PDMX Suite Installation Guide

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1.Introduction

This guide explains the Produmex Suite Installer. This tool allows for the complete installation and configuration of the PDMX suite and its components.

The components you can install with this tool are the Produmex Tools, the Produmex License server, the Produmex SB1 Notification listener and the Produmex FatClient. The Produmex add-on is registered and installed like a regular SAP add-on, however Produmex uses an Add-on loader to upload the files to the database.

How to do this will be described in this guide.

2.Prerequisites

The prerequisites for the installation of the PDMX Suite for SAP Business One are:

- Windows Server 2008 (minimum)
- Installation of MS SQL Server 2008 or 2012
- Installation of SAP Business One 9 (only 32-bit version is supported)
- Installation of .NET 3.5 framework service pack 1
- Installation of Crystal Reports basic runtime for Visual Studio 2008
- Administrative rights
- A valid Produmex license-file.
- The ComLicenseBridge

For some prerequisites you can have a look at:
ftp://public:Avaya789@ftp.produmex.name/Install/Prerequisites

If these are not installed on your computer, please install these prior to the installation of the PDMX suite components.

Note: if you have any antivirus software installed, you need to add the .exe of the Produmex Suite Installer as an exception.

Note: When using an operation system as Windows server 2012, Windows 8 or higher you need to install the following hotfix: http://support.microsoft.com/kb/2803760. This hotfix can only be installed by a direct support request to Microsoft.

Please make sure all prerequisites are installed, otherwise Produmex will not work!

3.Executing a new installation

In this and the following chapters we will describe how to perform a full and new installation of the PDMX suite.

First, copy the Produmex Installation Zip File to your computer (Produmex_PNG_XXX.zip) Extract it to a directory (e.g. with the same name as the version number e.g. {driveletter}:\Produmex_PNG_523) Preferably, do not extract it within the {driveletter}:\Program Files directory as this might cause interference with installed components later.

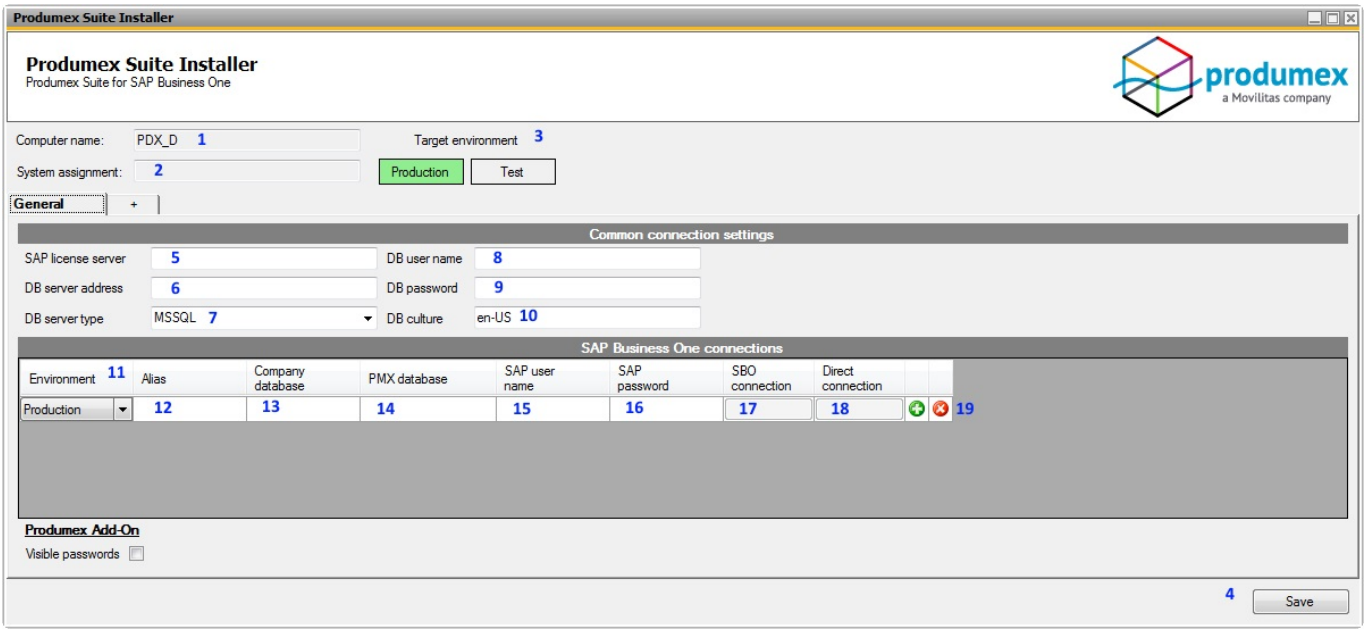
We recommend to keep this directory on a shared folder accessible from all servers. That way you can use the same configuration when you need to install and upgrade multiple components on separate systems (e.g.: a SAP server and a terminal server).

Afterwards, locate the directory of the Produmex Suite installer (e.g: Produmex_PNG_4_1_1_2\9\ProdumexSuiteInstaller) and execute the .exe. Make sure you have administrator privileges when executing this application.

Now we can start the configuration, in the following chapters will be describe step-by-step the fields you need to fill in.

3.1.Starting a fresh installation

Start the installation by entering the following fields as described below.



Main fields:

First you need to check if the following fields are set correct.

1. Computer name
Not editable. This is the computer name.

2. System assignment
Not editable. This field is updated when adding a system tab. This will be explained later.

3. Target environment
This indicates if a test environment or a production environment will be installed. A test environment is a complete separate installation with its own installation folder, next to the regular production folder. The installation procedure for a test environment is completely similar to a production environment.

4. Save
Allows the configuration to be saved in an xml file called “ProdumexInstallConfig.xml”. It is recommend to keep several backups of this file as you can use it for future installations of new PDMX Suite versions on that system.

Common connection settings

Here you set the common connection settings.

5. SAP license server:
The domain name of the server where the SAP license service is installed. This should be exactly the same as what has been configured in SLD.
This should include the port number of the SAP license server. On MSSQL, the port number is typically 30000, and on HANA the port number is typically 40000.

6. DB server:
The domain name of the server where the database is installed.
On HANA, the port number of the database server should also be included. The default port number is usually 30015.

7. DB server type:
The type of the database management system installed on the server

8. DB user name:
The database username that has dbo rights on the SBO company database(s)

9. DB password:
The database password

10. DB culture:
The database culture

Sap Business One connections

Here you can add/remove multiple connections and test them on errors. This information will be stored as a connection-string in the config files located in the installation folders of the PDMX components

11. Environment:
Production or test

12. Alias:
This is the name of the connectionString that is set in the config file. This alias will be used for components like the FatClient as their connection. For some components there is no possibility to have multiple connections strings. The system will always use the connection string with alias 'SboConnectionString'. It is recommended to use 'SboConnectionString' as alias for the default database.

13. Company database:
The name of the company database. (eg: SBODemo_US)

14. PMX database:
The name of the extra database (eg: PMX_SBODemo_US)

15. SAP user name:
The username of the sap user that is used (eg: manager)

16. SAP password:
The password of the sap user.

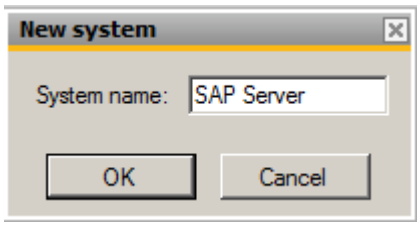
17. SBO connection:
Click this button to test the connection to the company database through SAP (DI API).

18. Direct connection:
Click this button to test a direct SQL connection to the database.

19. Add/remove buttons:
Use these buttons to add/remove the instance aliases.

After this information is entered you can add an extra tab to define the system assignment by clicking the add button next to the general tab.

Next you see the following screen, here you enter your system name you will assign.

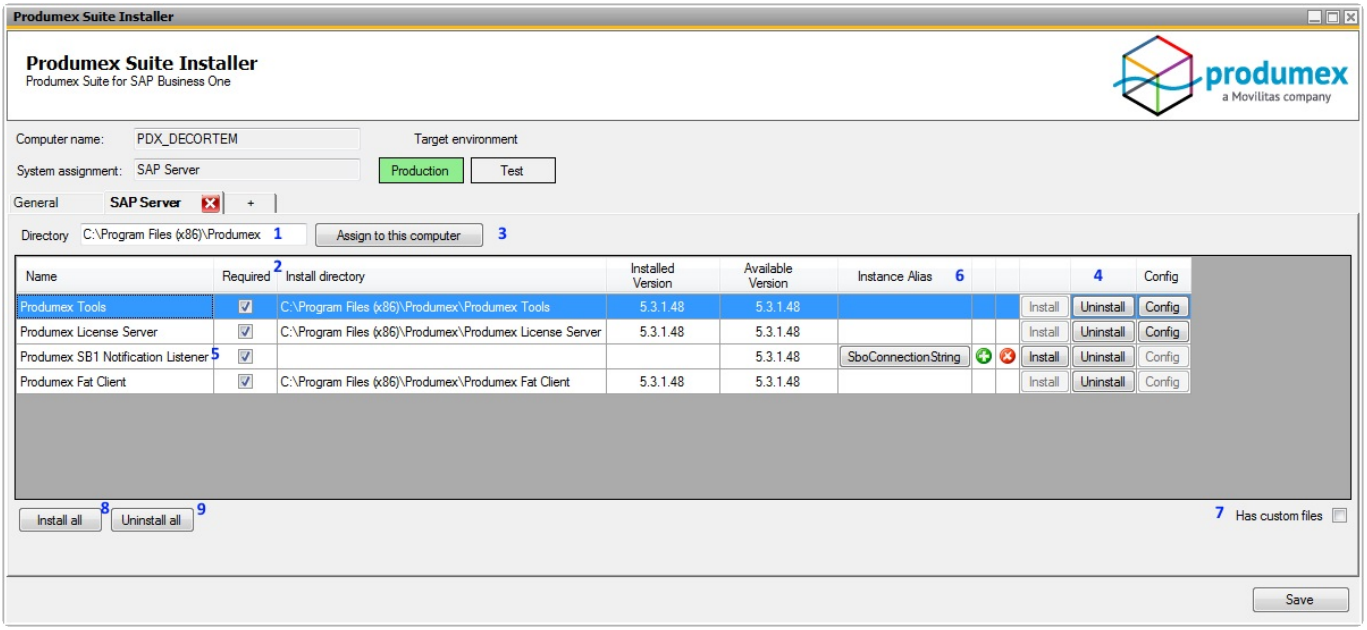


Now that connection configuration is done, we can start installing the separate PDMX suite components.

3.2.System tab

The system tab allows for the installation of the components of the PDMX Suite, except for the PDMX Suite add-on component, which is installed as a SAP add-on.

In most scenario's it is not always required to reinstall the license server. The Tools and FatClient components always need to be reinstalled and the tools component always needs to run with every new installation.



1. Directory:
The directory in which the PDMX Suite components need to be installed.

2. Required:
Indicates that this component is part of the installation on this system and therefor needs to be upgraded with each new version.

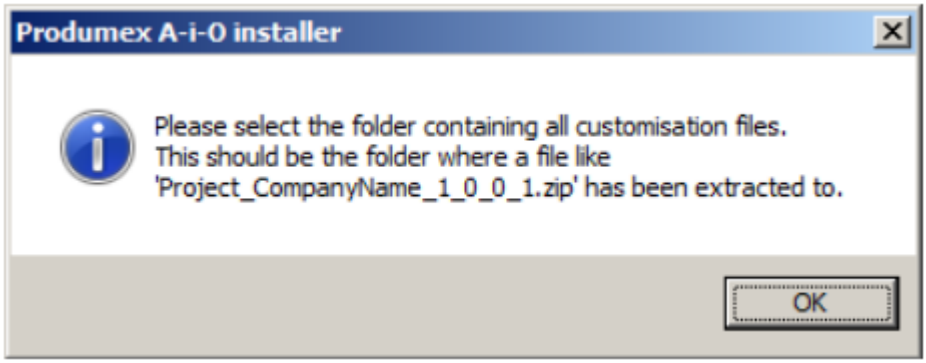
3. Assign to this computer:
Assign this system configuration to this system.

For example, you can have a SAP server were you only need to install the tools, license server and notification listener and a terminal server were you install the FatClient component. When you click the “Assign to this computer” button, this information is kept in the registry of the local machine file and next time you open the Produmex Suite installer from this system, it will open to this system tab.

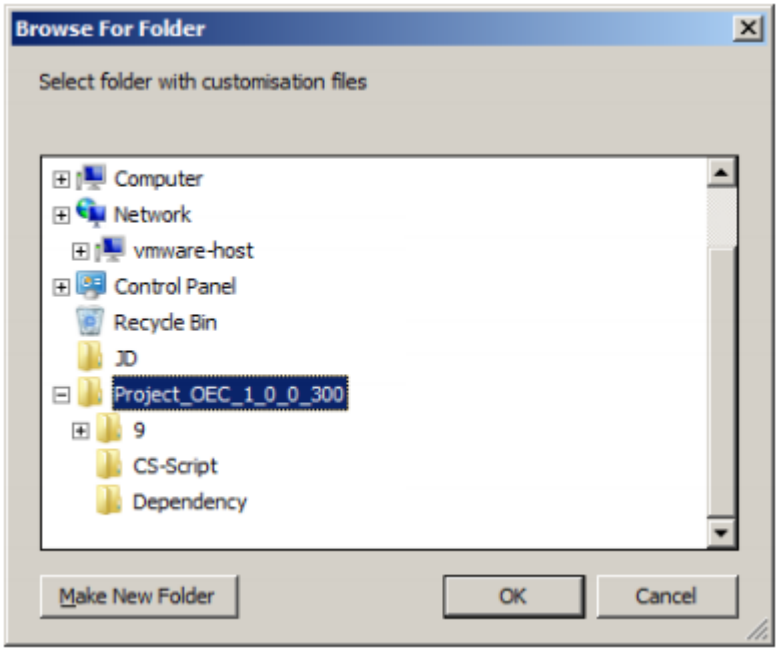
4. Configuration buttons

- a. Install: installs the component
- b. Uninstall: uninstall the component
- c. Config: opens the configuration screen

Note: if you tagged “Has custom files” on, on the General tab you will be prompted to locate the directory.



Afterwards you need to locate the directory where you can find these files.



5. Produmex SB1 Notification Listener

You can install multiple installations of the SB1 Notification listener for multiple instance aliases. These are defined as connections in the general tab under SAP Business One connections. The install directory of this component will also be extended with the instance alias name.

6. Instance alias:

Select an instance alias.

7. Has custom files
Indicates if there are custom files to be installed, such as customer specific workflowscripts. If this is tagged, you will be prompted for the directory were the custom files are unzipped to. This directory will have a name such as “Project_OEC_1_0_0_327”.

8. Install all:
Install all required components.

Note: When using the Produmex Tools remember that if you have multiple connections defined for one environment type (production or test) it will use the first one by default. For example, if you define a connection SboConn1 and SboConn2 on the general tab and you run the interface tool, the interface tool will use SboConn1 by default.

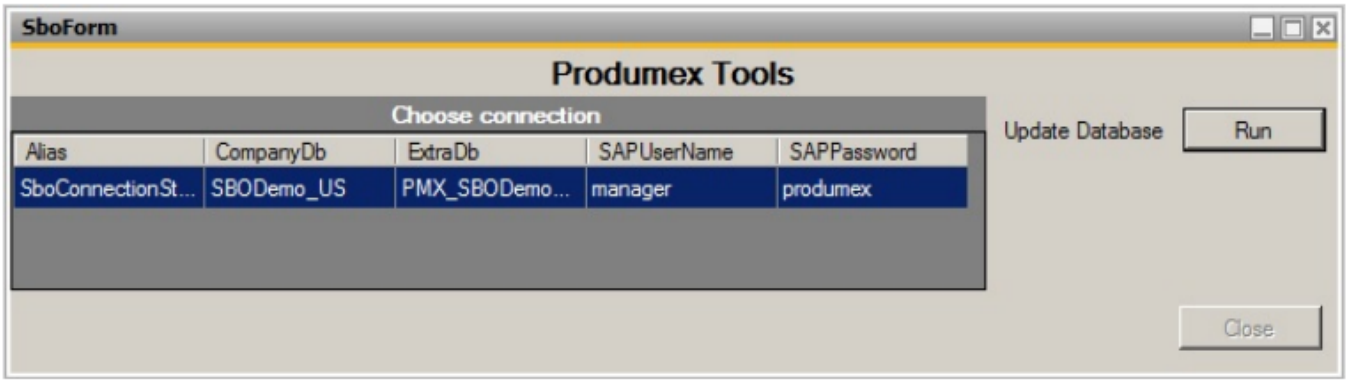
9. Uninstall all:
Uninstall all installed components.

4.Component configuration

All components, except the Fat Client, have their own configuration that needs to be set up.

4.1.Produmex tools configuration

Here you can see the configuration screen for the Produmex tools. Here you can select an instance alias which will connect to a company database that will be updated to the most recent PDMX version.

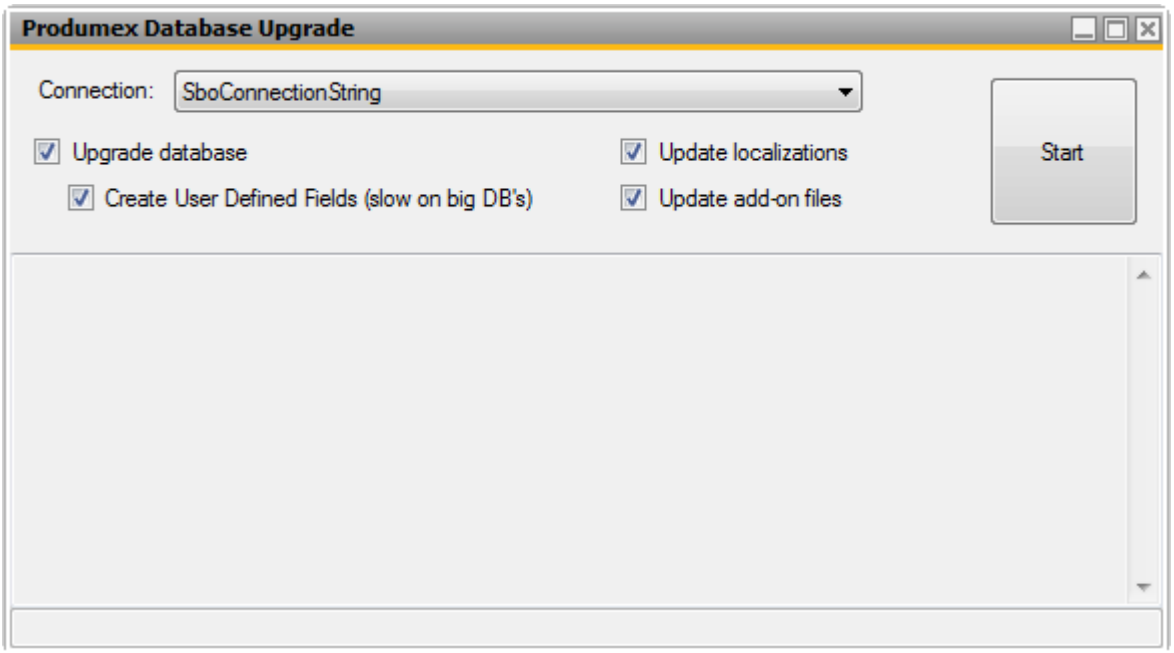


When you click the “Run” button will start the UpdateDatabase tool.

This tool consists of 3 steps, which you can enable or disable by using the checkboxes on the top of the window:

- Upgrade database
- Update localizations
- Update add-on files

You can also change the connection to use by using the drop-down list on the top of the window. The drop-down list is filled with all connection strings found in the configuration file of the UpdateDatabase tool.

