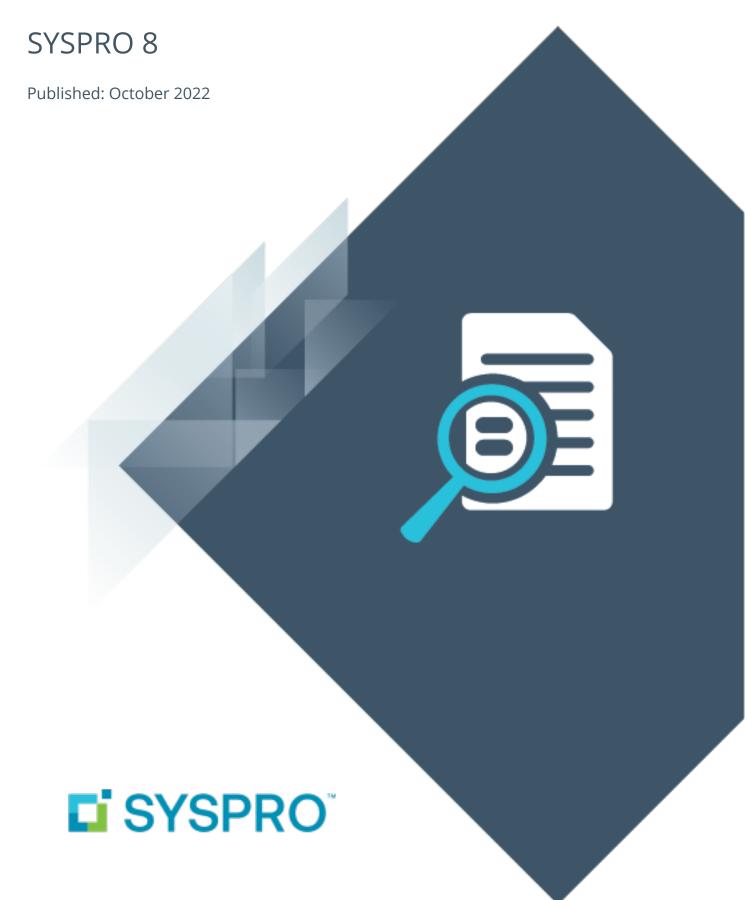
Installing SYSPRO 8 Point of Sale



Installing SYSPRO Point of Sale

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Installing SYSPRO Point of Sale

Exploring

Where it fits in?

SYSPRO Point of Sale (i.e. PoS) interfaces directly into the **SYSPRO Desktop** and provides for a rich and purpose-driven interface that users can use in any location, using an internet browser. Therefore, **SYSPRO Point of Sale** requires the installation of the online and offline application on individual servers to provide retail functionality to clients via the web.

The online version (installed on the same server as the main SYSPRO installation) provides full accessibility to all the functions provided by the *SYSPRO Point of Sale* system. While the offline version (installed on a server at each store location) synchronizes with the head office server at preconfigured time intervals.

Guide scope

This installation guide covers the aspects that pertain to the installation of **SYSPRO Point of Sale** using the **SYSPRO Installer Application** and associated autorun files.



View the **SYSPRO Installer** topic on the **SYSPRO Help and Reference** website for more information regarding the **SYSPRO Installer Application**.

This article is aimed at SYSPRO users who have a good understanding of the **Microsoft Windows** operating system environment, **Microsoft SQL Server** and **Internet Information Services (IIS)**. This requires an understanding of technical aspects of the SYSPRO environment and is therefore not recommended for first time users.

Architecture

SYSPRO Point of Sale Online Application

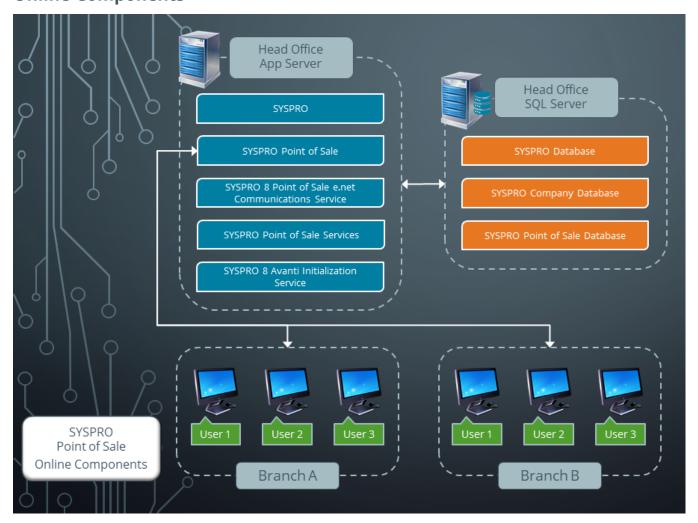
In the online architecture, branches are logical groupings based on operator logins. Therefore, each SYSPRO Point of Sale operator must be assigned to a specific branch so that when they login, they automatically trade under the branch to which they have been assigned.

These operators login to the main application server when they login to *SYSPRO Point of Sale*. As such, if connectivity to the Head Office fails, they won't be able to trade until the connection has been restored.



All users from all branches connect to the main server through a browser which points to the Head Office server IP address directly for all functionality (e.g. http://Head-office-server/SysproPOS/login.aspx).

Online Components



The following indicates the components required for the Head Office:

Head Office Application Server

SYSPRO

This is the SYSPRO ERP software.

SYSPRO Point of Sale Online

This is the online version of the **SYSPRO Point of Sale** software and includes the web components required for each SYSPRO Point of Sale company to transact.

SYSPRO 8 Point of Sale e.net Communication Service

This service allows the **SYSPRO Point of Sale** applications to interact with the core SYSPRO product.

Based on **Windows Communication Foundation**, this service exposes the SYSPRO64.DLL library to internal and external applications that need to interact with SYSPRO (e.g. **SYSPRO Espresso**, Predictive Search, third party developer applications, etc.).

Data is retrieved from the SYSPRO database using the open e.net architecture, without compromising data integrity.

This service replaces the legacy **SYSPRO e.net WCF Service** (originally developed to replace SYSPRO Web Services and DCOM) and provides for load balancing functionality, as well as being fault tolerant (e.g. if a channel fails, a new thread is initiated automatically to prevent the whole service from failing).

SYSPRO 8 Point of Sale Services

In *SYSPRO Point of Sale*, this service pack lets you synchronize master data, copy transactional data from offline branches to the Head Office server, post transactional data that was copied from offline branches and print directly to your printers. This comprises of the following services:

SYSPRO 8 Point of Sale Synchronize Service (Mandatory)

This Microsoft Windows service is installed in both online and offline environments and is used to synchronize **SYSPRO Point of Sale** application files (i.e. it self-heals web site components). It uses web services hosted on the Head Office server to synchronize changes to **SYSPRO Point of Sale**, as well as SYSPRO files at the various branches.

Its primary purpose is to check for any SYSPRO Point of Sale updates that may have been ported and automatically update the software accordingly.

The secondary purpose of this function in the offline environment is to check for any business object or work file changes that need to be applied to the Branch server. If it detects any updates, it copies down the relevant files needed by the SYSPRO Offline foundation.

This service should only be configured to run once a day after hours (or as required) when SYSPRO settings have changed or updates have been made, so that the required Internet Information Services (IIS) can restart without affecting trading.



Upon startup, the service makes 3 attempts to perform an initial sync, after which it resumes as per the scheduled setup. Restarting the service can be used to force a sync on a branch after specific setup values were changed at Head Office.

SYSPRO 8 Point of Sale Copy Service (Optional)

This is an essential service to successfully use the **SYSPRO Point of Sale** Offline architecture.

This Microsoft Windows service is installed on the Head Office server and its purpose is to copy transactional data from all offline branches to the main Head Office server. The service therefore continually checks each branch server for transactions that need to be copied up to the Head Office server. If it finds a transaction, it copies it from the branch server (where the Offline Foundation version of SYSPRO ERP is installed) to the Head Office server (where the complete version of SYSPRO ERP is installed) and marks it as "copied" on the branch server.

SYSPRO 8 Point of Sale Posting Service (Optional)

This Microsoft Windows service is installed on the Head Office server and checks for offline transactions that have been copied from the branch server to the main server, but that have not yet been posted to SYSPRO ERP.

Its purpose is to post the copied offline transactional data to SYSPRO ERP.



You can configure this service to post at defined intervals.

SYSPRO 8 Point of Sale Print Service (Optional)

This is an essential service to successfully print from within **SYSPRO Point of Sale**.

This Microsoft Windows service is installed on all servers and is used for device-based printing. It enables communication between *SYSPRO Point of Sale* and the printers configured on the server, thereby controlling all the printing sent directly to those printers.

SYSPRO 8 Avanti Initialization Service

This Windows service is responsible for starting the SYSPRO. exe process on the SYSPRO Application server, together with a number of other SYSPRO-specific functions, such as accessing the file system on the application server and controlling authentication when logging into SYSPRO.

This service is mandatory for running **SYSPRO Point of Sale** in **SYSPRO Web UI (Avanti)**.

Head Office SQL Server

SYSPRO Database

This key database is used for core SYSPRO and indicates the company ID for each company.



There is only one Sysprodb per SYSPRO installation.

SYSPRO Company Database

This SYSPRO ERP database is used for core SYSPRO and contains SYSPRO master information.



The SysproCompanyID database must exist for each SYSPRO company.

SYSPRO Point of Sale Database

This database stores key SYSPRO Point of Sale information.



The SysproCompanyID_POS database must exist for each SYSPRO Point of Sale company.

SQL Replication

When there is an offline branch installed, SQL replication must be configured on the main Head Office server. This pushes all relevant SYSPRO and SYSPRO Point of Sale data down to the branch.

Replication is incremental so every time a record changes in one of the tables being replicated, it is automatically pushed to each branch (provided the branches are online).



No transactional data is replicated; only master data is replicated.

SYSPRO Point of Sale Offline Application

The **SYSPRO Point of Sale** Offline architecture has been designed to provide the following:

- Critical sales functionality to store locations at all times.
 - This ensures that your store can trade and access critical customer-facing functionality in the event of lost internet connectivity with your Head Office (i.e. operators can still trade completely unaffected).
- Transaction processing offline at trade shows and such, where there is no connection to the Head Office at all.
 - As soon as the mobile device (e.g. laptop) is connected to the network again, it then automatically syncs and posts transactions processed while offline.
- The ability for all offline branches to trade in offline mode whilst planned maintenance or upgrades are being implemented at Head Office.



The Offline architecture is not designed to cater for poor internet connections with the Head Office as certain functions still require a connection to Head Office. The architecture also pulls and pushes data from the Head Office automatically and therefore requires decent connection speeds to the Head Office.

There is a direct relationship between line speed and volume of transactions, so it is important to consider all aspects of the architecture and connection when implementing **SYSPRO Point of Sale**.

We recommend that you ensure all stores have back-ups or fail-over lines in place, and provide high priority to your Head Office connection to ensure close to real-time processing from **SYSPRO Point of Sale** to **SYSPRO 8**.

Offline Components

In the Offline architecture, there is an additional server required at each store location to which all users at the location log on. The architecture pushes data from the Head Office server to the branch server via standard SQL replication. Transactions are then copied to Head Office and posted into SYSPRO ERP automatically.

When running the Offline architecture, certain functionality is configured to work offline and other functions work only when online. This means that a connection to the Head Office server is required for any functionality not configured with the offline architecture. The software detects if you are not connected to the Head Office server and notifies you that you are offline, indicating that you should try again later.

All users at the Offline branch connect to the Branch server when accessing offline functionality and to the Head Office Server when accessing online functionality.

The menu options point to the relevant server accordingly, so when accessing a menu item that runs via the offline foundation, the system looks at the Offline server.

FOR EXAMPLE:

http://branch-server/SysproPOS/login.aspx

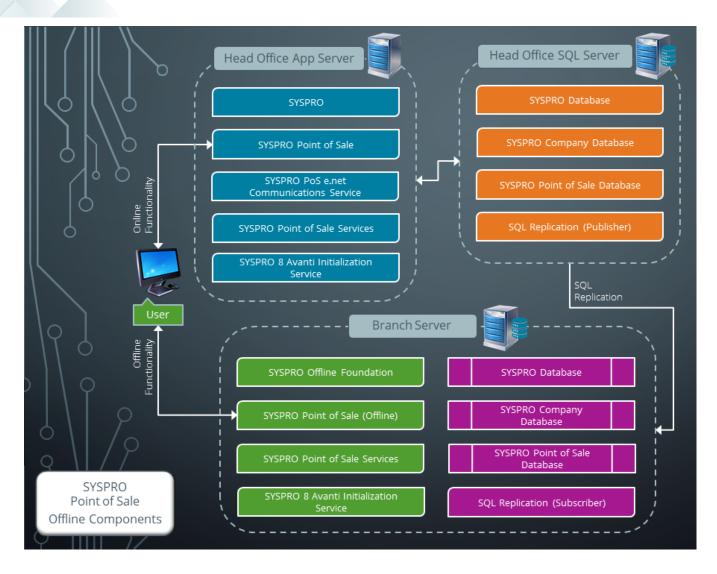
When accessing a menu item that runs via the online foundation, the system points to the online server.

FOR EXAMPLE:

http://head-office-server/SysproPOS/login.aspx



The software that is installed on the Head Office and Branch servers is identical; it is just the location to which it points, and from which the functionality runs, that changes.



The following indicates the components required for each branch server:

Branch Server

SYSPRO Offline Foundation

This is a basic version the SYSPRO ERP software which installs the base SYSPRO components required by the Offline server to run and query business objects.

SYSPRO Point of Sale Offline

This is the offline version of the **SYSPRO Point of Sale** software.

SYSPRO 8 Point of Sale Services

In *SYSPRO Point of Sale*, this service pack lets you synchronize master data, copy transactional data from offline branches to the Head Office server, post transactional data that was copied from offline branches and print directly to your printers. This comprises of the following services:

SYSPRO 8 Point of Sale Synchronize Service (Mandatory)

This Microsoft Windows service is installed in both online and offline environments and is used to synchronize *SYSPRO Point of Sale* application files (i.e. it self-heals web site components). It uses web services hosted on the Head Office server to synchronize changes to *SYSPRO Point of Sale*, as well as SYSPRO files at the various branches.

Its primary purpose is to check for any SYSPRO Point of Sale updates that may have been ported and automatically update the software accordingly.

The secondary purpose of this function in the offline environment is to check for any business object or work file changes that need to be applied to the Branch server. If it detects any updates, it copies down the relevant files needed by the SYSPRO Offline foundation.

This service should only be configured to run once a day after hours (or as required) when SYSPRO settings have changed or updates have been made, so that the required **Internet Information Services (IIS)** can restart without affecting trading.



Upon startup, the service makes 3 attempts to perform an initial sync, after which it resumes as per the scheduled setup. Restarting the service can be used to force a sync on a branch after specific setup values were changed at Head Office.

SYSPRO 8 Point of Sale Copy Service (Optional)

This is an essential service to successfully use the **SYSPRO Point of Sale** Offline architecture.

This Microsoft Windows service is installed on the Head Office server and its purpose is to copy transactional data from all offline branches to the main Head Office server. The service therefore continually checks each branch server for transactions that need to be copied up to the Head Office server. If it finds a transaction, it copies it from the branch server (where the Offline Foundation version of SYSPRO ERP is installed) to the Head Office server (where the complete version of SYSPRO ERP is installed) and marks it as "copied" on the branch server.

SYSPRO 8 Point of Sale Posting Service (Optional)

This Microsoft Windows service is installed on the Head Office server and checks for offline transactions that have been copied from the branch server to the main server, but that have not yet been posted to SYSPRO ERP.

Its purpose is to post the copied offline transactional data to SYSPRO ERP.



You can configure this service to post at defined intervals.

SYSPRO 8 Point of Sale Print Service (Optional)

■ This is an essential service to successfully print from within *SYSPRO Point of Sale*.

This Microsoft Windows service is installed on all servers and is used for device-based printing. It enables communication between *SYSPRO Point of Sale* and the printers configured on the server, thereby controlling all the printing sent directly to those printers.

SYSPRO 8 Avanti Initialization Service

This Windows service is responsible for starting the SYSPRO. exe process on the SYSPRO Application server, together with a number of other SYSPRO-specific functions, such as accessing the file system on the application server and controlling authentication when logging into SYSPRO.

This service is mandatory for running SYSPRO Point of Sale in SYSPRO Web UI (Avanti).

SYSPRO Database

This is a partial database used for core SYSPRO which has been replicated down to the branch. It indicates the company ID for each company as well as all the master data required by SYSPRO Point of Sale (e.g. customers, stock, warehouse, pricing, etc.).



There is only one Sysprodb per SYSPRO installation.

SYSPRO Company Database

This SYSPRO ERP database is used for core SYSPRO and contains SYSPRO master information.



The SysproCompanyID database must exist for each SYSPRO company.

SYSPRO Point of Sale Database

This database stores key SYSPRO Point of Sale information and offline transactions at the branch.



The SysproCompanyID_PoS database must exist for each SYSPRO Point of Sale company.

Client Machines

SYSPRO 8 Point of Sale Utility Service (Optional)

This service is installed on client machines and is used for device-based printing, as well as integration to external devices (e.g. signature pads and card payment integration pads).

It's purpose is to provide the client's details (i.e. IP address and computer name) to the **SYSPRO 8 Point of Sale Print Service** when printing from within **SYSPRO Point of Sale** on the **Microsoft Silverlight** platform.



This service doesn't apply when running **SYSPRO Point of Sale** in **SYSPRO Web UI (Avanti)**.

Offline Functionality

The following indicates the functionality available within the Offline architecture:



All other functionality is available from the branch running on the Offline architecture, but only if the branch server has a current connection to the Head Office server.

- Store:
 - Point of Sale
 - Account Payments
 - Manage Quotes
 - Credit Notes
 - Exchanges
- Query:
 - Customer Query
 - Inventory Query
- Finance:
 - Cash-up slip
 - Supervisor cash-up
 - End of day
 - Sales Report
 - Payments Report

The critical customer-facing sales functionality is available when connectivity is down, thereby enabling operators to take payments and service customers.

All other functionality is viewed as **Setup** or **Store Management**, which can be delayed if required. So, for example, if the lines are down and stock has arrived, you won't be able to receive it in until the lines are restored; however the operators are still able to sell the stock. Most of the Store Management functionality is transactional by nature and the source transaction may not have originated from the branch.

This means that it can't be edited or changed at a local branch as someone may have changed it in SYSPRO or at another branch. This would lead to data integrity issues as there would be multiple sources of the truth. For this reason, the functionality is only available when you have a connection to the Head Office server and the transaction is actually created or maintained directly on the Head Office server.

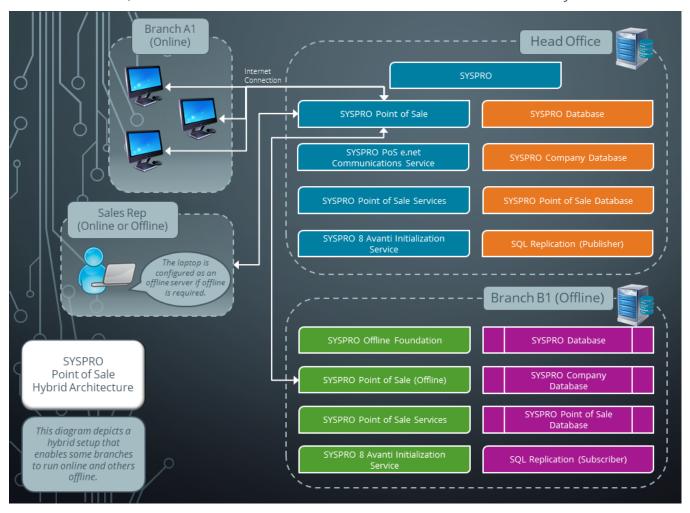
Manage Orders is a more involved order creation program that allows you to perform more complex transactions in *SYSPRO Point of Sale* (like deposit orders, order maintenance, partial invoicing, etc.). Therefore these are only available when you have a connection to the Head Office server.

