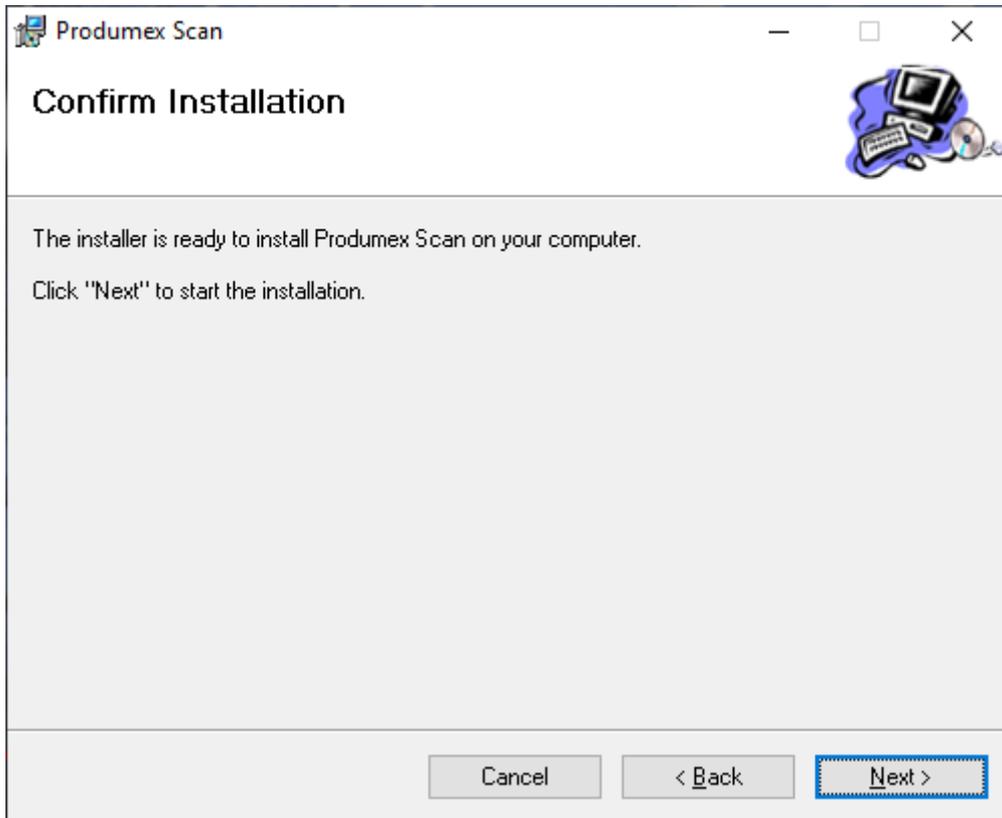
1. Cradle the mobile device on your computer.
2. Extract the ProdumexScan\_ClientWM6Setup\_[version].zip file and run the Produmex Scan Application setup file on the host computer with administrator rights.
3. On the Setup Wizard click Next.