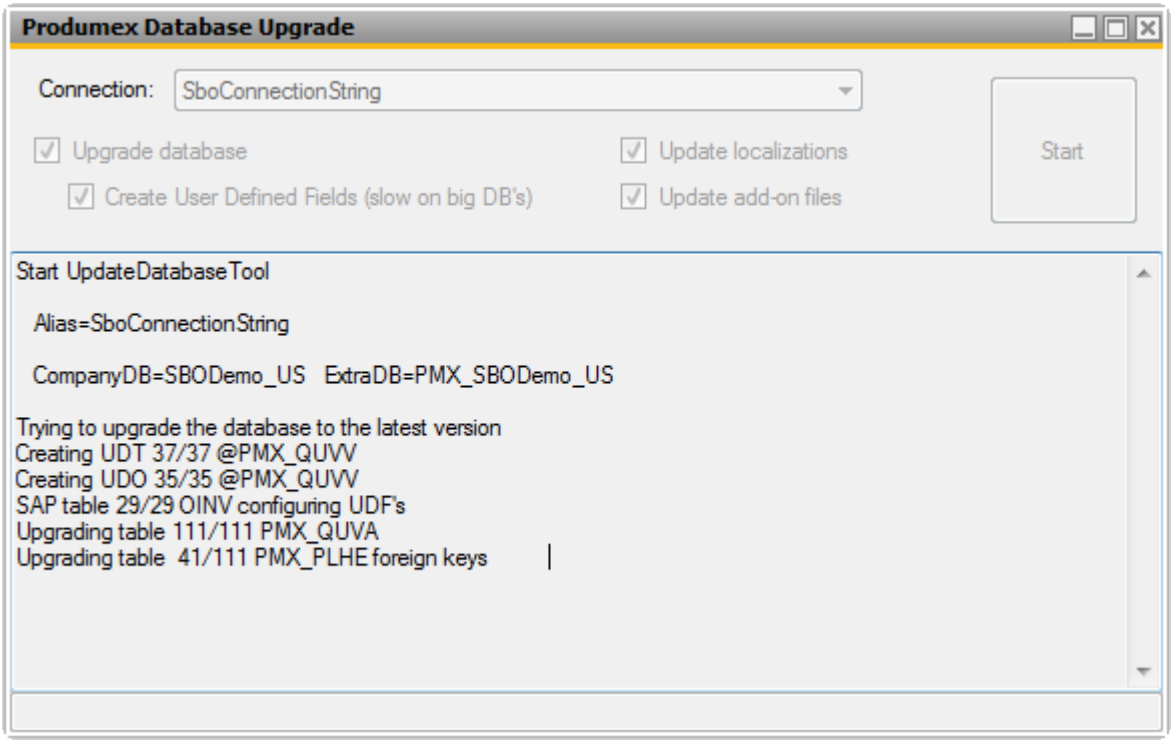


4.1.1 Upgrade database

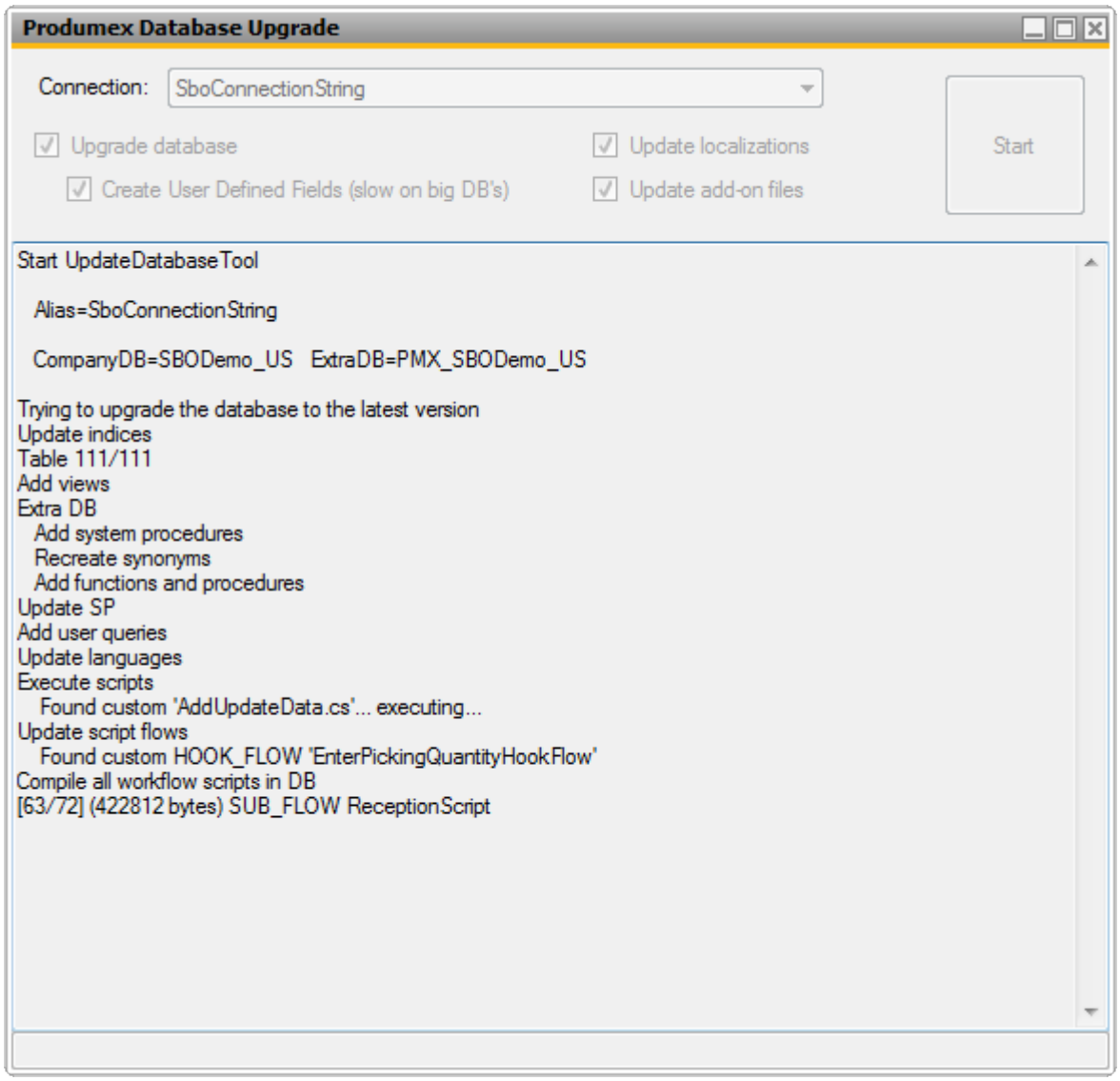
In the first step, the tool will upgrade your database to the most recent PDMX version. This step will only be executed if the “Upe database” checkbox is activated.

During this step, UDF’s might need to be created in SAP. Seeing how this is an intensive action, this action is optional, but vital if you want to complete a full installation.

You can disable the creation of UDF’s by deactivating the “Create User Defined Fields (slow on big DB’s)” checkbox on the top of the window. In this case, you will have to create the UDF’s manually in SAP; the UpdateDatabase tool will prompt you to do so.



Here the tool displays its actions. When starting from a new database without previous version of PDMX suite installed, it will adjust the database by first adding UDT's, UDO's, adding UDF's to SAP tables, creating PMX-tables, foreign keys, etc..



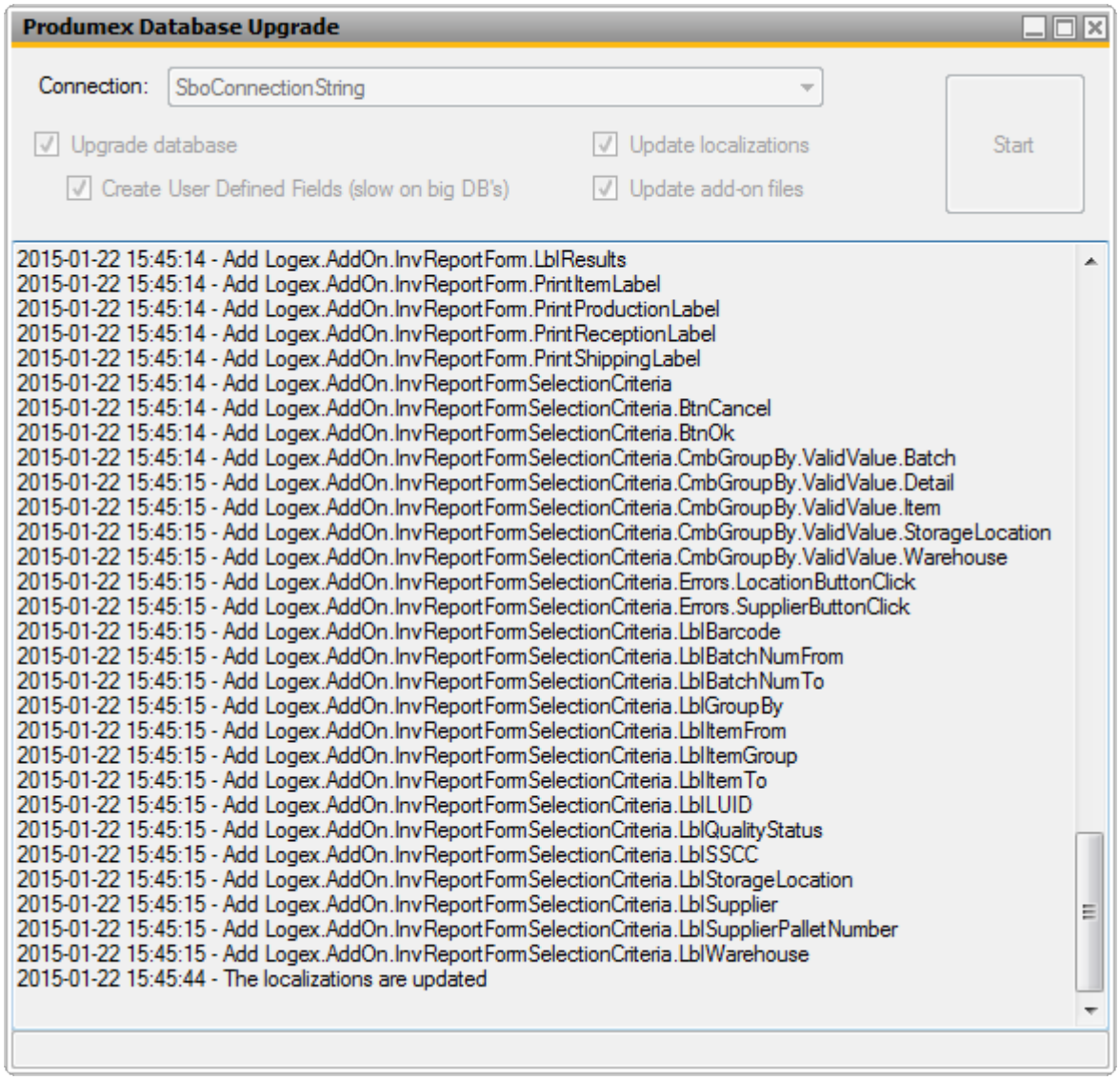
When this tool is running, and you have selected customer specific files in the previous steps you will see these kinds of messages:

- "Found custom 'AddUpdateData.cs': updates the database with custom UDF's/UDT's, PMX-tables, etc..This cs-script executes custom database-adjustments specific for that customer.
- "Found custom ': If a custom script is found and inserted to the database, you can see the name of the script here. In this example a EnterPickingQuantityHookFlow is inserted into the database or updated if it already exists.

4.1.2 Update localizations

The second step performs an update for the localizations. This step will update any translations to the most recent version of the current PDMX suite version.

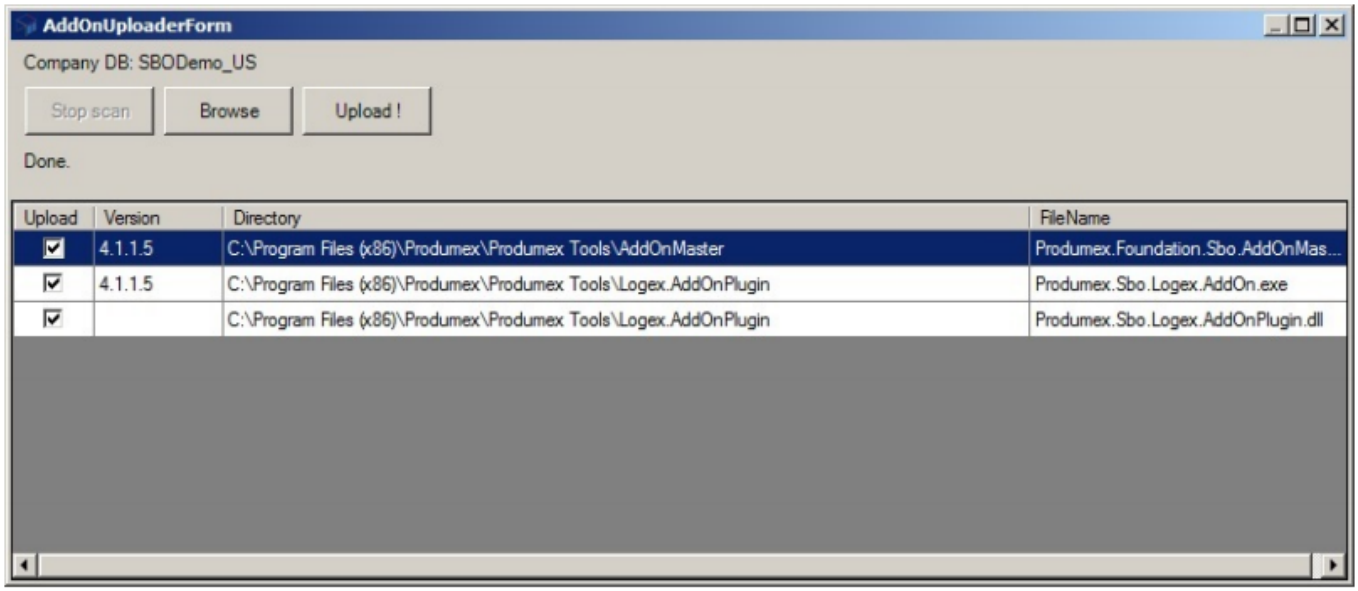
This step will only be executed if the "Update localizations" checkbox is activated.



4.1.3 Update add-on files

The final step you have the option to upload the PDMX suite add-on files necessary to run the PDMX suite add-on.

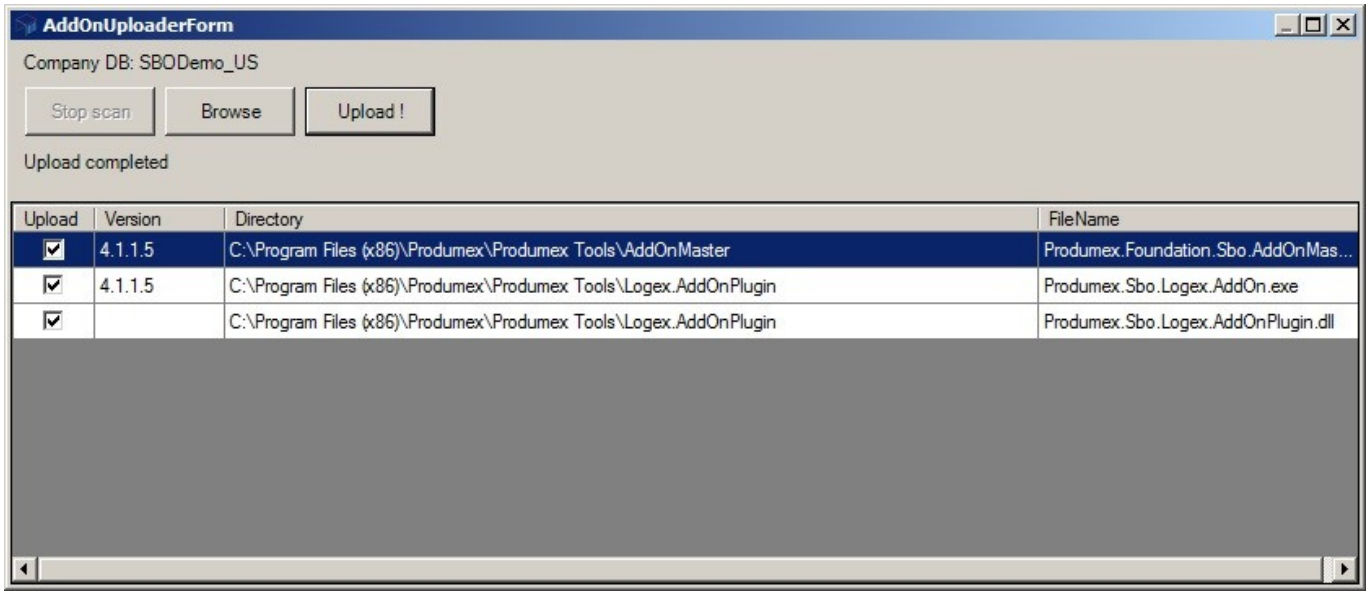
This step will only be executed if the “Update add-on files” checkbox is activated.



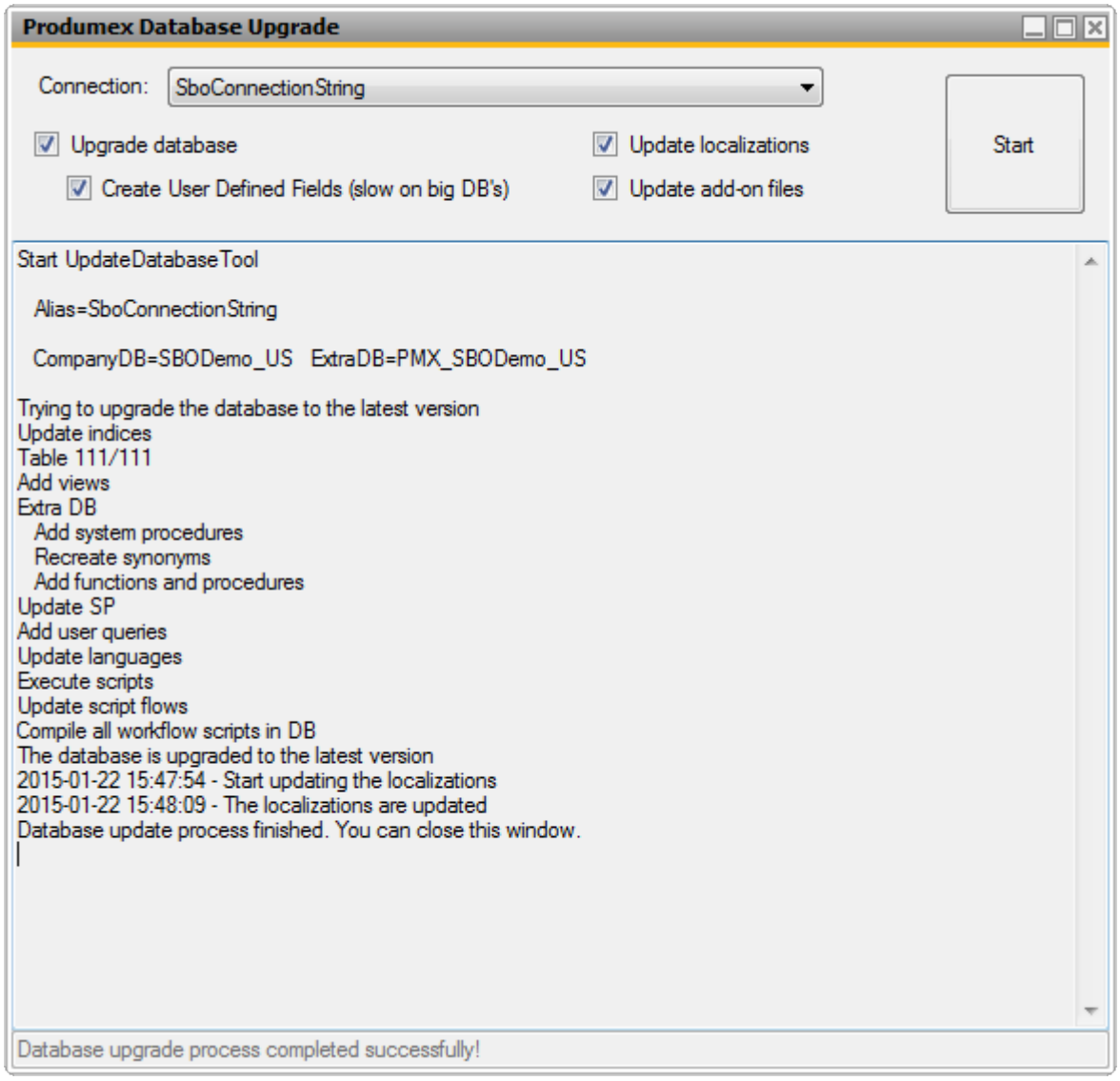
In this screen you can see the files required to upload. By default the Add-on Uploader will search in the build directory in which it is located.

**Note*: When the customer has specific functionality, a second zip file will have been provided with the files for these specific functionalities. You need press the "browse" button and select the folder where these files are located (e.g.: Project_OEC_1_0_0_300)*

Select the row(s) corresponding to the installation you are doing, and click 'Upload'. After uploading, close the screen.



