

Produmex Scan Fresh Installation

1. Introduction

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

2. Prerequisites

Supported database management systems:

- MSSQL Server 2012, 2014, 2016, 2017
- 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.

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

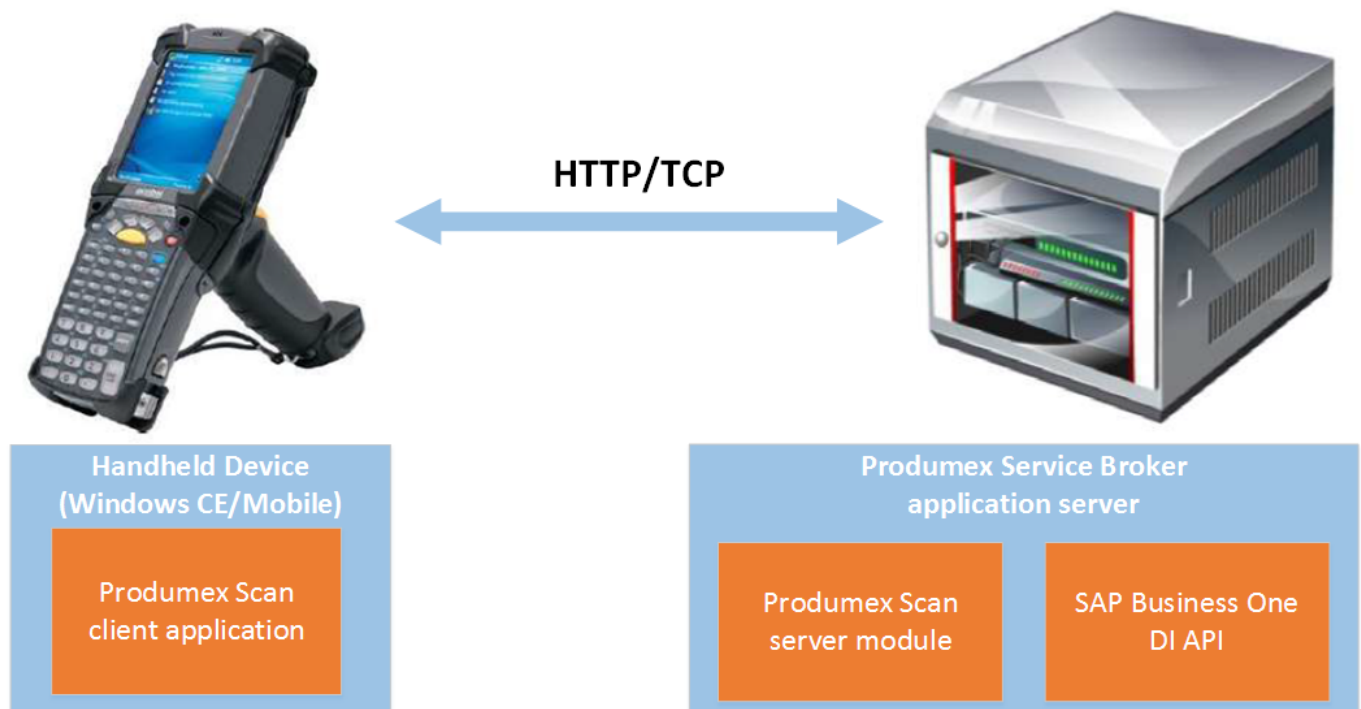
For more information about hardware requirements and server sizing see [Produmex Scan - Server sizing](#).

3. 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.

3.1. 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:





3.2. 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](#).

4. Performing a Fresh Installation

The following sections describe the steps of performing a fresh installation:

- 4.1. Download the Produmex Scan components
- 4.2. Install the Produmex Service Broker
- 4.3. Install the Produmex Scan Add-on (on premise or in SAP Cloud)
- 4.4. Install the Produmex Scan Client
- 4.5. Install the Produmex Scan Server Module
- 4.6. Check the installed components
- 4.7. Configure the Produmex Scan Client

4.1. 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 (in case of SAP Cloud) | |

3.4. Produmex Service Manager

The Produmex Service Manager is a standalone program that can handle the Produmex Service Broker and other Produmex services. Service parameters, connection data to the database server, and the connection data to the company database/schema can also be modified on the Service Manager.

It is automatically installed by the Produmex Service Broker installer. The Service Broker will automatically appear in the Produmex Service Manager, together with all other installed Produmex services that are supported by the Service Manager.

3.4.1. Setup/Modify Connection data to the SAP company

The Produmex Service Manager can handle the Produmex Service Broker and other Produmex services. Service parameters, connection data to the database server, and the connection data to the company database/schema can also be modified on the Service Manager.

The Service Manager needs to be started in Administrator mode because it has to be able to start/stop/modify the ProdumexServiceBroker Windows service.

4.1. Set up/Modify Connection to the SAP company

1. Click on the Setup Companies button.
2. On the opening screen enter the connection data to your SAP company database/schema.

