

# Technology Requirements

SYSPRO 8

Published: June 2024



# SYSPRO 8 - Technology Requirements

The following topic outlines the technology requirements identified for **SYSPRO 8**.

## SYSPRO ACTIVE DIRECTORY SINGLE SIGN-ON

- Microsoft .NET Framework 4.8
- SYSPRO 8 e.net Communications Load Balancer

A valid endpoint must be configured in the **Setup Options** program of **SYSPRO 8**.



The **SYSPRO 8 Active Directory Sync Service** must be run as a named user that has `READ` permission to access **Microsoft Active Directory (AD)**.

## SYSPRO APPLICATION GATEWAY

- Microsoft .NET Desktop Runtime 6

## SYSPRO WEB UI (AVANTI)

SYSPRO 8 Avanti Initialization Service:



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

- Microsoft .NET Framework 4.8
- SYSPRO 8 Service Upgrade Manager
- SYSPRO 8 e.net Communications Load Balancer

A valid endpoint must be configured in the **Setup Options** program of **SYSPRO 8**.

SYSPRO Avanti Web Service:

- Microsoft .NET Framework 4.8
  - SYSPRO 8 Server
  - SYSPRO 8 Service Upgrade Manager
  - SYSPRO 8 e.net Communications Load Balancer
- A valid endpoint must be configured in the **Setup Options** program of **SYSPRO 8**.
- SYSPRO 8 Avanti Initialization Service connection

- Internet Information Services (IIS) 7.0 Core Web Engine Feature
- Internet Information Services (IIS) 7.0 World Wide Web Publishing Feature
- Internet Information Services (IIS) WebSocket Protocol Feature



We recommend that you use **Windows Server 2019** (or higher) when running **SYSPRO Web UI (Avanti)**.

The following technology is required when using more than 30 instances of the **SYSPRO Web UI (Avanti)** - as defined against the **MAXIMUM NUMBER OF INSTANCES ALLOWED** setup option (*Setup Options > System Setup > System-Wide Personalization*):

- Windows Server 2022: Datacenter Edition
- SYSPRO Application Gateway service

## SYSPRO BOT

- Microsoft .NET Framework 4.8
- SYSPRO 8 Service Upgrade Manager
- SYSPRO 8 e.net Communications Load Balancer

A valid endpoint must be configured in the **Setup Options** program of **SYSPRO 8**.

- Internet Information Services (IIS) 7.0 Core Web Engine Feature
- Internet Information Services (IIS) 7.0 World Wide Web Publishing Feature

## SYSPRO 8 CLIENT

- Microsoft .NET Framework 4.8
- SYSPRO 8 Runtime

## SYSPRO COMMUNICATIONS SERVICE



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

- Microsoft .NET Framework 4.8
- SYSPRO 8 Service Upgrade Manager
- SYSPRO 8 e.net Communications Load Balancer

A valid endpoint must be configured in the **Setup Options** program of **SYSPRO 8**.

## SYSPRO CUSTOMIZED PANES

Requirements to use .net controls within customized panes in SYSPRO:

- Java Run Time
- Microsoft .NET Framework 4.6
- SYSPRO .NET Interop (i.e. Microsoft Interop Forms Redistributable Package 2.0a)
- Crystal Run Time (Only required when using a SRS / Crystal report type pane)

## SYSPRO DOCUMENT FLOW MANAGER

SYSPRO 8 Document Flow Manager Folder Poller:

- Microsoft .NET Framework 4.8
- SYSPRO 8 e.net Communications Load Balancer

A valid endpoint must be configured in the **Setup Options** program of **SYSPRO 8**.

SYSPRO 8 Document Flow Manager Queue Poller:

- Microsoft .NET Framework 4.8
- SYSPRO 8 e.net Communications Load Balancer

A valid endpoint must be configured in the **Setup Options** program of **SYSPRO 8**.

## SYSPRO EMBEDDED ANALYTICS

- SYSPRO Application Gateway service
- PostgreSQL 12 (Configured server-side)
- Microsoft Edge WebView2

This controller must installed on the SYSPRO Desktop Client for SYSPRO users to be able to design and deploy dashboards.



This is built into the Client install from SYSPRO 8 2022 onwards.