4.1.4 Closing the tool



After all the selected steps have been executed, you can close the screen. To do so, press the ‘x’ cross in the top-right corner of the window.

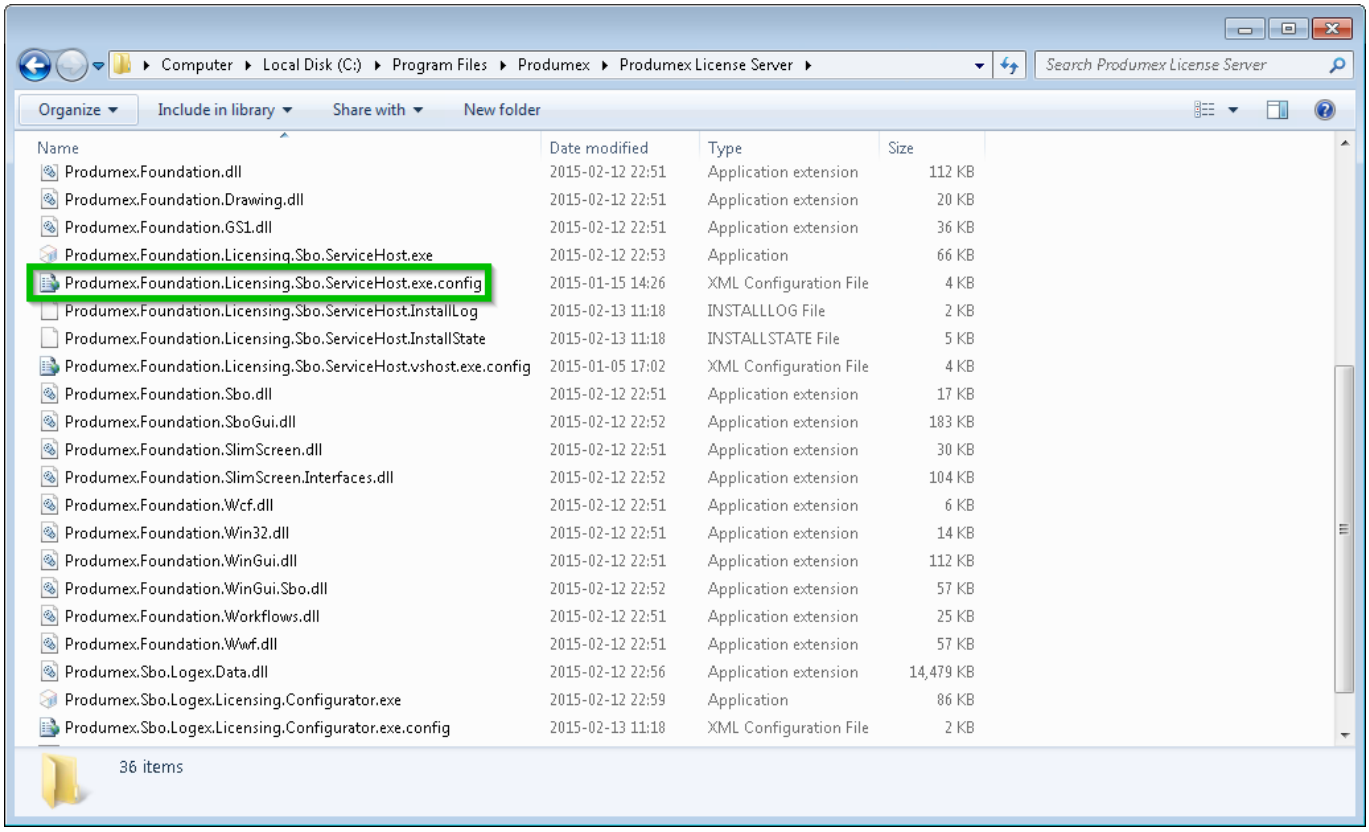
4.2.Produmex License Server configuration

4.2.1. Additional installation steps for SAP HANA

If you are using SAP HANA, you need to update the Produmex License Server's configuration file. This file is located in the installation folder of Produmex License Server, for example C:\Program Files (x86)\Produmex\Produmex License Server\

The configuration file is called 'Produmex.Foundation.Licensing.Sbo.ServiceHost.exe.config'

See the picture below to locate it more easily:



Open that file with a text editor (e.g. notepad), and locate the section called 'appSettings':

```
<appSettings>
  <add key="TransactionIsolation" value="ReadCommitted" />
  <add key="TransactionTimeout" value="00:10:00" />
  <!--<add key="SapLicenseServer" value="localhost:30000"/>-->
  <!--<add key="SapLicenseServer" value="localhost:40000"/>-->
</appSettings>
```

Locate the line that contains 'SapLicenseServer', and do the following:

- uncomment that line (remove the '<!-' and '->' at the beginning and at the end of the line)
- replace the license server (default: localhost:40000) by the actual SAP license server's address (in this example: imdbhdb:40000)

```
<appSettings>
  <add key="TransactionIsolation" value="ReadCommitted" />
  <add key="TransactionTimeout" value="00:10:00" />
  <!--<add key="SapLicenseServer" value="localhost:30000"/>-->
  <add key="SapHanaLicenseServer" value="imdbhdb:40000" />
</appSettings>
```

Finally, save the configuration file.

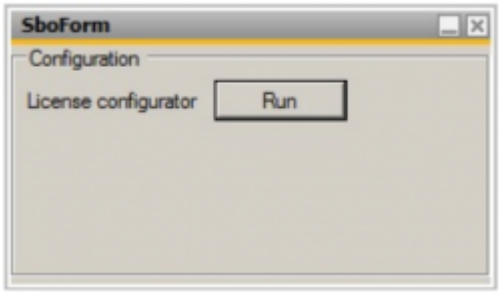
4.2.2. Configuration

You will need to get a license file from Produmex. To create this file, we need the Hardware Key of the SAP installation.

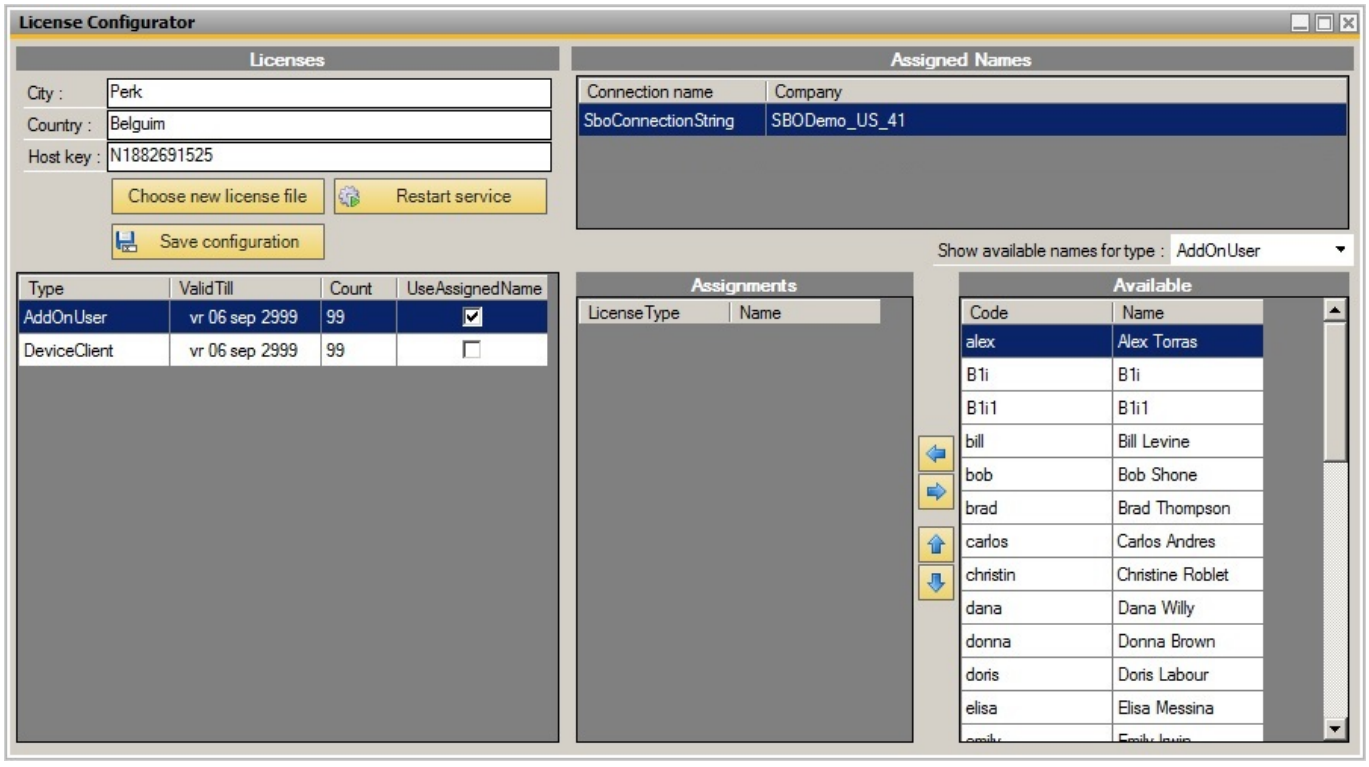
After that Produmex will send you a license file. You will have to put this file into the installation folder of the Produmex Licensing Module. After renaming the file to 'PmxLicenseData.xml', you can start the configurator.

Make sure the file name is correct. If known extensions are hidden, and you fill in 'PmxLicenseData.xml' as name, the file is actually called 'PmxLicenseData.xml'.

Afterwards you can run the config of the Produmex license configurator; this will show the following screen.

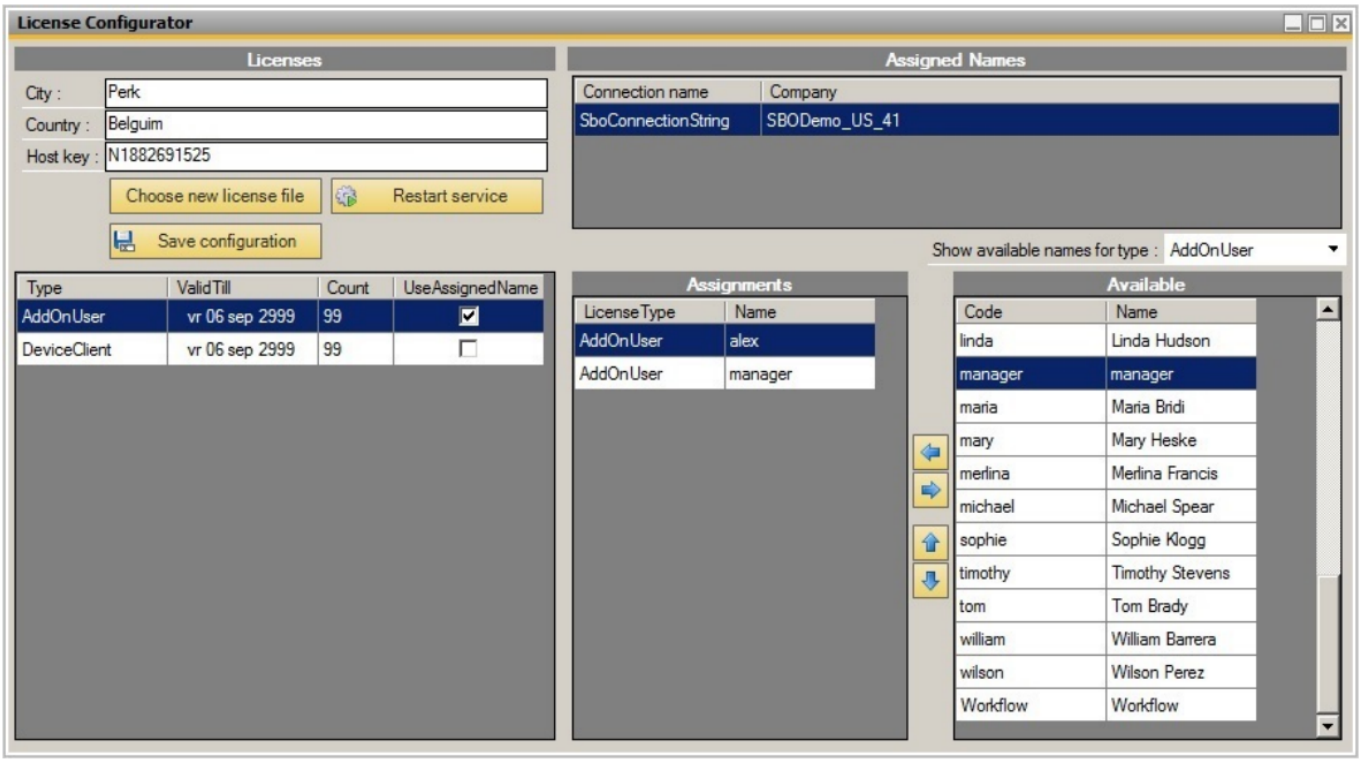


Clicking the "Run" button will start the license configurator.



Now you can link users to the license. This is only needed if 'UseAssignedName' is set to true.

After linking users, you need to click 'Save configuration'. Even if 'UseAssignedName' is set to false for all types, you need to save the configuration by clicking the "Save configuration button".



So now the configuration is done, and the only thing to do now is to (re)start the Produmex License service.

This can be done by clicking the “Restart service” button.

IMPORTANT: If you restart the service for the first time, and it does not start, make sure you have installed the COM License bridge AND .NET Framework 3.5 SP1.
(See “Prerequisites” section)

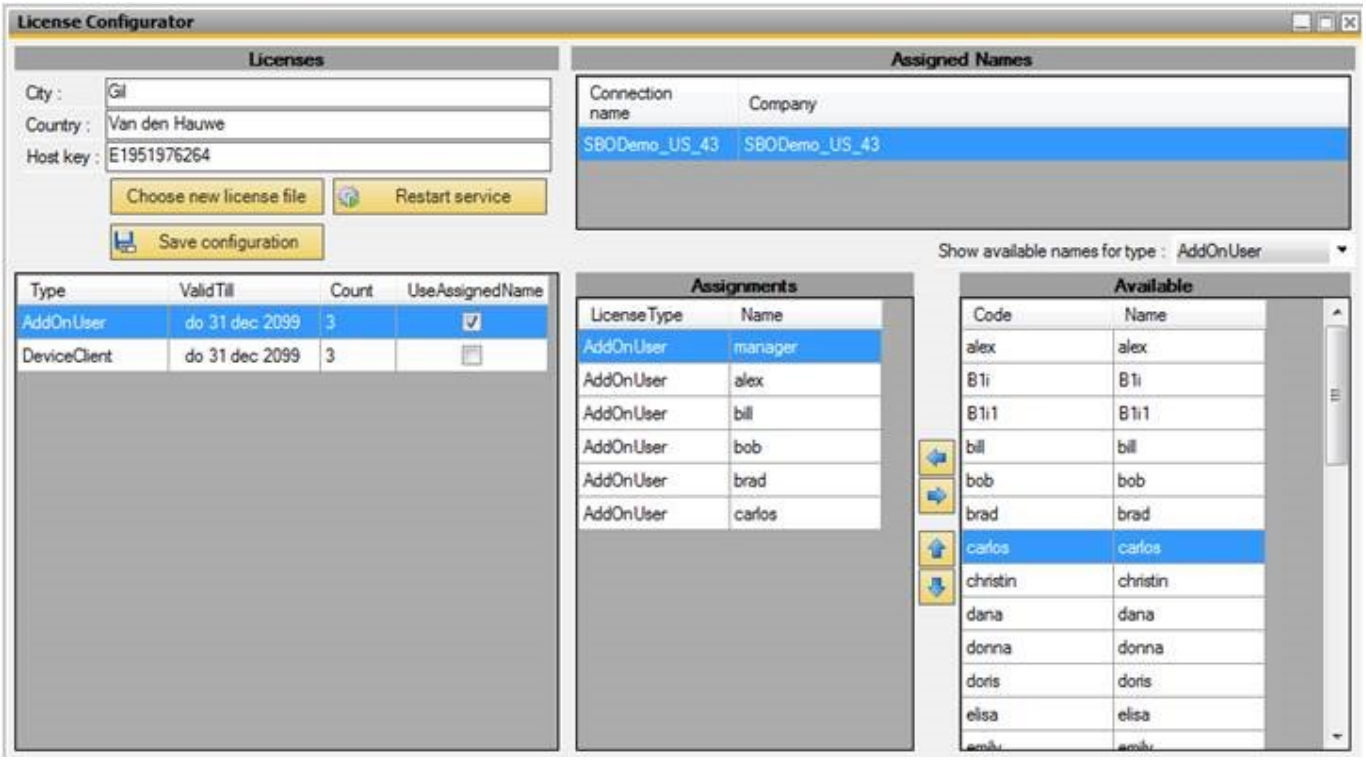
Note: When changes have been made to the configuration of the Produmex License, you need to restart the Produmex License service.

4.3. Types of license

4.3.1. Produmex Professional License

This is the license that is needed to run the add-on in SAP. On the license configuration this is called ‘AddOnUser’.

These licenses have to be ‘assigned’ to specific user(s).
This means that these ‘assigned’ user(s) are used to limit the group of users entitled for a PDMX License.
But it’s possible that you have for example only 3 licenses, and there are 6 users in the list of assigned users:



This will result in: the first 3 users from this list of 6 users that starts up the Produmex Add-on, will get a license.

(So within this list of 6, the principle of "first come, first served" is valid)

4.3.2. Produmex Terminal user

This is the license needed to run a flow on a device.
These are typically scanners or touchscreens.
On the license configuration this is called 'DeviceUser'.

These licenses are 'Unassigned' licenses.
So every running Produmex.Sbo.Logex.Execute.FatClient.exe, will occupy 1 license.
So this also works with the "first come, first served" principle.

4.3.3. Produmex 3PL license

This license is needed to use the additional functionality for 3PL invoicing.
On the license configuration this is called 'Mod_3PL'.

This license is an 'Unassigned' license.
There will be 99999 licenses available.

4.3.4. Produmex EDI license

This license is needed to use the additional functionality for EDI messages.

On the license configuration this is called ‘Mod_EDI’.

This license is an ‘Unassigned’ license.
There will be 99999 licenses available.

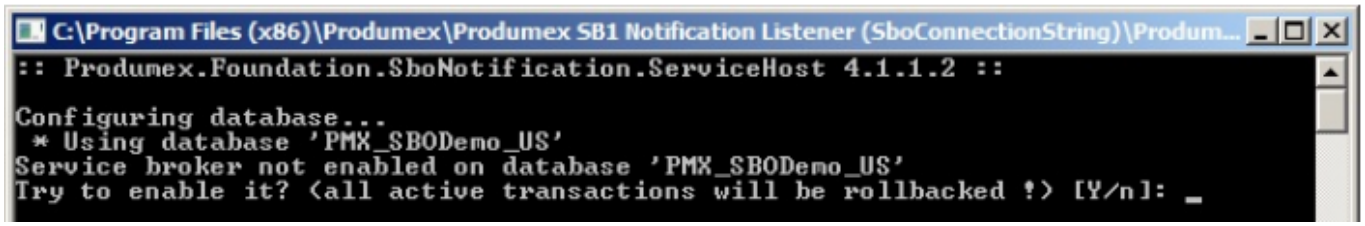
4.4.Produmex SB1 Notification listener

4.4.1 Configuring the database

In order to activate the SB1 Notification listener, you need to enable the service broker; first you click the config button of the Produmex SB1 Notification Listener. This will show the following screen:

Click the “Run in console Mode” button of the configuration database option. This will show the following console.

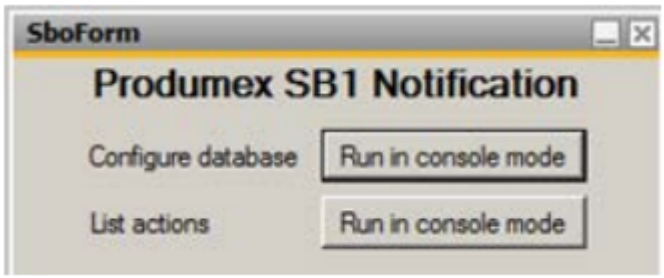
*Note: do **NOT** perform this action on an environment with active users.*



Simply hit ENTER to finish the database configuration.