- **MSSQL**

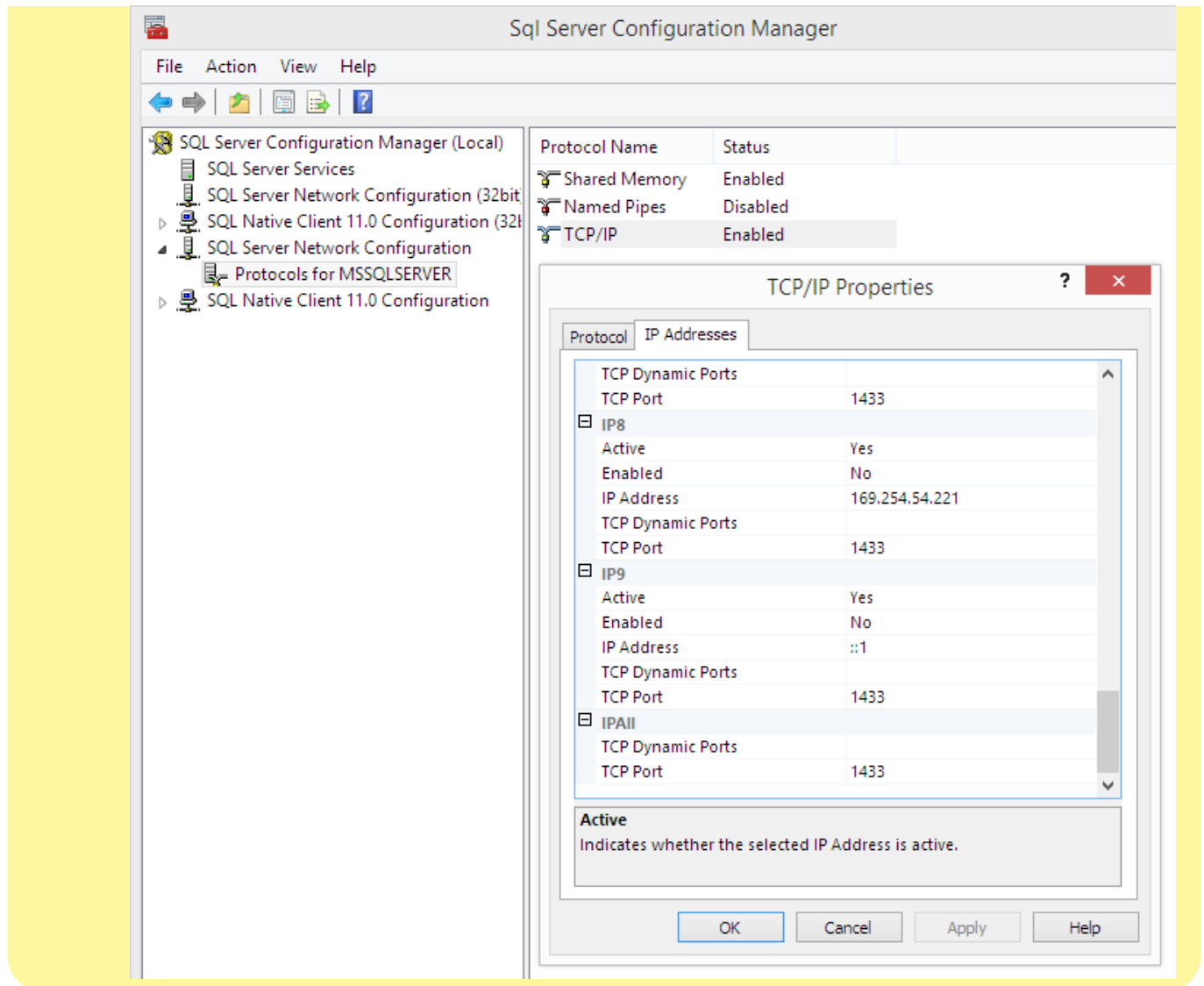
- **Server:** Enter the name or IP address of the server.
- **Port:** Enter the port on which the application can connect to the database server. It is usually 1433, but if you have a named instance in the SQL server, the actual port must be checked.
- **MSSQL Version:** Select the MSSQL version number in the drop-down menu.
- **Language:** The language of the DI API transactions can be modified in the field.
- **SQL User:** Enter the SQL Server user name.
- **SQL Password:** Enter the SQL Server password.



How to check the port number on SQL

Open the SQL Server Configuration Manager. Select the SQL Server instance and right-click on TCP/IP on the right side. Click on Properties and on the displayed form go to the bottom and check the port number.

Note: In this example there are no instances and the port is the default value of 1433.



- **HANA**

- **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:

| Company Name | Database Name | Localization | Version |
|--------------|---------------|--------------|---------|
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- **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.
- **MSSQL version:** Select HANADB in the dropdown menu
- **Language:** The language of the DI API transactions can be modified in the field.
- **SQL User:** Enter the SQL Server user name.
- **SQL Password:** Enter the SQL Server password.
- 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.



If you click **Test DB Connection**, the Service Manager tries to connect to the server with the given data. If the connection can be established, you will get the message *Database connection test - success!*

4.2. Add new database

Click on the **Setup Companies** button.

On the opening **'Setup companies'** screen check the connection data. If you would like to add a database from a different database server, modify the connection parameters then click on the **'Test DB Connection'** button to test the connection. The modification of the connection parameters does not affect the connection settings of the already added databases.

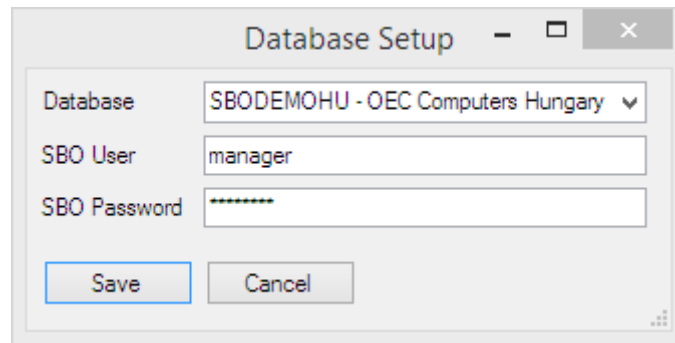
Click on the **'+'** icon to add a new database/schema.