Operators can fall back to the **Point of Sale** screen to process sales if the lines are down, but none of the complex ordering functions are available in **Manage Orders** until the lines are restored.

SYSPRO Point of Sale Hybrid Architecture

The following depicts an overview of the *SYSPRO Point of Sale* architecture with a hybrid setup that enables some branches to run online and others offline.

In a typical retail environment, the offline architecture is always deployed (regardless of line speeds and fail-over lines) to ensure that the store can still trade if connection is lost for any reason.



Starting

Prerequisites

Hardware

The following hardware requirements are applicable to using **SYSPRO Point of Sale**:

- Intel Xeon E3 3.2GHz / Core i5 3.2 GHz or higher processor (Server standard processor and ram according to SYSPRO requirements.)
- 16 GB of RAM

Client Machine (Recommended):

- Microsoft Windows
 - Microsoft Windows 7
 - An installation of Microsoft Silverlight (version 4.1.10329.0 or later) only works with Internet Explorer



See the **End of Life Warning** section for important information.

- SYSPRO Web UI (Avanti) is compatible with Google Chrome.
- Screen Resolution: minimum of 1024 x 768
- Internet Explorer 10 (Browsers must be in 32-bit mode)



See the **End of Life Warning** section for important information.

- 1.6 GHz or higher processor
- RAM according to SYSPRO's minimum specifications
- Macintosh OS 10.4/10.5 Intel (Intel-based):
 - Intel Core Duo 1.83 GHz or higher processor
 - 512MB of RAM

System Requirements

There are three platforms required in order to run SYSPRO Point of Sale:

1. Main Head Office Server:

Running Windows Server and Microsoft SQL Server.

2. Branch Server:

Running Windows Server and SQL Server Express Edition

3. Client Machine:

Running **Microsoft Windows** or Macintosh OS.



The servers will not only be running the *SYSPRO Point of Sale*, but also **Microsoft Windows**, Internet Browser, **Internet Information Services (IIS)** and multiple other applications. Therefore, this will affect performance.

Minimum System Requirements

The following indicates the minimum requirements (as a guideline):



Ensure that each of the following is installed and adhered to on each of the respective servers, prior to the **SYSPRO Point of Sale** implementation.

- Windows Server 2012
- Microsoft SOL Server 2012

Considerations:

- Ensure that **Replication** and **Agent** are installed.
- The SYSPRO Point of Sale database must use the same Microsoft SQL collation as the SYSPRO database.
- When installing the Express version for the branches, the AUTOCLOSE option for the databases must be false, otherwise it will close if it is not active and result in the application crashing.
- Enable SQL network communications (typically on port 1433).
 This involves changing the firewall settings against online and offline branches.
- Ensure that the relevant client protocols are enabled against your SQL Server's configuration (i.e. TCP/IP or Named Pipes).
- Set Max Text Replication Size to 2147483647 (SQL Server Properties > Advanced).
- Microsoft .NET Framework 4.5 or later

Considerations:

 If you are running Microsoft Windows 8 and above and/or Windows Server 2012 and above, you must enable HTTP Activation for WCF services.

Control Panel > Programs > Programs and Features > Turn Windows features on or off > Microsoft .NET Framework 4.5:

Enable the following options:

- NET Framework 4.5 Advanced Services
- WCF Services
- HTTP Activation
- If you are not running on one of these versions, you only need to install .NET
 Framework 4.5.
- Internet Information Services (IIS) 7

Considerations:

Control Panel > Programs > Programs and Features > Turn Windows features on or off > Internet Information Services:

Enable the following options:

- Web Management Tools
- IIS 6 Management Compatibility:
 - IIS 6 WMI Compatibility
 - IIS Metabase and IIS 6 configuration compatibility
 - IIS Management Console
- World Wide Web Services:
 - Application Development Features
 - NET Extensibility
 - ASP.NET
 - ISAPI Extensions
 - ISAPI Filters
 - Common HTTP Features
 - Default Document
 - Directory Browsing
 - HTTP Errors
 - Static Content

- - HTTP Logging
 - Request Monitor
 - Performance Features
 - Static Content Compression
 - Security
 - Request Filtering
- Microsoft Silverlight (version 4.1.10329.0 or later)

Considerations:

 If you are running Microsoft Windows 8 and above and/or Windows Server 2012 and above, you must enable HTTP Activation for WCF services.



See the **End of Life Warning** section for important information.

Adobe Acrobat Reader



Windows Server 2012 creates user profiles for each IIS application pool (e.g. when you change the decimal separator to a "." for en-ZA, the change is only applied to the profile into which you are logged).

You can resolve this by changing it against the user profile that was created for the application pool.

Internet Requirements

Online configuration

For a purely online configuration, where the main server is hosted off-site, a fast, low latency and consistent Internet connection is required between the client and the server.



There will be a lower transfer of data since only the required data will be retrieved and communicated to the main server. However speed, latency and consistency will have a considerable impact on the user experience.

Offline-Online configuration

For an offline - online configuration, the main server periodically communicates with the offline server and requires a fast internet connection between the servers. This is to facilitate the main server updating the offline server through data replication (which could be substantial) and for the offline server to copy transactions to the main server.

The connection between the servers does not need to be consistent, but would be determined by how up-to-date the data needs to be.



There is more bulk transfers between the servers, but this allows the users to avoid connecting to the main server for the majority of the functionality by using the intermediary offline server.

Minimum Requirements for Touch Screen Tills

Screen resolution:

A minimum resolution of 1024 x 768 is recommended.

Operating system:

Windows 7 with Internet Explorer 10 (IE10)



See the **End of Life Warning** section for important information.

Printing till slips:

Laser Printers should be used for printing till slips.

Operating Systems and Browsers

The following indicates the **SYSPRO Point of Sale** compatible operating systems and browsers:



See the **End of Life Warning** section for important information.

Operating System	IE10	IE9	IE8	IE7	Firefox 3.6+	Safari 4+	Chrome 12+
Windows Vista	Yes	Yes	Yes	Yes	Yes	No	Yes
Windows 7	Yes	Yes	Yes	No	Yes	No	Yes
Windows Server 2008	Yes	Yes	Yes	Yes	Yes	No	Yes
Windows Server 2008 R2	Yes	Yes	Yes	No	No	No	Yes
Windows Server 2003, Windows XP SP2, SP3	No	No	Yes	Yes	Yes	No	Yes
Macintosh OS 10.5.7+ (Intel-based)	No	No	No	No	Yes	Yes	No

Technology

The following technology prerequisites are applicable to using **SYSPRO Point of Sale**:

- Microsoft .NET Framework 4.6
- SYSPRO 8 Service Upgrade Manager
- SYSPRO 8 Runtime
- SYSPRO 8 Point of Sale e.net Communication Service
 A valid endpoint must be configured in the Setup Options program of SYSPRO 8.
- SYSPRO 8 Point of Sale Synchronize Service
- SYSPRO Point of Sale
- SYSPRO 8 Avanti Initialization Service



This service must be installed on the same application server as the **SYSPRO 8** Server.

- SYSPRO POS Offline Foundation (for offline branches)
- Internet Information Services (IIS) WebSocket Protocol Feature

Licensing

SYSPRO ERP Modules

SYSPRO Point of Sale integrates with the following SYSPRO ERP modules:

Mandatory SYSPRO ERP modules:

Accounts Receivable

Customer information is used in Point of Sale sales orders.

Sales Orders

Sales are recorded in sales orders.

Inventory Control

Provides stock code information, availability and price.

Cash Book

Handles the transactional bank to which end of day processing amounts will be posted.

General Ledger

Defines the ledger codes to which end of day processing amounts will be posted.

Recommended SYSPRO ERP modules

Lot Traceability

Lot traceable stock items can be entered in counter sales.

Trade Promotions

Promotions are currently available and Pricing will follow.

Software License

The software that runs at a branch is referred to as the **SYSPRO Offline Foundation**; this is a 'lite' version of core SYSPRO.

Microsoft SQL Server License

You need to license the full **Microsoft SQL Server** product for the main Head Office server, as this is the product that provides the functionality to replicate data to branches.



To assist in keeping branch costs down, **Microsoft SQL Server Express** can be installed at each branch.

User Licenses

Licensing users for **SYSPRO Point of Sale** is different to core SYSPRO as SYSPRO Point of Sale licensing allows for concurrent users per Point of Sale branch.

FOR EXAMPLE:

- Point of Sale user licenses = 10
- Branches = 3

Licenses must be allocated to each branch first, say Branch 10 = 3 licenses, Branch 20 = 5 licenses, and Branch 30 = 2 licenses.

Concurrency is then controlled by branch according to what has been allocated.

In this example no more then 3 users will be able to log into branch 10.

You can change this allocation at any stage providing that the total number of Point of Sale users licensed in SYSPRO is not exceeded.

As SYSPRO Point of Sale users are separate entities from SYSPRO Users, you can, for example, have 10 SYSPRO users and 500 SYSPRO Point of Sale users. However, you can link a Point of Sale user to an existing SYSPRO user, for example, when the Point of Sale operator has functions that are also performed in SYSPRO.

When creating a Point of Sale user, the system automatically generates a SYSPRO user for auditing purposes, which are flagged as Point of Sale only (i.e. the SYSPRO operator that is generated cannot be used to login to SYSPRO).



When SYSPRO Point of Sale generates an operator in SYSPRO, it copies the _ **POS** operator. Therefore it is recommended that you ensure the correct access, Microsoft SQL passwords, etc. is configured for this user.

SYSPRO e.net Solutions licensing with SYSPRO Point of Sale

Neither the **e.net System Manager** nor any e.net business objects need to be purchased for **SYSPRO Point of Sale**, as all the required e.net functionality is bundled into the module. Therefore, you don't have to license **e.net Solutions** to use SYSPRO Point of Sale.

However, if any third party application needs to interface with SYSPRO, a SYSPRO *e.net Solutions* license will be required.

Although SYSPRO Point of Sale does not need to be licensed for e.net Solutions in any way, there is still access against an operator group that can cause permission issues if the operator does not have access to the business object being used in SYSPRO Point of Sale. Therefore, we recommend that you create a **POS** operator group and assign the **__POS** operator (as well as all existing POS operators) to this group.

In addition to this, ensure that you provide access to all the e.net Solutions business objects against this operator group to avoid potential access problems when new features (which use new business objects) are added to SYSPRO Point of Sale.

SYSPRO Installer

The following prerequisites are required to run the **SYSPRO Installer Application**:

- Valid **InfoZone** login credentials on www.syspro.com.
- Admin privileges on the computer(s) that will be used.
- The deployment service is installed once per network and must be installed on a discoverable machine that is on 24/7 and which has constant Internet connectivity.

Configuring

Required Connection Details

The following connection details need to be readily available prior and during the online and offline installations:

- SYSPRO login details
- Server username & password (for SQL and SYSPRO application server)
- Team Viewer details for both
- Microsoft SQL login details
- Administrative access

Prerequisites for Installation

- Set authentication to use Microsoft SQL Server:
 - Set your SYSPRO authentication to Microsoft SQL Server Authentication this applies to your SQL company, your SYSPRO operators and your ODBC data source.
- Add your license to your company registration:
 - Add the **SYSPRO Point of Sale** license to your company registration this should be the same license used to install the branch/offline server.
 - Additionally, ensure that the **_POS** operator has been created (done automatically when you import the **SYSPRO Point of Sale** license).
- Disable stock reservations:
 - Ensure that the **Reserving STOCK REQUIRED** setup option is disabled in SYSPRO (*Setup Options > Configuration > Distribution > Sales Orders*).
- Configure Credit note tax to avoid VAT duplication:
 - Define the Use TAX CODE FOR CREDIT NOTES setup option (Setup Options > Tax > Sales Orders).
 - Define the **Default sales Tax codes** against the **Credit Notes** setup option accordingly (*Setup Options* > *Tax* > *Company Tax Options*).

Installation considerations

- The offline version requires the online version to function. However, an online and offline instance should not be installed on the same machine.
- Each SYSPRO Point of Sale company must be installed as a separate website.
- The **SYSPRO Point of Sale** install seamlessly installs all Point of Sale components and prerequisites. It provides for both online and offline server installations, and allows you to install multiple versions for multiple SYSPRO companies.

The install includes the following:

- Prerequisites
- SYSPRO 8 Point of Sale e.net Communication Service
- Point of Sale components
- Point of Sale services
- SYSPRO POS Offline Foundation (for offline branches)

The first time you run the application after the install has completed, it creates all the SYSPRO Point of Sale databases and prompts you to configure your first branch and user.

Restrictions and Limits

- You cannot run the SYSPRO Installer Application on a machine for which Federal Information Processing Standard (FIPS) has been enabled.
- The **SYSPRO Point of Sale** application doesn't support **Microsoft Windows Terminal** client machines.
- SYSPRO Point of Sale doesn't support versions of Internet Explorer older than IE10.



See the **End of Life Warning** section for important information.

Microsoft End of Life Warning

Background

Microsoft Silverlight development framework is currently only supported on **Internet Explorer**, with **Silverlight** reaching the end of support on the 12th October 2021, and **Internet Explorer** end of support on the 15th June 2022.

Microsoft is not planning to terminate **Silverlight** and **Internet Explorer** applications after the dates mentioned above, however, **Silverlight** and **Internet Explorer** will be unsupported and therefore not receive any future quality or security updates from **Microsoft**. These two applications will not be redistributable once they reach the end of the support date.

• Excerpt from **Microsoft** Support site:

 $\verb|https://support.microsoft.com/en-us/windows/silverlight-end-of-support-0a3be3c7-bead-e203-2dfd-74f0a64f1788|$

Silverlight development framework is currently only supported on **Internet Explorer 10** and **Internet Explorer 11**, with support for **Internet Explorer 10** ending on 31 January 2020. There is no longer support for **Chrome**, **Firefox**, or any browser using the **Mac** operating system.

Excerpt from Microsoft Docs site:

https://docs.microsoft.com/en-us/lifecycle/faq/internet-explorer-microsoft-edge

Please note that the **Internet Explorer (IE) 11** desktop application will end support for certain operating systems starting June 15, 2022. Customers are encouraged to move to **Microsoft Edge** with IE mode. IE mode enables backward compatibility and will be supported through at least 2029. Additionally, **Microsoft** will provide notice one year prior to retiring IE mode.

Impact

Microsoft's end of support for **Microsoft Silverlight** and **Internet Explorer** has a direct impact on **SYSPRO Point of Sale** as it is developed on these platforms for **SYSPRO 6.1**, **SYSPRO 7 Update 1**, and **SYSPRO 8**.

The **Silverlight** version of **SYSPRO Point of Sale** will continue to work, however, no further enhancements will be made by SYSPRO for this version, as of July 2023.

How to address this challenge

SYSPRO recommends that customers upgrade to **SYSPRO 8 2021 R1** or later, to take advantage of **SYSPRO Point of Sale** running in **SYSPRO Web UI (Avanti)** - which is supported on any HTML5 browser (such as **Google Chrome** or **Microsoft Edge**, to name a few).

SYSPRO customers that wish to continue using the **Silverlight** version can potentially make use of **Microsoft Edge** with **Internet Explorer mode**. This enables backward compatibility and will be supported by **Microsoft** through at least 2029.



As **Microsoft** does not allow **Silverlight** to be downloaded or re-distributed any more, customers will require the **Silverlight** executable to already be available on their network location.

Resolution Impact

SYSPRO customers that are already on **SYSPRO 8 2021 R1** or later can make use of the **SYSPRO Web UI (Avanti)** version of **SYSPRO Point of Sale** immediately, which currently runs in parallel to the **Silverlight** version.

Solving

FAQs

Installation and Security

How does SYSPRO Point of Sale handle security?

SYSPRO Point of Sale doesn't support anti-tampering, therefore the following explains how security is managed:

- SYSPRO Point of Sale utilizes ASP tokens which are used to identify operator sessions. This information is encrypted by utilizing the HSTS header and HTTPS communication standard which is the default setup option of SYSPRO Point of Sale from SYSPRO 8 2021 R2.
- The SQL database can be encrypted using the same method for the SYSPRO database to secure it in Rest.
 - The connection to **Microsoft SQL Server** can also be secured by adding the **Encrypt=true** value to the SQL connection string in the SYSPRO Point of Sale web.config file.
- SYSPRO Point of Sale doesn't store any sensitive information about payments being processed.
 - The custom payment integration code (third party software) has full control of the transaction and it is the third party software's responsibility to process card payments safely and securely.

In general, communication with client card devices predominantly consists of activating a specific device with a specific amount required. These devices handle all communication and payment processing internally and pass a success or failure message back to **SYSPRO Point of Sale**, so data that can be compromised is kept to a minimum.

How do I enable Single Sign-on for SYSPRO Point of Sale?

From **SYSPRO 8 2021 R2**, **Single Sign-on** capabilities are available with **SYSPRO Point of Sale** when running in **SYSPRO Web UI (Avanti)**.

The following requirements must be met to use the SSO capabilities:

- A registered certificate for the SYSPRO Point of Sale server is required to run Single Signon.
- A customer account must be registered with Azure B2C and configured with the correct redirect URL back to the specific SYSPRO Point of Sale instance.
- **SYSPRO Point of Sale** users must be configured with an email address for the system to identify the correct operator.

To enable **Single Sign-on** functionality in **SYSPRO Point of Sale** (when running in **SYSPRO Web UI** (**Avanti**)) add the following tags within the Web.config file located in the

\inetpub\wwwroot\SYSPRO8POS xxxx\SYSPROPOSAVANTI folder (where xxxx is your company code):

```
<add key="ida:IsB2Cauth" value="true" /><add key="ida:Tenant" value="yourcloud.onmicrosoft.com" />
<add key="ida:ClientId" value="yourUniqueTenantId" />
<add key="ida:ClientId" value="yourUniqueClientId " />
<add key="ida:ClientSecret" value="YourClientSecret" />
<add key="ida:AadInstance" value="https://yourcloud.b2clogin.com/tfp/{0}/{1}" />
<add key="ida:RedirectUri" value="https://yourCompany.com/SYSPRO8POSAVANTI_EDU1/" />
<add key="ida:SignUpSignInPolicyId" value="b2c_1_susi" />
<add key="ida:EditProfilePolicyId" value="b2c_1_edit_profile" />
<add key="ida:ResetPasswordPolicyId" value="b2c_1_reset" /></add key="ida:ResetPasswordPolicyId" value="b2c_1_reset" />
```

What user must be assigned to the SYSPRO Point of Sale Application Pool in Internet Information Services (IIS)?

Network Service.

What .Net framework must be assigned against the SYSPRO Point of Sale Application Pool?

Microsoft .NET Framework 4 or higher.

What permissions must be given to the SYSPRO and SYSPRO Point of Sale folders?

IUSR and Network Service.

Can I use a test company as a master copy for live installs?

You should always setup a test company first. However, there is currently no way to use setup data in test company as a master copy for a live install.

Can I copy a branch to ease the requirements for setup when installing?

No, there is no copy branch facility. The branch settings need to be carefully considered for each branch.

End of Day settings, allowed warehouses, payment types, etc. are different per branch so it is not advisable to copy a branch.

What are the recommended firewall and anti-virus settings?

To assist with a smooth installation and optimal performance:

- the SQL port needs to be open (inbound and outbound).
- the port that SYSPRO Point of Sale is being hosted on (set in Internet Information Services (IIS)) must be open, both inbound and outbound.

What online versus offline options are available when installing SYSPRO Point of Sale?

There are 2 options when installing **SYSPRO Point of Sale**:

- Online version
 - This must be installed on the same server that the main SYSPRO installation resides and provides full accessibility to all the functions provided by the *SYSPRO Point of Sale* system.
- Offline SYSPRO Point of Sale system
 - This is installed at each location on a server and synchronizes with the head office server at time intervals, depending on your configuration.

Both versions can run simultaneously, or the online version can be run on its own. However, the offline version requires the online version to function.