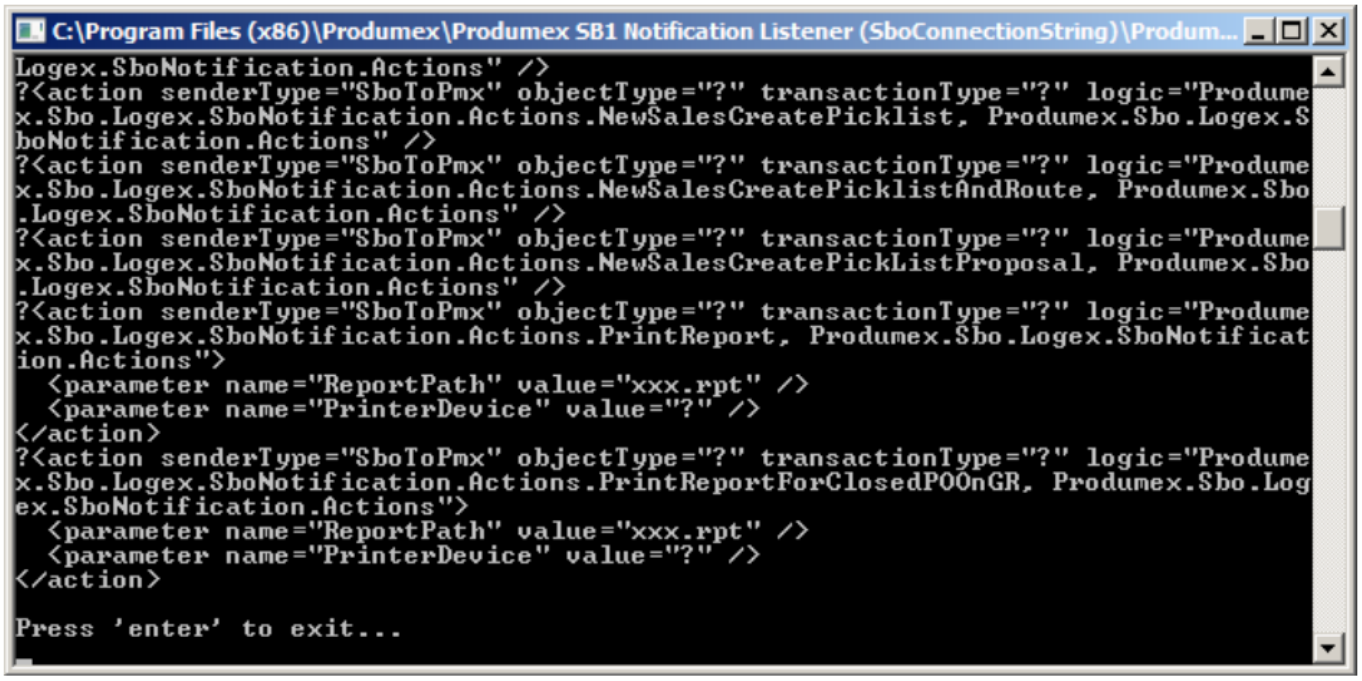
4.4.2 Listing the actions

You need to list any actions where that the Produmex SB1 Notificationlistener needs to listen to.
To do this click the “Run in console mode” of the list actions option.



The tool will add the actions to the config-file located in the installation folder of the Produmex SB1

Notificationlistener.



Afterwards press ENTER to exit.

5.Adaptation of stored procedures

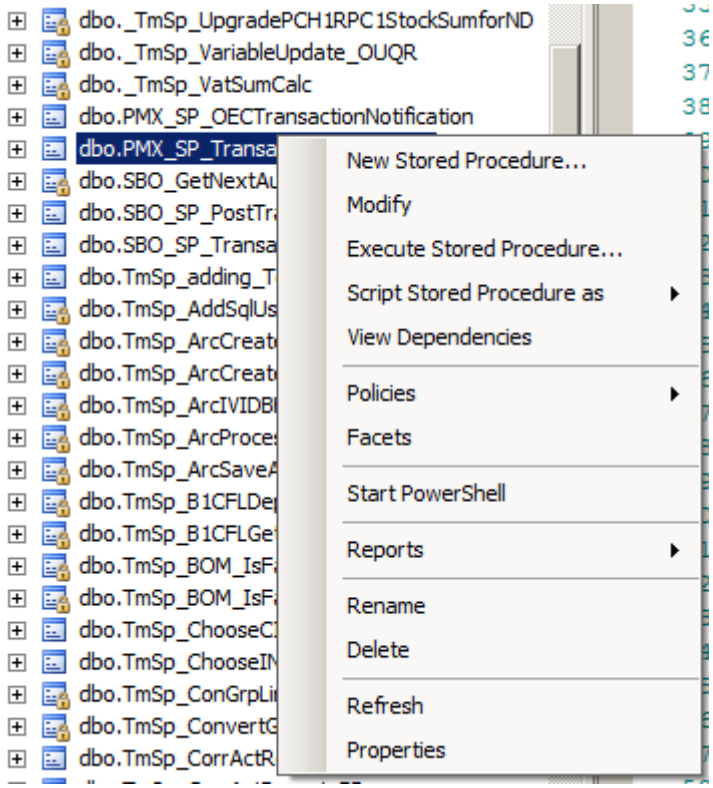
5.1. Enable the standard PMX stored procedure.

5.1.1. With Microsoft SQL Server

After the configuration is done you need to enable the (custom) stored procedures in the stored procedure of SAP named “SBO_TransactionNotification”.

When applying the Produmex Add-on the first time to a database you will also need to adapt the stored procedure “SBO_SP_TransactionNotification”

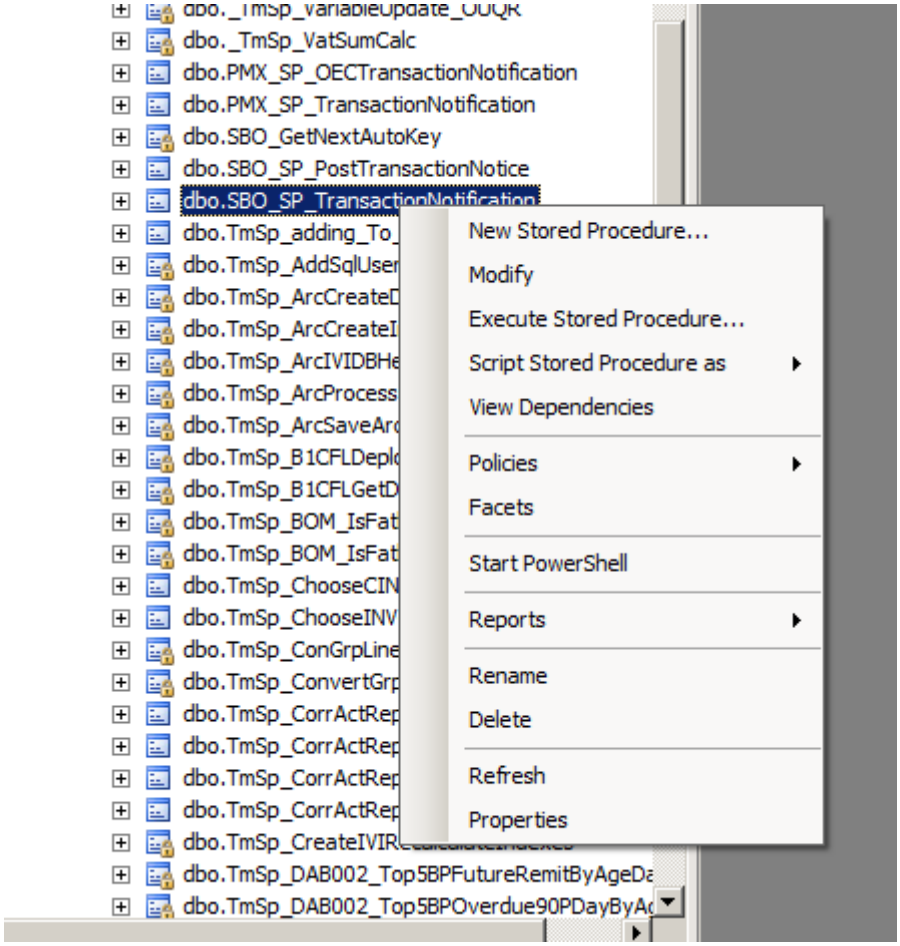
- To do this open “SQL Server Management Studio” and connect to your database server.
- Expand the “Databases” folder and locate the database to which you want to apply the Produmex Add-on.
- Open this database directory and open the “Programmability\Stored Procedures” subdirectory.
- Locate the “dbo.PMX_SP_TransactionNotification” stored procedure, right-click it and select “Modify”.



Locate the “Produmex Logex Addon Code” at the end of this stored procedure (see illustration below)

```
8113
8114 ----Following code must be added to the stored procedure SBO_SP_TransactionNotification
8115 ----to execute the PMX stored procedure:
8116
8117 ----************************************************************************************************************
8118 ----Start executing Produmex Logex Addon code
8119 ----************************************************************************************************************
8120 --BEGIN TRY
8121 --  EXEC [dbo].[PMX_SP_TransactionNotification]
8122 --  @object_type,
8123 --  @transaction_type,
8124 --  @num_of_cols_in_key,
8125 --  @list_of_key_cols_tab_del,
8126 --  @list_of_cols_val_tab_del,
8127 --  @error = @error OUTPUT,
8128 --  @error_message = @error_message OUTPUT
8129 --END TRY
8130 --BEGIN CATCH
8131 --  SET @error = ERROR_NUMBER()
8132 --  SET @error_message = ERROR_MESSAGE()
8133 --  DECLARE @msg as NVARCHAR(255)
8134 --  SET @msg = SUBSTRING('PMX_SP: sql error ' + CAST(ERROR_NUMBER() AS NVARCHAR) + ' : ' + ERROR_MESSAGE()
8135 --           + ISNULL( ' line ' + CAST(ERROR_LINE() AS NVARCHAR), '' ) + ISNULL( ' in ' + ERROR_PROCEDURE(), '' ),1,255)
8136 --  EXEC xp_logevent 999999, @msg, ERROR
8137 --END CATCH;
8138 ----************************************************************************************************************
8139 ----End executing Produmex Logex Addon code
8140 ----************************************************************************************************************
```

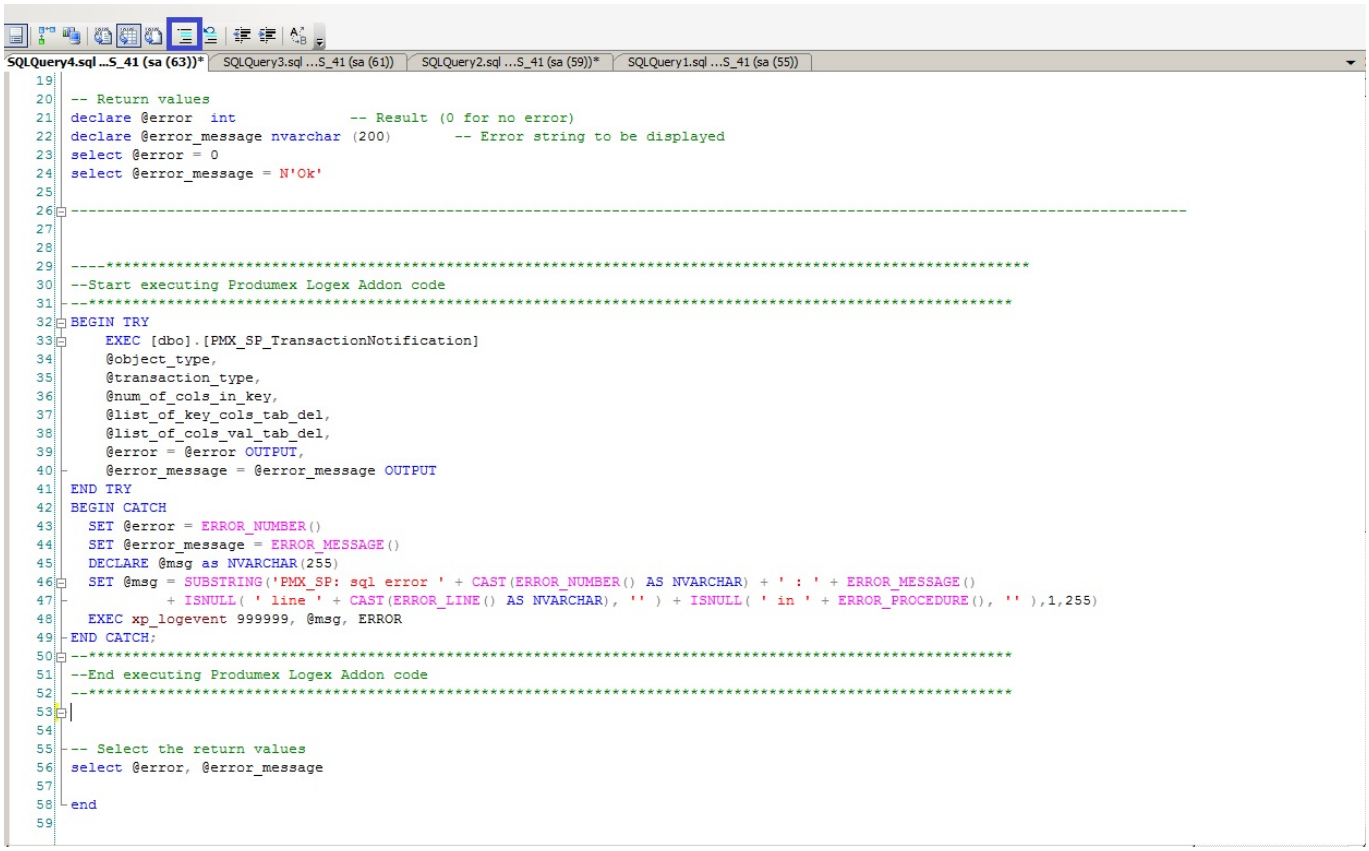
Copy the “Produmex Logex Addon Code”.
This code should now be pasted in the “SBO_SP_TransactionNotification” stored procedure, modify this stored procedure in the same way you modified the PMX_SP_TransactionNotification.



Paste the “Produmex Logex Addon Code” at the end of it. With a new installation you will see a marked area like “– ADD YOUR CODE HERE”.

```
277
278 ----Following code must be added to the stored procedure SBO_SP_TransactionNotification
279 ----to execute the PMX stored procedure:
280
281 ----************************************************************************************************************************
282 ----Start executing Produmex Logex Addon code for OEC
283 ----************************************************************************************************************************
284 --IF @error = 0
285 --BEGIN
286 --  BEGIN TRY
287 --      EXEC [dbo].[PMX_SP_OECTransactionNotification]
288 --      @object_type,
289 --      @transaction_type,
290 --      @num_of_cols_in_key,
291 --      @list_of_key_cols_tab_del,
292 --      @list_of_cols_val_tab_del,
293 --      @error = @error OUTPUT,
294 --      @error_message = @error_message OUTPUT
295 --  END TRY
296 --  BEGIN CATCH
297 --      SELECT @error = ERROR_NUMBER(), @error_message = ERROR_MESSAGE()
298 --      SET @msg = SUBSTRING('PMX_SP_NCF: sql error ' + CAST(ERROR_NUMBER() AS NVARCHAR) + ' : ' + ERROR_MESSAGE()
299 --          + ISNULL( ' line ' + CAST(ERROR_LINE() AS NVARCHAR), '' ) + ISNULL( ' in ' + ERROR_PROCEDURE(), '' ),1,255)
300 --      EXEC xp_logevent 999999, @msg, ERROR
301 --  END CATCH;
302 --END
303 ----************************************************************************************************************************
304 ----End executing Produmex Logex Addon code
305 ----************************************************************************************************************************
```

Afterwards you need to uncomment the SP by clicking the “uncomment” button in SQL management studio. The end result should look like this:



```
SQLQuery4.sql ...S_41 (sa (63))* | SQLQuery3.sql ...S_41 (sa (61)) | SQLQuery2.sql ...S_41 (sa (59))* | SQLQuery1.sql ...S_41 (sa (55))

19
20  -- Return values
21  declare @error  int             -- Result (0 for no error)
22  declare @error_message nvarchar (200)       -- Error string to be displayed
23  select @error = 0
24  select @error_message = N'Ok'
25
26  ------------------------------------------------------------------------------------------------------------------------
27
28
29  ----********************************************************************************************************
30  --Start executing Produmex Logex Addon code
31  --********************************************************************************************************
32  BEGIN TRY
33      EXEC [dbo].[PMX_SP_TransactionNotification]
34      @object_type,
35      @transaction_type,
36      @num_of_cols_in_key,
37      @list_of_key_cols_tab_del,
38      @list_of_cols_val_tab_del,
39      @error = @error OUTPUT,
40      @error_message = @error_message OUTPUT
41  END TRY
42  BEGIN CATCH
43    SET @error = ERROR_NUMBER()
44    SET @error_message = ERROR_MESSAGE()
45    DECLARE @msg as NVARCHAR(255)
46    SET @msg = SUBSTRING('PMX_SP: sql error ' + CAST(ERROR_NUMBER() AS NVARCHAR) + ' : ' + ERROR_MESSAGE()
47            + ISNULL( ' line ' + CAST(ERROR_LINE() AS NVARCHAR), '' ) + ISNULL( ' in ' + ERROR_PROCEDURE(), '' ),1,255)
48    EXEC xp_logevent 999999, @msg, ERROR
49  END CATCH;
50  --********************************************************************************************************
51  --End executing Produmex Logex Addon code
52  --********************************************************************************************************
53
54
55  -- Select the return values
56  select @error, @error_message
57
58  end
59
```

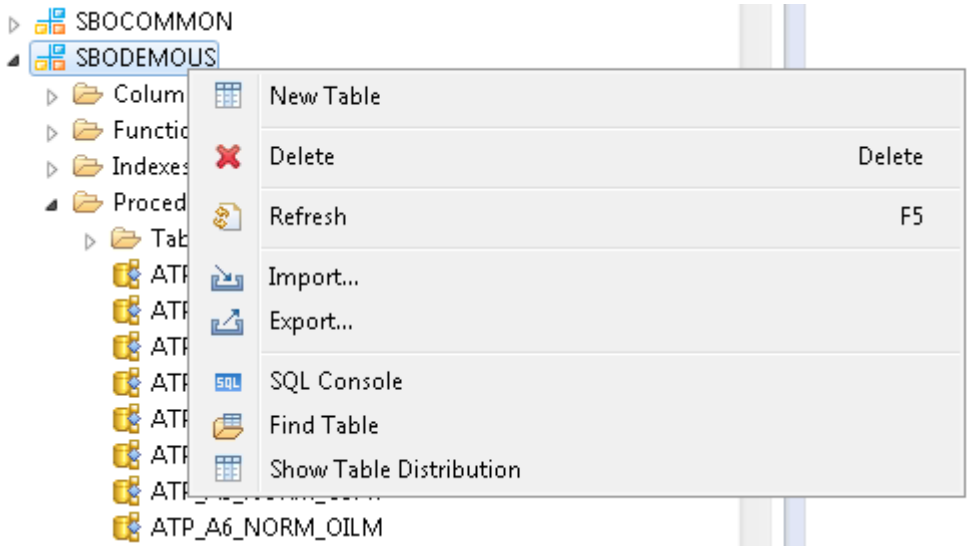
After these modifications. Execute the SBO_SP_TransactionNotification stored procedure.

5.1.2. With SAP HANA

After the configuration is done you need to enable the (custom) stored procedures in the stored procedure of SAP named “SBO_TRANSACTIONNOTIFICATION”.