If the company is modified and saved by the save button, it updates the connection with the database information section!

On the '**Database Setup**' window select the database/schema from the dropdown menu.

Enter an SBO User and its password to create the connection to the database/schema. SAP employees are used for log in the mobile device. Transactions initiated by the employees will be posted by the SAP user defined for the Service Broker. The SBO user must have the authorizations to create stock related bookings in SAP Business One (Delivery, Goods Receipt PO, Stock Transfer, etc.) The SBO user also need at least an SAP Indirect Access license type as of SBO 9.2. PL08.



Click on the '**Save**' button then close the window. You can close now Setup Companies and go back to the Service Manager main screen.

Now you have to assign your companies to the Produmex Service Broker and other Produmex services.

Click on the '**Companies...**' button and select the company database/schema on the opening '**Select Companies**' screen.



4.3. Configure Produmex Service Broker

The Produmex Service Broker can work together with different Produmex add-ons, therefore in the Service Manager you have to configure which add-on you want to use. To do that, click on the 'Configure...' button or select it from the line of the Service Broker.

General tab

Service Broker service has to be restarted after changing a setting.

If you set the '*Debug writeline log*' parameter to true, it will write a log about each command the Service Broker processes. **Only set it to true, if Produmex support asks you to do that.**

Kill time: If a Service Broker process does not finish within this time limit, it will be aborted. The setting depends on your server. If you have a quick server, set it to a small number, if you have a slow server, set it higher. The default value is 30 seconds.

'Modules to load' is the module of the add-on to which the service broker connects. It is automatically done by the module installer for you.

At the '*Port to listen on*' you can set which port is used by the service broker to communicate with the clients. The default is 50231. Make sure that the port you set here is not blocked by any firewall or

antivirus software.

The '*Server Discovery Enable*' turns on the feature that the client can look up the running service broker server automatically. It makes setting up the clients easier.

You have to assign an administrator user to the service in the Windows Service Manager, otherwise the Service Broker cannot connect to SBO and cannot write to its log files. If the Service Broker stops right after starting it, and in the log file you have access denied errors, then the cause is that you have not assigned the administrator user to the service.



License check

From product version 2022.01, the Produmex Service Broker checks the client application license.

The Produmex Service Broker retrieves the application license based on the installation number and the system number. These numbers can be configured in Produmex Service Manager > Produmex Service Broker service configuration window.

If the installation number and the system number are not provided, the system retrieves these numbers from a license already downloaded by the add-on.

The license download happens in every 12 hours. If the license cannot be downloaded, the system tries the download process in every 5 minutes.



Produmex Service Broker tab

On the Produmex Service Broker tab you can see the loaded modules, and you can remove/install new modules if needed.

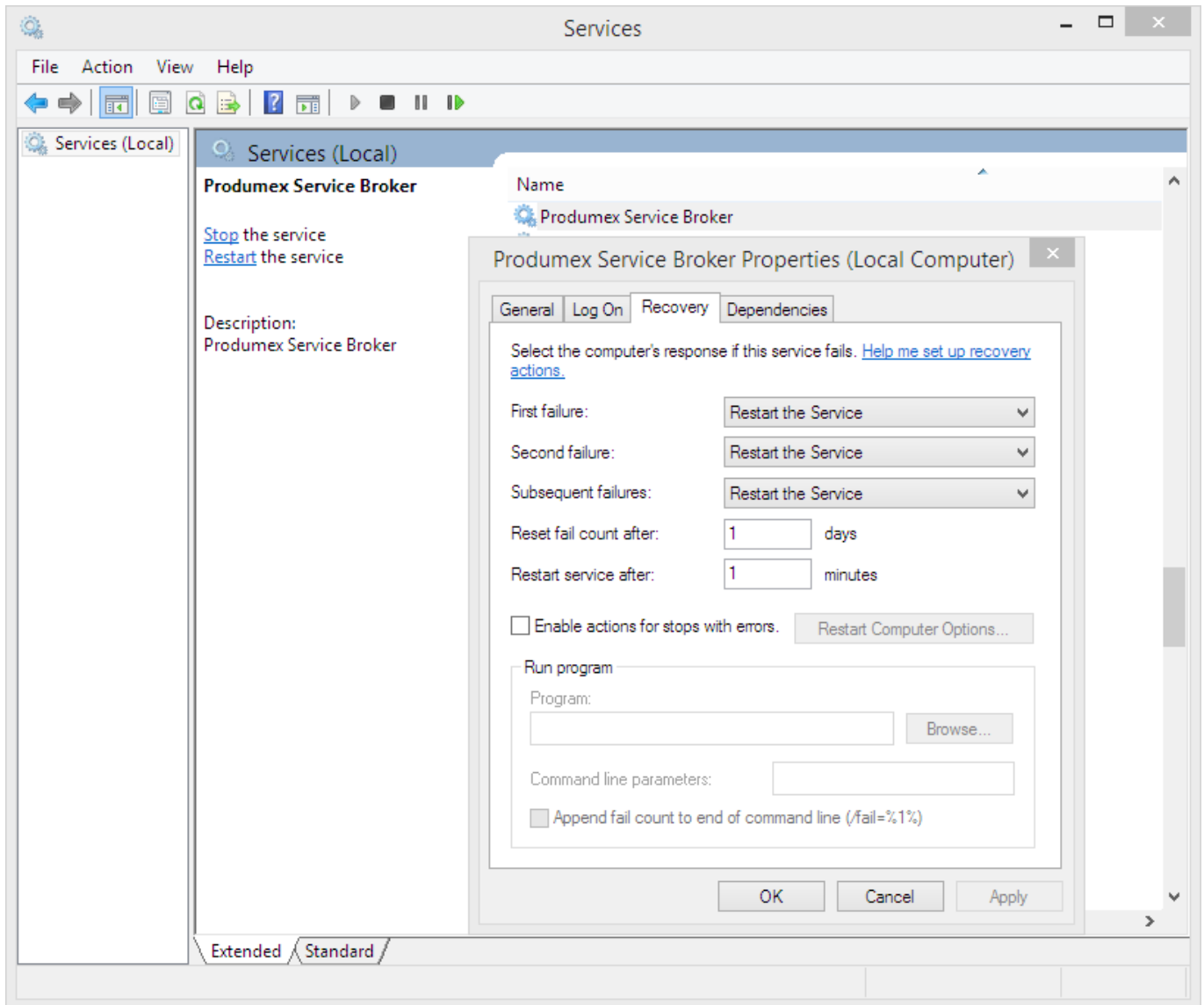
If you see a check icon before the module name, it means it could be loaded successfully. If a problem arises, you will see error beside the module name.