## SYSPRO E.NET COMMUNICATIONS LOAD BALANCER

SYSPRO 8 e.net Communications Load Balancer:



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

- Microsoft .NET Framework 4.8
- SYSPRO 8 Service Upgrade Manager
- SYSPRO 8 Server

Additional Load Balancer Service:

- SYSPRO 8 e.net Communications Load Balancer

## SYSPRO E.NET DIAGNOSTICS

Requirements to use the SYSPRO e.net Diagnostics harness for support purposes, or for development using e.net Solutions business objects:

- Microsoft .NET Framework 4.8
- SYSPRO 8 e.net Communications Load Balancer

A valid endpoint must be configured in the **Setup Options** program of **SYSPRO 8**.



SYSPRO e.net Diagnostics only supports SYSPRO connections using the SYSPRO 8 e.net Communications Load Balancer service, which is a prerequisite when installing **SYSPRO 8**.

## SYSPRO ESPRESSO SOFTWARE REQUIREMENTS

SYSPRO 8 Espresso:

- Microsoft .NET Framework 4.8
- SYSPRO 8 Service Upgrade Manager
- SYSPRO 8 e.net Communications Load Balancer

A valid endpoint must be configured in the **Setup Options** program of **SYSPRO 8**.

- SYSPRO 8 Espresso Notification Service
- Internet Information Services (IIS)

- SSL Certificate

A valid SSL certificate is required to run the Espresso application and connect to an IP address on an Android device.

SYSPRO 8 Espresso Notification Service:

- Microsoft .NET Framework 4.8
- SYSPRO 8 Service Upgrade Manager
- SYSPRO 8 e.net Communications Load Balancer

A valid endpoint must be configured in the **Setup Options** program of **SYSPRO 8**.

## RECOMMENDED HARDWARE

Most mobile devices from the middle of 2017 onwards have sufficient hardware capabilities to run **SYSPRO Espresso** without any performance problems. Hardware requirements are not determined so much by the application but rather the operating system (and operating system version) installed on the mobile device. Therefore the operating system will have a far greater impact on the performance of the mobile device compared to the **SYSPRO Espresso** application.

In addition, the speed of the network connection between the mobile device and the Espresso server has an even greater performance impact than the device hardware.

Below are the minimum recommended hardware specifications:



This is only a guideline as mobile devices in a lower spectrum can still perform well within **SYSPRO Espresso**.

	Apple	Android
Storing Capacity	32GB	32GB
Display	Retina 5.5"	5.8"
Chip	A10 Fusion chip	Octa-Core 835
Camera	8MP	8MP
Memory	2GB	4GB
Operating System	IOS 11	Android 7



**Multi-Factor Authentication** and **SSO using Active Directory** are not currently supported with **SYSPRO Espresso**.

## SYSPRO HARMONY

SYSPRO's cloud-based multi-user experience platform that unites social media capabilities, internal and external collaboration, machine learning, cognitive services and data analytics into a single offering for accomplishing targeted or highly-complex tasks.

SYSPRO 8 Harmony Service:

- Microsoft .NET Framework 4.8
- Microsoft SQL Server 2012 or higher
- SYSPRO 8 Service Upgrade Manager
- SYSPRO 8 e.net Communications Load Balancer

A valid endpoint must be configured in the **Setup Options** program of **SYSPRO 8**.

SYSPRO 8 Harmony API Service:

- Microsoft .NET Framework 4.8
- SYSPRO 8 Service Upgrade Manager
- SYSPRO 8 e.net Communications Load Balancer

A valid endpoint must be configured in the **Setup Options** program of **SYSPRO 8**.

- Internet Information Services (IIS) 7.0 Core Web Engine Feature
- Internet Information Services (IIS) 7.0 World Wide Web Publishing Feature
- Microsoft .NET Core 1.0.1 Runtime (x64)

## SYSPRO 8 LANGUAGE PACKS



This applies to all language packs available from the **Product Selection** (French, Chinese, German, Russian, Spanish).

- SYSPRO 8 Server

## SYSPRO MACHINE LEARNING



This service can be installed on any server as long as the **SYSPRO 8 e.net Communications Load Balancer** endpoint is configured correctly in the service's configuration file.

- Microsoft .NET Framework 4.8
- SYSPRO 8 e.net Communications Load Balancer

A valid endpoint must be configured in the **Setup Options** program of **SYSPRO 8**.

## SYSPRO ODATA

- Microsoft .NET Framework 4.8
- Internet Information Services (IIS) - including:
  - .NET Core hosting bundle (version 3.1.12 or higher)



Minimum .NET Core frameworks required by the SYSPRO OData API:

- Microsoft.AspNetCore.App (version 3.1.8 or higher)
- Microsoft.NETCore.App (version 3.1.0 or higher)
- NETStandardLibrary (version 2.1.0 or higher)

- SSL Certificate for live production sites



The **SYSPRO OData** deployment must be secured by an IIS certificate.