When applying the Produmex Add-on the first time to a database you will also need to adapt the stored procedure “SBO_SP_TRANSACTIONNOTIFICATION”

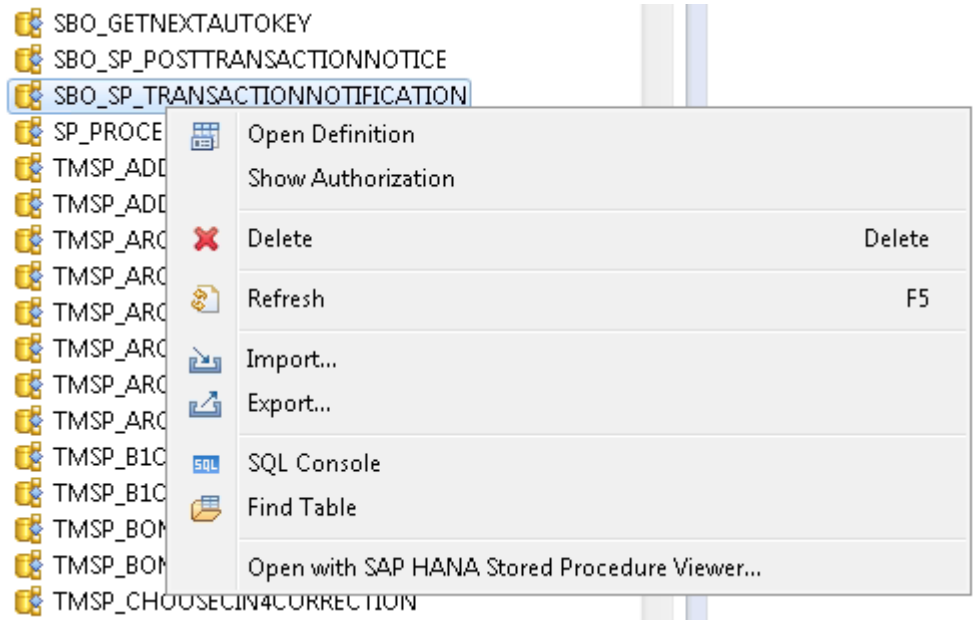
- To do this open “SAP HANA Studio” and connect to your SAP HANA server.
- Expand the “Catalog” folder and locate the schema to which you want to apply the Produmex Add-on.
- Right-click on this schema and select “SQL Console” to open a new SQL console



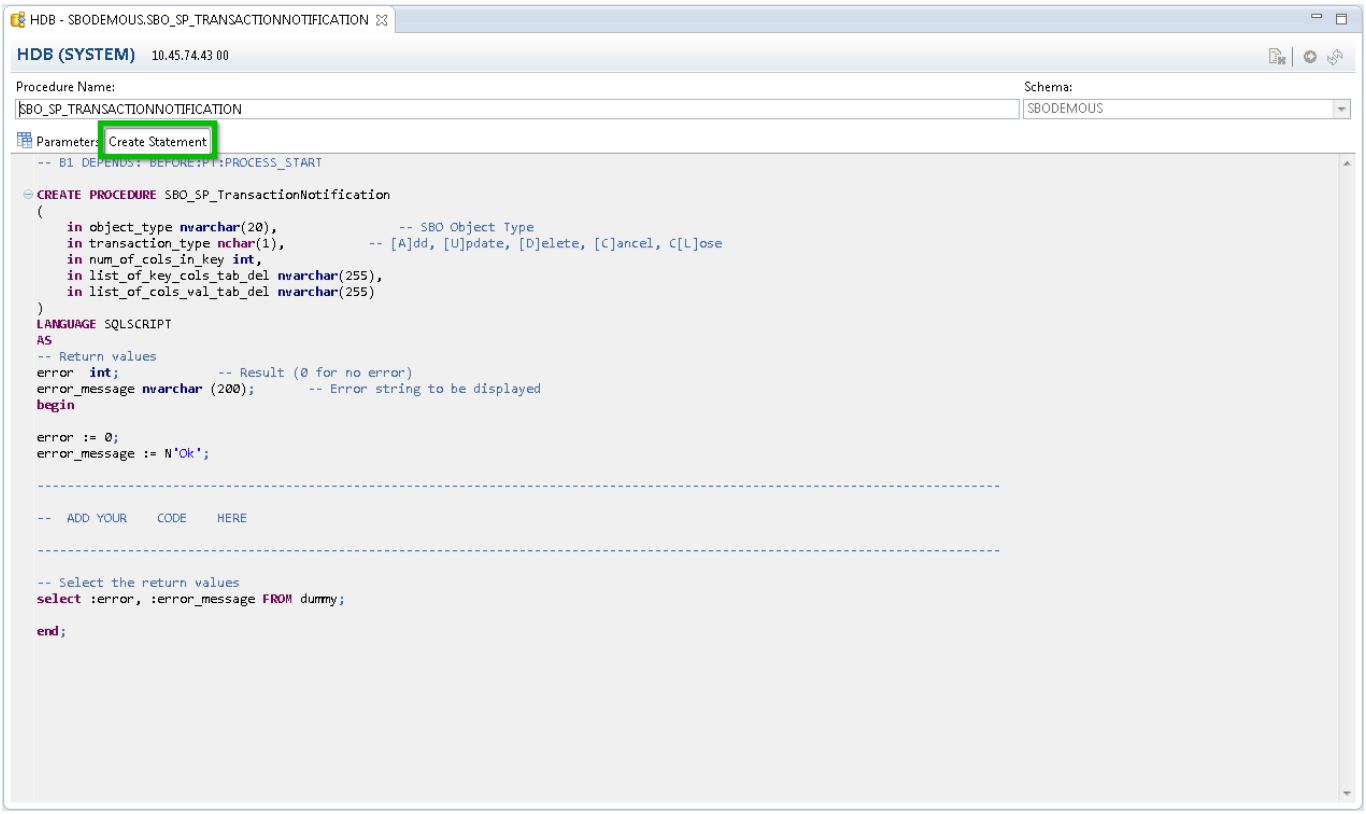
Keep this SQL console open during the whole process.

Then locate the “SBO_SP_TRANSACTIONNOTIFICATION” stored procedure:

- Expand the schema directory and open the “Procedures” subdirectory.
- Locate the “SBO_SP_TRANSACTIONNOTIFICATION” stored procedure, right-click it and select “Open Definition”.

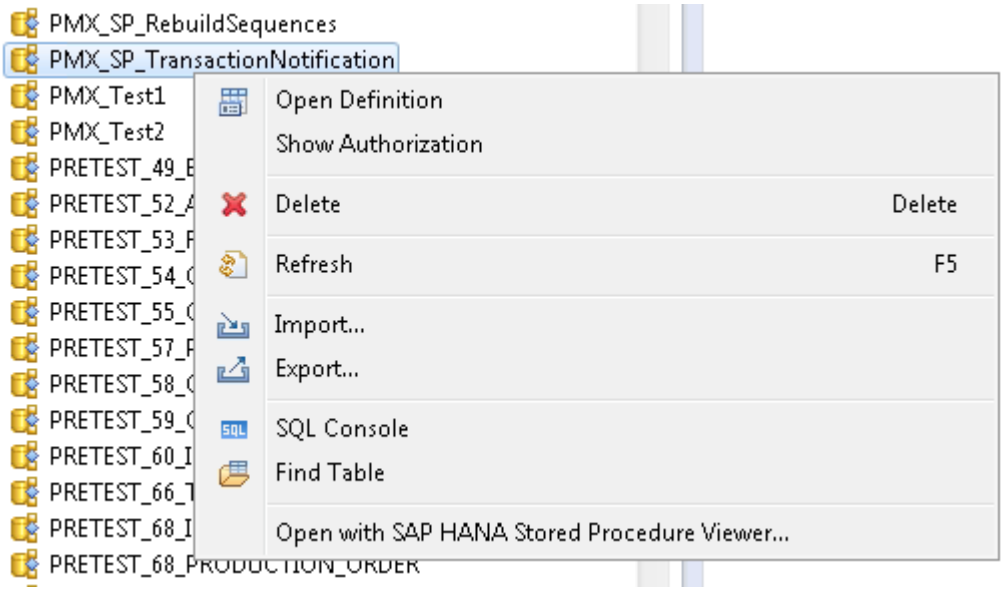


Open its content by opening the “Create statement” tab:

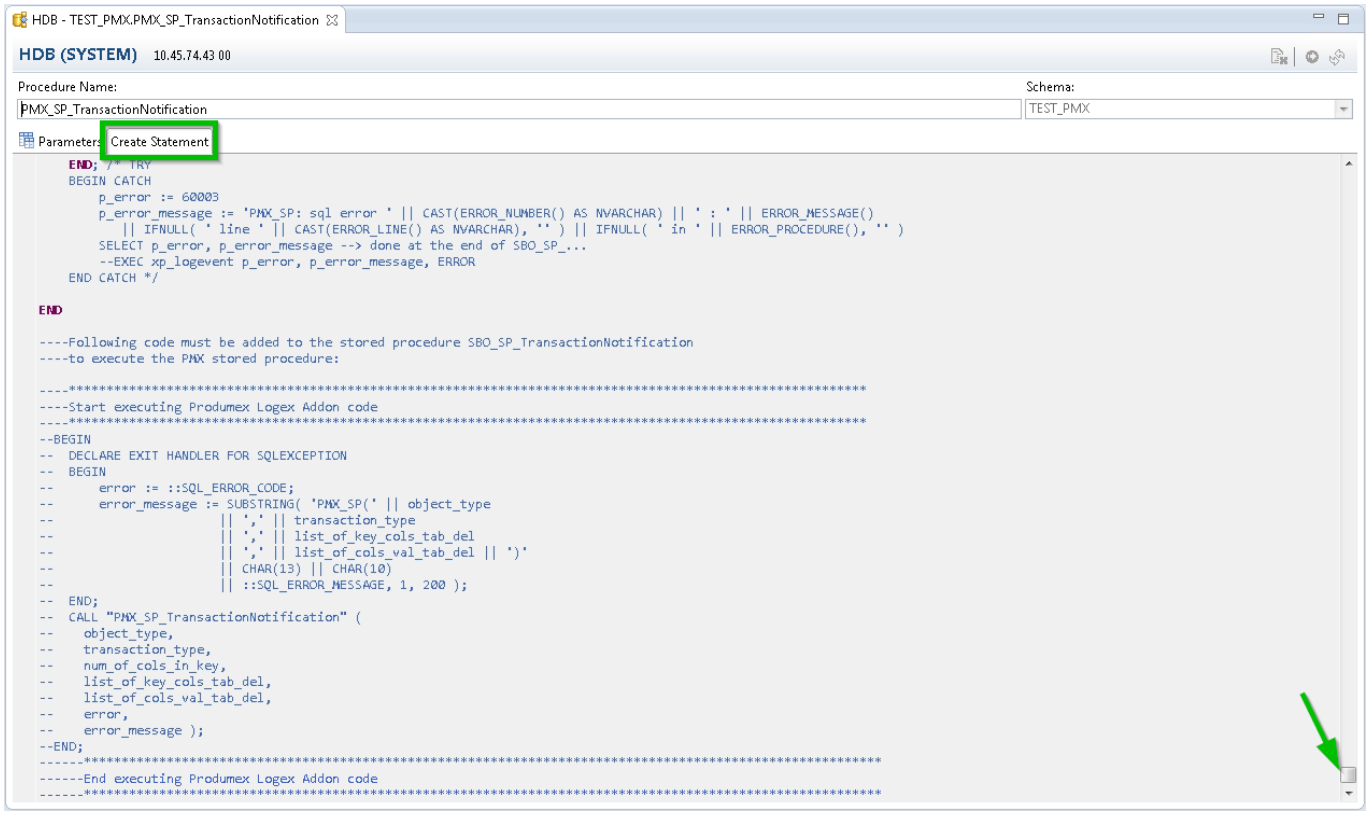


Copy the content into the SQL console.

Next, locate the “PMX_SP_TransactionNotification” stored procedure, right-click it and select “Open Definition”.



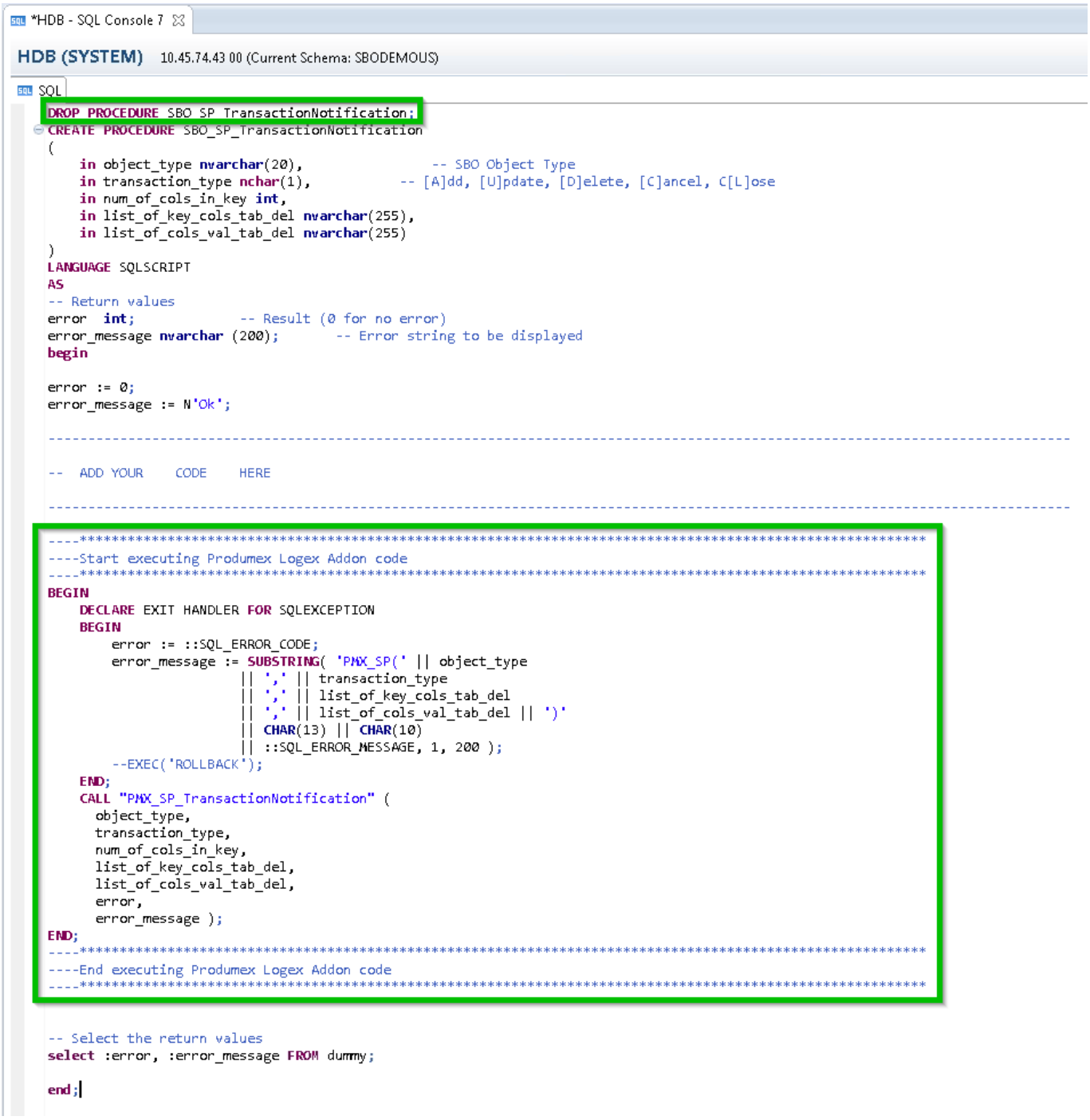
Open its content by opening the “Create statement” tab, and locate the “Produmex Logex Addon Code” at the end of this stored procedure (see illustration below)



- Copy the “Produmex Logex Addon Code”.
- This code should now be pasted into the SQL console, where you have already pasted the content of the “SBO_SP_TRANSACTIONNOTIFICATION” stored procedure. Paste the “Produmex Logex Addon Code” at the end of it. With a new installation you will see a marked area like “– ADD YOUR CODE HERE”.
- You also need to uncomment the copied code by removing the leading '–' from each line.
- Finally, add the following line on the top of your SQL console:

```
DROP PROCEDURE SBO_SP_TransactionNotification;
```

The SQL console should look like this



Finally, execute the code in your SQL console to modify the SBO_SP_TRANSACTIONNOTIFICATION procedure.

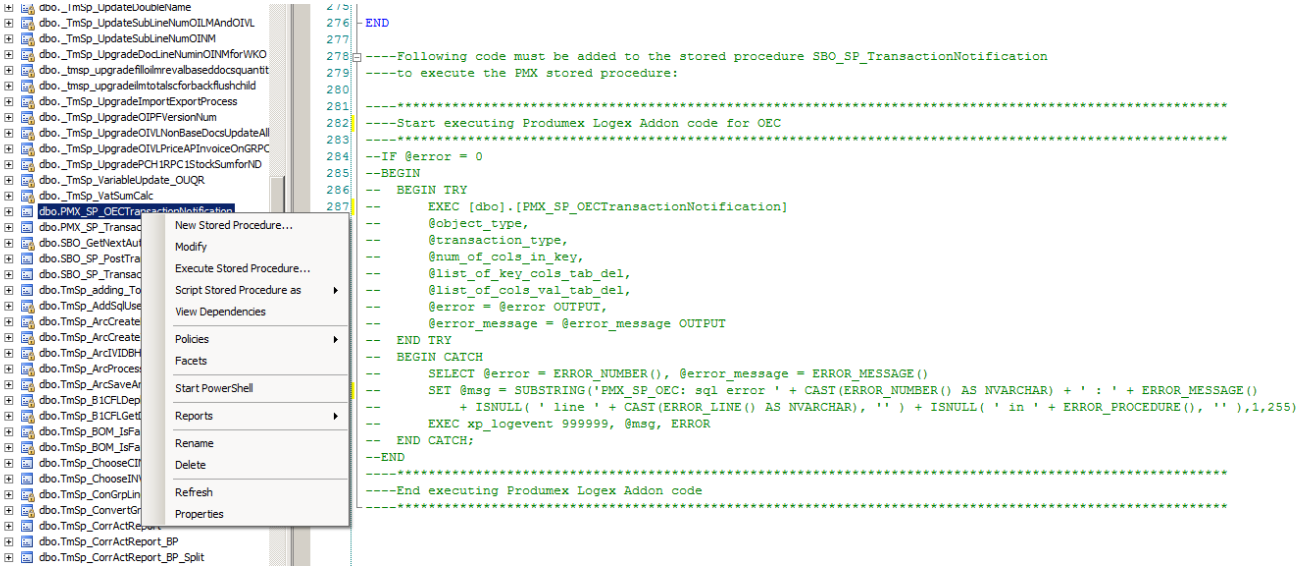
5.2. Enable a custom stored procedure.

When installing a custom build, it is possible a custom stored procedure is added to the database and needs to be modified in the same way as the standard stored procedure.

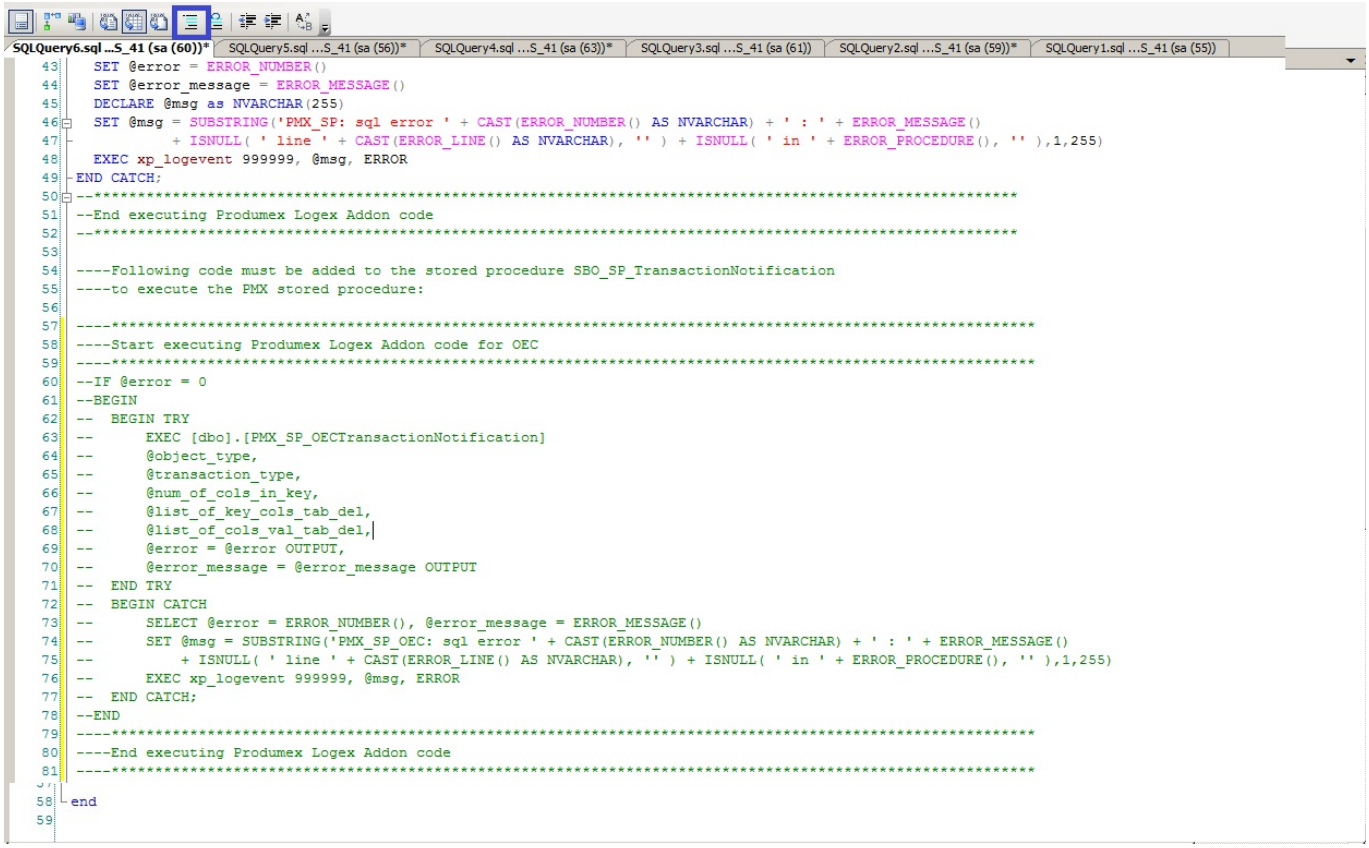
Note: Produmex custom development usually only requires a modification of the SBO_SP_transactionNotification stored procedure. It is possible other kind of SAP stored need to be modified, although unlikely.
If this is the case, the stored procedures will be added on the company database in the same way a custom TransactionNotification stored procedure is added.