4.4. Start Produmex Service Broker

After you have set all settings and installed the server module, you can start the Service Broker service in the Service Manager by selecting first the service then clicking on the '*Start*' button. If you want to stop a service, click on the '*Stop*' button.

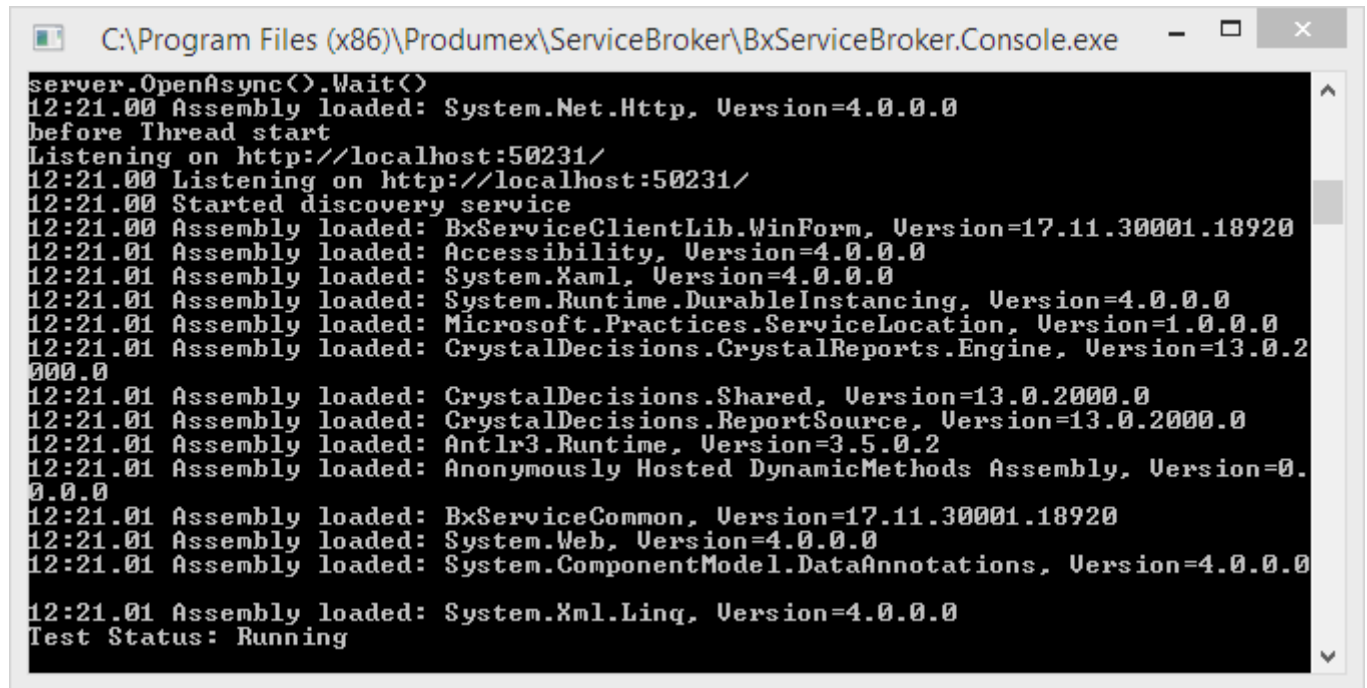
You can also stop or start the services from windows service manager, but you cannot change the Produmex settings there. It is recommended that you set the service to *Automatic start* and that you set the recovery options to *Restart at Recovery* in Service Properties for the service.



4.5. Start Produmex Service Broker in console mode

The Service Broker can be started from the command window as well. Only one instance can be started at the same time and the Service Broker service must be stopped. The use of the command window is recommended for debugging purposes and in production environment the use of the service is more efficient.