An SSL certificate can be purchased online and deployed on the host server. It is essentially the remit of the solution platform provider to assist in deploying a valid SSL certificate into the IIS instance and to configure the solution for access on **Port 443**.

- A connection to Microsoft SQL Server
- A connection to the SYSPRO 8 e.net Communications Load Balancer via net.tcp
- SYSPRO OData Service



We strongly recommend exposing this service over HTTPS to ensure security.

## SYSPRO OFFICE INTEGRATION (SOI)

Requirements to integrate your SYSPRO application with **Microsoft Office** elements (e.g. looking up SYSPRO data from within **Microsoft Word** or **Microsoft Excel**):

- Microsoft .NET Framework 4.8
- Microsoft Visual Studio 2010 Tools for Office
- SYSPRO 8 Server *or* SYSPRO 8 Client



**SYSPRO Office Integration** is not supported with any 64-bit version of **Microsoft Office** and is not compatible when running **Microsoft Office 365 Click-to-Run**.



## SYSPRO POINT OF SALE

- Microsoft .NET Framework 4.8
- 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

The following versions of **Microsoft SQL Server** have been tested and verified with **SYSPRO Point of Sale**:

- SQL Server 2017
- SQL Server 2016
- SQL Server 2014
- SQL Server 2012



When using **SQL Server Express Edition**:

Please take special note of the database size limitations set by Microsoft for **SQL Server Express Edition**: Maximum relational database size = 10GB.

For more information, please refer to the following Microsoft documentation:

[Editions and supported features of SQL Server 2022](#)

[Editions and supported features of SQL Server 2019](#)

[Editions and supported features of SQL Server 2017](#)

[Editions and supported features of SQL Server 2016](#)

## SYSPRO REPORTING SERVICES (SRS)



The **SYSPRO 8 Reporting Host Service** must be installed on the same application server as the **SYSPRO 8 Server**.

### SYSPRO Additional Reporting Software 2020 SP4

*(Available from **SYSPRO 8 2023** onwards. This is only applicable within **SYSPRO 8 2023** if **Hotfix KB8100663** has been applied.)*

- Server-Side Software:

- Microsoft .NET Framework 4.8
- SAP Crystal Reports Server 2020 SP4
- SYSPRO 8 Runtime
- SYSPRO 8 Reporting Host Service

- Client-Side Software:

Requirements to print SYSPRO reports using the SRS technology, via client-side:

- Microsoft .NET Framework 4.8
- SAP Crystal Reports Server 2020 SP35
- SAP Crystal Reports Runtime Engine
- SYSPRO 8 Runtime
- SYSPRO 8 Reporting Components

- Designer Software:

Requirements to change the standard SYSPRO SRS reports or design your own reports/documents, via client-side:

- Microsoft .NET Framework 4.8
- SAP Crystal Reports Runtime Engine
- SYSPRO 8 Runtime
- SYSPRO 8 Reporting Components
- SAP Crystal Reports Server 2020 SP4
- BusinessObjects .NET SDK 64bit 4.3 SP4
- SYSPRO 8 Reporting Designer Addin

## SYSPRO Additional Reporting Software 2020

(Available from **SYSPRO 8 2021 R2** to **SYSPRO 8 2023**)

- Server Side Software:

- Microsoft .NET Framework 4.8
- SAP Crystal Reports Server 2020
- SYSPRO 8 Runtime
- SYSPRO 8 Reporting Host Service

- Client-Side Software:

Requirements to print SYSPRO reports using the SRS technology, via client-side:

- Microsoft .NET Framework 4.8
- SAP Crystal Reports Runtime Engine
- SYSPRO 8 Runtime
- SYSPRO 8 Reporting Components

- Designer Software:

Requirements to change the standard SYSPRO SRS reports or design your own reports / documents, via client-side:

- Microsoft .NET Framework 4.8
- SAP Crystal Reports Runtime Engine
- SYSPRO 8 Runtime
- SYSPRO 8 Reporting Components
- SAP Crystal Reports 2020 SP2
- BusinessObjects .NET SDK 64bit 4.3 SP2
- SYSPRO 8 Reporting Designer Addin

## SYSPRO Additional Reporting Software 2016

(Applicable for use from **SYSPRO 8 2020 R2** to **SYSPRO 8 2021 R2**)



Due to SAP Crystal Reports 2016 having reached the end of its life cycle, the **Additional Reporting Software 2016** is no longer available for new installations from January 2024.