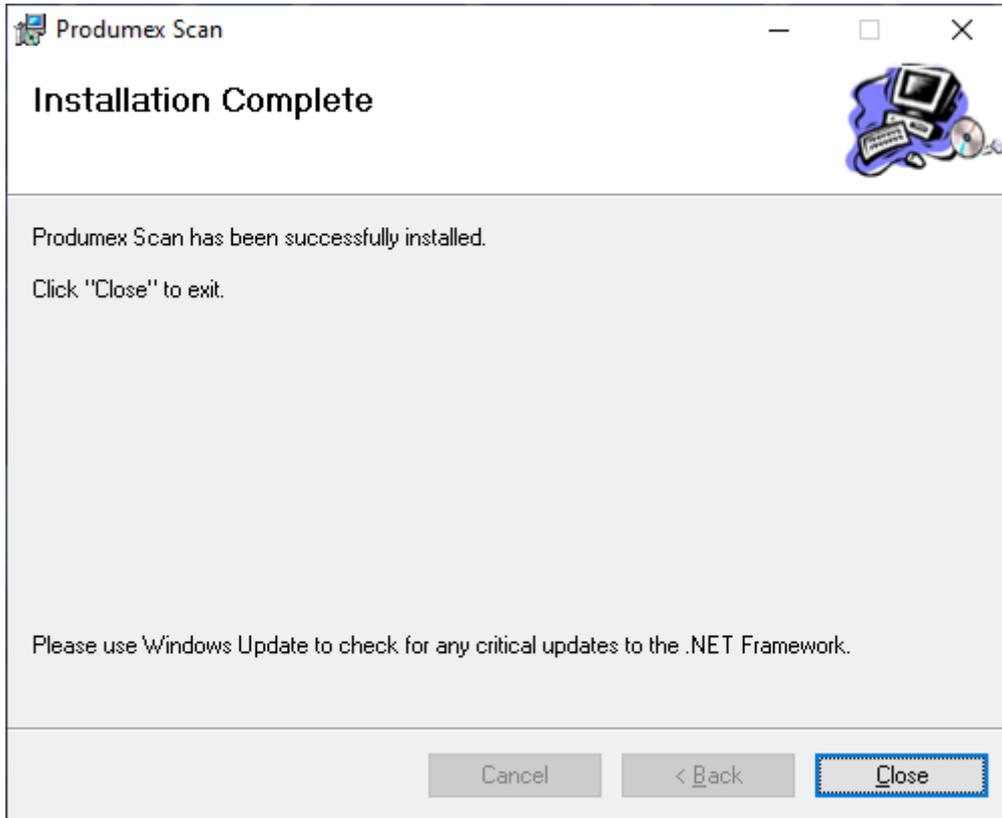


4. Choose the destination folder.

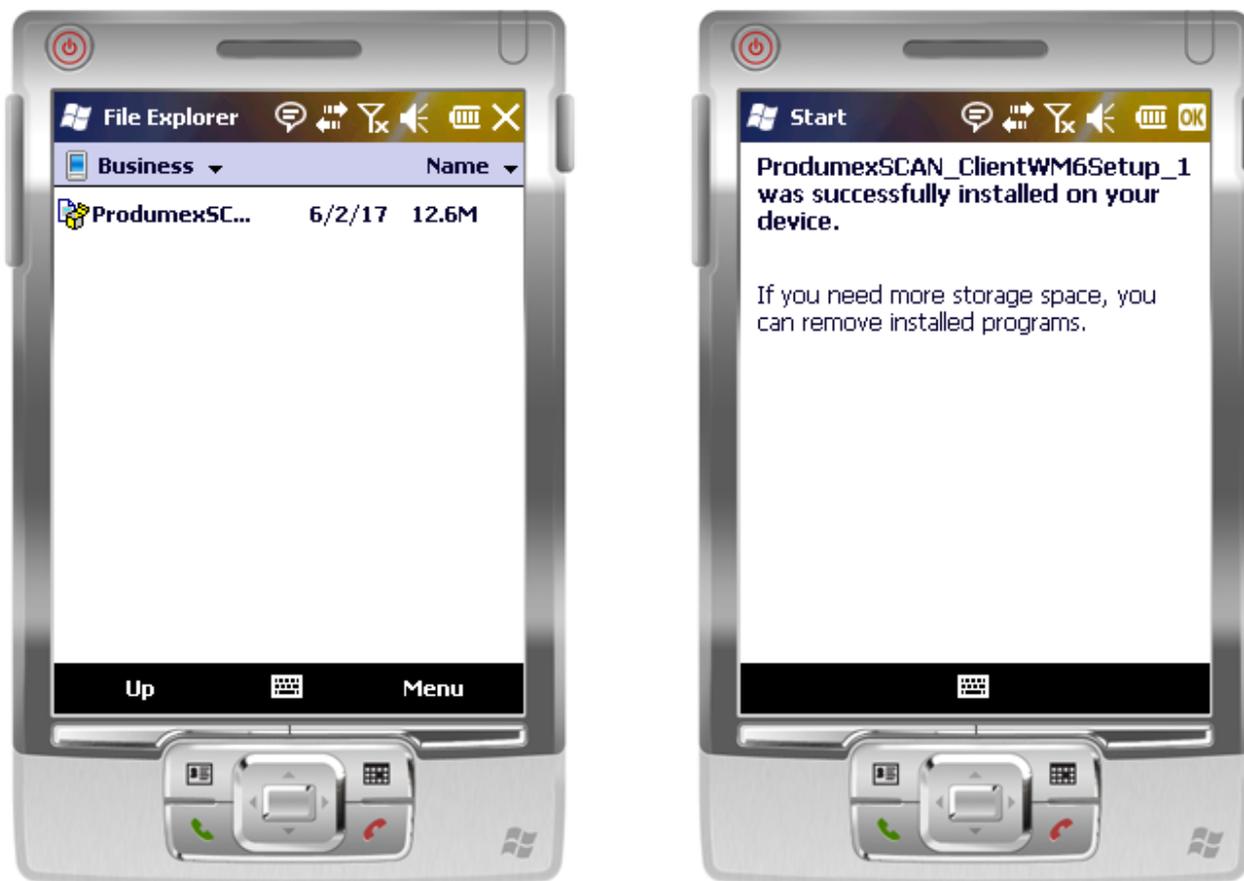


5. Click Next and then click Close.





6. The installer is set up on the cradled, connected mobile device as well. If the installation on the mobile device is interrupted, it can be installed directly on the mobile device. Copy `ProdumexSCAN_ClientWM6Setup_version nbr. _SBO version.cab` from `c:\Windows\WindowsMobile\BXMobileWH9\` to your mobile with Windows Mobile Device Center and run it in the mobile device.



You can find the configuration form and the application among the installed programs (in the Start Menu).



Note: When client is started for the first time, the Produmex Scan Configuration window is opened. (It is configured later on in section [3.7. Configure the Produmex Scan Client.](#))

With the installation new shortcuts are also added to the Start Menu under the Produmex folder to run Produmex Scan and Configure Produmex Scan in desktop mode. This helps to simulate the mobile device client without setting up an emulated mobile environment.

Continue with section [3.6. Check the installed modules and start the Service Broker.](#)

### 3.5.3. Install the Client application on Android

Download the **ProdumexScan\_ClientAndroid\_[version].apk** file on the device, and let the system install it after the download. **“Install unknown apps”** setting must be enabled in the Android operating system.