If you are unsure if such a modification is required, please contact your designated support address (eg: yourcompanyname.support@produmex.com) and one of our helpdesk administrator will contact you as soon as possible.

First you need to modify the custom stored procedure. In this example: PMX_SP_OECTransactionNotification.



Copy the commented text and modify the SBO_SP_TransactionNotification again. Add the text and uncomment it.



The end result should look something like this:

```
----**************************************************************************************************************
--Start executing Produmex Logex Addon code
--**************************************************************************************************************
BEGIN TRY
    EXEC [dbo].[PMX_SP_TransactionNotification]
    @object_type,
    @transaction_type,
    @num_of_cols_in_key,
    @list_of_key_cols_tab_del,
    @list_of_cols_val_tab_del,
    @error = @error OUTPUT,
    @error_message = @error_message OUTPUT
END TRY
BEGIN CATCH
  SET @error = ERROR_NUMBER()
  SET @error_message = ERROR_MESSAGE()
  DECLARE @msg as NVARCHAR(255)
  SET @msg = SUBSTRING('PMX_SP: sql error ' + CAST(ERROR_NUMBER() AS NVARCHAR) + ' : ' + ERROR_MESSAGE()
           + ISNULL( ' line ' + CAST(ERROR_LINE() AS NVARCHAR), '' ) + ISNULL( ' in ' + ERROR_PROCEDURE(), '' ),1,255)
  EXEC xp_logevent 999999, @msg, ERROR
END CATCH;
--**************************************************************************************************************
--End executing Produmex Logex Addon code
--**************************************************************************************************************

--Following code must be added to the stored procedure SBO_SP_TransactionNotification
--to execute the PMX stored procedure:

--**************************************************************************************************************
--Start executing Produmex Logex Addon code for OEC
--**************************************************************************************************************
IF @error = 0
BEGIN
    BEGIN TRY
        EXEC [dbo].[PMX_SP_OECTransactionNotification]
        @object_type,
        @transaction_type,
        @num_of_cols_in_key,
        @list_of_key_cols_tab_del,
        @list_of_cols_val_tab_del,
        @error = @error OUTPUT,
```

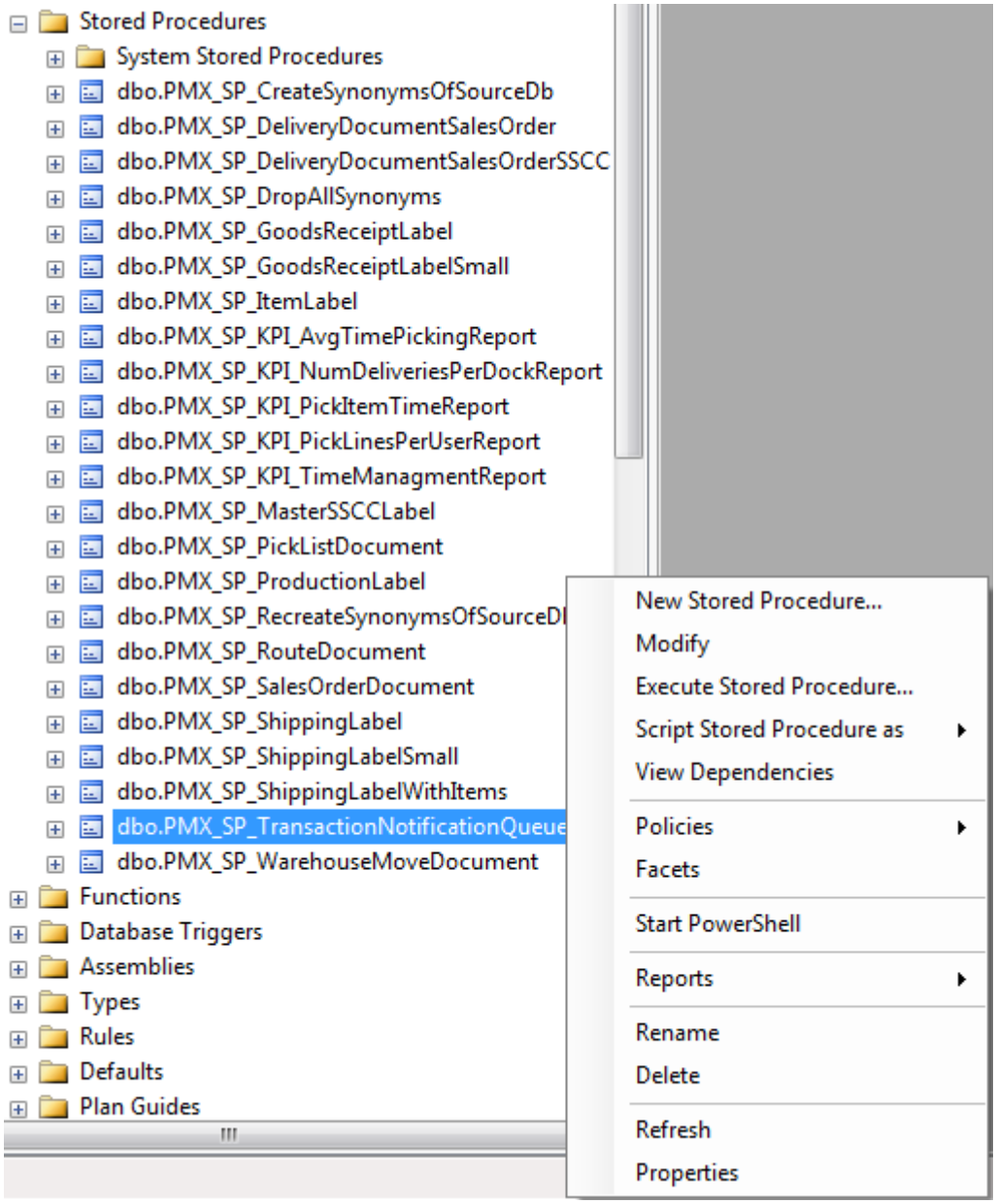
After these modifications. Execute the SBO_SP_TransactionNotification stored procedure.

5.2. Enable the Notification Listener stored procedure

After the Notification Listener configuration is done you need to enable the stored procedures in the stored procedure of SAP named “SBO_TransactionNotification”.

This step is only necessary if you intend to use the SB1 Notification Listener.

- To do this open “SQL Server Management Studio” and connect to your database server.
- Expand the “Databases” folder and locate the **PMX database** (not the Company database) to which you want to apply the Produmex Add-on.
- Open this database directory and open the “Programmability\Stored Procedures” subdirectory.
- Locate the “dbo.PMX_SP_TransactionNotificationQueue” stored procedure, right-click it and select “Modify”.

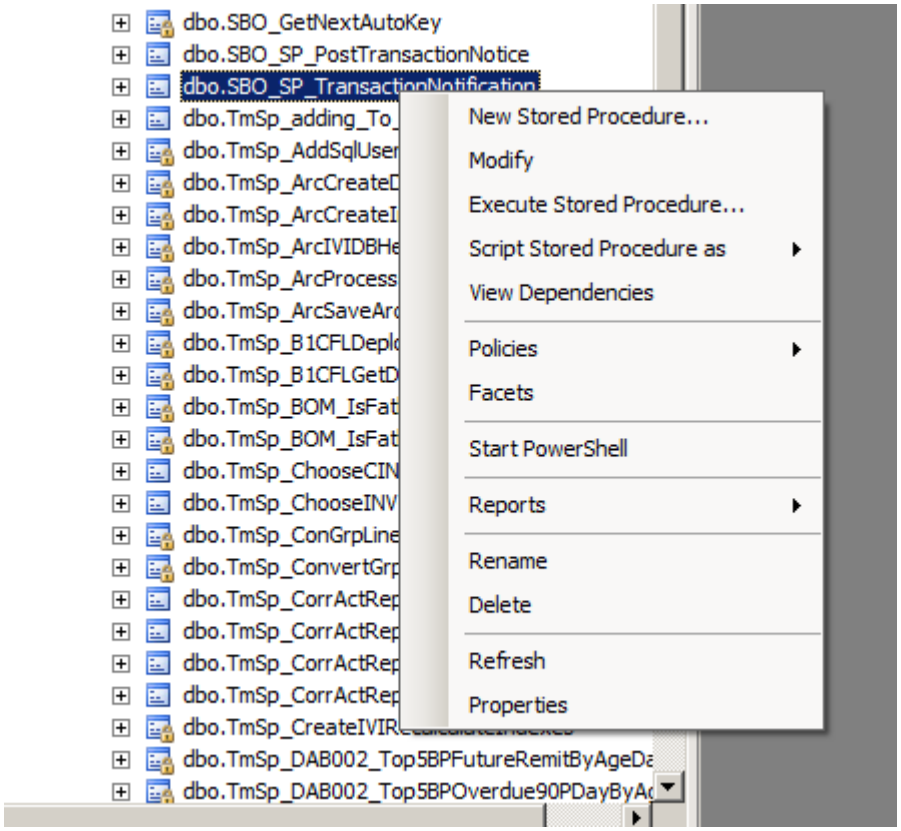


Locate the “Produmex SboNotification Queue Code” at the end of this stored procedure (see illustration below)

```
----Following code must be added to the stored procedure SBO_SP_TransactionNotification
----to execute the PMX stored procedure:

----************************************************************************************************************
----Start executing Produmex SboNotification Queue code
----************************************************************************************************************
--IF @error = 0 BEGIN
--  BEGIN TRY
--      EXEC [EXTRA-DB].[dbo].[PMX_SP_TransactionNotificationQueue]
--      @object_type,
--      @transaction_type,
--      @num_of_cols_in_key,
--      @list_of_key_cols_tab_del,
--      @list_of_cols_val_tab_del,
--      @error = @error OUTPUT,
--      @error_message = @error_message OUTPUT
--  END TRY
--  BEGIN CATCH
--      SELECT @error = ERROR_NUMBER(), @error_message = ERROR_MESSAGE()
--      DECLARE @msg2 as NVARCHAR(255)
--      SET @msg2 = SUBSTRING('PMX_NQ_SP: sql error ' + CAST(ERROR_NUMBER() AS NVARCHAR) + ' : ' + ERROR_MESSAGE()
--              + ISNULL( ' line ' + CAST(ERROR_LINE() AS NVARCHAR), '' ) + ISNULL( ' in ' + ERROR_PROCEDURE(), '' ),1,255)
--      EXEC xp_logevent 999999, @msg2, ERROR
--  END CATCH
--END
----************************************************************************************************************
----End executing Produmex SboNotification Queue code
----************************************************************************************************************
```

Copy the “Produmex SboNotification Queue Code”.
This code should now be pasted in the “SBO_SP_TransactionNotification” stored procedure, in the **Company database**. Modify this stored procedure in the same way you modified the PMX_SP_TransactionNotificationQueue

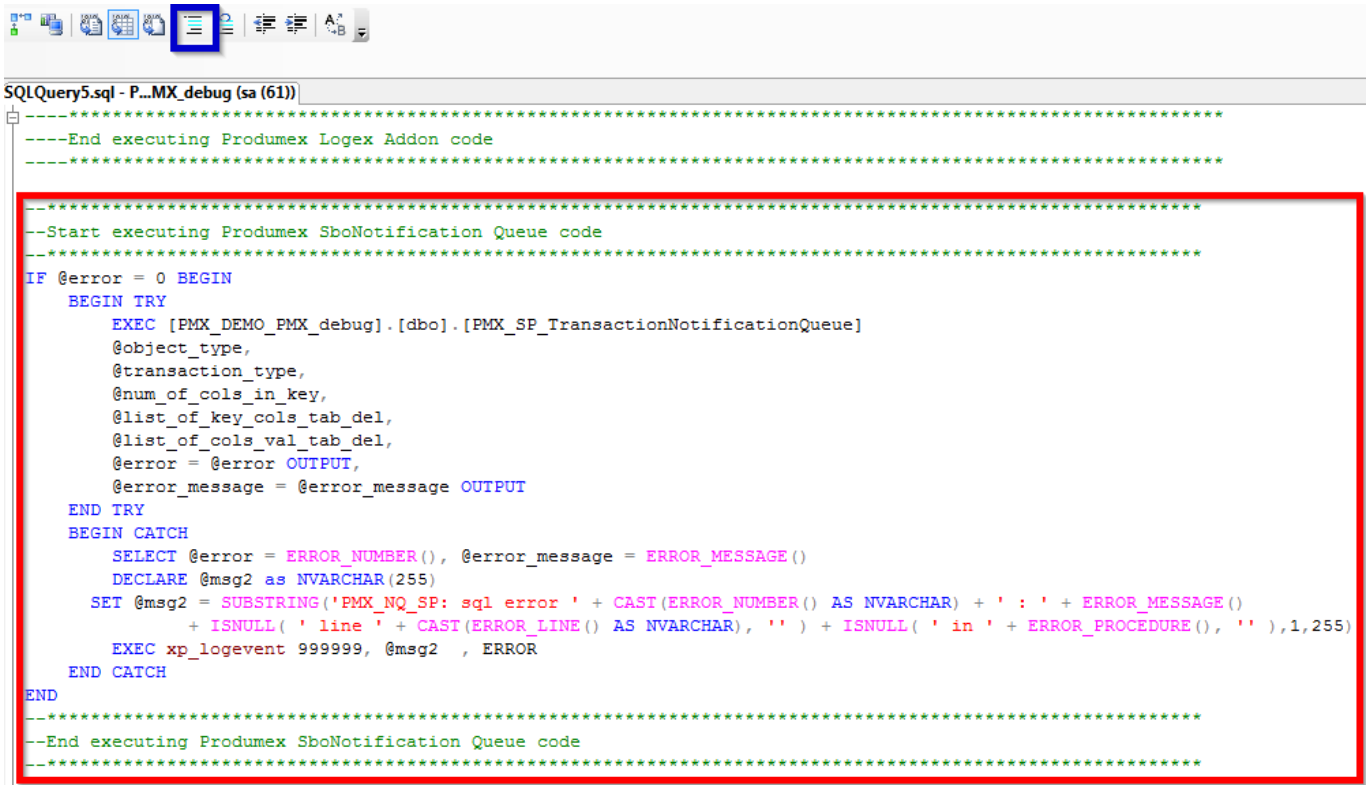


Paste the “Produmex SboNotification Queue Code” at the end of it, right after the code you have copied for the Produmex Addon stored procedure (see “Enable the standard PMX stored procedure”).

```
----************************************************************************************************************
----End executing Produmex Logex Addon code
----************************************************************************************************************

----************************************************************************************************************
----Start executing Produmex SboNotification Queue code
----************************************************************************************************************
--IF @error = 0 BEGIN
--  BEGIN TRY
--      EXEC [PMX_DEMO_PMX_debug].[dbo].[PMX_SP_TransactionNotificationQueue]
--      @object_type,
--      @transaction_type,
--      @num_of_cols_in_key,
--      @list_of_key_cols_tab_del,
--      @list_of_cols_val_tab_del,
--      @error = @error OUTPUT,
--      @error_message = @error_message OUTPUT
--  END TRY
--  BEGIN CATCH
--      SELECT @error = ERROR_NUMBER(), @error_message = ERROR_MESSAGE()
--      DECLARE @msg2 as NVARCHAR(255)
--      SET @msg2 = SUBSTRING('PMX_NQ_SP: sql error ' + CAST(ERROR_NUMBER() AS NVARCHAR) + ' : ' + ERROR_MESSAGE()
--               + ISNULL( ' line ' + CAST(ERROR_LINE() AS NVARCHAR), '' ) + ISNULL( ' in ' + ERROR_PROCEDURE(), '' ),1,255)
--      EXEC xp_logevent 999999, @msg2  , ERROR
--  END CATCH
--END
----************************************************************************************************************
----End executing Produmex SboNotification Queue code
----************************************************************************************************************
```

Afterwards you need to uncomment the SP by clicking the “uncomment” button in SQL management studio.
The end result should look like this:



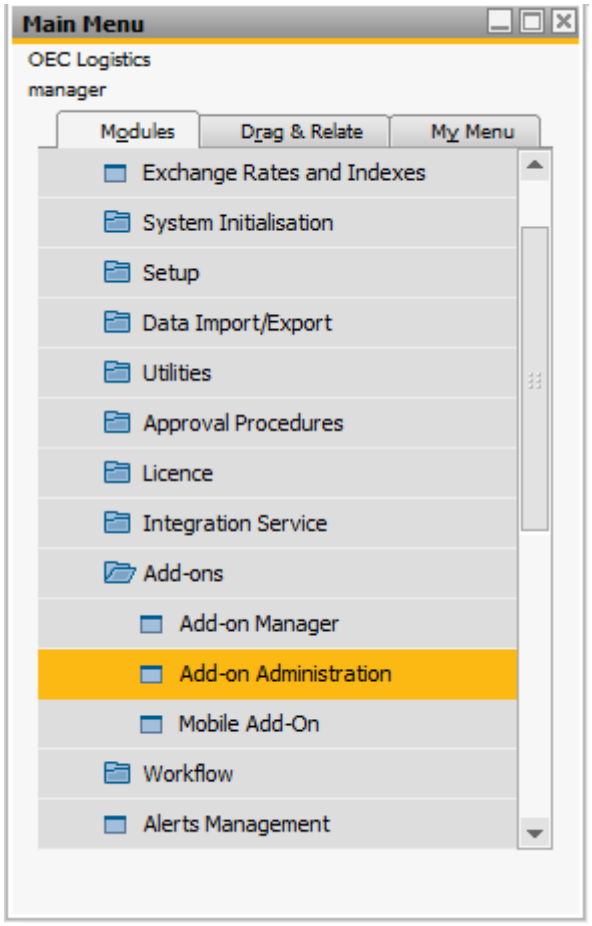
After these modifications. Execute the SBO_SP_TransactionNotification stored procedure.