Is there a stand-alone option for SYSPRO Point of Sale?

SYSPRO Point of Sale is developed specifically to run off SYSPRO ERP, therefore a stand-alone option is not available. However, you can buy a single SYSPRO ERP User license (with the modules required for **SYSPRO Point of Sale**) and as many Point of Sale user licenses as required. SYSPRO would then be in place in order to power the application.

How do I switch between different companies when using SYSPRO Point of Sale?

The SYSPRO company is defined when **SYSPRO Point of Sale** is initially installed. Therefore, to run multiple SYSPRO Point of Sale companies simultaneously, multiple installs are required to cater for each company.

Is SYSPRO Point of Sale compatible with Windows Communication Foundation (WCF)?

Yes.

However, an error may arise when HTTP Activation is not enabled for WCF services, as this prevents **SYSPRO Point of Sale** from communicating with the services it requires. The solution is to simply enable this within **Windows Features** as it is disabled by default.

What type of internet connection (bandwidth) is recommended or required?

Unfortunately, this is not something we can stipulate. We recommend that you get in a specialist who can assess your network, data size and all other elements that could affect your requirements.

The following factors need to be taken into account when considering line speeds:

- Number of users accessing the system
- Volume of transactions being processed

What happens if an error is encountered while installing SYSPRO Point of Sale?

The installation rolls back if it encounters an error. However, if the install completes and the application fails to open, you can check the following possible causes:

- The domain exists, and that both the online main server and offline branch server(s) reside on the same domain.
- The SysproLoginForPos SQL user does not already exist.

This SQL user is created (including password generation) and the necessary permissions are assigned to it during the installation process. Therefore, this user must not be changed.

In addition, the _Sysproposrole role is created within **Microsoft SQL Server** during the installation process, and it inherits permissions from the SQL user. Therefore, this role must not be altered in any way.

- The ISAPI and CGI restrictions are set up correctly in **Internet Information Services (IIS)**.
- Permissions are configured correctly for the following:

```
LOG - ERROR.txt
SysproPos.xap
Silverlight.js
```

- The connection string in the web.config file is pointing the application to the correct server.
- That **Microsoft Publisher** allows **Microsoft SQL Server** ports through the firewall (this is generally port number 1433).



If you are printing to a network shared printer, try using the identity impersonate="true" tag in the web.config file.

How do I enable the Internet Information Services (IIS) WebSocket Protocol feature?

The **Internet Information Services (IIS) WebSocket Protocol** feature is required when installing one of the following:

- SYSPRO Web UI (Avanti)
- SYSPRO Point of Sale

Therefore, before installing either of these products, you can enable the **Internet Information Services (IIS) WebSocket Protocol** feature as follows:

- 1. Open the **Turn Windows Features on or off** program.
- 2. Navigate as follows:

Internet Information Services > World Wide Web Services > Application Development Features

- 3. Enable the WebSocket Protocol option.
- 4. Save your changes.

How do I manually update the SystemConfig.xml file?

Proceed as follows to manually configure the **SYSPRO 8 Point of Sale Utility Service** after its installation:

- 1. Navigate to where you installed SYSPRO Point of Sale.
- 2. Select to edit the SystemConfig.xml file.
- 3. Locate the <SysproPosClientSideServiceUrl/> element and enter the relevant entry (e.g. http://localhost:30210<SysproPosClientSideServiceUrl >http://localhost:30210</sysproPosClientSideServiceUrl>).
- 4. Save the file.

We recommend that you stop and restart this service after performing this function.

Why should I apply an SSL certificate?

The core function of an SSL certificate is to protect server-client communication. It protects your information online by encrypting any data sent to you, and then decrypting it once you've received it (i.e. the data is locked and can only be unlocked by the intended recipient as no-one else can have the key to open it).

SSL certificates also provide website authentication - identity verification being one of the most important aspects of web security.

How do I apply an SSL certificate to my IIS website?

Requirements:

- Your server certificate
- Your intermediate certificates
- Your private key

Installation instructions:

- 1. Launch the Internet Information Services (IIS) Manager.
- 2. Select your server name from the **Connections** menu (i.e. the host to which you want to install the certificate).
- 3. Navigate to the **Security** section by selecting the **Server Certificates** icon under **Security**.
- 4. Select the **Complete Certificate Request** function from the **Actions** menu.
- 5. From the **Complete Certificate Request** wizard, browse for your Server Certificate file (previously saved on your server's desktop) and select **OK**.

Binding your certificate to your website:

The following describes how to assign or bind the SSL certificate to the appropriate website:

- 1. From the **Connections** menu in **Internet Information Services (IIS) Manager**, expand your server's name, followed by the **Sites** folder, and then select the site that you want to secure.
- 2. Select the **Bindings** function of the **Actions** menu.
- 3. From the **Site Bindings** window, select the **Add** function.
 - If you already have the appropriate site binding created, select the **Edit** function to change the SSL Certificate accordingly.
- 4. Enter the following within the **Add Site Binding** window:
 - Type: https
 - IP Address: All unassigned.

If you have multiple IP addresses, select the correct one that applies.

- Port: 443
- SSL Certificate: Select the *friendly name* of the SSL certificate you've installed.
 You can also select the **View** function to confirm the validity of the certificate.
- 5. Select **OK** to finish binding the SSL certificate to your live website.

As SSL certificates have an expiry date, ensure that you renew your certificates timeously to prevent any unexpected down time.

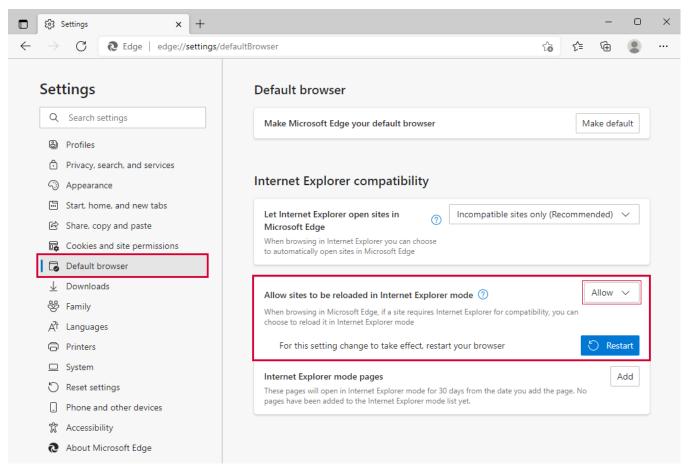
How do I enable Internet Explorer Mode in Microsoft Edge?

SYSPRO customers that wish to continue using the **Silverlight** version can potentially make use of **Microsoft Edge** with **Internet Explorer mode**. This enables backward compatibility and will be supported by **Microsoft** through at least 2029.



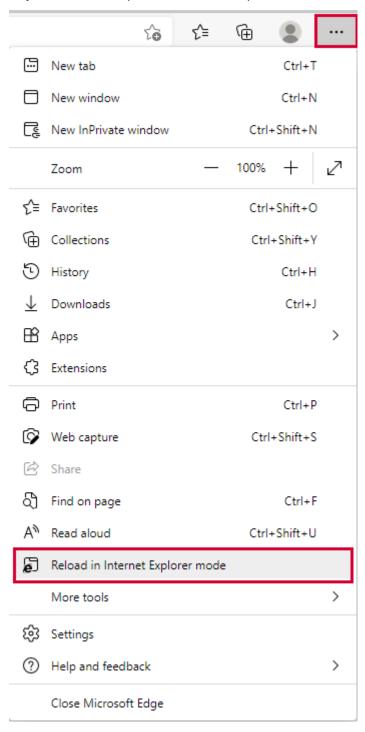
As **Microsoft** does not allow **Silverlight** to be downloaded or re-distributed any more, customers will require the **Silverlight** executable to already be available on their network location.

- 1. Open Microsoft Edge.
- 2. Navigate to the **Default browser** section of the **Settings** panel.
- 3. Within the Internet Explorer compatibility section, define the Allow sites to be reloaded in Internet Explorer mode option as Allow:



- 4. Restart your browser for the change to take effect.
- 5. Enter the SYSPRO Point of Sale URL in your browser and select the **Reload in Internet**

Explorer mode option from the ellipses menu:



Microsoft Edge then loads the SYSPRO Point of Sale site in Internet Explorer mode.

What if Microsoft Silverlight is required on new machines after its end of life?

Microsoft Silverlight development framework is currently only supported on **Internet Explorer**, with **Silverlight** reaching the end of support on the 12th October 2021, and **Internet Explorer** end of support on the 15th June 2022.

Microsoft is not planning to terminate **Silverlight** and **Internet Explorer** applications after the dates mentioned above, however, **Silverlight** and **Internet Explorer** will be unsupported and therefore not receive any future quality or security updates from **Microsoft**. These two applications will not be redistributable once they reach the end of the support date.

If, however, you need to install **Microsoft Silverlight** on new machines (up to **Microsoft Windows 11**) you can install this manually from an old download location or existing machine.

Alternatively, you can attempt to source the install from an alternative site to **Microsoft** via Google searching. However, SYSPRO doesn't provide specific recommendations for this as it won't be supported, secured or patched by **Microsoft**.

Replication and Synchronization

How are SYSPRO files synchronized?

Depending on the UpdatedInterval defined, the SYSPRO file syncing executes and retrieves the latest SYSPRO files from the Head Office Server and proceeds to copy it down to the branch.

The files that are copied depend on the results returned by the **SYSPRO POS Query** business object (i.e. POSQRY). The branch checks and gathers the following file details that currently reside in the directories of the branch's SYSPRO installation:

- File names
- Created date
- Modified date

This list is sent to the **SYSPRO 8 Point of Sale Synchronize Service** and compared to the files on the main Head Office server. Files which do not match created and modified dates are added to a zip file which is then streamed down to the windows service. These files are then extracted and used to update the branch's SYSPRO.



The IMPACT. INI file isn't copied down, but rather a copy is made and renamed to IMPACT POS.INI and then copied down to the branch.

How does replication work in SYSPRO Point of Sale?

Replication is configurable within the branch setup, so you have the option to create the publications and subscriptions when creating an offline branch. The replication setup is required to distribute the data down to all the Offline branches. Any changes happening at Head Office are then replicated down to the branches so that the branches are kept up to date (e.g. stock levels and customer balances, etc.).

The type of replication chosen is transactional replication so that the updates are replicated down to the branches as soon as they happen. This ensures that the branch data is as up-to-date as the internet connection allows for. Only setup data is replicated, which means that you will centrally administer all your setup (including Branch and User setup). This information is then replicated to all branches so that consistent setup is maintained across all branches.

There are 3 parts to replication:

1. Distributor and distribution

The first part of the replication setup is the distribution, which is where you configure the distributor and distribution database and the accounts involved. This defines which server acts as the distributor and which database will be utilized as the distribution database.

2. Publisher and publication

The second part of replication setup is to define the publisher and which distributor it needs to use. The publisher is the server that will publish a database and/or other **Microsoft SQL**Server items known as articles. During publisher and publication setup, you specify which articles you want published, as well as which distributor will be used by the publisher to send it's publications.

3. Subscriber

The third part of the setup is the subscriber, which is where you specify the server that will receive the publications from the distributor and how this subscription will be handled by these two servers.

How does replication work when the connection comes back up after a disconnection?

Any changes happening at Head office/Online will be replicated down to the Branches/Offline as soon as a connection is re-established. Likewise, the **SYSPRO 8 Point of Sale Copy Service** is running the whole time and will keep trying to copy data from the branches. So, when it fails, it will retry until there is a connection and copy any transactions and cash ups from the offline server to the online server, so that they can be posted.

What is the replication interval set to?

By default, it is set to immediate. This means it will replicate data to the subscribers as it changes, taking connectivity to the branch into consideration.

What is the average replication time on larger installations of the 'Always on' capability?

Replication is instant once the initial snapshot has been copied to the branch, but in our experience, larger databases can take between 5-10 seconds.

Why are errors rendered on the offline branch after disabling replication?

Deliberately stopping the replication is not recommended when running **SYSPRO Point of Sale** as this causes the offline branch to not function correctly.

What SQL tool can I use to troubleshoot and oversee the replication?

The replication monitor.

What data is replicated to the branch server from the SYSPRO database?

Only customer, inventory, price, tax and other key setup information required. Basically, no transactional data is replicated due to high volumes of data. You can view the data that is copied to the branches by replication using the replication publication articles.

Services

Where do I configure settings for the SYSPRO Point of Sale services?

The settings are configurable within each specific service's configuration file, which is located in the install directory of each specific service.

How are database updates handled?

The underlying **SYSPRO Point of Sale** architecture provides real time updates and seamless database creation and updates, making it truly adaptable.

If any updates are required, **SYSPRO Point of Sale** automatically updates both the components and databases based on the version currently deployed or updated.

The **SYSPRO 8 Point of Sale Synchronize Service** controls all updates of the software on the Head Office server and all branch servers. As soon as an update file is found, it ensures that components are copied to all required servers and automatically updates the database, Point of Sale components and SYSPRO components required on the offline server.

This means that updates can be done automatically as part of the SYSPRO update architecture.

What is the SYSPRO 8 Point of Sale Synchronize Service?

This Microsoft Windows service is installed in both online and offline environments and is used to synchronize *SYSPRO Point of Sale* application files (i.e. it self-heals web site components). It uses web services hosted on the Head Office server to synchronize changes to *SYSPRO Point of Sale*, as well as SYSPRO files at the various branches.

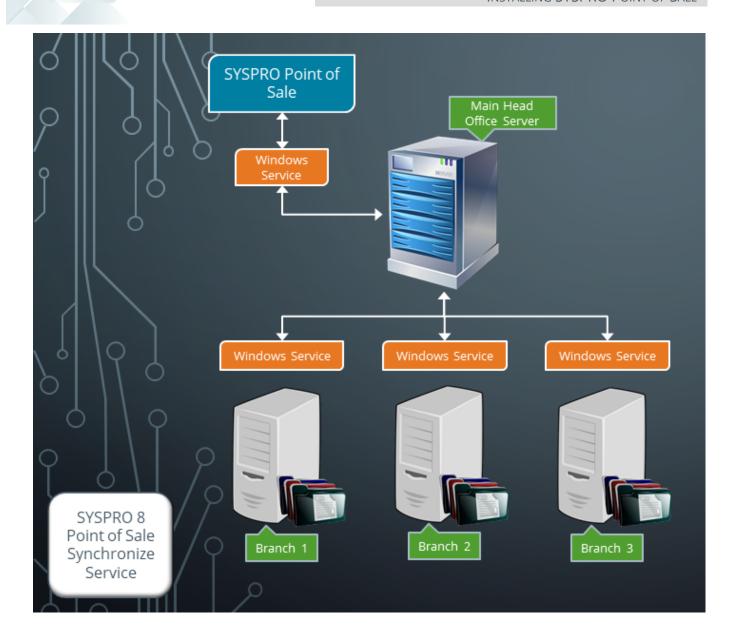
Its primary purpose is to check for any SYSPRO Point of Sale updates that may have been ported and automatically update the software accordingly.

The secondary purpose of this function in the offline environment is to check for any business object or work file changes that need to be applied to the Branch server. If it detects any updates, it copies down the relevant files needed by the SYSPRO Offline foundation.

This service should only be configured to run once a day after hours (or as required) when SYSPRO settings have changed or updates have been made, so that the required **Internet Information Services (IIS)** can restart without affecting trading.



Upon startup, the service makes 3 attempts to perform an initial sync, after which it resumes as per the scheduled setup. Restarting the service can be used to force a sync on a branch after specific setup values were changed at Head Office.



Where must the SYSPRO 8 Point of Sale Synchronize Service be installed?

This service must be installed on all servers.

What statuses are written to the application log?

Besides errors, the **SYSPRO 8 Point of Sale Synchronize Service** writes the following statuses to the application log:

- SYSPRO Files Sync Started
- SYSPRO Files Synced
- POS Files Sync started
- POS Files Synced

How does the SYSPRO 8 Point of Sale Copy Service work?

This is an essential service to successfully use the **SYSPRO Point of Sale** Offline architecture.

This Microsoft Windows service is installed on the Head Office server and its purpose is to copy transactional data from all offline branches to the main Head Office server. The service therefore continually checks each branch server for transactions that need to be copied up to the Head Office server. If it finds a transaction, it copies it from the branch server (where the Offline Foundation version of SYSPRO ERP is installed) to the Head Office server (where the complete version of SYSPRO ERP is installed) and marks it as "copied" on the branch server.

In the SYSPROPOS database, a table called <u>BranchesSqlConnections</u> contains the connection strings which the SYSPRO 8 Point of Sale Copy Service references to copy the waiting offline branch data. Each offline branch requires a corresponding connection string in this table to be processed.

Each time the service runs, it determines which branch to copy next by comparing the ProcessDate field in the table, and the last branch processed is the first one to process next. The RecordsToCopy field is used to determine how many transactions will be copied at once.

When the copying process starts, the records being copied are flagged as Busy Copying. When this process completes, it updates with the status COPIED.

Two types of data are copied via the SYSPRO 8 Point of Sale Copy Service:

- Transaction data
- End of Day cash up data

How are multiple companies updated?

The **SYSPRO 8 Point of Sale Posting Service** posts per company. Therefore, only a single service is installed and the service itself controls posting to multiple companies. It posts on a different thread per company, meaning that it still operates as a separate service but is only installed once.

How do I troubleshoot the SYSPRO 8 Point of Sale Posting Service?

You can use one of the following sources:

■ The log tracing detail text file of the SYSPRO 8 Point of Sale Posting Service



If this type of logging is enabled in the Posting service configuration file.

■ The Windows application logs (*Event Viewer > Windows Logs > Application*)

Which account must be specified when installing the SYSPRO 8 Point of Sale Print Service on a server?

A local administrator account that has access to all printers.

How do I troubleshoot the SYSPRO 8 Point of Sale Print Service?

This depends on what version of the SYSPRO 8 Point of Sale Print Service is installed on the server:

- If an older version of the service is installed, then you can look in the Temp directory of your c drive for the service text file.
- If a newer version of the service is installed, then you can look in the service's install directory for the LOG OPERATIONAL.txt and LOG ERROR.txt text files.

How do I install the SYSPRO 8 Point of Sale Utility Service?

This service is installed on client machines and is used for device-based printing, as well as integration to external devices (e.g. signature pads and card payment integration pads).

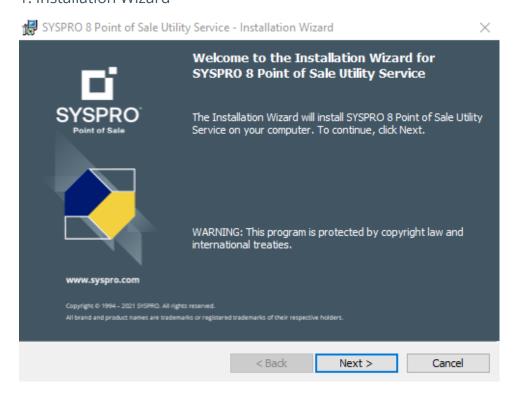
It's purpose is to provide the client's details (i.e. IP address and computer name) to the **SYSPRO 8 Point of Sale Print Service** when printing from within *SYSPRO Point of Sale* on the **Microsoft Silverlight** platform.



This service doesn't apply when running **SYSPRO Point of Sale** in **SYSPRO Web UI** (**Avanti**).