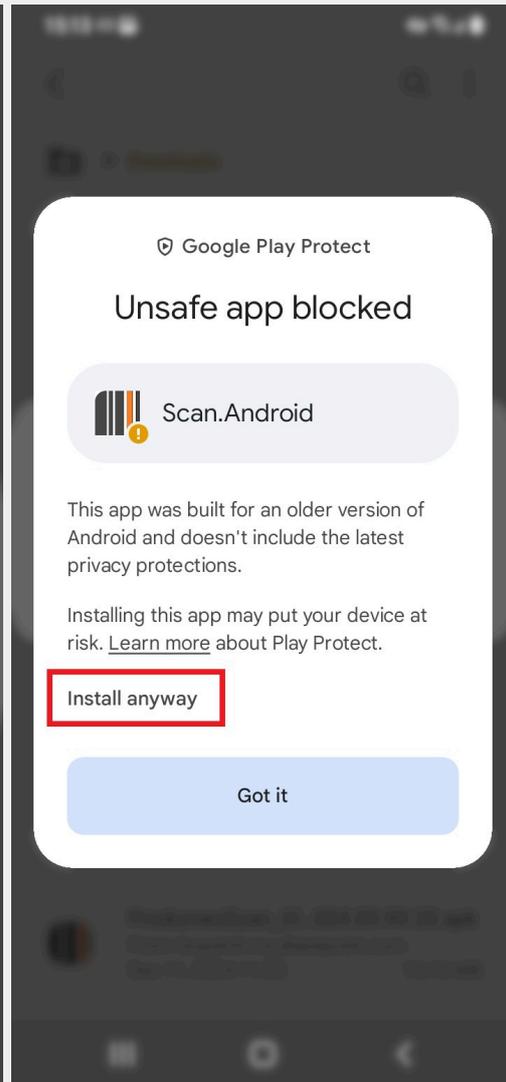
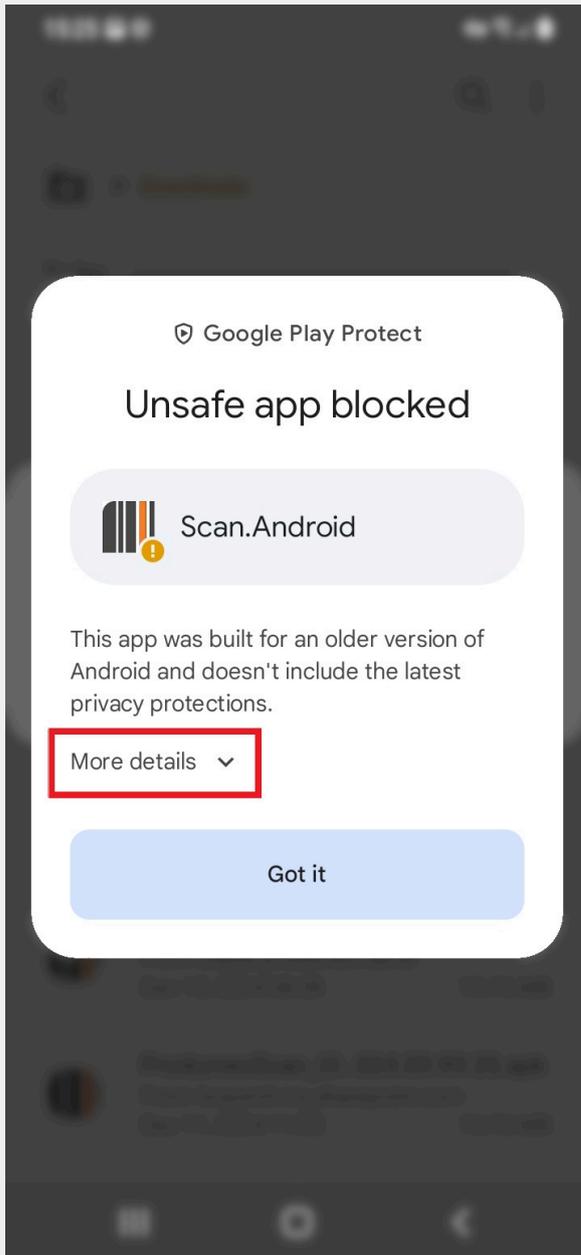
**Note:** When installing the Client application on an Android device, the following warning may appear. You might be asked to enter the device PIN before proceeding with the