6. Registering the Produmex add-on

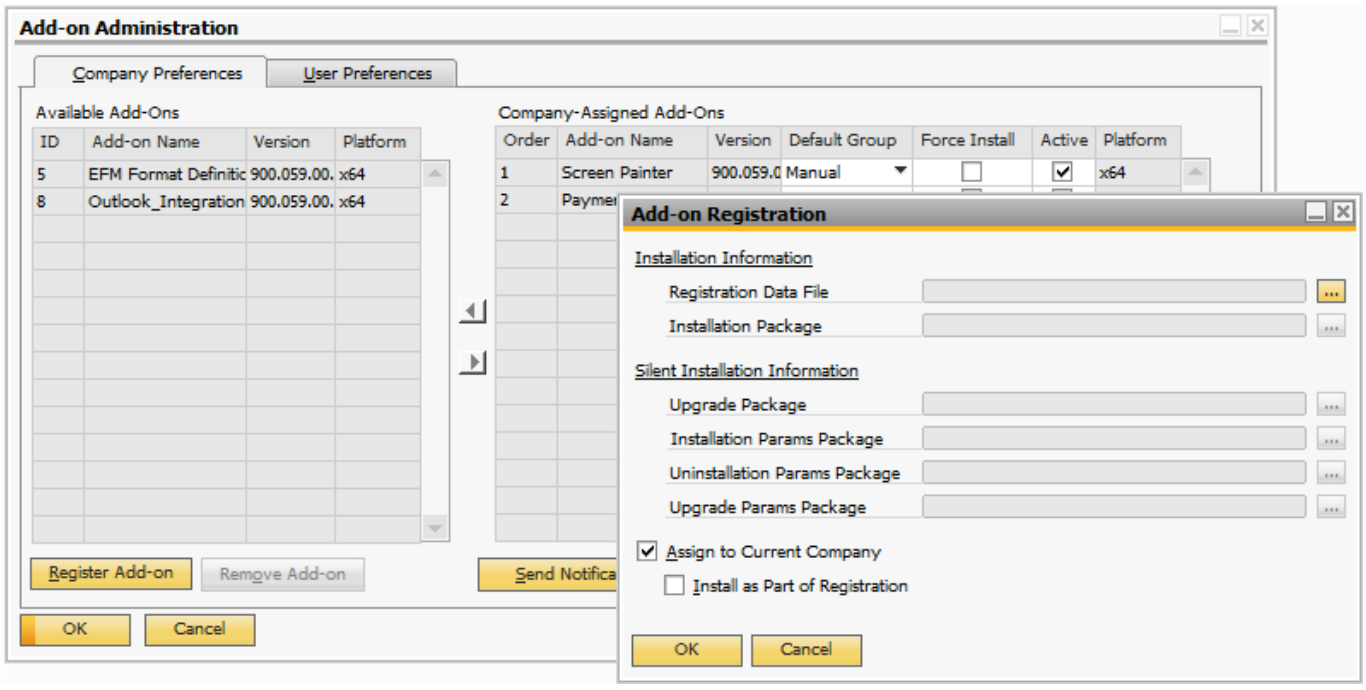
For our next step we need to register the Produmex add-on component in Sap Business One.

Note: Make sure you run SAP Business One Client as administrator and use the 32-bit version.
Sap Business One Client 64-bit is not supported.

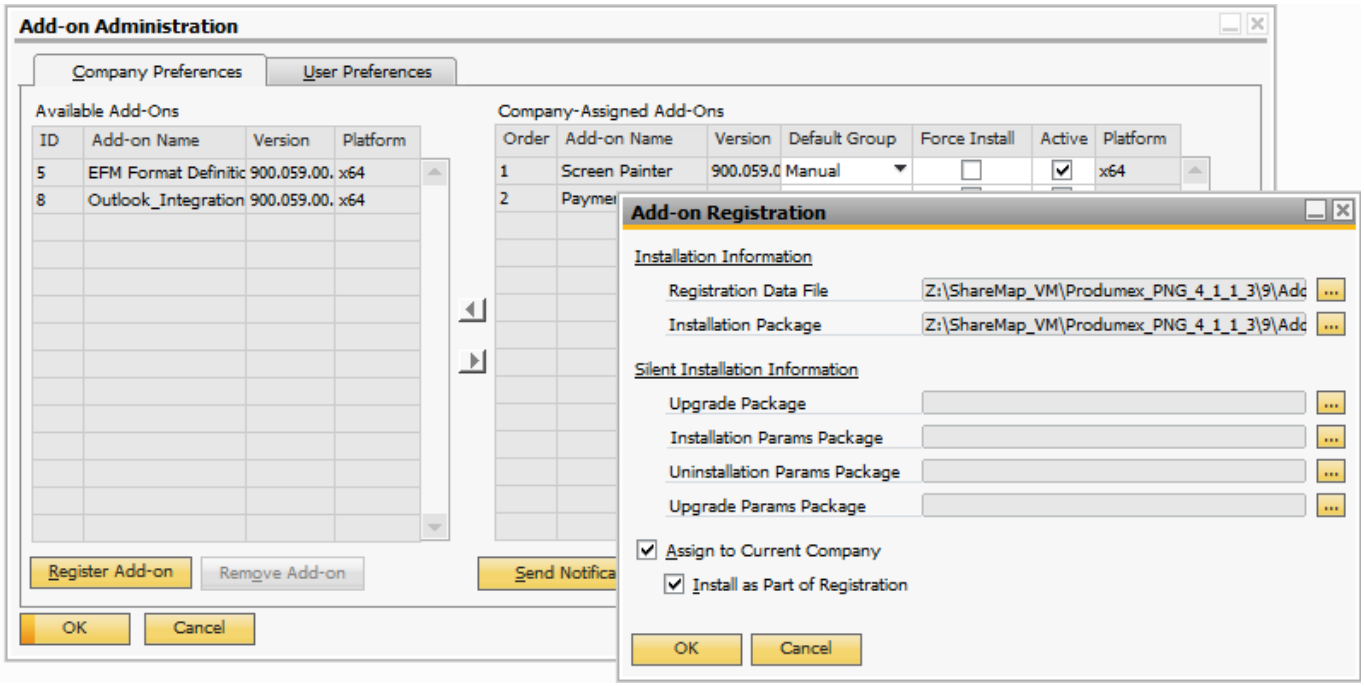
- In SAP Business One open the “Administration” module and then select “Add-On Administration”



- Select “Register Add-On” and select the “Produmex AddOnLoader.ard” file that can be found in the installation file “.... \9\AddOnLoader”

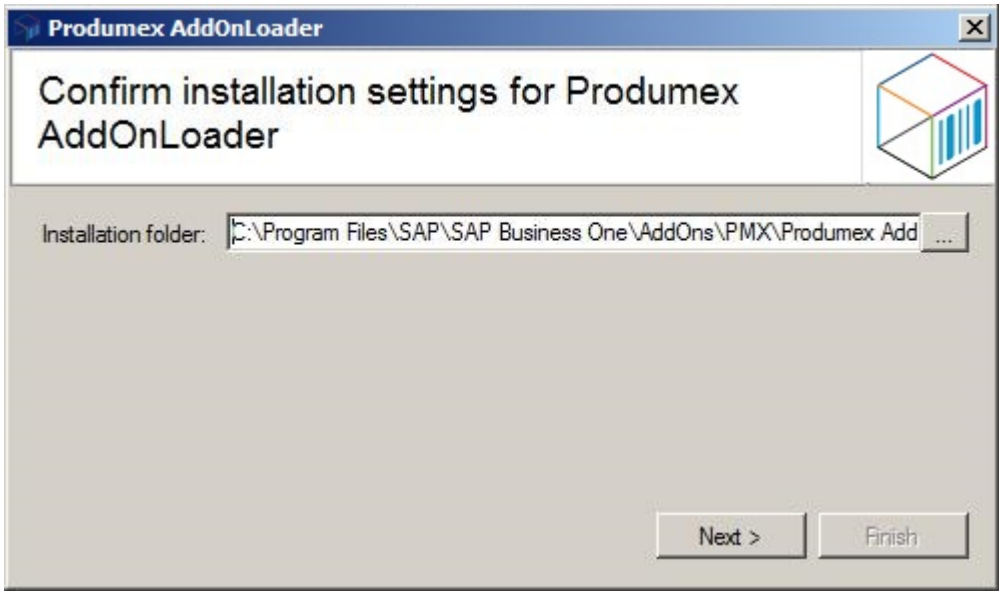


- Selecting this file will also open the associated add-on installation package

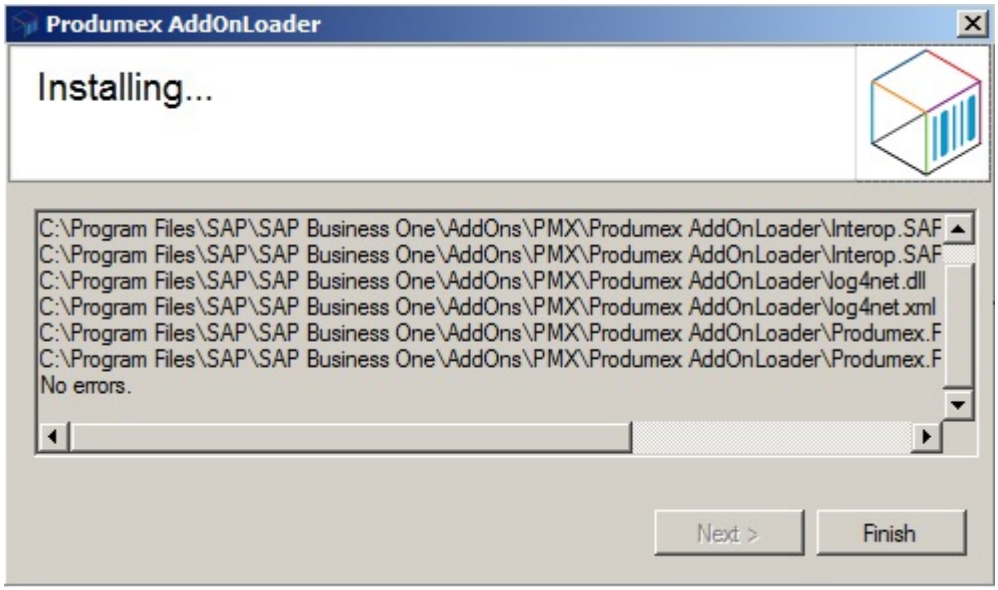


- Select the option “install as part of my registration”.

Select the installation folder, then press next.

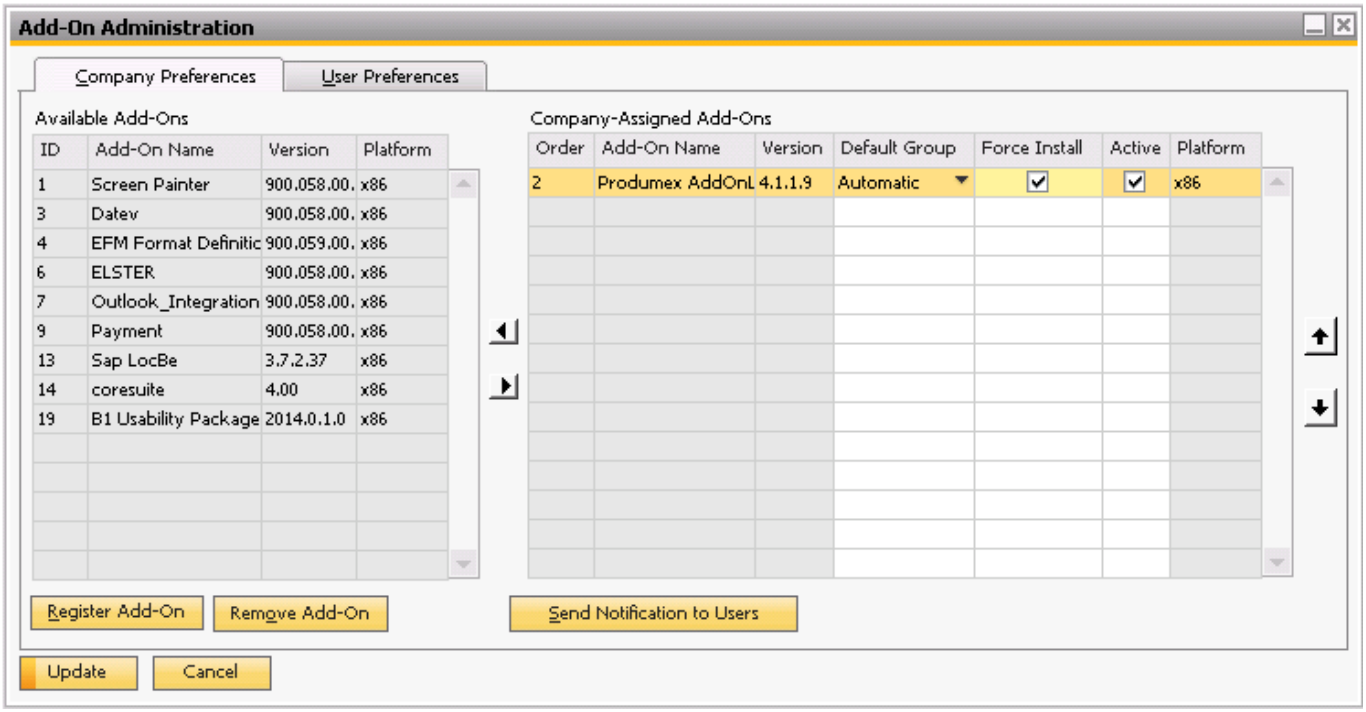


The installer opens and starts installing the Produmex add-on. Following the installation, SAP Business One needs to close and be restarted.



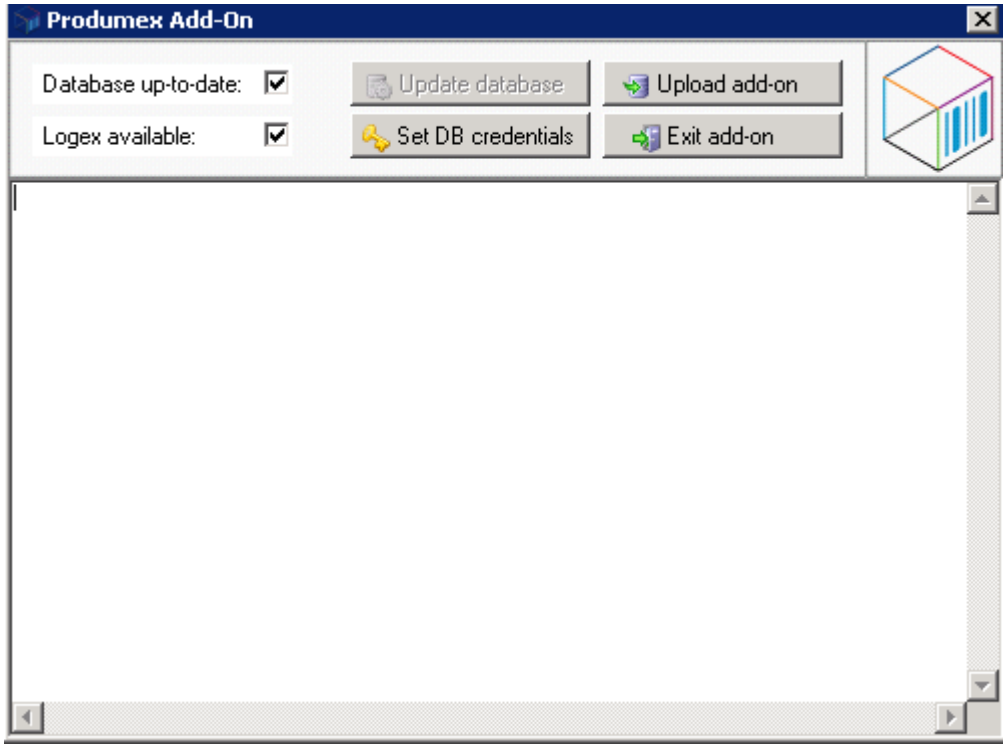
Restart SBO, open the “Administration” module and then select “Add-On Administration”.

- In the “Company Preferences Tab” select the Produmex Add-On and tick the options “Active”, “Automatic” and “Force Install”. Then click update.



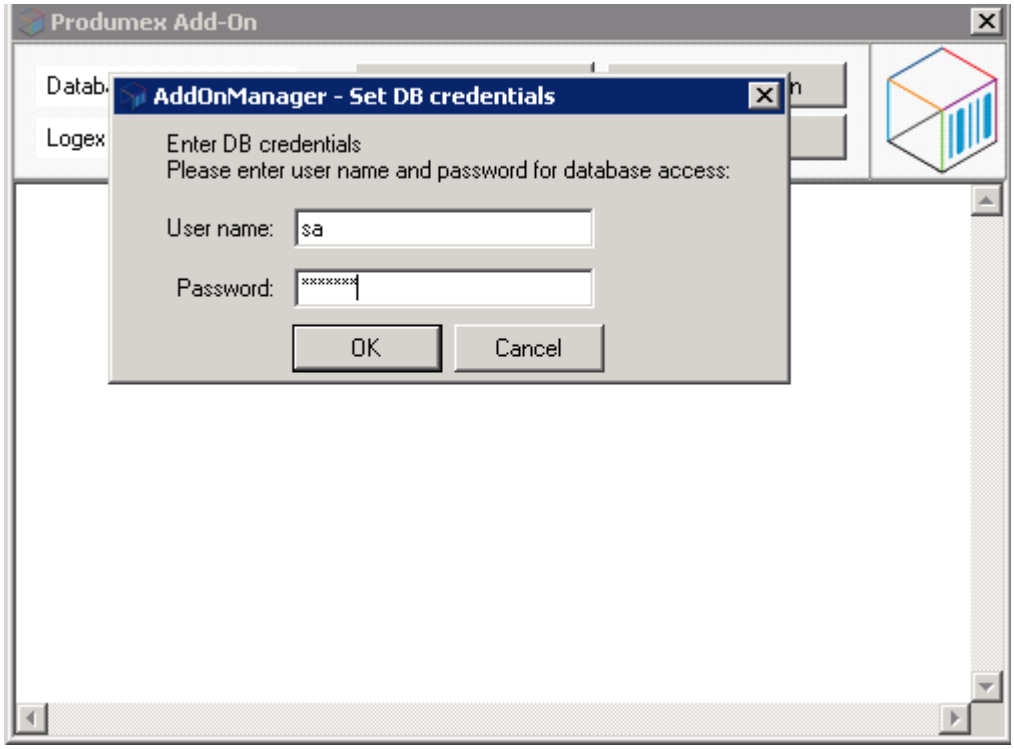
- In the “User Preferences Tab”, select the Produmex Add-On, select the user ‘manager’ and verify that for the Produmex Add-On the preferences are set to automatic.
- Next go to “Add-On Manager” function, select “installed add-ons”.
- If the Produmex Add-On is not running, select it and click “start”.

The following screen appears:



First click Update database to perform the needed database changes. (Only if database is not up to date yet).

Click the button ‘Set DB Credentials’ to provide the needed data.

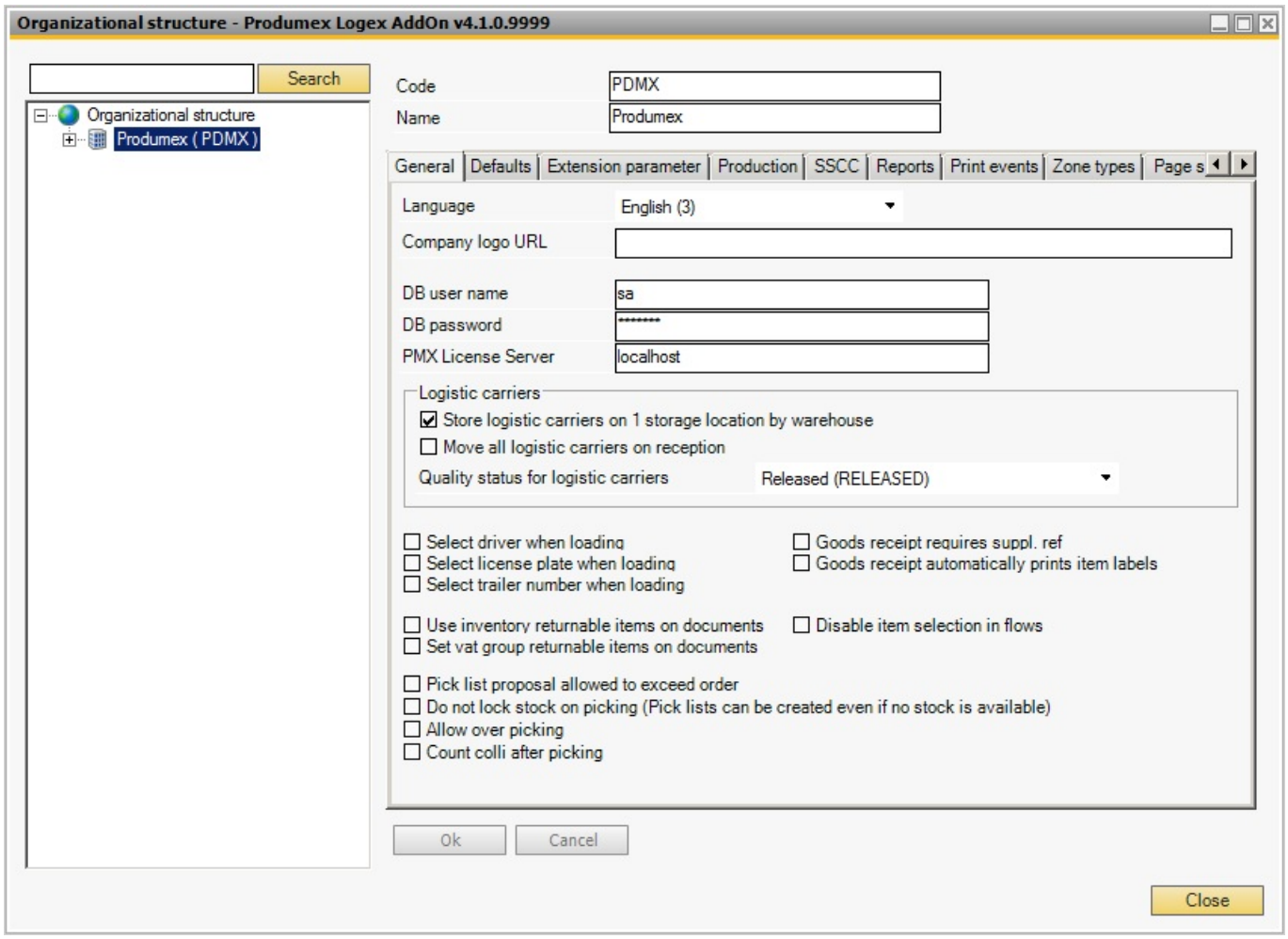


When credentials are set, you can click the button ‘Exit Add-on’. This will start downloading the needed files for the add-on.