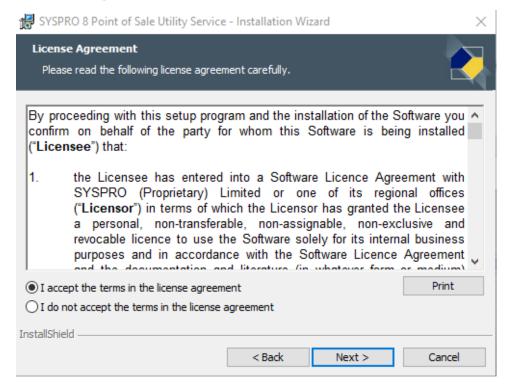
Proceed as follows to install this service using the SYSPRO Point of Sale autorun.exe wizard:

1. Installation Wizard



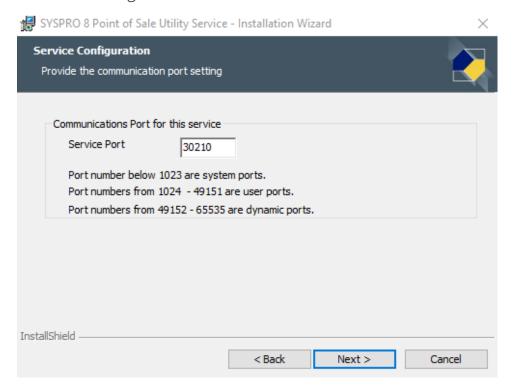
From the Welcome to the Installation Wizard for SYSPRO 8 Point of Sale Utility Service window, select Next to continue.

2. License Agreement



From the **License Agreement** window, accept the terms of the agreement.

3. Service Configuration



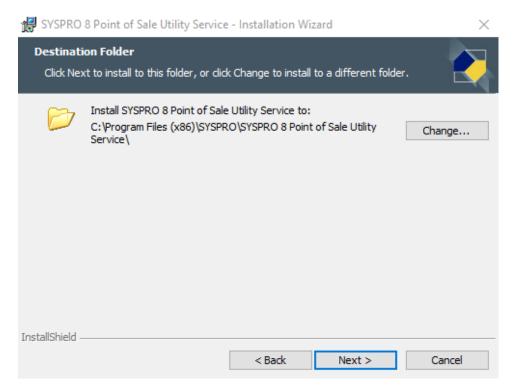
From the **Services Configuration** window, indicate the communication port to be used for the SYSPRO 8 Point of Sale Utility Service.



This port number must match the port defined during the install of the SYSPRO 8 Point of Sale Services.

Select **Next** to continue.

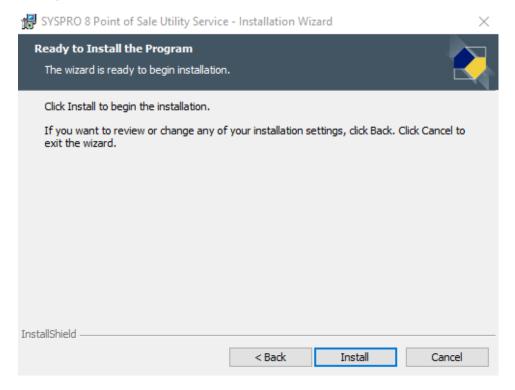
4. Destination Folder



From the **Destination Folder** window, indicate the install location for the service or accept the default provided.

Select **Next** to continue.

5. Begin Install

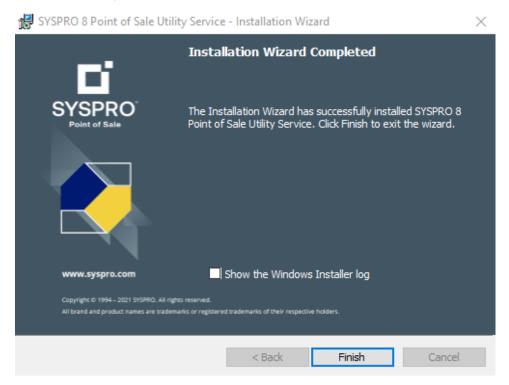


From the **Ready to Install the Program** window, select the **Install** function to begin the installation.



Use the **Back** function if you want to review or change any of your installation settings.

6. Install Complete



Once the installation completes, the **Installation Wizard Completed** window is displayed. Select **Finish** to exit the wizard.

Operators

Can I use the same online SYSPRO Point of Sale user to log into an offline branch?

No. A SYSPRO Point of Sale user is linked to a SYSPRO Point of Sale branch. Therefore, if a user is linked to a branch that is flagged as offline, they are only able to log into that specific offline branch.

Similarly, a user linked to an online branch can't log into an offline branch with the same credentials. However, the online user can switch between online branches using the **Branch Selection** program within **SYSPRO Point of Sale**.

What is a POS Only SYSPRO Operator?

This is a SYSPRO operator that is created with full admin permissions and is flagged as POS Only. This grants the POS user all the right permissions to use **SYSPRO Point of Sale** and simultaneously log into SYSPRO in the background. While the POS user is linked to a SYSPRO operator with full admin rights, they will not be able to log into SYSPRO using this operator.

What is the _POS operator used for?

This operator is used to call the required business objects to retrieve setup information from SYSPRO. It is also used to generate SYSPRO operators linked to *SYSPRO Point of Sale* operators for traceability of transactions in SYSPRO, however, none of these users can log into core SYSPRO.

Is one _POS user sufficient to handle all business object calls from multiple branches, each with multiple operators?

Each **SYSPRO Point of Sale** operator has a generated (or existing where required) SYSPRO operator, which provides traceability and audit trails in SYSPRO at an operator level. These generated operators are copied from __Pos and are flagged as Point of Sale only operators, therefore they can't log into core SYSPRO. Only SYSPRO Point of Sale programs use the __Pos operator internally for retrieving required system information before a user has even logged in.

Branches

Can I switch off the branch server when the store closes?

No, the branch server must be on at all times, with the exception of temporary power failures.

How do I resolve the "Company license has expired" branch error after changing my SYSPRO license?

The **SYSPRO 8 Point of Sale Synchronize Service** is set to run in 24-hour intervals by default. Restart this service at the branches and monitor the Microsoft Windows application logs for the **SYSPRO FILES SYNCED** status.

Offline Architecture

What are the benefits of the Offline architecture?

Faster speeds

One of the biggest benefits the offline architecture is speed.

When processing sales from *SYSPRO Point of Sale* you don't have to wait for SYSPRO posting to occur to complete the sale as this gets done in the background by the posting services. This increases the processing speed substantially which is important in a true retail environment where high transaction volumes are being processed.



This does not apply to **Manage Orders** as this functionality is only available when the lines are up and will post information to SYSPRO immediately.

Always-on functionality

The offline architecture ensures that the branch has limited or no down-time if there are connection issues to head-office or the main server goes down.

This is critical in retail as it allows the branches to trade and service customers regardless of whether or not you are connected to head-office.

Only operations that are critical to servicing customers are available in the event the lines go down:

- Point of Sale
- Quotes
- Credit notes
- Exchanges
- Account payments
- Cash-ups
- End of Day
- Offline trading mode
 - During maintenance:

The Offline architecture enables all offline branches to trade in offline mode whilst planned maintenance or upgrades are being implemented at Head Office.

Trade shows:

The Offline architecture enables transaction processing offline at trade shows and such, where there is no connection to the Head Office at all. As soon as the mobile device (e.g. laptop) is connected to the network again, it then automatically syncs and posts transactions processed while offline.

How does the offline functionality work?

Offline branches don't have a complete SYSPRO installation, rather they have the SYSPRO offline foundation version installed. This version has all the business objects required to create all of the different transactions, but not post them to SYSPRO.

All of the offline transactions are saved in the **SYSPRO Point of Sale** database and are then copied later to the main server (where SYSPRO is installed) using the windows copy service. Once the transaction is copied, the windows posting service posts all of the transactions to SYSPRO.

All the data that is needed on the branch (e.g. customer information) is replicated down from the main server using SQL replication to ensure that the branch always has the most up to date information from SYSPRO.

Is the offline architecture a good fit for sites with poor line speed or branches that are often not connected to head office?

The offline architecture in **SYSPRO Point of Sale** is not designed to cater for poor line speeds.

The offline architecture still has to copy transactions to head-office and retrieve data from head-office, therefore the internet lines need to be suitable to handle this.

Using the offline architecture enables operators to trade regardless of whether the lines are down, or the speed has dipped. If the lines do go down, the operator can still trade unaffected and completely independent of what is happening with the lines.



This only applies to core functionality required to trade.

Microsoft SQL Server

What SQL Server users are required?

The following SQL Server users must exist with the appropriate permissions enabled:

User type	Rules
Administration SQL user	The user entered here must have the following SQL permissions assigned: SQL Server Roles
	db_creator
	This is used to create and drop entities, such as databases, tables, columns, etc.
	bulkadmin
	This is used to issue BULK INSERT statements.
	securityadmin
	This is used to give database-level permissions as and when needed.
	processadmin
	This is used to end SQL processes running on the server using the View Users program.
	Database Mapping
	db_owner
	This needs to be set for both system-wide and company databases.
	The user cannot be the same account as the Standard SQL user and the User name cannot contain any spaces.
Standard SQL user	The user entered here must have the following SQL permissions enabled for both system-wide and company databases:
	db_datareaderdb_datawriter
	The user cannot be the same account as the Administrative SQL user and the User name cannot contain any spaces.

Are there any SQL licensing additions required on the HO server to use SYSPRO Point of Sale with SQL replication?

The head office server requires a fully licensed **Microsoft SQL Server** version (the minimum being **Microsoft SQL Server 2008 R2**).

This allows you to set-up replication and no additional licenses are required for the branches to subscribe.

Do Point of Sale users require a SQL server client license if connecting to the HO server (Online)?

Microsoft SQL Server Express 2008 R2 (free version) can be used at the branches for a branch server and requires no license.

What databases are involved in SYSPRO Point of Sale?

- Sysprodb
- SYSPRO Company
- SYSPRO Point of Sale database

How does SYSPRO Point of Sale query the SQL databases?

SYSPRO Point of Sale queries the databases via stored procedures that are managed internally.

If the exception log indicates that SYSPRO Point of Sale database is not accessible for the SQL user specified, what process would you take to troubleshoot this issue?

- 1. Log into the SQL instance used with the SQL user and password specified in the connection string of the Web.config file.
- 2. Check if the SQL login specified in the connection string has access to the database.

 If not, then log into SQL with a SQL administrator account and check that the database mappings for the SQL user in Web.config file are correct according to the documentation.

What if I need to change the SQL Server credentials used by the Deployment Service?

Use the **SQL Server Credentials** function within the app.

For more information on this, view the help section **Updating SQL Server Credentials**, located under **Configuring the app**.

Can I use SQL Express with SYSPRO 8?

Yes, you can.

The only difference is during your SQL Configuration when running the **SYSPRO Installer** app for the first time.

At the **SQL Server Name** field, ensure that you enter the full instance name (e.g. INSTANCENAME\SQLEXPRESS).

You can check this entry if you run **SQL Server Management Studio** and view the instance to which you are logging in.

What is recommended for backing up databases, logs and general SQL maintenance activities?

As Microsoft SQL Server Express does not include the SQL Agent, SQL backups can't be scheduled.

Therefore, if you require scheduled back-ups, you need to purchase a full version of **Microsoft SQL Server** for the branches.

What backup plan is recommended for SYSPRO Point of Sale?

We recommend daily backups of the following:

- Head office SYSPRO Company
- SYSPRO Point of Sale database
- All of the branch's SYSPRO Point of Sale databases

What backup is recommended for the offline server?

If there is a connection to head office, the transactions will be copied to head office.

If the branch server fails it will lose minimal data - if any. Unless, there are - for example, 10 POS users at the branch doing 100's of invoices every day; in which case, a better strategy is required where backups are made at the branch at specific time intervals.

It must be considered what the potential loss of data is versus the cost of implementing and managing backups at all the branches. This means you would potentially store the backups remotely or require an extra branch server at each of the stores which now also has to be managed.

But this is ultimately up to you to decide.

SYSPRO Installer

What is the SYSPRO Installer Application?

The **SYSPRO Installer Application** lets you install **SYSPRO 8** and its required software components, as well as deploy hotfixes.

How do I access the SYSPRO Installer Application?

After you have applied for **SYSPRO 8** you will receive a notification email confirming your registration.

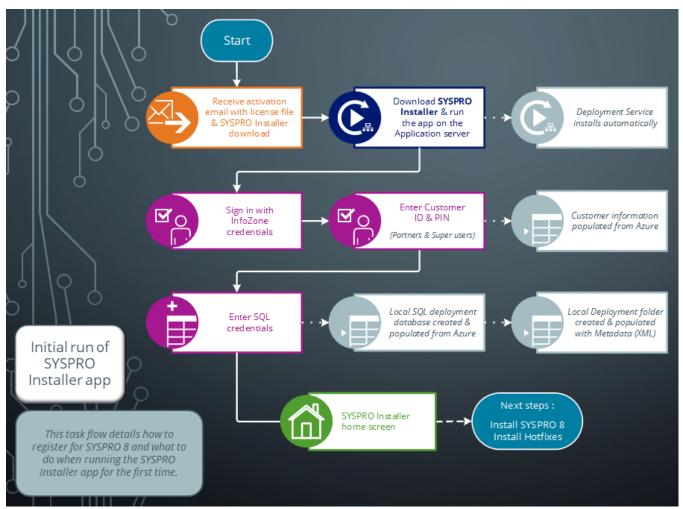
After your registration has been approved and the applicable license generated, you will receive an email with your new *SYSPRO 8* license XML file and a link to the **SYSPRO Installer Application** download.

A 6-digit pin is included in your license file and in the email, which will be used when logging into your customer code within the Installer application.

Using

Process

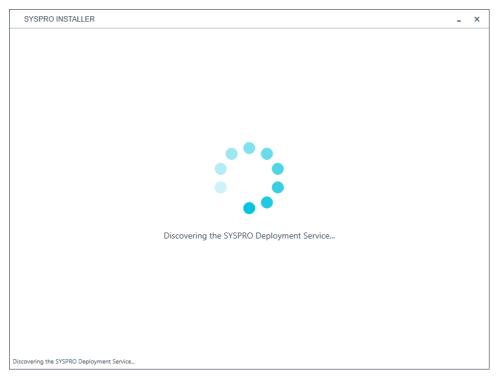
Initial run of the SYSPRO Installer Application





Ensure to run the **SYSPRO Installer Application** on the SYSPRO application server.

1. Application Start-up



When you launch the **SYSPRO Installer**, it checks your registry to detect if there is a saved **endpoint address** for the **SYSPRO Deployment Service**:

- If the application finds an address entry in your registry, it uses this to find the SYSPRO Deployment Service at that address.
- If a registry entry is not found, the application performs discovery for the SYSPRO Deployment Service.

If the service is found, the application writes this address to your registry and continues.

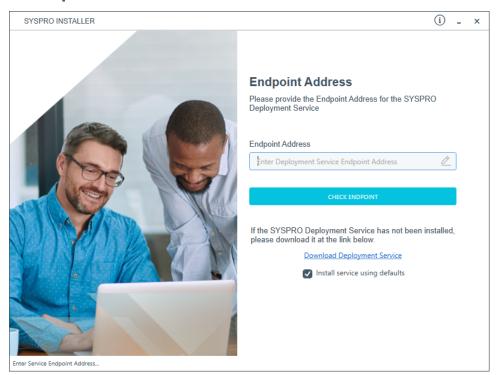


This *discovery phase* is not performed when using the support version of the application (**SYSPRO Installer Support**). Instead, you are taken directly to the **Endpoint Address** screen.

- If the **SYSPRO Deployment Service** is not discovered:
 - The app checks whether the service has been installed on your machine.
 If the service is installed, and discovery failed, it could be that the service is not running.
 - If the deployment service is not installed, a link is provided to allow you to download the service.

- The deployment service setup installation file is automatically downloaded from Azure and installed on your machine.
 - Once the deployment service is installed, the application verifies the connecting endpoint.
- Once the deployment service is discovered, it is silently installed in the background by default.

2. Endpoint Address





The **Endpoint Address** screen is only displayed if the **SYSPRO Deployment Service** has never been installed on your machine.

If no download link is displayed, then the service is installed, but may not be currently running.

Select the **Insert default Endpoint** icon inside the **Endpoint Address** text block to populate the block with the current machine DNS name and default Deployment Service SOAP Port.

You can use the **Check Endpoint** option to start discovery for the service again, if required, however this only works if the **Endpoint Address** text block is already populated. This is useful if your deployment service has been restarted.



When using the support version of the application, you will need to enter the endpoint address manually during start up. To locate this endpoint address, open the relevant configuration file and view the baseAddress entry:

C:\Program Files\SYSPRO\SYSPRO Deployment Support
Service\SYSPRODeployServiceHost.exe

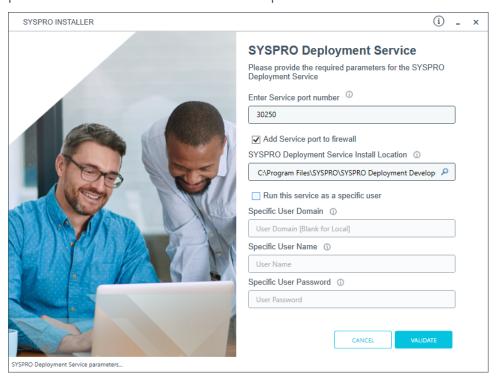
Install service using defaults option

The **Install service using defaults** option enables you to decide how to install the service.

This option is enabled by default and (if left enabled) results in the Deployment service being downloaded and installed silently to a default location on your c: drive.

If you disable this option, the Deployment service will download and you can select how and where you want to install the service.

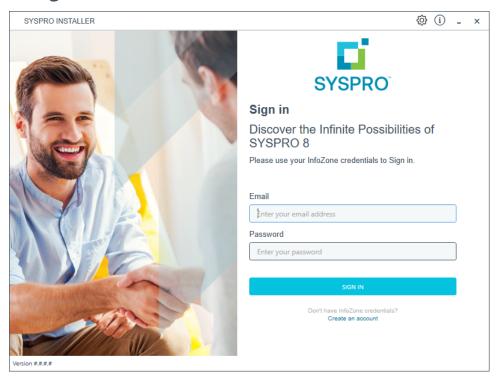
When the option is disabled, the following screen will allow you to enter the installation parameters and domain credentials required to run the service:



You would typically disable this option in one of the following situations:

- You want to run the **SYSPRO Deployment Service** as a specific user.
- You want to change the installation options for the **SYSPRO Deployment Service**.

3. Login



Once a connection is made to the **SYSPRO Deployment Service**, you need to login using your **InfoZone** credentials.

A valid **InfoZone** account is required to continue.



Enable the **Save Customer Details** checkbox option if you want the app to save your **Customer Code** and **Customer PIN** when logging in.



If you are not listed as a customer on the **InfoZone** (i.e. you are a Partner or Super-user) an additional screen is displayed for you to enter the relevant customer code for the customer you want to install.

Partners and Super-users



Ensure that you enter the **Customer ID** for the customer being installed.

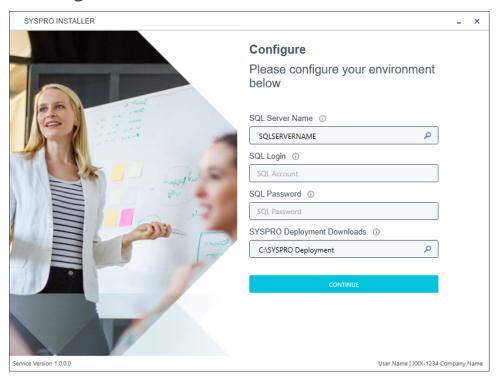


The **Customer ID** defaults to the customer code defined within your **InfoZone** profile, therefore you *must* ensure that it matches the SYSPRO account that you are installing.

The **Customer PIN** is the 6-digit code included in the email you received that contained your **SYSPRO 8** license.

You can verify your customer ID and PIN against the CustomerId and CustomerPin elements of the license XML file.

4. Configuration





The **Configure** screen is only displayed if this is a first time install.

The **SYSPRO Installer** application requires access to a *SQL Server Instance* on your network.

The application uses this SQL instance from now onwards to download and record your installation preferences and configuration; including information about your deployment groups, software component versions and installed hotfixes.

Capturing requirements

You are required to set up your SQL authentication and the name of the SQL Server which will store the SYSPRO Deployment database.