# installation.

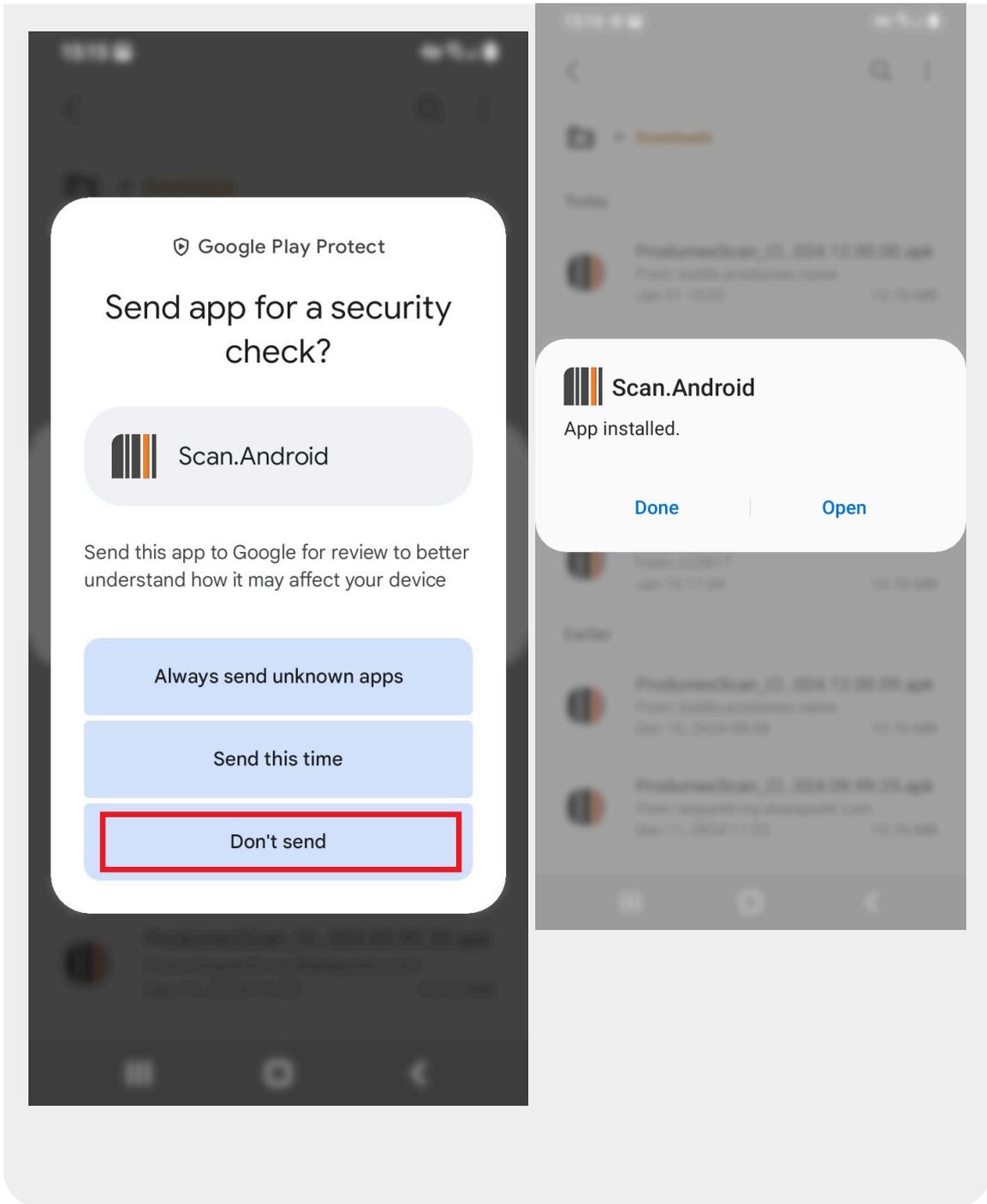
## Steps to Install the Client application

First, click on the **More details** dropdown link to proceed with the installation process.

Then, click on the **Install anyway**.