The Service Broker in console mode can be started by running the following .exe file in Administrator Mode: C:\Program Files (x86)\Produmex\ServiceBroker\BxServiceBroker.Console.exe



```
server.OpenAsync().Wait()
12:21.00 Assembly loaded: System.Net.Http, Version=4.0.0.0
before Thread start
Listening on http://localhost:50231/
12:21.00 Listening on http://localhost:50231/
12:21.00 Started discovery service
12:21.00 Assembly loaded: BxServiceClientLib.WinForms, Version=17.11.30001.18920
12:21.01 Assembly loaded: Accessibility, Version=4.0.0.0
12:21.01 Assembly loaded: System.Xaml, Version=4.0.0.0
12:21.01 Assembly loaded: System.Runtime.DurableInstancing, Version=4.0.0.0
12:21.01 Assembly loaded: Microsoft.Practices.ServiceLocation, Version=1.0.0.0
12:21.01 Assembly loaded: CrystalDecisions.CrystalReports.Engine, Version=13.0.2000.0
12:21.01 Assembly loaded: CrystalDecisions.Shared, Version=13.0.2000.0
12:21.01 Assembly loaded: CrystalDecisions.ReportSource, Version=13.0.2000.0
12:21.01 Assembly loaded: Antlr3.Runtime, Version=3.5.0.2
12:21.01 Assembly loaded: Anonymously Hosted DynamicMethods Assembly, Version=0.0.0.0
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12:21.01 Assembly loaded: System.Web, Version=4.0.0.0
12:21.01 Assembly loaded: System.ComponentModel.DataAnnotations, Version=4.0.0.0
12:21.01 Assembly loaded: System.Xml.Linq, Version=4.0.0.0
Test Status: Running
```

3.4.2. Add new database

Click on the Setup Companies button.

On the opening **'Setup companies'** screen check the connection data. If you would like to add a database from a different database server, modify the connection parameters then click on the **'Test DB Connection'** button to test the connection. The modification of the connection parameters does not affect the connection settings of the already added databases.

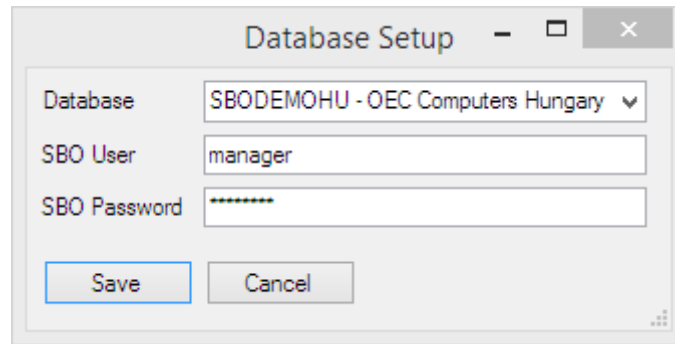
Click on the '+' icon to add a new database/schema.



If the company is modified and saved by the save button, it updates the connection with the database information section!

On the **'Database Setup'** window select the database/schema from the dropdown menu.

Enter an SBO User and its password to create the connection to the database/schema. SAP employees are used for log in the mobile device. Transactions initiated by the employees will be posted by the SAP user defined for the Service Broker. The SBO user must have the authorizations to create stock related bookings in SAP Business One (Delivery, Goods Receipt PO, Stock Transfer, etc.) The SBO user also need at least an SAP Indirect Access license type as of SBO 9.2. PL08.



Click on the **'Save'** button then close the window. You can close now Setup Companies and go back to the Service Manager main screen.

Now you have to assign your companies to the Produmex Service Broker and other Produmex services.

Click on the **'Companies...'** button and select the company database/schema on the opening **'Select Companies'** screen.



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The Produmex Service Manager can handle the Produmex Service Broker and other Produmex services. Service parameters, connection data to the database server, and the connection data to the company database/schema can also be modified on the Service Manager.