Field	Description				
SQL Server Name	This entry defaults to the DNS name of the current machine.				
	If you are using SQL Express , ensure that you enter the correct and full instance name (e.g. INSTANCENAME\SQLEXPRESS).				
	You can check this entry if you run SQL Server Management Studio and view the instance to which you are logging in.				
SQL Login	Enter your SQL Server login credentials.				
SQL Password	Enter your SQL Server password credentials.				
SYSPRO Deployment Downloads	This folder is the physical location to which all software components and hotfixes are downloaded, and subsequently run from during each installation process.				
	All downloads, being either the Parameter XML files or the actual install files are downloaded here and stored in the Release subfolder.				
	The entry defaults to C:\SYSPRO Deployment, but can be changed if required. However, once the folder name is set during this stage of the app, please ensure that no changes are made to the folder name, location, contents or structure.				
	Any subsequent change to the folder will result in checksum errors and the app not being able to download any files.				
	A share is created for this folder that must be available to the network.				

Background processes

At this point, the application checks Azure to determine which products are available. It then proceeds to configure an on-premise database and downloads the relevant XML definition files and runtime components (for later use during the install).

Downloading SYSPRO Point of Sale Autorun Files

Currently, the components for installing *SYSPRO Point of Sale* are available as part of an ISO image and launched via an Autorun, however overtime this install will be incorporated into the standard way of installing SYSPRO software through the **SYSPRO Installer Application**.

In the meantime, this task explains how to download the *SYSPRO Point of Sale* installation autorun files.

1. Login



Once a connection is made to the **SYSPRO Deployment Service**, you need to login using your **InfoZone** credentials.

A valid **InfoZone** account is required to continue.



Enable the **Save Customer Details** checkbox option if you want the app to save your **Customer Code** and **Customer PIN** when logging in.



If you are not listed as a customer on the **InfoZone** (i.e. you are a Partner or Super-user) an additional screen is displayed for you to enter the relevant customer code for the customer you want to install.

Partners and Super-users



Ensure that you enter the **Customer ID** for the customer being installed.



The **Customer ID** defaults to the customer code defined within your **InfoZone** profile, therefore you *must* ensure that it matches the SYSPRO account that you are installing.

The **Customer PIN** is the 6-digit code included in the email you received that contained your **SYSPRO 8** license.

You can verify your customer ID and PIN against the CustomerId and CustomerPin elements of the license XML file.

2. Home screen

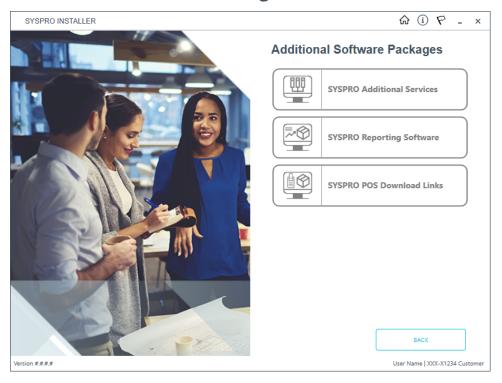


From the **SYSPRO Installer** home screen, select the **SYSPRO Additional Software** option.



You can navigate back to this home page from any point in the app by selecting the home icon () from the toolbar at the top of each screen.

3. Additional Software Packages



The **Additional Software Packages** screen provides you with a list of additional software available to install from the **SYSPRO Installer** application.

The installation files of these products are stored on the Deployment Share in the sysproadditional-software folder.

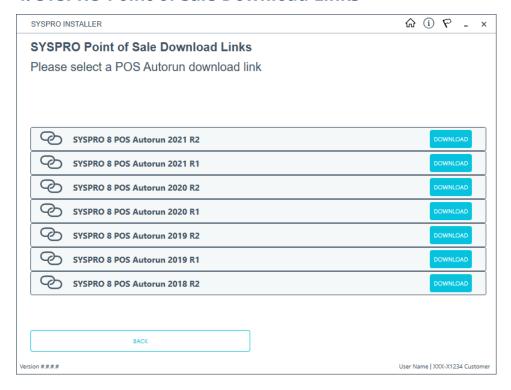
Most products include an associated Sequence File XML that is downloaded from Azure when required.

Currently, the following products are available:

- SYSPRO Additional Services
- SYSPRO Reporting Software
- SYSPRO POS Download Links

Select the **SYSPRO POS Download Links** option.

4. SYSPRO Point of Sale Download Links



Select the **Download** button from the applicable version that you want to install. The application then downloads the Autorun ISO to your local Deployment Share folder.

5. Complete



Once the download has completed, a message is displayed confirming the folder location.

The following components are included:

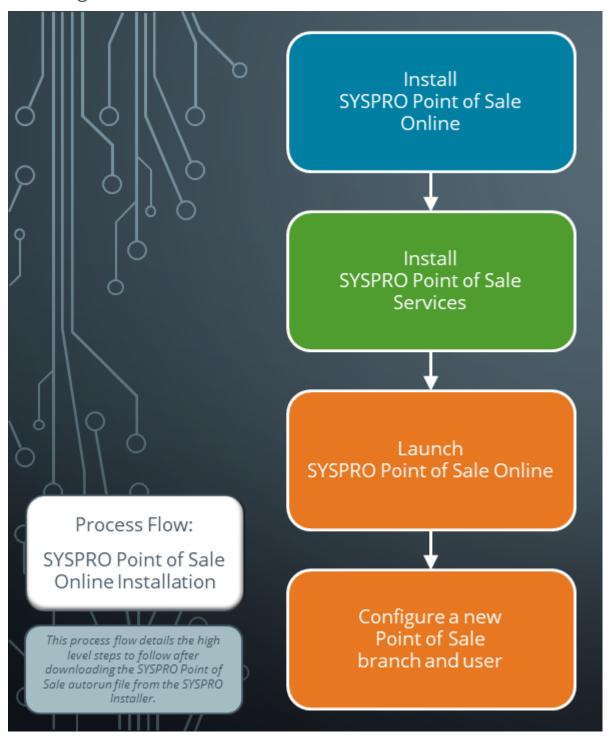
Online Installation

Component	2020 R1 onwards	2019 R2	2019 R1	2018 R2
Microsoft .NET Framework 4.5	\checkmark	\checkmark	\checkmark	√
SYSPRO 8 Avanti Initialization Service	\checkmark	\checkmark		
SYSPRO 8 Point of Sale e.net Communication Service	\checkmark	\checkmark	\checkmark	\checkmark
SYSPRO Point of Sale Online	\checkmark	\checkmark	\checkmark	\checkmark
SYSPRO 8 Point of Sale Services	\checkmark	\checkmark	\checkmark	\checkmark

Offline Installation

Component	2020 R1 onwards	2019 R2	2019 R1	2018 R2
Microsoft .NET Framework 4.5	\checkmark	√	\checkmark	√
SYSPRO 8 Runtime	\checkmark	\checkmark	\checkmark	
SYSPRO 8 Avanti Initialization Service	\checkmark	\checkmark		
SYSPRO 8 Point of Sale Offline Foundation	\checkmark	\checkmark	\checkmark	\checkmark
SYSPRO 8 Point of Sale e.net Communication Service	\checkmark	\checkmark	\checkmark	\checkmark
SYSPRO 8 Point of Sale	\checkmark	\checkmark	\checkmark	\checkmark
SYSPRO 8 Point of Sale Services	\checkmark	\checkmark	\checkmark	\checkmark

Installing SYSPRO Point of Sale Online



SYSPRO Point of Sale Online

The following steps describe how to install **SYSPRO Point of Sale** Online at the main site, using the SYSPRO Point of Sale autorun.exe wizard:

Prerequisites

Ensure that the following are installed:

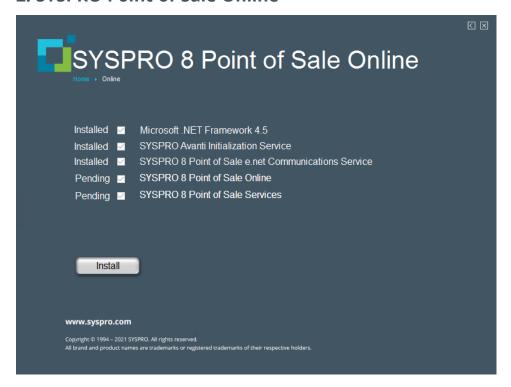
- Microsoft .NET Framework 4.5
- SYSPRO 8 Point of Sale e.net Communication Service or SYSPRO 8 e.net Communications Load Balancer
- SYSPRO 8 2019 R2 or higher

1. Installation Type



From the **Welcome** window, select the **Online Installation** or **Offline Installation** option, based on your requirements.

2. SYSPRO Point of Sale Online



Within the **SYSPRO 8 Point of Sale Online** window, select the **SYSPRO 8 Point of Sale Online** option.



Components that still need to be installed display with an install status of PENDING.

Components that have already been installed display with a status of INSTALLED and you have the option to install another instance of SYSPRO Point of Sale for a different SYSPRO company.

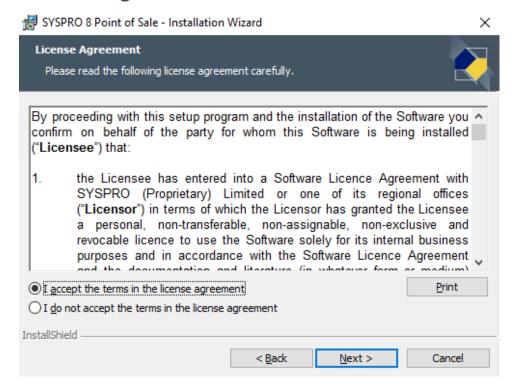
Select **Install** to continue.

3. Installation Wizard



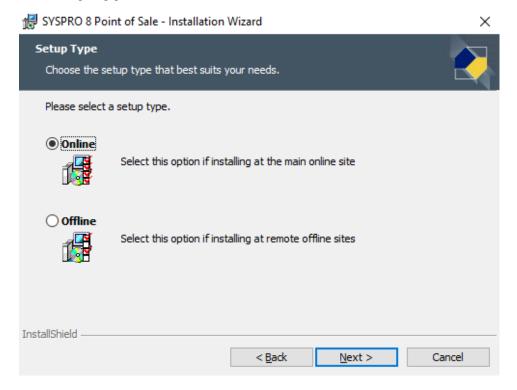
From the **Welcome to the Installation Wizard for SYSPRO 8 Point of Sale** window, select **Next** to continue.

4. License Agreement



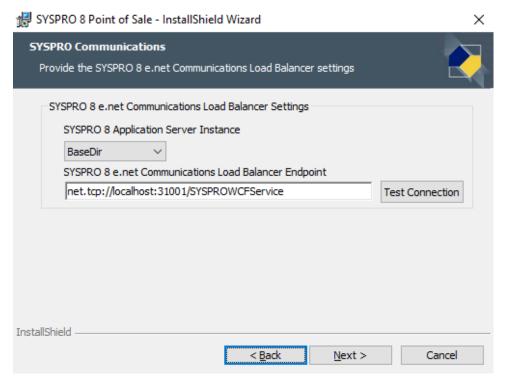
From the **License Agreement** window, accept the terms of the agreement.

5. Setup Type



From the Setup Type window, select the Online option.

6. Communications Settings



From the **SYSPRO Communications** window, enter the SYSPRO 8 e.net Communications Load Balancer settings:

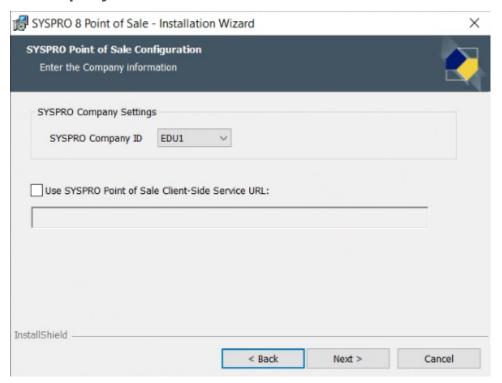
- 1. Indicate the base directory for the **SYSPRO 8 Application Server Instance** (e.g. BaseDir), or accept the default provided.
- 2. Enter the URL for the **SYSPRO 8 e.net Communications Load Balancer Endpoint** (e.g. net.tcp://localhost:31001/SYSPROWCService).
- 3. Select the **Test Connection** function.

The **SYSPRO 8 e.net Load Balancer** message box is displayed indicating whether or not the test connection was successful.



If the test connection fails, you must address any issues before proceeding.

7. Company Information



From the **SYSPRO Point of Sale Configuration** window, select the applicable SYSPRO Company ID from the drop-down list.

Microsoft Silverlight consideration:

If you are running SYSPRO Point of Sale on the Microsoft Silverlight platform and want to print directly to your printers (i.e. without receiving the printer selection pop-up dialog) proceed as follows:

- 1. Select the **Use SYSPRO Point of Sale Client-Side Service URL** option.
 - This enables the Head Office server to communicate with the **SYSPRO 8 Point of Sale Utility Service** which must be installed on each client machine.
- 2. Enter the URL of where the SYSPRO 8 Point of Sale Utility Service is installed:

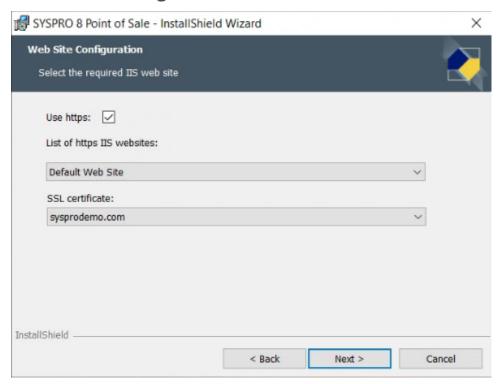
http://localhost:xxxxx/ (where xxxxx indicates the port used during the service install)





This doesn't apply if you are running SYSPRO Point of Sale in SYSPRO Avanti.

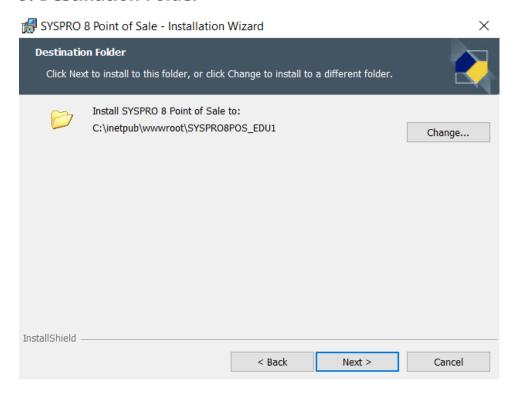
8. Web Site Configuration



From the **Web Site Configuration** window:

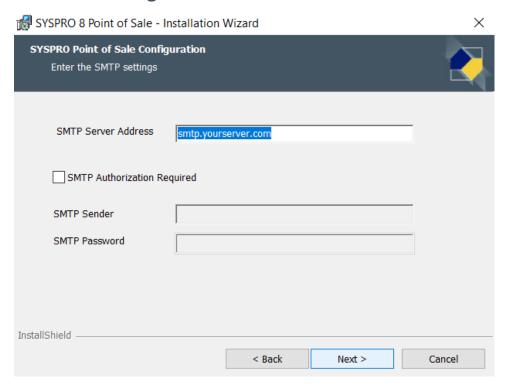
- 1. Enable the **Use https** option for improved security.
- 2. Select your required IIS website.
- Select the applicable SSL certificate.
 This encrypts the traffic through your website.

9. Destination Folder



From the **Destination Folder** window, accept the default destination folder or use the **Change** function to amend the path according to your requirements.

10. SMTP Settings



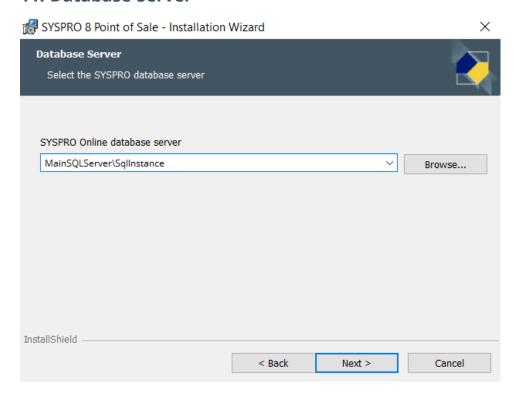


This step only applies if you intend on using Simple Mail Transfer Protocol (SMTP).

From the **SYSPRO Point of Sale Configuration - SMTP settings** window, define the SMTP settings as follows:

- 1. Enter a SMTP Server Address.
- 2. If authorization is required, enable the SMTP Authorization Required option.
 - a. Enter the **SMTP Sender**.
 - b. Enter the **SMTP Password**.

11. Database Server

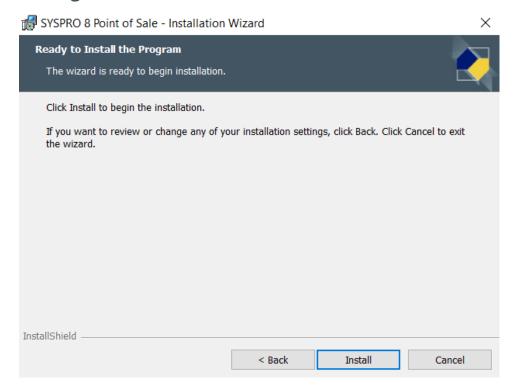


From the **Database Server** window, indicate the applicable SYSPRO Online database server.

FOR EXAMPLE:

MainSQLServer\SqlInstance

12. Begin Install

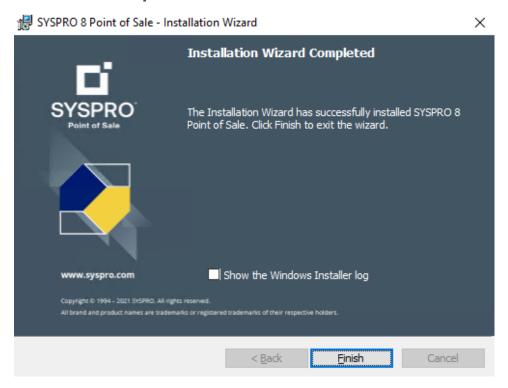


From the **Ready to Install the Program** window, select the **Install** function to begin the installation.



Use the **Back** function if you want to review or change any of your installation settings.

13. Install Complete



Once the installation completes, the **Installation Wizard Completed** window is displayed. Select **Finish** to exit the wizard.

If not performed earlier, you are now ready to install the SYSPRO 8 Point of Sale Services.

SYSPRO Point of Sale Services

The following steps describe how to install the services required for **SYSPRO Point of Sale** in an Online environment, using the SYSPRO Point of Sale autorun.exe wizard:

Prerequisites

Ensure that the following are installed:

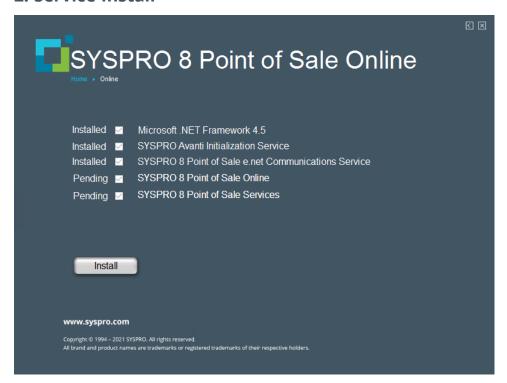
- Microsoft .NET Framework 4.5
- SYSPRO 8 Avanti Initialization Service
- SYSPRO 8 Point of Sale e.net Communication Service
- SYSPRO 8
- SYSPRO Point of Sale Online

1. Select an Installation Type



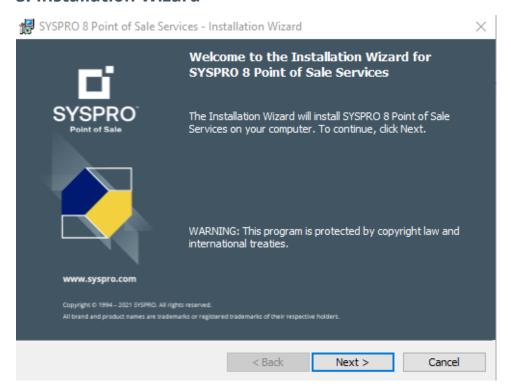
From the **Welcome** window, select the **Online Installation** option, based on your requirements.