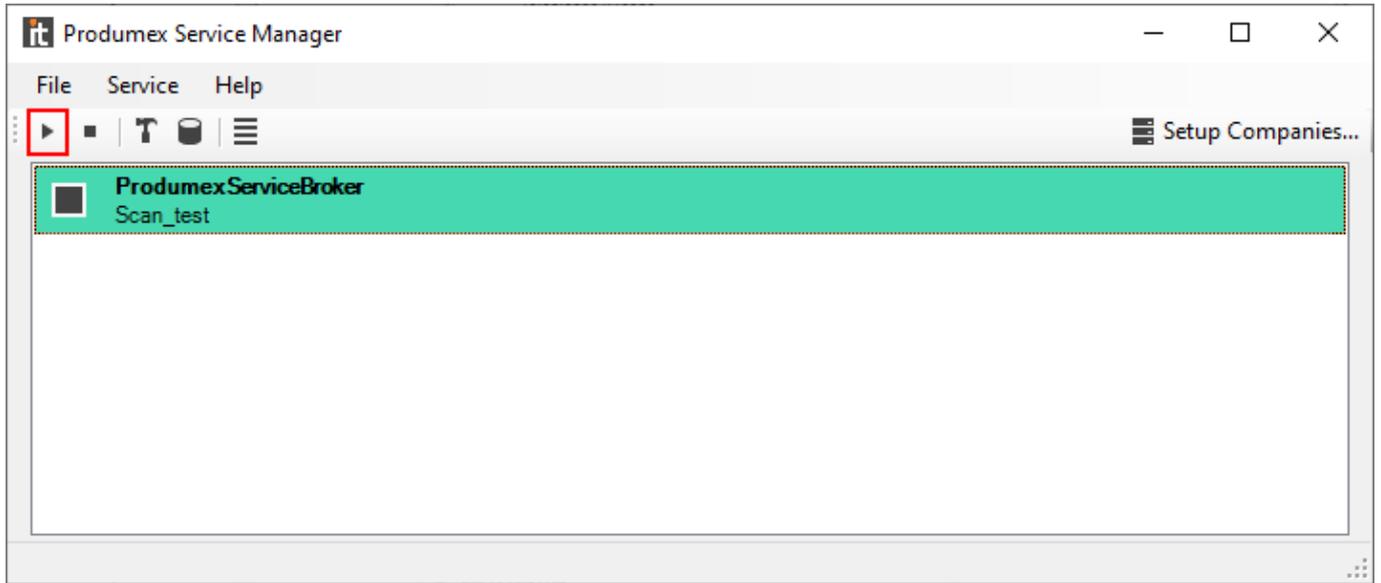


Click on the **Don't send** button, then wait for the end of the installation, if it's done click on the preferred action: **Done** or **Open**.



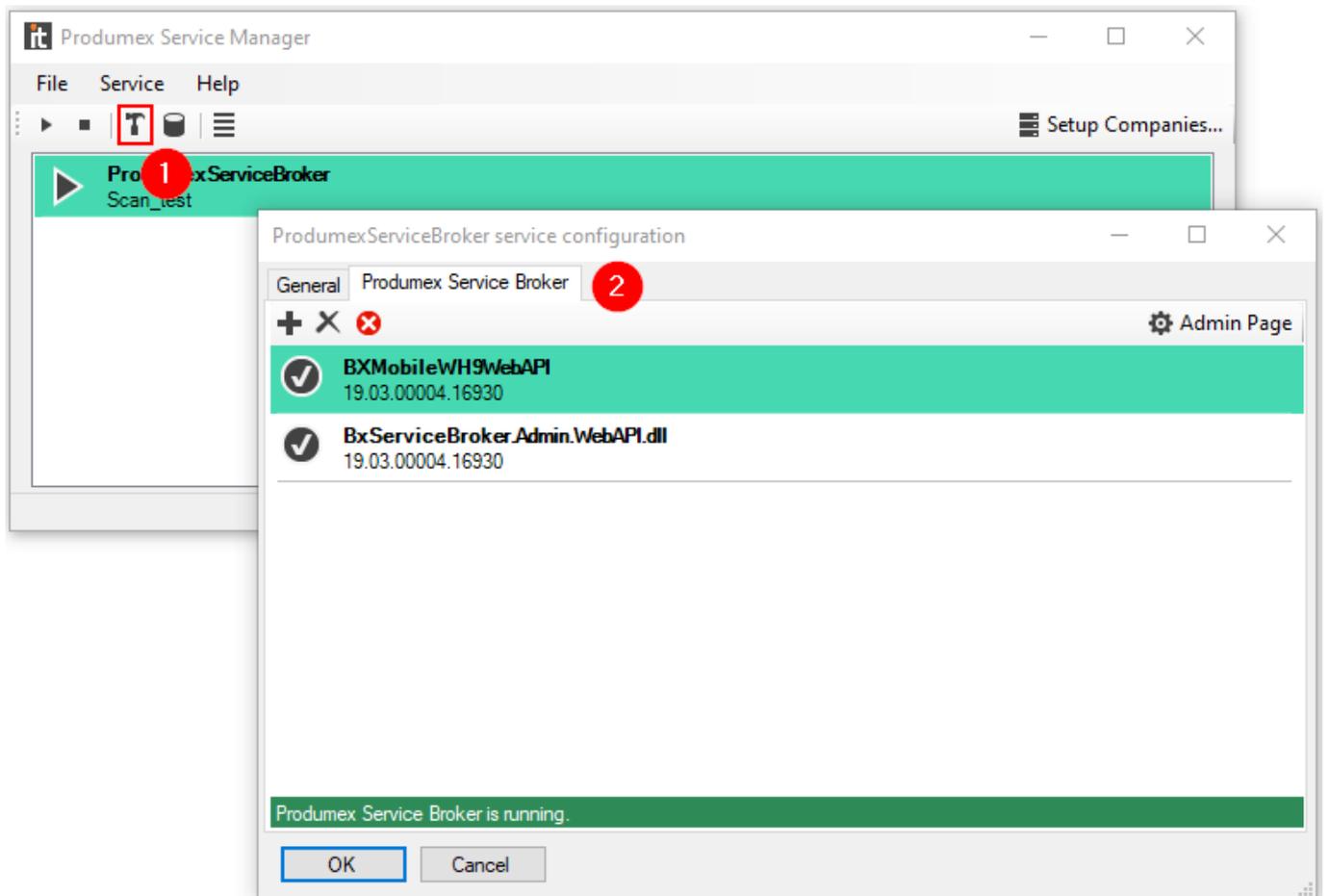
### 3.6. Check the installed modules and start the Service Broker