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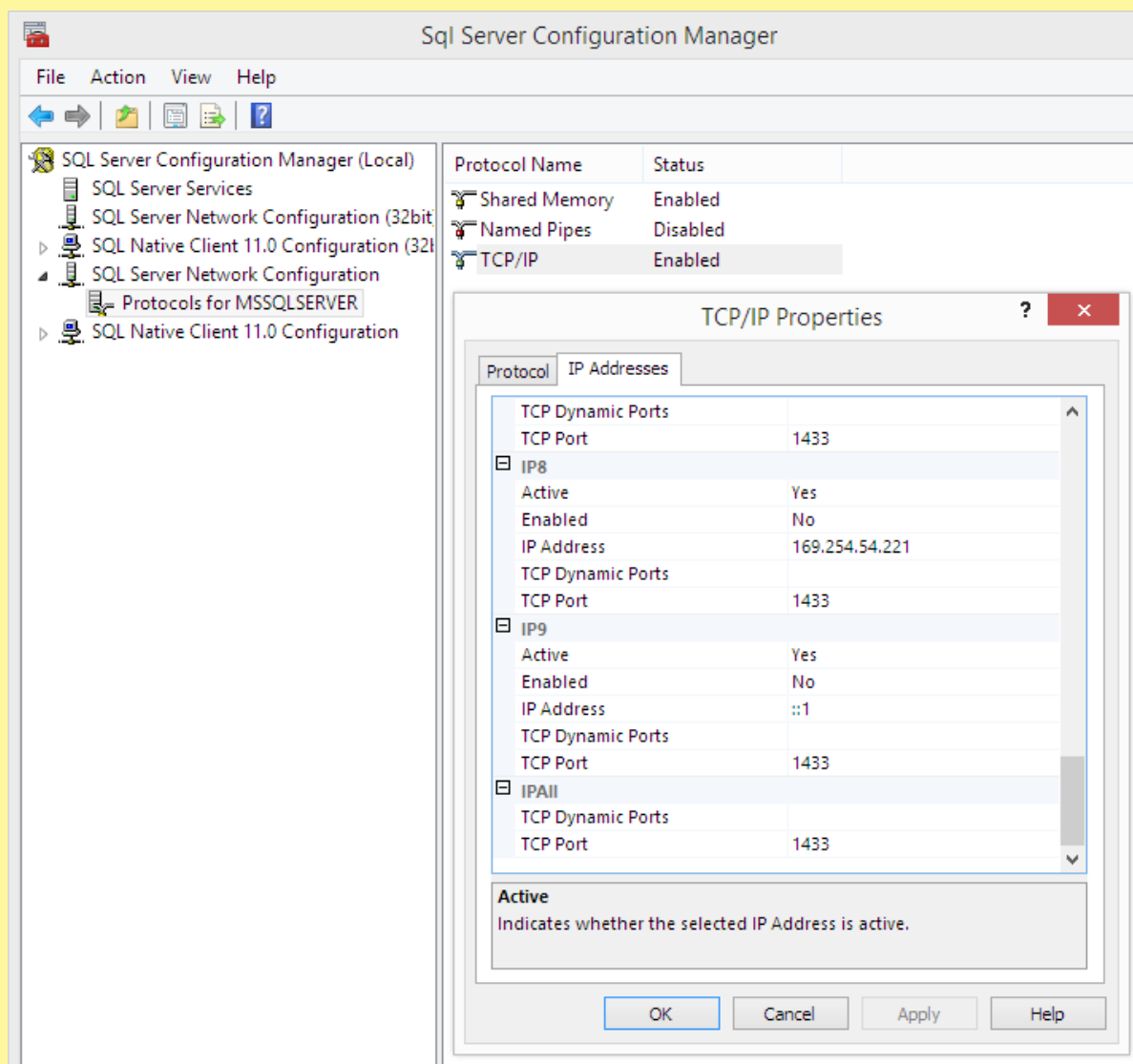
- **MSSQL**

- **Server:** Enter the name or IP address of the server.
- **Port:** Enter the port on which the application can connect to the database server. It is usually 1433, but if you have a named instance in the SQL server, the actual port must be checked.
- **MSSQL Version:** Select the MSSQL version number in the drop-down menu.
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- **HANA**

- **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.
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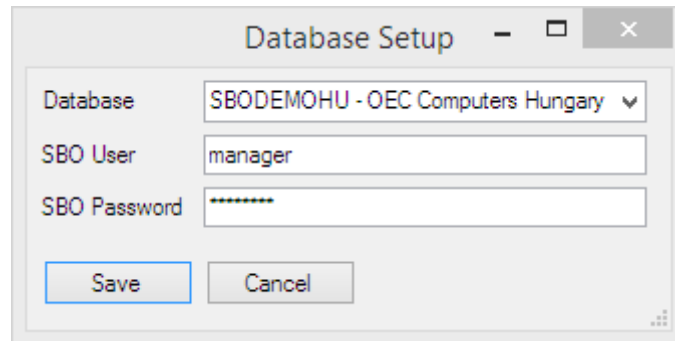
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'Modules to load' is the module of the add-on to which the service broker connects. It is automatically done by the module installer for you.

At the '*Port to listen on*' you can set which port is used by the service broker to communicate with the clients. The default is 50231. Make sure that the port you set here is not blocked by any firewall or

antivirus software.

The '*Server Discovery Enable*' turns on the feature that the client can look up the running service broker server automatically. It makes setting up the clients easier.