2. Service Install



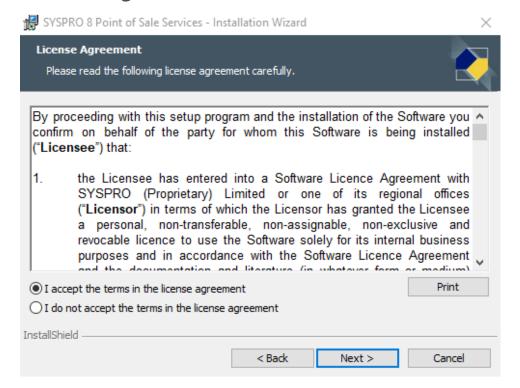
Within the **SYSPRO 8 Point of Sale** window, select the **SYSPRO 8 Point of Sale Services** option. Select **Install** to continue.

3. Installation Wizard



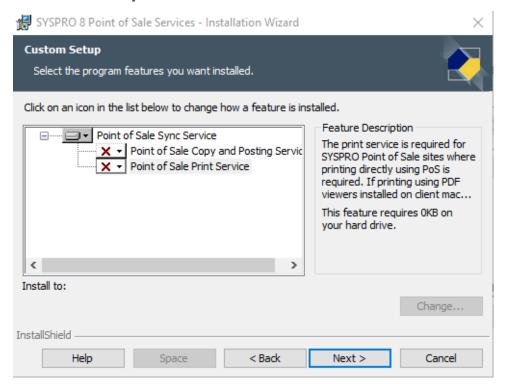
From the **Welcome to the Installation Wizard for SYSPRO 8 Point of Sale Services** window, select **Next** to continue.

4. License Agreement



From the **License Agreement** window, accept the terms of the agreement.

5. Install Setup



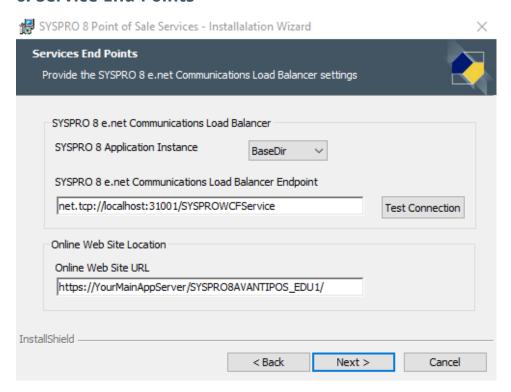
The **Custom Setup** window lists the **SYSPRO 8 Point of Sale Services** available for install, which comprise of the following:

- SYSPRO 8 Point of Sale Synchronize Service
- SYSPRO 8 Point of Sale Copy Service
- SYSPRO 8 Point of Sale Posting Service
- SYSPRO 8 Point of Sale Print Service

Proceed as follows:

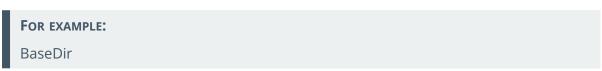
- 1. Select the **This feature**, **and all sub-features**, **will be installed on local hard drive** option against the following:
 - Point of Sale Sync Service (Mandatory Online and Offline)
 - Point of Sale Copy and Posting Service (Optional Online only)
 These are required on the Head Office server if you have offline branches.
 - Point of Sale Print Service (Optional Online and Offline)
 This is required if you want to print directly to your printers from within SYSPRO Point of Sale.
- 2. Accept or change the installation path for these service installs.
- 3. Select **Next** to continue.

6. Service End Points



From the **Services End Points** window, provide the details required for the **SYSPRO 8 e.net Communications Load Balancer** and Online Web Site Location:

1. Indicate the base directory against the SYSPRO 8 Application Instance



2. Enter the **SYSPRO 8 e.net Communications Load Balancer Endpoint** or accept the default provided.

FOR EXAMPLE: net.tcp://localhost:31001/SYSPROWCFService

3. Test the connection.

A message box is displayed indicating whether or not the test connection was successful.

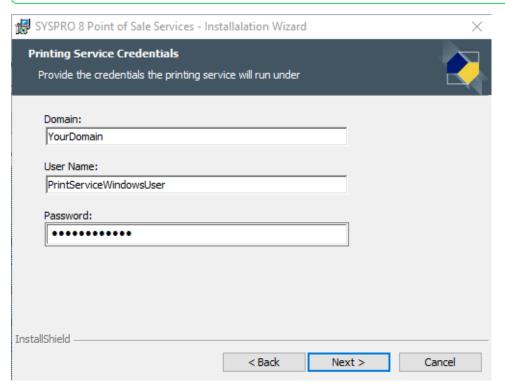
4. Enter the web site location against the **Online Web Site URL** field.

For example: https://YourMainAppServer/SYSPRO8POS_EDU1/

7. Printing Service Credentials



This step only applies if you selected to install the SYSPRO 8 Point of Sale Print Service.



From the **Printing Service Credentials** window, indicate the credentials against which the **SYSPRO 8 Point of Sale Print Service** must be run:

Domain

Indicate the name of the network to which you are connecting.

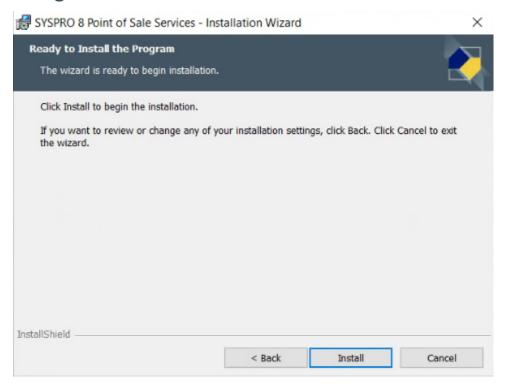
User name

Indicate the user login credentials of the SYSPRO 8 Point of Sale Print Service Windows user that is used to access the network.

Password

Indicate the password credentials used to access the network.

8. Begin Install



From the **Ready to Install the Program** window, select the **Install** function to begin the installation.



Use the **Back** function if you want to review or change any of your installation settings.

9. Install Complete



Once the installation completes, the **Installation Wizard Completed** window is displayed. Select **Finish** to exit the wizard.

Initial Launch of SYSPRO Point of Sale Online

The following steps describe how to launch and log into **SYSPRO Point of Sale** Online after its installation, as well as how to configure a new branch and user:

1. Open the **SYSPRO Point of Sale** application by launching your browser and entering the URL http://{your servername}/SYSPRO8AvantiPOS {yourcompanyID}/.

FOR EXAMPLE:

http://localhost/SYSPRO8AvantiPOS_EDU1/



Currently you need to use **Internet Explorer** to load the **Silverlight** version of **SYSPRO Point of Sale**.

2. The initial site loading might take longer due to the SYSPRO Point of Sale database being added to **Microsoft SQL Server**.

Once the database is created, SYSPRO Point of Sale detects that there are no branches configured as yet and renders a message box indicating as such.

Select **OK** to continue.

- 3. Within the Add New Branch And User program:
 - a. From the **Branch Detail** tab, enter the following information to create a new branch:
 - i. Enter a unique branch code of up to 10 characters in the **Branch Code** field (e.g. 10 North).
 - ii. Enter a description for the branch in the **Description** field (e.g. Receivables North (Online)).
 - iii. Select the appropriate SYSPRO branch from the SYSPRO Branch list (e.g. 10 Receivables North).
 - b. From the **User Detail** tab, enter the following information to create a new user:
 - i. Enter the login name for the user in the **User Name** field.
 - ii. Enter an email address in the **Email** field.
 - iii. Enter a password in the **Password** field.
 - iv. Enter the user's first name in the **First Name** field.
 - v. Enter the user's last name in the **Last Name** field.
 - vi. Against the **SYSPRO Operator** field, select the **Existing** option to link this user to an existing SYSPRO operator.

Alternatively, select **New** to create a new SYSPRO operator for SYSPRO Point of Sale only.



If linking to an existing SYSPRO operator:

Ensure that the SYSPRO operator is configured to use **Microsoft SQL Server** authentication and that the user name and password used for authentication are the same as the details provided in the SYSPRO Point of Sale Online and Offline installation wizards.

- vii. Enable the **Change Password On Next Login** option if you want the operator to create their own password on their next login.
- c. Select **Ok** to continue.

An **Admin** user with full permissions is then created. We recommend that you change the admin password on first login.



The bare minimum information is entered here, therefore you must return to the **Branch and User** program to complete the balance of the required information later.

The SYSPRO Point of Sale Login window is displayed.

Additional Online Instances

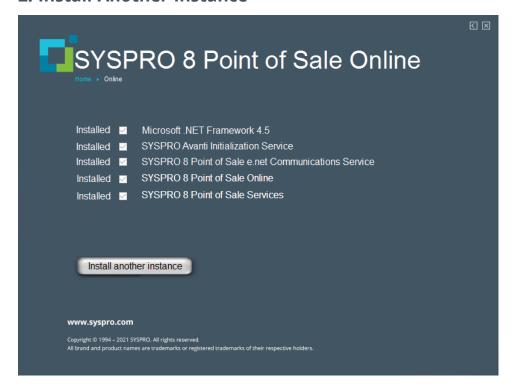
The following steps describe how to install another instance of **SYSPRO Point of Sale** Online, using the SYSPRO Point of Sale autorun.exe wizard:

1. Installation Type



From the **Welcome** window, select the **Online Installation** or **Offline Installation** option, based on your requirements.

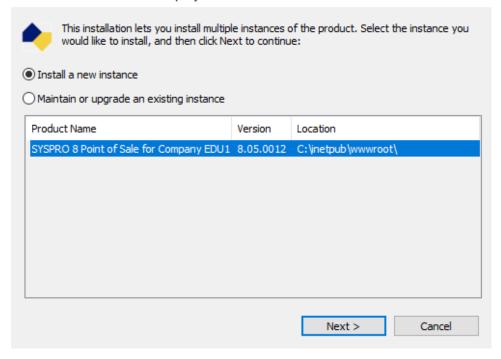
2. Install Another Instance



Within the SYSPRO 8 Point of Sale Online window, select the Install another instance option.

3. InstallShield Wizard

SYSPRO 8 Point of Sale for Company EDU1 - InstallShield Wizard



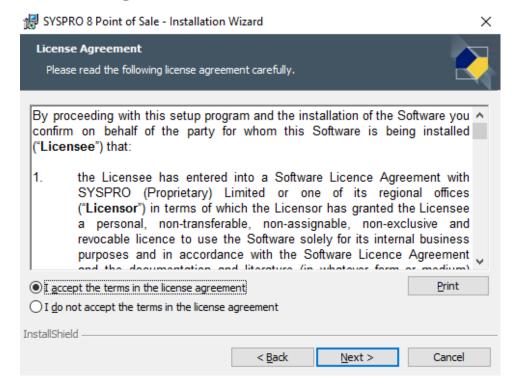
From the **SYSPRO 8 Point of Sale for (***CompanyID***) - InstallShield Wizard** window, select the **Install a new instance** option.

4. Installation Wizard



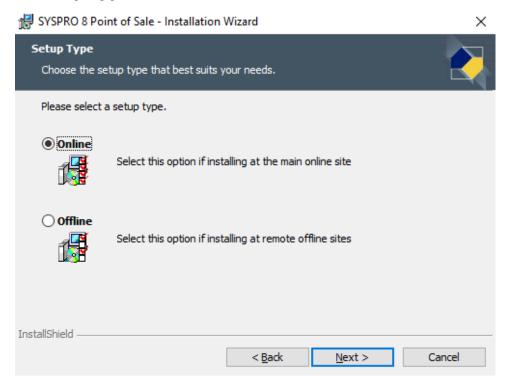
From the **Welcome to the Installation Wizard for SYSPRO 8 Point of Sale** window, select **Next** to continue.

5. License Agreement



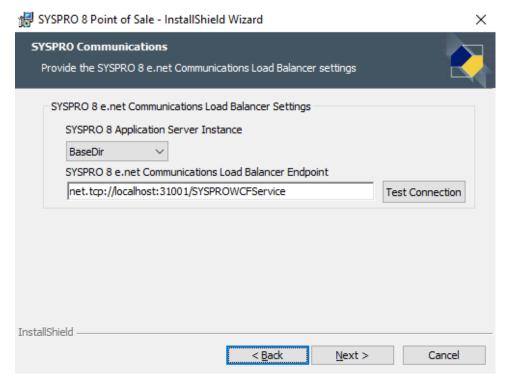
From the **License Agreement** window, accept the terms of the agreement.

6. Setup Type



From the Setup Type window, select the Online option.

7. Communications Settings



From the **SYSPRO Communications** window, enter the SYSPRO 8 e.net Communications Load Balancer settings:

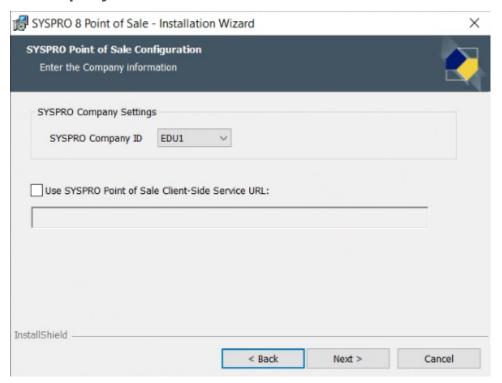
- 1. Indicate the base directory for the **SYSPRO 8 Application Server Instance** (e.g. BaseDir), or accept the default provided.
- 2. Enter the URL for the **SYSPRO 8 e.net Communications Load Balancer Endpoint** (e.g. net.tcp://localhost:31001/SYSPROWCService).
- 3. Select the **Test Connection** function.

The **SYSPRO 8 e.net Load Balancer** message box is displayed indicating whether or not the test connection was successful.



If the test connection fails, you must address any issues before proceeding.

8. Company Information



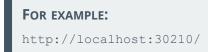
From the **SYSPRO Point of Sale Configuration** window, select the applicable SYSPRO Company ID from the drop-down list.

Microsoft Silverlight consideration:

If you are running SYSPRO Point of Sale on the Microsoft Silverlight platform and want to print directly to your printers (i.e. without receiving the printer selection pop-up dialog) proceed as follows:

- 1. Select the **Use SYSPRO Point of Sale Client-Side Service URL** option.
 - This enables the Head Office server to communicate with the **SYSPRO 8 Point of Sale Utility Service** which must be installed on each client machine.
- 2. Enter the URL of where the SYSPRO 8 Point of Sale Utility Service is installed:

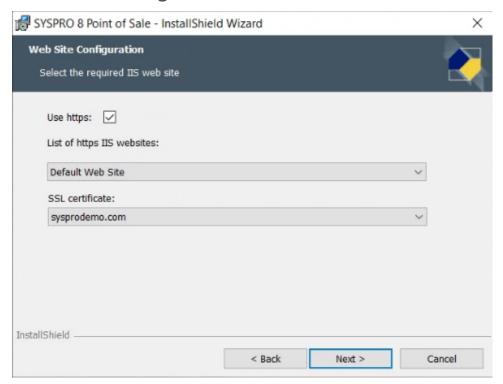
http://localhost:xxxxx/ (where xxxxx indicates the port used during the service install)





This doesn't apply if you are running SYSPRO Point of Sale in SYSPRO Avanti.

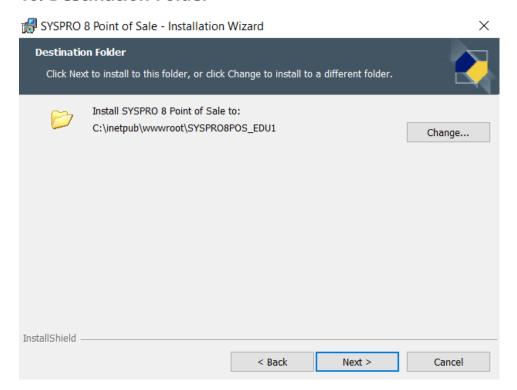
9. Web Site Configuration



From the **Web Site Configuration** window:

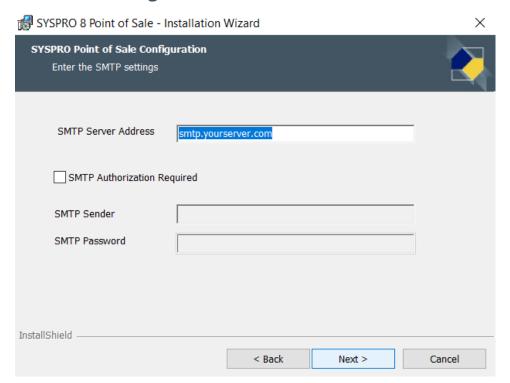
- 1. Enable the **Use https** option for improved security.
- 2. Select your required IIS website.
- Select the applicable SSL certificate.
 This encrypts the traffic through your website.

10. Destination Folder



From the **Destination Folder** window, accept the default destination folder or use the **Change** function to amend the path according to your requirements.

11. SMTP Settings



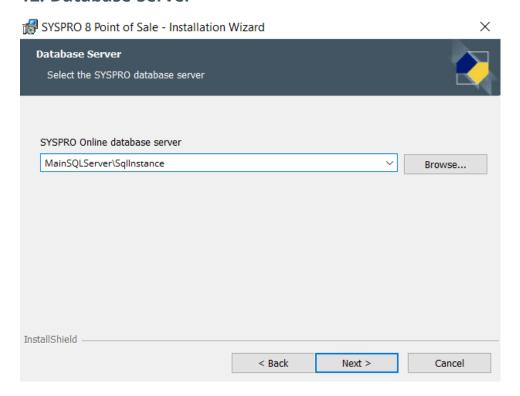


This step only applies if you intend on using Simple Mail Transfer Protocol (SMTP).

From the **SYSPRO Point of Sale Configuration - SMTP settings** window, define the SMTP settings as follows:

- 1. Enter a SMTP Server Address.
- 2. If authorization is required, enable the SMTP Authorization Required option.
 - a. Enter the SMTP Sender.
 - b. Enter the **SMTP Password**.

12. Database Server

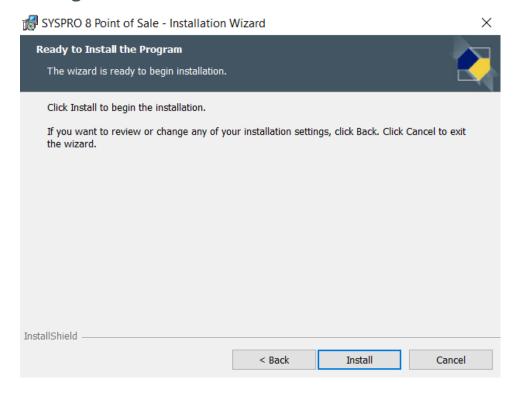


From the **Database Server** window, indicate the applicable SYSPRO Online database server.

FOR EXAMPLE:

MainSQLServer\SqlInstance

13. Begin Install

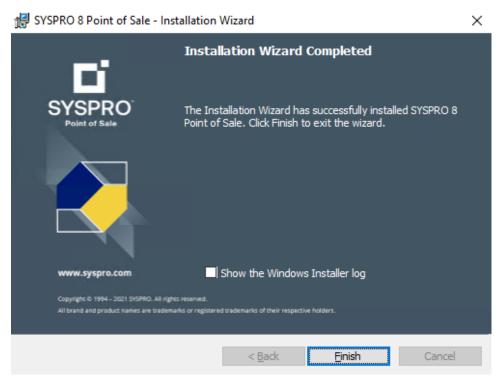


From the **Ready to Install the Program** window, select the **Install** function to begin the installation.