- Server Side Software:

- Microsoft .NET Framework 4.8
- SAP Crystal Reports Server 2016 SP8
- SYSPRO 8 Runtime
- SYSPRO 8 Reporting Host Service
- SAP BusinessObjects BI platform .NET SDK Redistributable 64bit 4.2 SP8

- Client-Side Software:

Requirements to print SYSPRO reports using the SRS technology, via client-side:

- Microsoft .NET Framework 4.8
- Business Objects Runtime 2016 x86
- SYSPRO 8 Runtime
- SYSPRO 8 Reporting Components

- Designer Software:

Requirements to change the standard SYSPRO SRS reports or design your own reports / documents, via client-side:

- Microsoft .NET Framework 4.8
- Business Objects Runtime 2016 x86
- SYSPRO 8 Runtime
- SYSPRO 8 Reporting Components
- SAP BusinessObjects BI platform .NET SDK Redistributable 64bit 4.2 SP8
- SAP Crystal Reports 2016 SP8
- SYSPRO 8 Reporting Designer Addin

## SYSPRO Additional Reporting Software 2013

(Applicable for use up to and including **SYSPRO 8 2020 R1**)



Due to SAP Crystal Reports 2013 having reached the end of its life cycle, the **Additional Reporting Software 2013** is no longer available for new installations from January 2024.

- Client-Side Software:

Requirements to print SYSPRO reports using the SRS technology, via client-side:

- Microsoft .NET Framework 4.8
- SAP Crystal Reports Runtime engine
- SYSPRO 8 Reporting Components
- SYSPRO 8 Runtime

- Designer Software:

Requirements to change the standard SYSPRO SRS reports or design your own reports / documents, via client-side:

- Microsoft .NET Framework 4.8
- SAP Crystal Reports Runtime engine
- SYSPRO 8 Runtime
- SYSPRO 8 Reporting Components
- SAP Crystal Reports 2013 SP6
- SAP Crystal Reports 2013 SP8 update
- BI platform .NET SDK Redistributable
- SYSPRO 8 Reporting Designer Addin



The SYSPRO 8 Reporting Components enable you to print reports through SYSPRO when the **REPORTING CONFIGURATION** setup option is defined as **Client-side reporting using SQL** or **Client-side reporting using XML** (*Setup Options > System Setup > Reporting*).

## SYSPRO RULES ENGINE

- Microsoft .NET Framework 4.8
- SYSPRO 8 Service Upgrade Manager
- SYSPRO 8 e.net Communications Load Balancer

A valid endpoint must be configured in the **Setup Options** program of **SYSPRO 8**.

## SYSPRO 8 SERVER

- Microsoft .NET Framework 4.8
- SYSPRO 8 Runtime
- SYSPRO 8 e.net Communications Load Balancer

A valid endpoint must be configured in the **Setup Options** program of **SYSPRO 8**.

## SYSPRO 8 SERVICE UPGRADE MANAGER

- Microsoft .NET Framework 4.8

## SYSPRO SUPPLY CHAIN PORTAL

- Microsoft .NET Framework 4.8
- SYSPRO 8 Service Upgrade Manager
- SYSPRO 8 Avanti Initialization Service
- Internet Information Services (IIS) 7.0 Core Web Engine Feature
- Internet Information Services (IIS) 7.0 World Wide Web Publishing Feature
- SYSPRO 8 Reporting Host Service

## SYSPRO WEB SERVICES

Requirements to view SYSPRO information in a web environment:

- Microsoft .NET Framework 4.8
- Internet Information Server (IIS) 7.0
- SYSPRO 8 e.net Communications Load Balancer

A valid endpoint must be configured in the **Setup Options** program of **SYSPRO 8**.



SYSPRO Web Services is a wrapper around the SYSPRO 8 e.net Communications Load Balancer service, which is a prerequisite when installing **SYSPRO 8**.

## SYSPRO WORKFLOW SERVICES

Requirements to design and use a Workflow to optimize your business processes:

- Microsoft .NET Framework 4.8
- SYSPRO 8 Service Upgrade Manager
- SYSPRO 8 e.net Communications Load Balancer

A valid endpoint must be configured in the **Setup Options** program of **SYSPRO 8**.



[www.syspro.com](http://www.syspro.com)

Copyright © SYSPRO. All rights reserved.  
All brand and product names are trademarks or  
registered trademarks of their respective holders.