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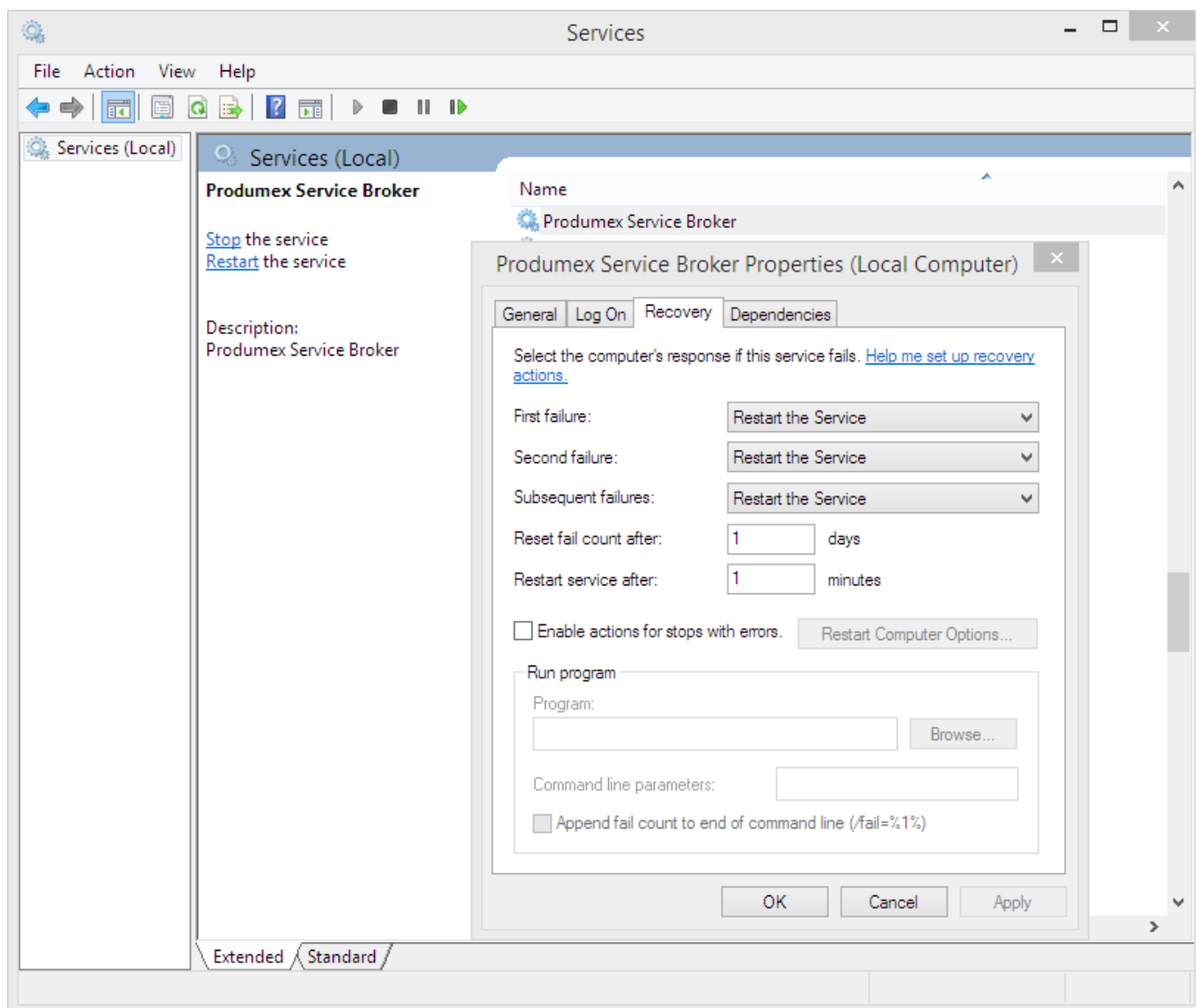
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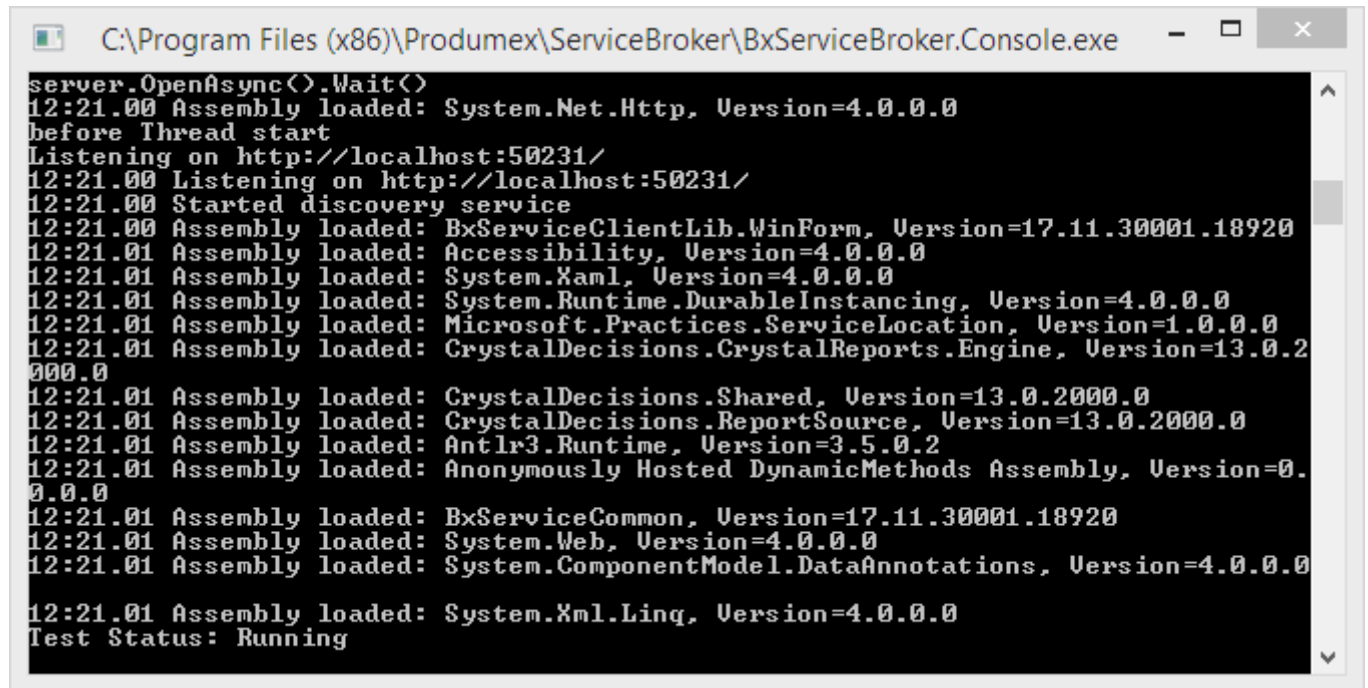
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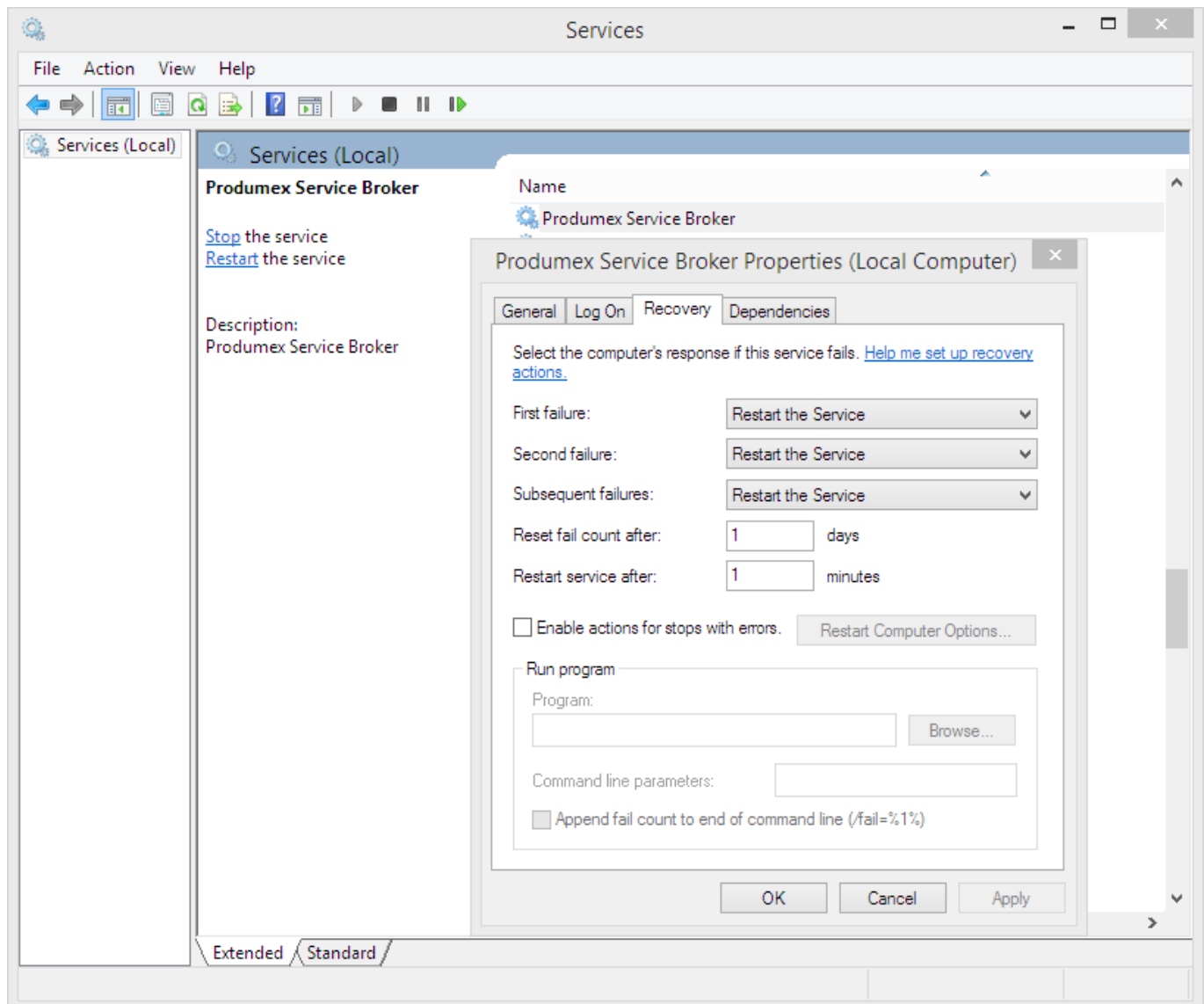