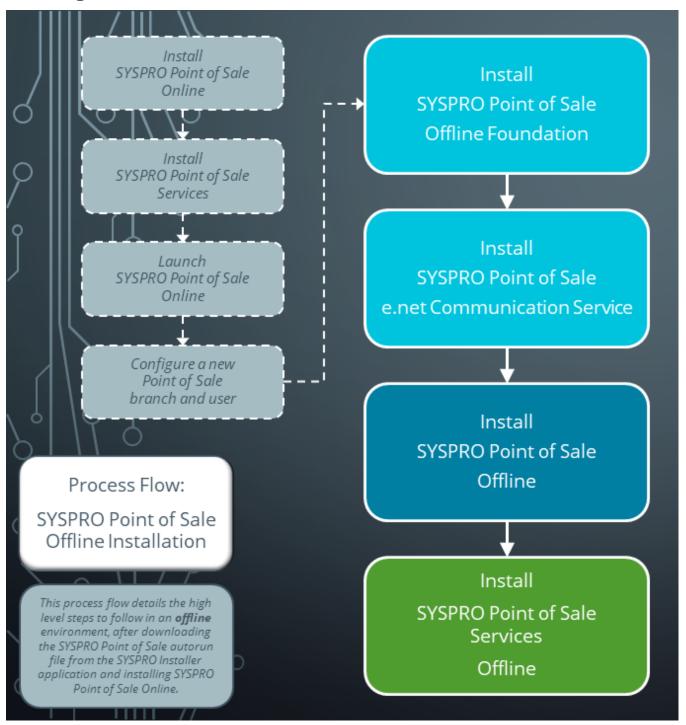
Use the **Back** function if you want to review or change any of your installation settings.

14. Install Complete



Once the installation completes, the **Installation Wizard Completed** window is displayed. Select **Finish** to exit the wizard.

Installing SYSPRO Point of Sale Offline



SYSPRO Point of Sale Offline Foundation

The following steps describe how to install the **SYSPRO Point of Sale Offline Foundation** using the SYSPRO Point of Sale autorun.exe wizard:

Prerequisites

Ensure that the following are installed:

- Microsoft .NET Framework 4.5
- SYSPRO 8 Runtime
- SYSPRO Point of Sale Online
- SYSPRO 8 Point of Sale Services (installed at the online branch)

Ensure that the following are configured in SYSPRO Point of Sale Online:

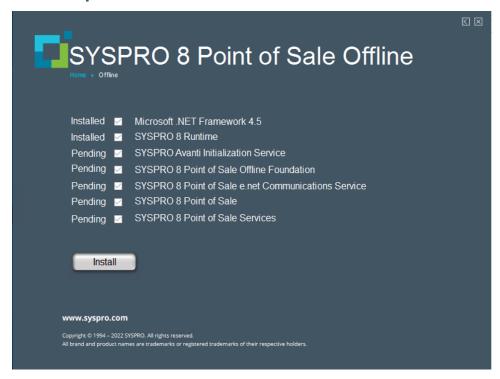
- Online Branch
- User
- License allocation
- Offline branch (via the **Branch Settings** program)
- Offline user (via the **Manage User** program)

1. Installation Type



From the **Welcome** window, select the **Offline Installation** option.

2. Prerequisites Check



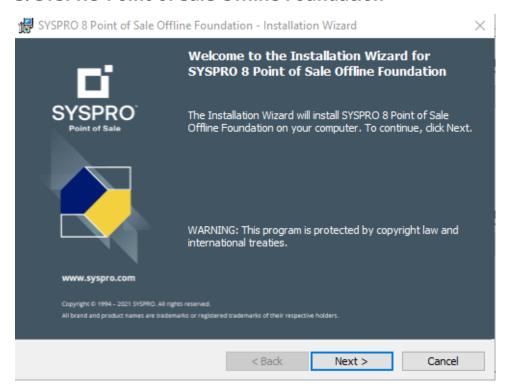
Before commencing with the SYSPRO Point of Sale Offline install, the system verifies if the prerequisites have been installed (i.e. Microsoft .NET Framework 4.5 and SYSPRO 8 Runtime) and if not, launches the appropriate wizards accordingly.

The following explains the wizard process for installing the SYSPRO 8 Avanti Initialization Service, which enables you to run SYSPRO Point of Sale in **SYSPRO Web UI (Avanti)**:

- 1. From the Welcome screen of the **SYSPRO Avanti Initialization Service Installation Wizard**, select **Next**.
- 2. From the **License Agreement** window, accept the terms of the agreement.
- 3. From the **Destination Folder** window, indicate the folder in which you want to install the SYSPRO 8 Avanti Initialization Service.
- 4. From the **SYSPRO Communications** window, indicate the communications port for the service.
- 5. From the **Ready to install the Program** window, select **Install** to continue.
- 6. From the **Installation Wizard Completed** window, select **Finish** to conclude the installation.

The Welcome to the Installation Wizard for SYSPRO 8 Point of Sale Offline Foundation window is displayed.

3. SYSPRO Point of Sale Offline Foundation

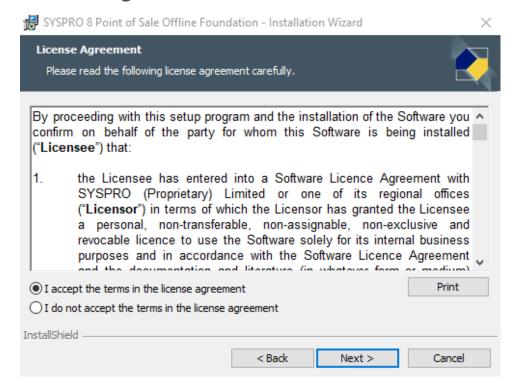


From the Welcome to the Installation Wizard for SYSPRO 8 Point of Sale Offline Foundation window, select Next to continue.



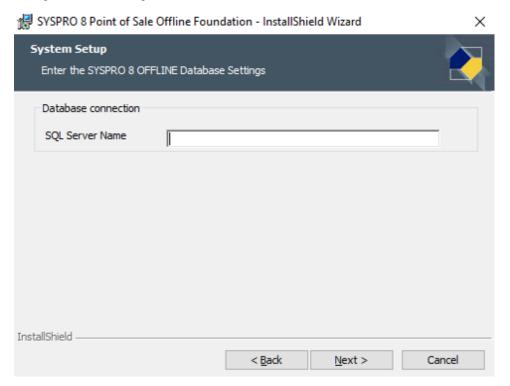
The **SYSPRO Point of Sale Offline Foundation** installs the SYSPRO files and folders that are required for SYSPRO Point of Sale to run at an offline site.

4. License Agreement



From the **License Agreement** window, accept the terms of the agreement.

5. System Setup



From the **System Setup** window, enter the name of your SYSPRO Offline database server.

FOR EXAMPLE:

OfflineBranchSQLServer\SqlInstance

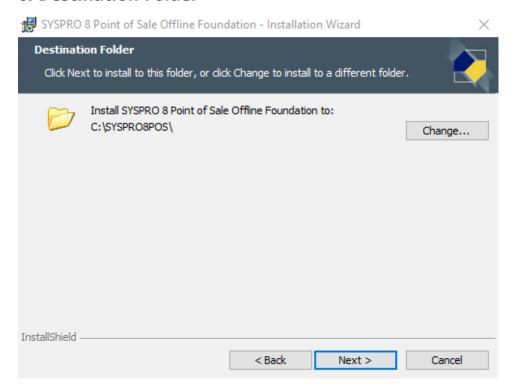


Ensure that you enter the correct database details for your **offline** server, as data integrity will be compromised if your data source connects to the online server.

A system message is displayed prompting you to confirm that you have entered the correct details for your offline environment.

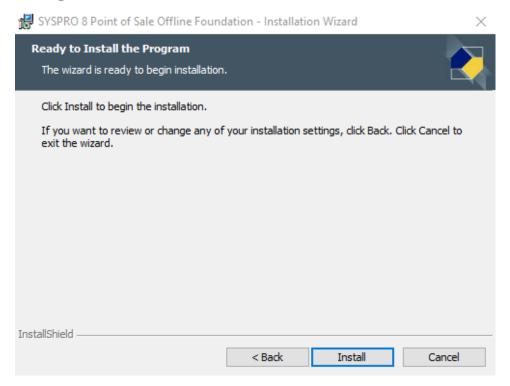
Select **Yes** to proceed.

6. Destination Folder



From the **Destination Folder** window, accept the default destination folder or use the **Change** function to amend the path according to your requirements.

7. Begin Install



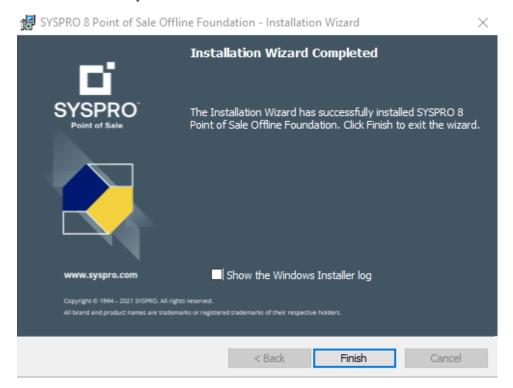
From the **Ready to Install the Program** window, select the **Install** function to begin the installation.



Use the **Back** function if you want to review or change any of your installation settings.

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8. Install Complete



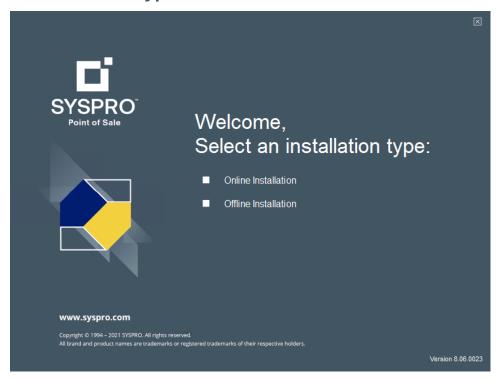
Once the installation completes, the **Installation Wizard Completed** window is displayed. Select **Finish** to exit the wizard.

Your next step is to install the SYSPRO 8 Point of Sale e.net Communication Service.

SYSPRO 8 Point of Sale e.net Communication Service

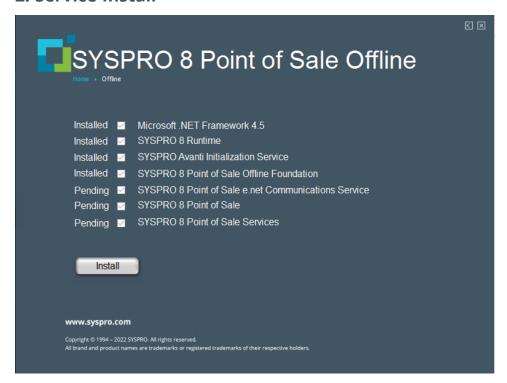
The following steps describe how to install the **SYSPRO 8 Point of Sale e.net Communication Service** in an Offline environment, using the SYSPRO Point of Sale autorun.exe wizard:

1. Installation Type



From the **Welcome** window, select the **Offline Installation** option.

2. Service Install



Within the SYSPRO 8 Point of Sale Offline window, select the SYSPRO 8 Point of Sale e.net Communications Service option.

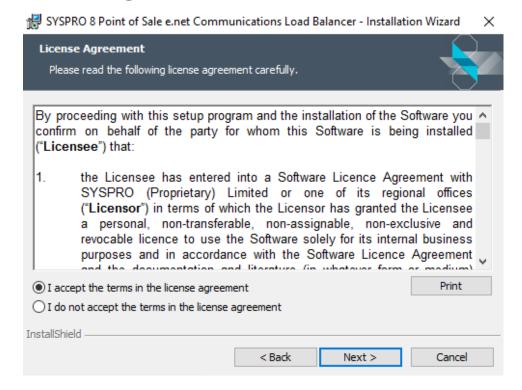
Select Install to continue.

3. Installation Wizard



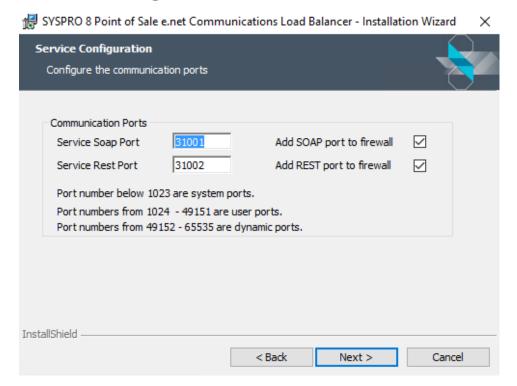
From the Welcome to the Installation Wizard for SYSPRO 8 Point of Sale e.net Communications Load Balancer window, select Next to continue.

4. License Agreement



From the **License Agreement** window, accept the terms of the agreement.

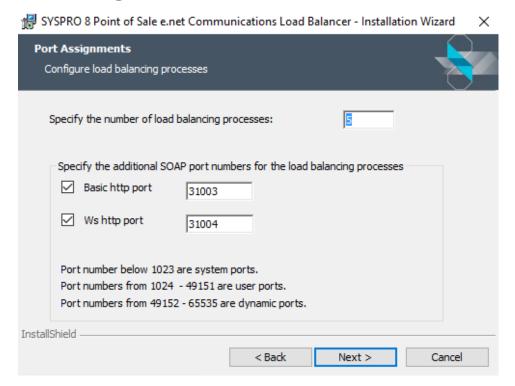
5. Service Configuration



From the **Service Configuration** window:

- 1. Enter the relevant **Service SOAP Port**, or accept the default provided.
- 2. Enable the **Add SOAP port to firewall** option.
- 3. Enter the relevant **Service REST Port**, or accept the default provided.
- 4. Enable the **Add REST port to firewall** option.

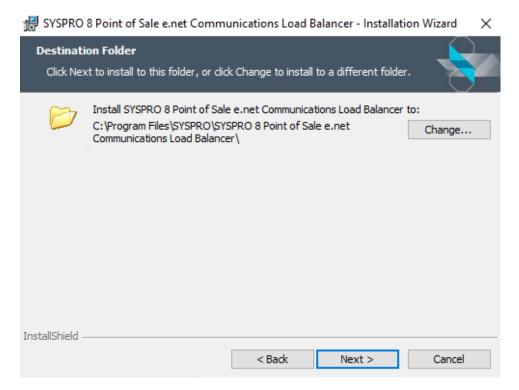
6. Port Assignment



From the **Port Assignments** window, configure your load balancing processes as follows:

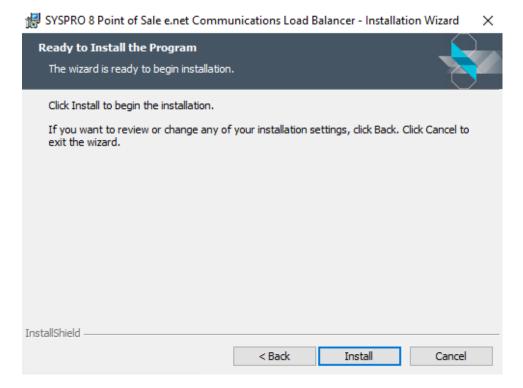
- 1. Indicate your required number of load balancing processes.
- 2. Enter the additional SOAP port numbers for the load balancing processes, or accept the defaults provided.

7. Destination Folder



From the **Destination Folder** window, accept the default folder of where you want to install the **SYSPRO 8 Point of Sale e.net Communication Service**, or use the **Change** function to amend the path according to your requirements.

8. Begin Install



From the **Ready to Install the Program** window, select the **Install** function to begin the installation.



Use the **Back** function if you want to review or change any of your installation settings.

9. Install Complete



Once the installation completes, the **Installation Wizard Completed** window is displayed. Select **Finish** to exit the wizard.

Your next step is to install SYSPRO Point of Sale Offline.

SYSPRO Point of Sale Offline

The following steps describe how to install **SYSPRO Point of Sale** in an offline environment, using the SYSPRO Point of Sale autorun.exe wizard:

Prerequisites

Ensure that the following are installed:

- Microsoft .NET Framework 4.5
- SYSPRO 8 Runtime
- SYSPRO Point of Sale Online
- SYSPRO Point of Sale Offline Foundation
- SYSPRO 8 Point of Sale e.net Communication Service

Ensure that the following are configured in SYSPRO Point of Sale Online:

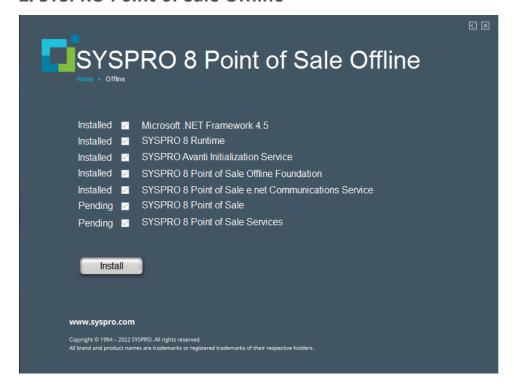
- Branch
- User

1. Installation Type



From the **Welcome** window, select the **Offline Installation** option.

2. SYSPRO Point of Sale Offline



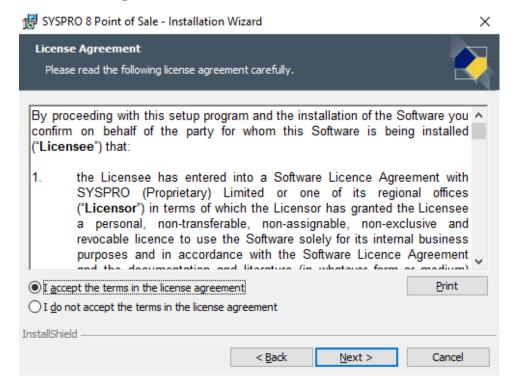
Within the **SYSPRO 8 Point of Sale Offline** window, select the **SYSPRO 8 Point of Sale** option. Select **Install** to continue.

3. Installation Wizard



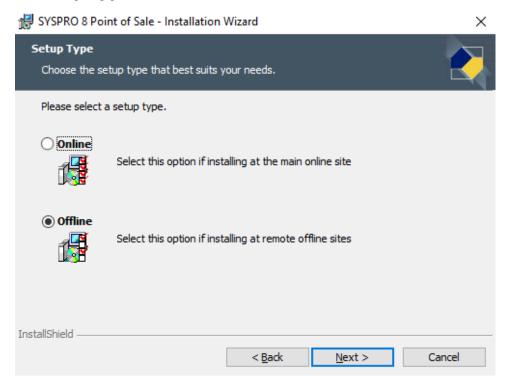
From the **Welcome to the Installation Wizard for SYSPRO 8 Point of Sale** window, select **Next** to continue.

4. License Agreement



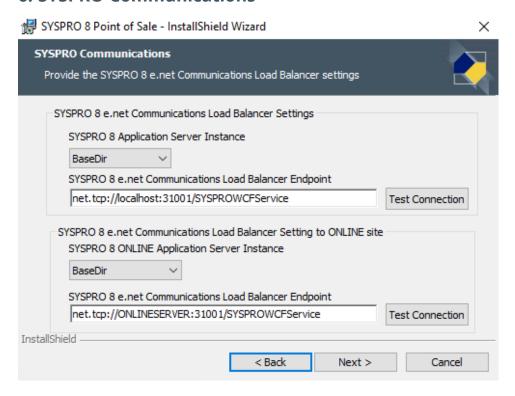
From the **License Agreement** window, accept the terms of the agreement.

5. Setup Type



From the Setup Type window, select the Offline option.

6. SYSPRO Communications



From the **SYSPRO Communications** window, enter the SYSPRO 8 e.net Communications Load Balancer settings:

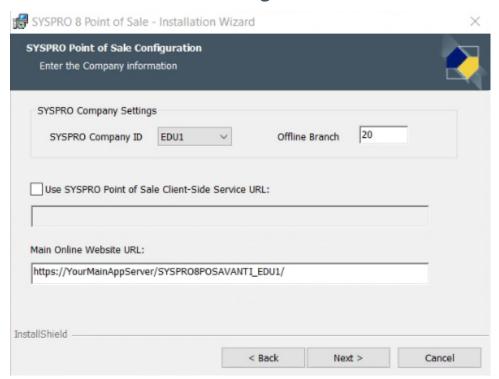
- 1. Indicate the base directory for the **SYSPRO 8 Application Server Instance** (e.g. BaseDir), or accept the default provided.
- 2. Enter the URL for the **SYSPRO 8 e.net Communications Load Balancer Endpoint** (e.g. net.tcp://localhost:31001/SYSPROWCService).
- 3. Select the **Test Connection** function.