The Produmex Add-On is now installed and ready to be used.

7.Configuration for clients

7.1.Organizational structure



Make sure the IP address or host name of the server where the PMX License Server is running is filled in, add-on clients will require this to be able to connect.

You can do this initially on the SBO license server itself because the add-on will try to connect locally if this field is empty.

If it is not possible to run the add-on on the machine running the PMX License Server, you will have to enter this information in the database, after creating the company element. Table “PMX_OSCO”, field “SboLicenseServerAddress”: only enter the IP address or host name, no port or other information is allowed.

8.Performing a version update

8.1.Uninstalling and installing the components.

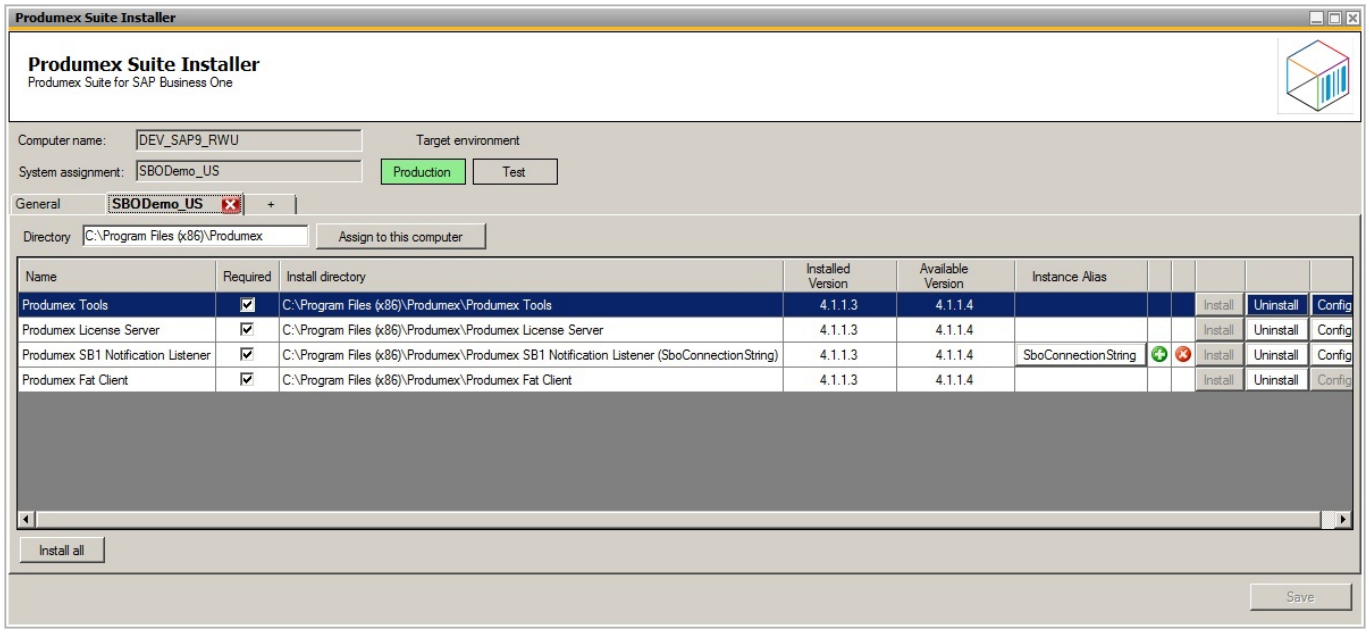
Installing a new version of PDMX suite over an older version is similar to installing a completely new version. This chapter will explain every step that needs to be taken to perform a version update. Seeing some steps are equal to the steps of a completely new installation, this chapter will not go into detail on these steps. For more details, please refer to the instructions described in the previous chapters.

First, make sure **no one is logged in the SAP live environment, neither SAP users nor Device-clients**. To verify this, check the Task manager and disconnect every user that still has a connection open to the server.

Device-clients like touchscreen-terminals and scanners keep most of their data in cache, such as company settings and any installation files. When these devices boot, they will connect to the server and retrieve the new scripts and other installation files.

As a best practice, copy the configuration file *(ProdumexInstallConfig.xml)* of your previous installation in the ProdumexSuiteInstaller directory of your new version. In this way you will not have to specify your SAP Business One databases manually.

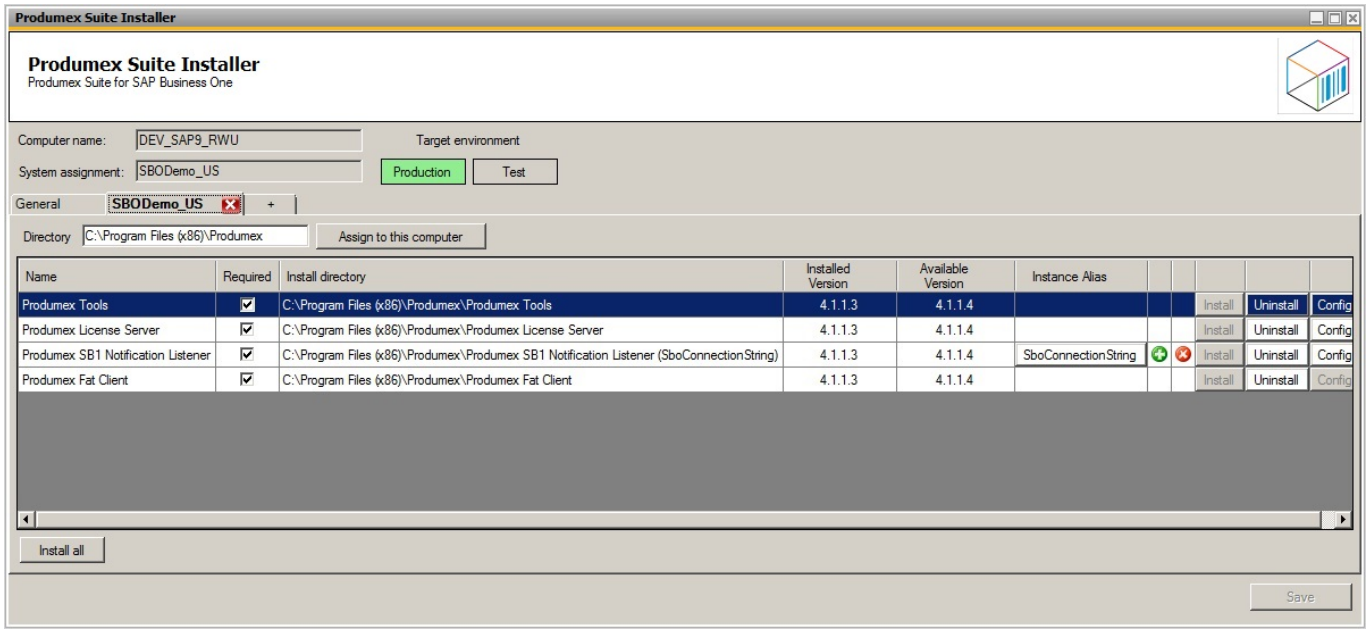
Second, we need to remove the old components. To do this, start the Produmex Suite installer **as an administrator**.



Then, click the uninstall button of each component to remove the component.

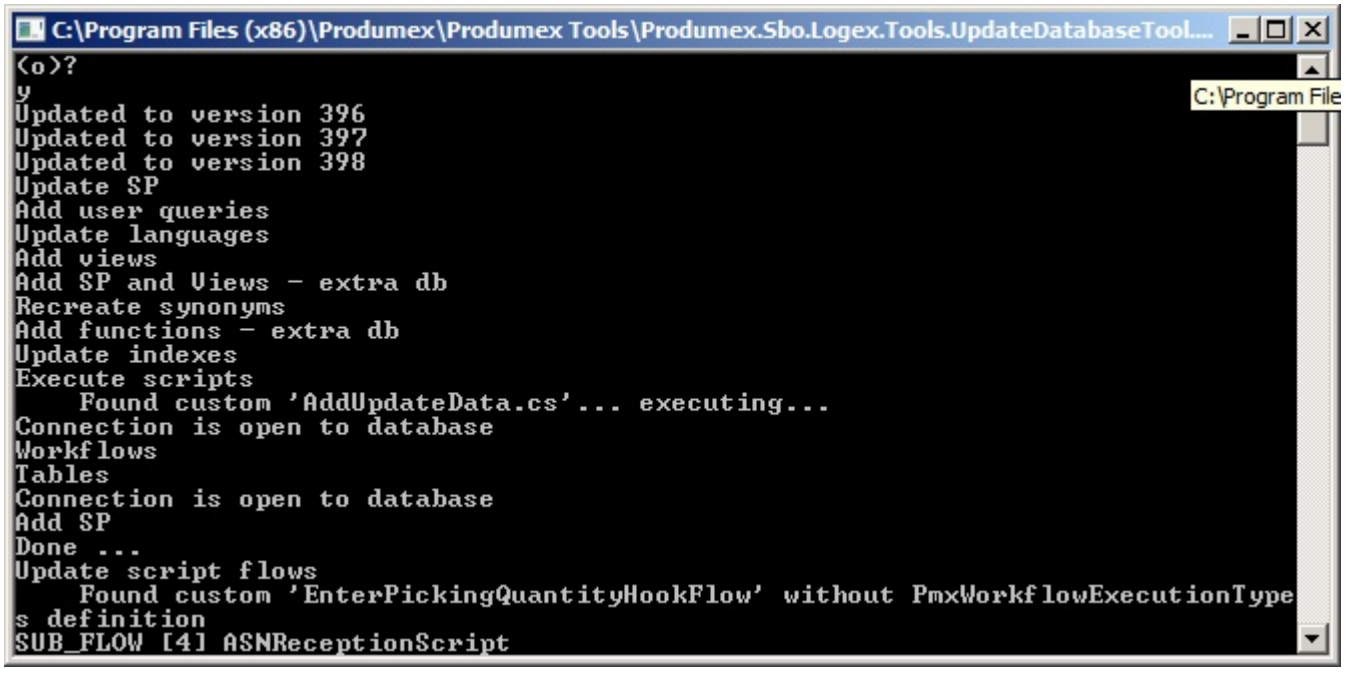
Note: It is not necessary to remove the "Produmex Licensing Server" for the installation of a new version of the Produmex Add-on. In case it is not removed, the "Produmex Licensing Module" will not have to be re-installed during the installation process. If you do need to reinstall the Produmex License Server, make sure you back up the PmxLicenseData.xml file from the install directory so you can use this after the installation.

Afterwards, you need to install every component. Now you need to run the UpdateDatabase tool by clicking the config button of the Produmex Tools component.



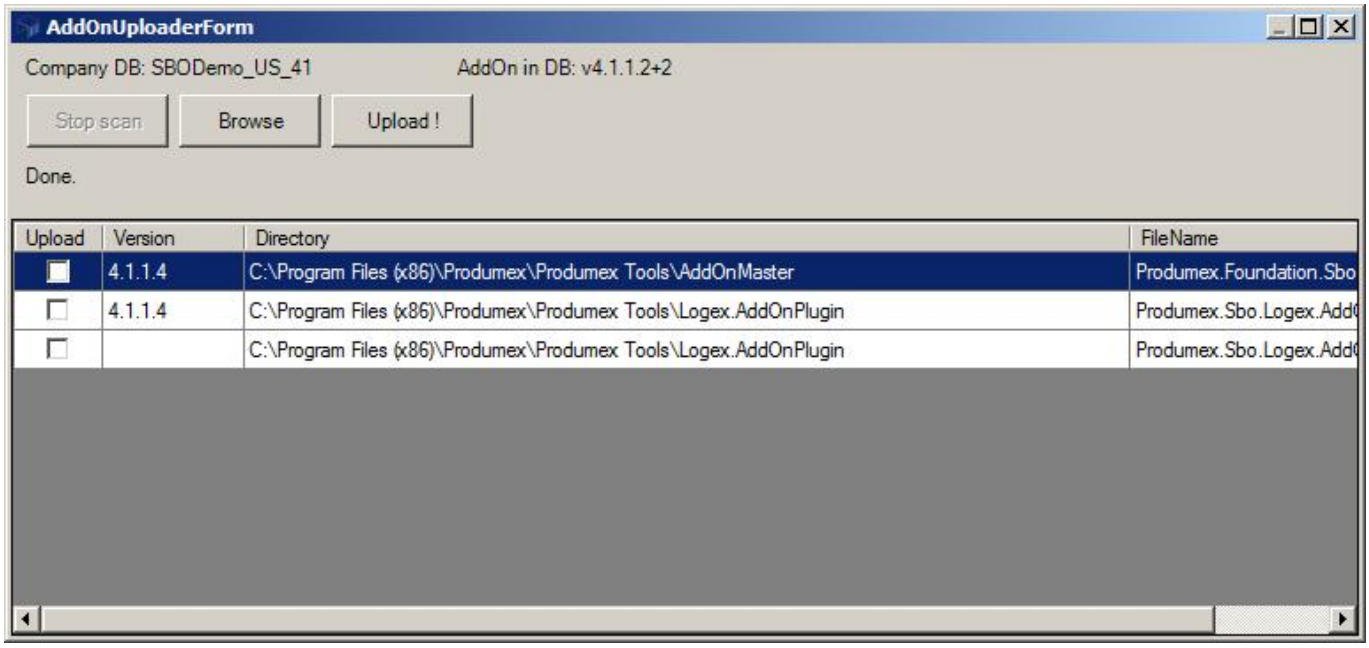
8.2.Configuration of the components.

Running the UpdateDatabase tool is similar as installing a new version. Only the steps taken are somewhat different:



Here the UpdateDatabase tool will look for the version installed and add every database modification it needs. Just like in previous steps taken, we will see custom adjustment executed if applicable.

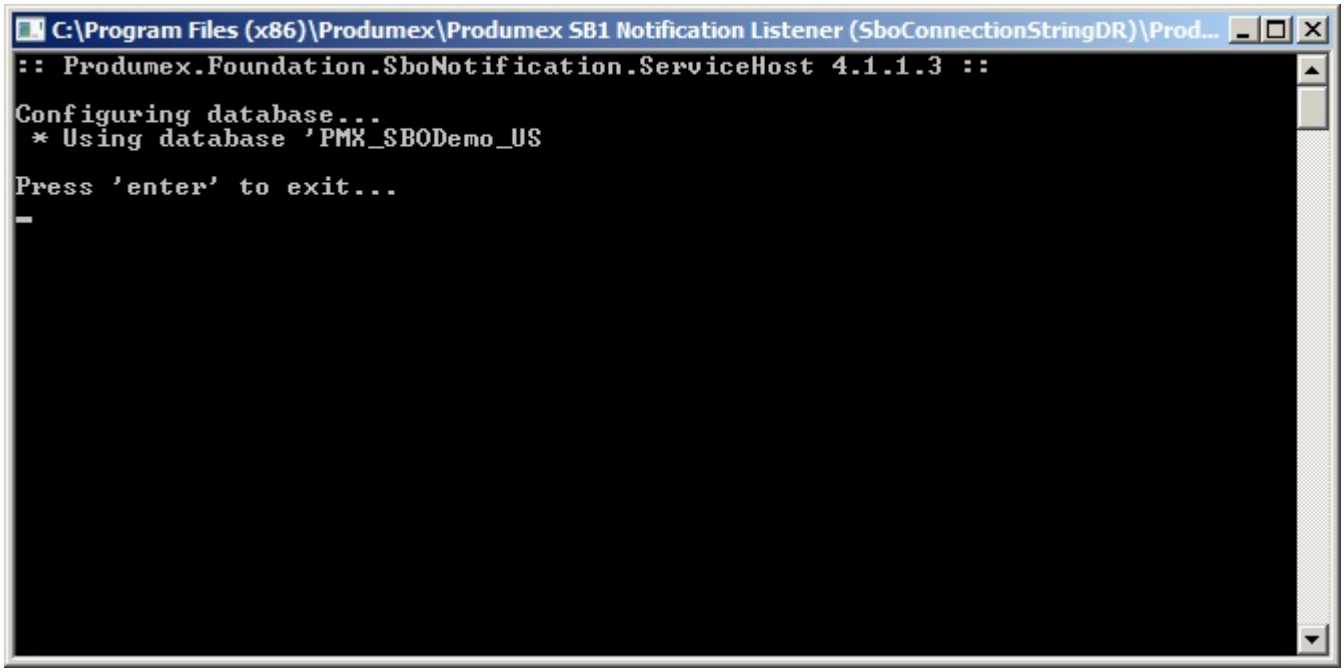
Besides this, you need to update the localizations and upload the addon-files to the database. Do not forget to browse for the custom project build if needed.



Afterwards, click upload.

Next you need configure the notification listener. Return to the system tab of the Produmex Suite installer and click the config button of that component.

Make sure the service broker is enabled by running the “Configure database” option in Console mode. If the service broker is enabled you will see the following message:



Next you need to list the actions in the same manner as performing a new installation., run the “List Actions” option in console mode and when the tool is done, press ENTER.

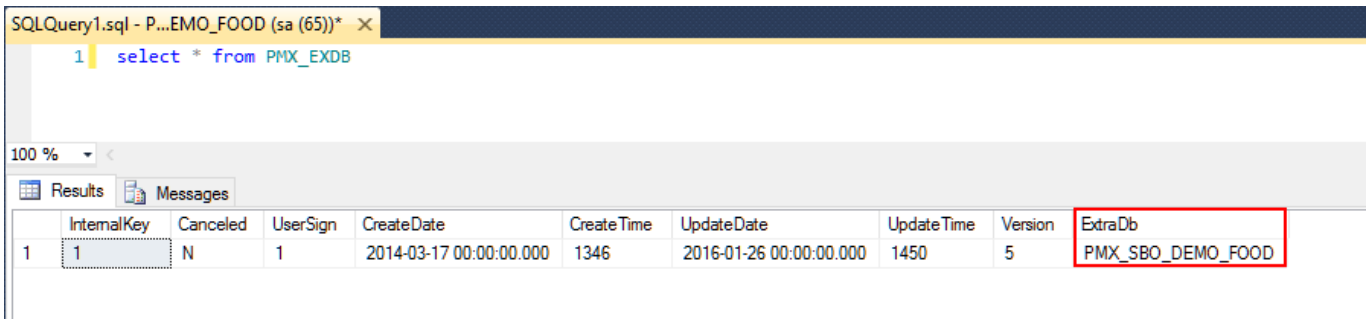
Next you need to adjust the standard SBO_SP_TransactionNotification with the T-SQL code from the “PMX_SP_TransactionNotification” stored procedure as descripted in chapter 5, the same goes for any custom stored procedures if any are included in the custom version.

Afterwards you can start SAP Business One and the addon-files will be automatically loaded. Make sure the company settings on your organizational structure settings are correct (see chapter 7).

9. check the link between the SAP database and the PMX database

After installing PMX, you'll have an organizational structure. When you made this company with a restore of another database, the link between the SAP and the PMX database will be wrong.

You can check this with following query; this query should be executed on the SAP database. you have to have a link to the correct PMX database;



When you did a restore of another existing database, you'll also have to run the following stored procedure on the PMX database. You'll have to give the SAP database as a parameter.

```
USE PMX_DATABASE
GO

DECLARE @RC int
DECLARE @sourceDb sysname

-- TODO: Set parameter values here.

EXECUTE @RC = [dbo].[PMX_SP_RecreateSynonymsOfSourceDb]
   @SAP_DATABASE
GO
```