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12:21.01 Assembly loaded: System.Xaml, Version=4.0.0.0
12:21.01 Assembly loaded: System.Runtime.DurableInstancing, Version=4.0.0.0
12:21.01 Assembly loaded: Microsoft.Practices.ServiceLocation, Version=1.0.0.0
12:21.01 Assembly loaded: CrystalDecisions.CrystalReports.Engine, Version=13.0.2000.0
12:21.01 Assembly loaded: CrystalDecisions.Shared, Version=13.0.2000.0
12:21.01 Assembly loaded: CrystalDecisions.ReportSource, Version=13.0.2000.0
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12:21.01 Assembly loaded: System.ComponentModel.DataAnnotations, Version=4.0.0.0
12:21.01 Assembly loaded: System.Xml.Linq, Version=4.0.0.0
Test Status: Running
```

3.4.4. Start Produmex Service Broker

After you have set all settings and installed the server module, you can start the Service Broker service in the Service Manager by selecting first the service then clicking on the 'Start' button. If you want to stop a service, click on the 'Stop' button.

You can also stop or start the services from windows service manager, but you cannot change the Produmex settings there. It is recommended that you set the service to *Automatic start* and that you set the recovery options to *Restart at Recovery* in Service Properties for the service.



3.5. Produmex Scan Client Application

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Permanent link:
<https://wiki.produmex.name/doku.php?id=implementation:scan:install&rev=1581525941>

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