The **SYSPRO 8 e.net Load Balancer** message box is displayed indicating whether or not the test connection was successful.

If the test connection fails, you must address any issues before proceeding.

- 4. Indicate the base directory for the **SYSPRO 8 ONLINE Application Server Instance** (e.g. BaseDir), or accept the default provided.
- 5. Enter the URL for the **SYSPRO 8 e.net Communications Load Balancer Endpoint** at the Online site (e.g. net.tcp://localhost:31001/SYSPROWCService).

7. SYSPRO Point of Sale Configuration



From the **SYSPRO Point of Sale Configuration** window, enter your company and branch information:

- 1. Select the applicable SYSPRO Company ID from the drop-down list.
- 2. Enter the SYSPRO branch code (for the branch at which you are installing the Offline Foundation) within the **Offline Branch** field.
- 3. Enter the Main Online Website URL field (e.g. https://YourMainAppServer/SYSPRO8POS_EDU1/).

Microsoft Silverlight consideration:

If you are running SYSPRO Point of Sale on the Microsoft Silverlight platform and want to print directly to your printers (i.e. without receiving the printer selection pop-up dialog) proceed as follows:

- 1. Select the Use SYSPRO Point of Sale Client-Side Service URL option.
 - This enables the Head Office server to communicate with the **SYSPRO 8 Point of Sale Utility Service** which must be installed on each client machine.
- 2. Enter the URL of where the SYSPRO 8 Point of Sale Utility Service is installed:
 - http://localhost:xxxxx/ (where xxxxx indicates the port used during the service install)

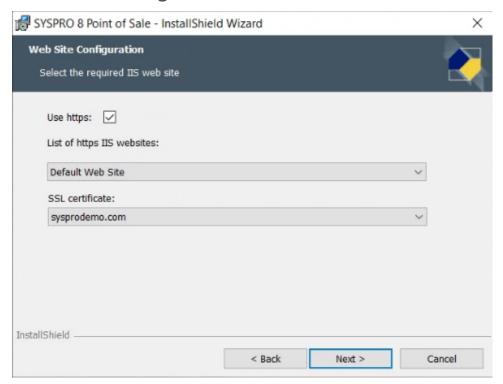
FOR EXAMPLE:

http://localhost:30210/



This doesn't apply if you are running SYSPRO Point of Sale in SYSPRO Avanti.

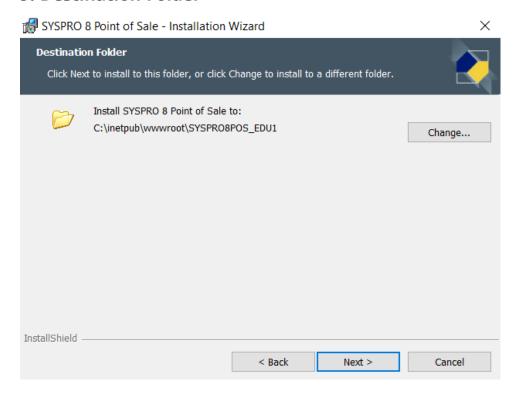
8. Web Site Configuration



From the **Web Site Configuration** window:

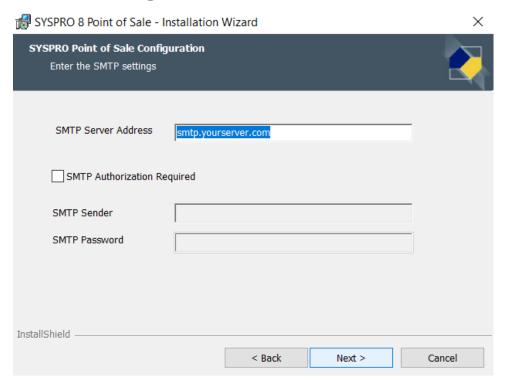
- 1. Enable the **Use https** option for improved security.
- 2. Select your required IIS website.
- Select the applicable SSL certificate.
 This encrypts the traffic through your website.

9. Destination Folder



From the **Destination Folder** window, accept the default destination folder or use the **Change** function to amend the path according to your requirements.

10. SMTP Settings





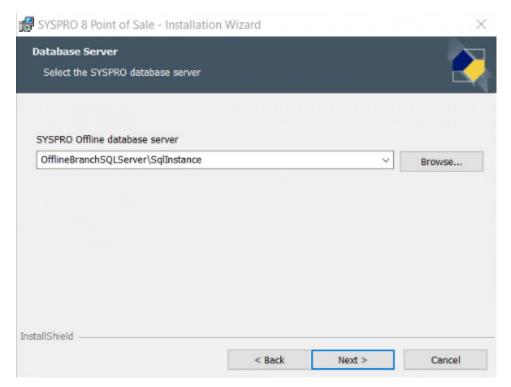
This step only applies if you intend on using Simple Mail Transfer Protocol (SMTP).

From the **SYSPRO Point of Sale Configuration - SMTP settings** window, define the SMTP settings as follows:

- 1. Enter a SMTP Server Address.
- 2. If authorization is required, enable the SMTP Authorization Required option.
 - a. Enter the **SMTP Sender**.
 - b. Enter the **SMTP Password**.

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11. Database Server

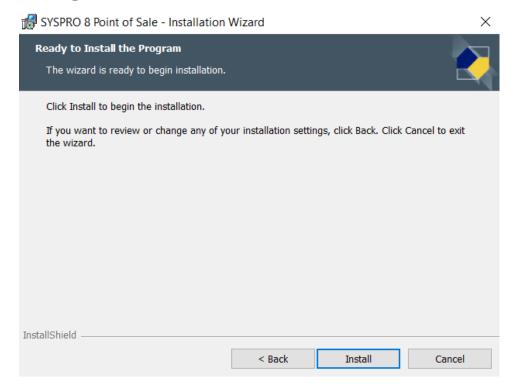


From the **Database Server** window, indicate the applicable SYSPRO Offline database server.

FOR EXAMPLE:

OfflineBranchSQLServer\SqlInstance

12. Begin Install

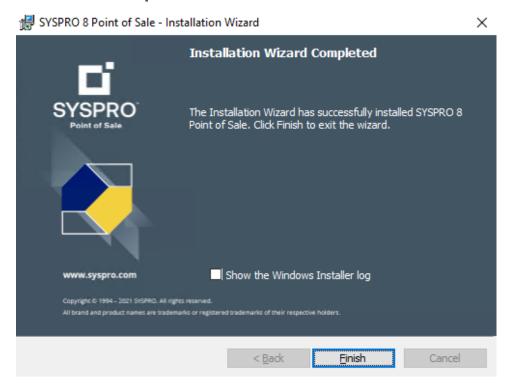


From the **Ready to Install the Program** window, select the **Install** function to begin the installation.



Use the **Back** function if you want to review or change any of your installation settings.

13. Install Complete



Once the installation completes, the **Installation Wizard Completed** window is displayed. Select **Finish** to exit the wizard.

Your next step is to install SYSPRO Point of Sale Services Offline.

SYSPRO Point of Sale Services Offline

The following steps describe how to install the services required for **SYSPRO Point of Sale** in an Offline environment, using the SYSPRO Point of Sale autorun.exe wizard:

Prerequisites

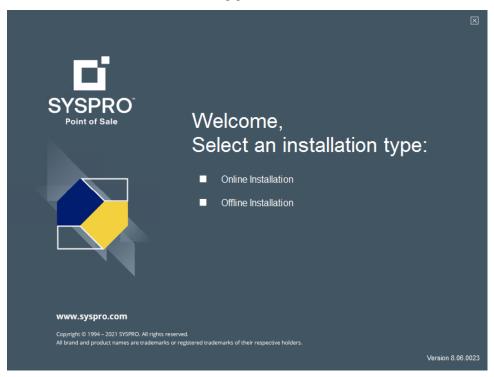
Ensure that the following are installed:

- Microsoft .NET Framework 4.5
- SYSPRO 8 Runtime
- SYSPRO Point of Sale Online
- SYSPRO Point of Sale Offline Foundation
- SYSPRO 8 Point of Sale e.net Communication Service
- SYSPRO Point of Sale Offline

Ensure that the following are configured in SYSPRO Point of Sale Online:

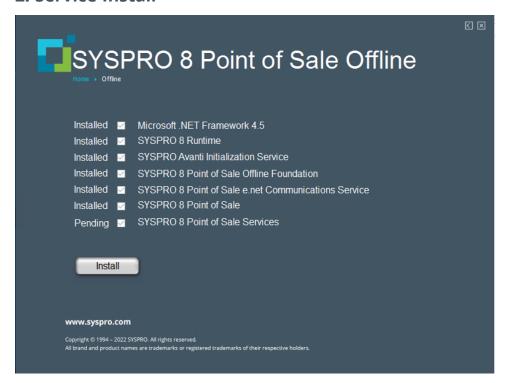
- Branch
- User

1. Select an Installation Type



From the **Welcome** window, select the **Offline Installation** option, based on your requirements.

2. Service Install



Within the **SYSPRO 8 Point of Sale Offline** window, select the **SYSPRO 8 Point of Sale Services** option.

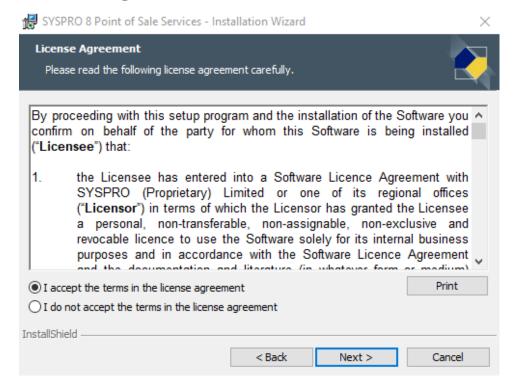
Select **Install** to continue.

3. Installation Wizard



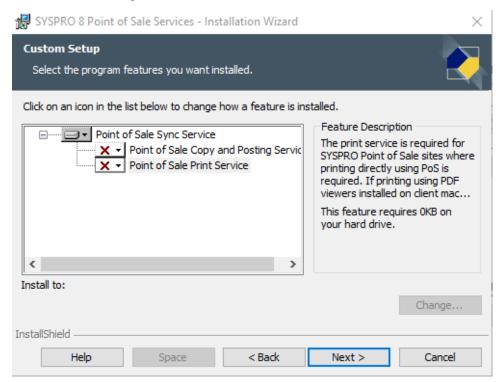
From the **Welcome to the Installation Wizard for SYSPRO 8 Point of Sale Services** window, select **Next** to continue.

4. License Agreement



From the **License Agreement** window, accept the terms of the agreement.

5. Install Setup



The **Custom Setup** window lists the **SYSPRO 8 Point of Sale Services** available for install, which comprise of the following:

- SYSPRO 8 Point of Sale Synchronize Service
- SYSPRO 8 Point of Sale Copy Service
- SYSPRO 8 Point of Sale Posting Service
- SYSPRO 8 Point of Sale Print Service

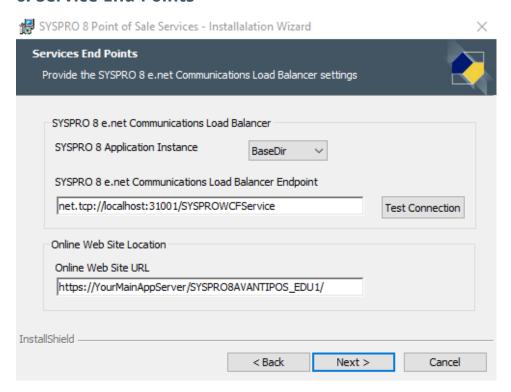
Proceed as follows:

- 1. Select the **This feature**, **and all sub-features**, **will be installed on local hard drive** option against the following:
 - Point of Sale Sync Service (Mandatory)
 - Point of Sale Print Service (Optional)

This is required if you want to print directly to your printers from within SYSPRO Point of Sale.

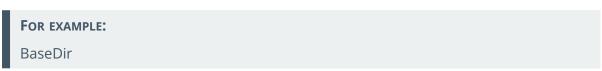
- 2. Accept or change the installation path for these service installs.
- 3. Select **Next** to continue.

6. Service End Points



From the **Services End Points** window, provide the details required for the **SYSPRO 8 e.net Communications Load Balancer** and Online Web Site Location:

1. Indicate the base directory against the SYSPRO 8 Application Instance



2. Enter the **SYSPRO 8 e.net Communications Load Balancer Endpoint** or accept the default provided.

FOR EXAMPLE: net.tcp://localhost:31001/SYSPROWCFService

3. Test the connection.

A message box is displayed indicating whether or not the test connection was successful.

4. Enter the web site location against the **Online Web Site URL** field.

FOR EXAMPLE:

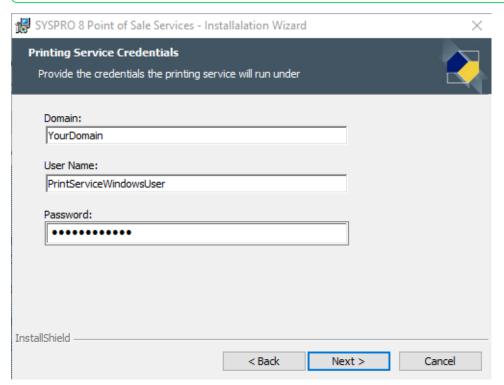
https://YourMainAppServer/SYSPRO8POS_EDU1/

Select **Next** to continue.

7. Printing Service Credentials



This step only applies if you selected to install the SYSPRO 8 Point of Sale Print Service.



From the **Printing Service Credentials** window, indicate the credentials against which the **SYSPRO 8 Point of Sale Print Service** must be run:

Domain

Indicate the name of the network to which you are connecting.

User name

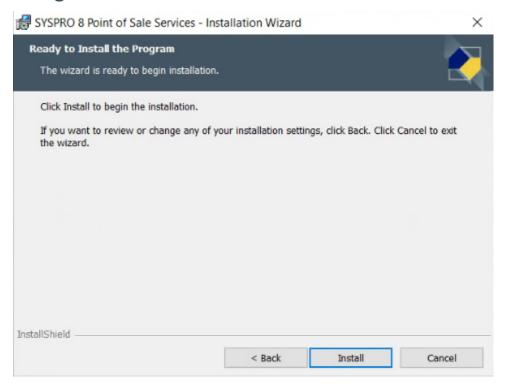
Indicate the user login credentials of the SYSPRO 8 Point of Sale Print Service Windows user that is used to access the network.

Password

Indicate the password credentials used to access the network.

Select **Next** to continue.

8. Begin Install

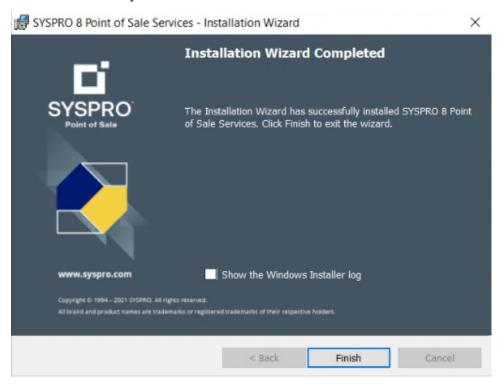


From the **Ready to Install the Program** window, select the **Install** function to begin the installation.



Use the **Back** function if you want to review or change any of your installation settings.

9. Install Complete



Once the installation completes, the **Installation Wizard Completed** window is displayed. Select **Finish** to exit the wizard.

Online vs. Offline Functionality

The following indicates which *SYSPRO Point of Sale* programs are available Online versus Offline within each of the available modules:

Setup

Functionality	Online	Offline
Branch Management		
Branch Selection	Yes	No
Branch Settings	Yes	No
Branch Customers	Yes	No
Branch Licenses	Yes	No
Security		
Manage Roles	Yes	No
Manage Users	Yes	No
User Unlock At Branch	Yes	Yes
Access Control	Yes	No
Change Password	Yes	No
Access Control Setup	Yes	No
Printing		
Printing Designer	Yes	No
Manage Mappings	Yes	No
Manage Printers	Yes	No
Device Setup	Yes	No
System Management		
Discount Setup	Yes	No
Custom Narratives	Yes	No
System Overview	Yes	No
System Settings	Yes	No

Functionality	Online	Offline
Menu Setup	Yes	No
Barcode Management		
Manage Barcodes	Yes	No
Barcode Integration	Yes	No
Barcode Cross References	Yes	No
Configurable		
Versions	Yes	No
Pages	Yes	No
Groups	Yes	No
Fields	Yes	No
Attributes	Yes	No
Relationships	Yes	No
Manage Inventory		
Categories	Yes	No
Brands	Yes	No
Stock Codes	Yes	No
Product Classes	Yes	No
Miscellaneous		
iTunes Setup	Yes	No

Store

Functionality	Online	Offline
General		
Point of Sale	Yes	Yes
Account Payment	Yes	Yes
Manage Quotes	Yes	Yes
Open Drawer	Yes	Yes
Stock Returns		
Credit Note	Yes	Yes
Exchanges	Yes	Yes

Store Management



When an Offline System (such as a client at an offline branch) attempts to perform online functionality such as **Manage Orders**, the printing occurs from the main server as well. Therefore, the Head Office Server must be able to see the branch's printers in order to print (and have the correct access, such as permissions, etc.).

Functionality	Online	Offline
General		
Manage Orders	Yes	No
Reprint Invoices	Yes	Only for invoices generated at the same offline branch.
Reprint Sales Orders	Yes	No
Petty Cash	Yes	No
iTunes Card Entry	Yes	No
Manage Credit Notes	Yes	No
Adjustments	Yes	No
Customer Account Payment Reallocation	Yes	No
Stock Transfer		
Manage SCT's	Yes	No
Immediate Transfer	Yes	No
Receive GIT	Yes	No
Transaction Review		
iTunes Card Review	Yes	No
Manage Online	Yes	No
Stock take		
Stock Take Review	Yes	No
Stock Take Capture	Yes	No

Query



Inventory Query and **Customer Query** have certain functionality that will only function if the client machine can connect to the Head Office server directly. Even though the Branch server may be able to connect to the Head Office Server, the functionality won't work if the client itself can't make that connection.

Functionality	Online	Offline
Review		
Invoices & Payments	Yes	No
Customer Movements	Yes	No
Account Payment Query	Yes	No
Petty Cash Review	Yes	Yes - However, reprinting is not available offline.
Queries		
Customer Query	Yes	Yes
Order Query	Yes	No
Inventory Query	Yes	Yes
Job Query	Yes	No
GIT Query	Yes	No
Deposits Trial Balance	Yes	No
Deposits Audit Trail	Yes	No

Contacts

Functionality	Online	Offline
General		
Manage Contacts	Yes	No
Manage Customers	Yes	No
Customer Cards		
Allocate Cards	Yes	No
Manage Cards	Yes	No

Finance

Functionality	Online	Offline
General		
Manage Currency	Yes	No
Drawer Bank Setup	Yes	No
Cash-Up		
Cash-Up Slip	Yes	Yes
Supervisor Cash-Up	Yes	Yes
End of Day		
End of Day	Yes	Yes
Reporting		
Sales Report	Yes	Yes
Payments Report	Yes	Yes
End of Day Review	Yes	Yes
End of Day Reconciliation	Yes	No

Audit Trails

Functionality	Online	Offline
Audit Trail Queries		
Header Authorization Audit Trail	Yes	No
Detail Authorization Audit Trail	Yes	No
Line Delete Audit Trail	Yes	No
Price And Discount Audit Trail	Yes	No
Print Audit Trail	Yes	No
Ship Method Audit Trail	Yes	No
Tax Code Audit Trail	Yes	No



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