1. Start the Produmex Service Manager.
2. Start the Service Broker.



3. Click Configure (T).

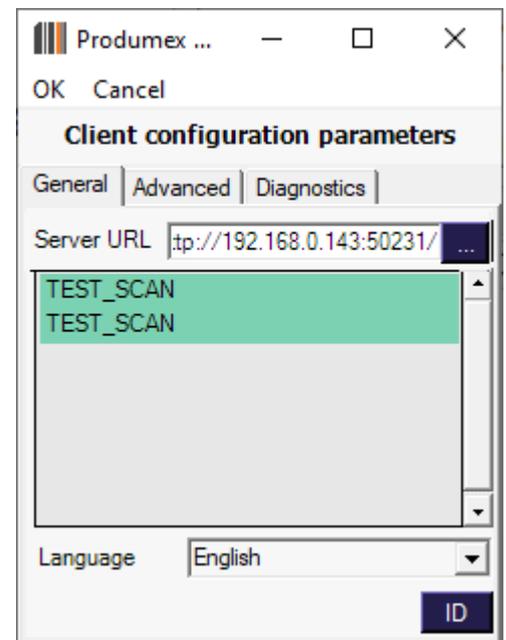
4. On the Produmex Service Broker tab check if the installation of the following modules is successful (marked with a tick):



Continue with section [3.7. Configure Produmex Scan Client.](#)

### 3.7. Configure the Produmex Scan Client

1. Start the Client Configuration Parameters and on the General tab determine the connection settings and the language of the application as follows.



2. In the Server URL field enter the Server URL of the server where the client application will connect. The server URL consists of the IP address of the server where the Service Broker runs and the port number. The port number is 50231 by default.

In case the application cannot connect to the ServiceBroker then check the Firewall setting if the port number is open for communication, and check if the server module is installed (topic 3.4) [Check the installed modules](#)

3. Click the ... button to scan for servers.

When the Server URL is added, the active databases assigned to the Service Broker are listed on the box.

3. Select the company database from the list.

If the application cannot connect to the server, an error message is shown and you may need to check the URL, the database, etc.

4. Select the language of the client application from the Language drop-down menu.

Continue with section [3.8. Start the add-on in SAP Business One](#).

### 3.8. Start the add-on in SAP Business One

The process of a fresh installation is finished.

1. In SAP Business One navigate to Administration > Add-On Manager.

2. On the Installed Add-ons tab select the Produmex Scan add-on.

3. Click Start.

## 4. Additional Documentation

- [Device Requirements](#)
- [How to Add a New Database to an Existing Installation](#)
- [How to Configure HTTPS for Produmex Service Broker with a Self-Signed Certificate](#)
- [How to Set Up Android Devices for Produmex Scan](#)
- [How to Set Up Mobile Devices for Produmex Scan](#)
- [How to Set Up Remote Desktop Connection for Produmex Scan](#)
- [Version Upgrade](#)

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