SYSPRO 8 Pre-installation - Upgrade

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SYSPRO
Simplifying your Success

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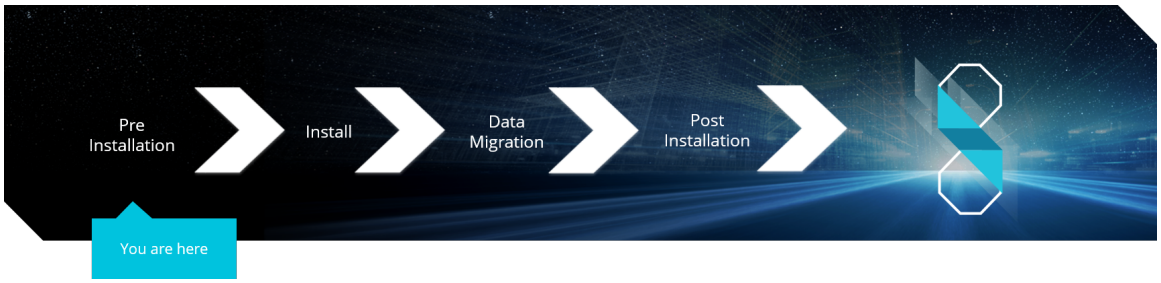
SYSPRO 8 Upgrade Installation



Audience: You are an existing SYSPRO user and are about to upgrade to SYSPRO 8.

SYSPRO 8 is a web-based, Cloud-first ERP solution designed to add significant value, flexibility, control and visibility of operations for manufacturing and distribution companies.

With the integration of a number of powerful new features, including a web-based version of SYSPRO, social media as a collaboration tool and a host of the hottest new IT capabilities - the benefits of SYSPRO 8 to business are virtually infinite.

Therefore, you are about to install a best-of-breed, fully-integrated software solution that will assist you in managing your supply chain business processes (from internal planning, analysis and reporting, management and control, execution and operations to external integration).

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Upgrade Considerations

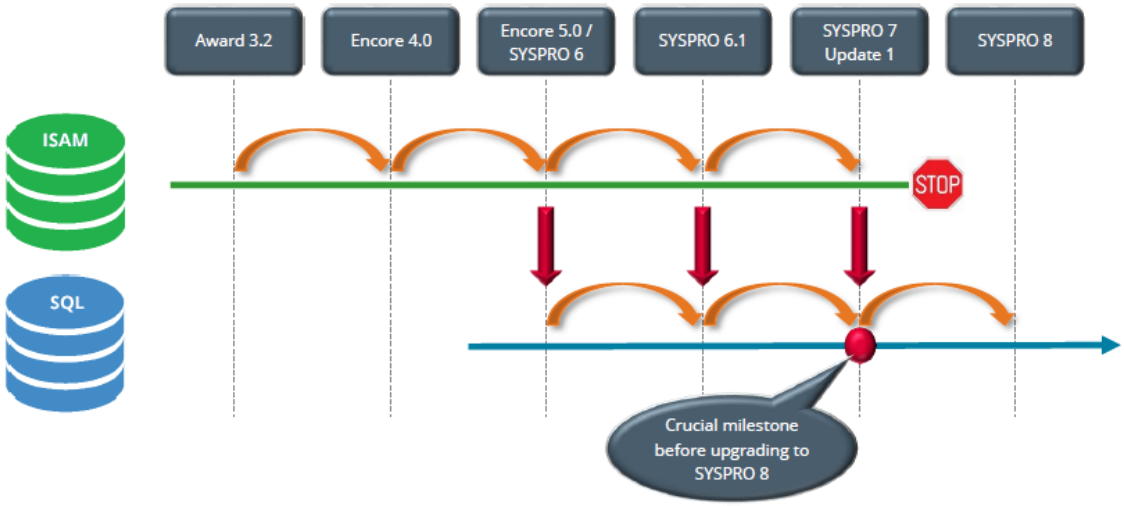
Upgrading to SYSPRO 8 from previous versions

You can upgrade to SYSPRO 8 from any previous version of SYSPRO (including Encore and Award versions) however all upgrades need to be done in a systematic and version-by-version manner (as explained in the diagram and upgrade matrix below).

From the Encore 5.0 / SYSPRO 6.0 release, we have introduced support for SQL databases and steadily moved the system from ISAM to SQL.

As SYSPRO 8 is a SQL-only environment, it no longer uses any ISAM files. Therefore, if your current SYSPRO version is still on ISAM, you have 2 options available:

- Update along the ISAM path until you reach SYSPRO 7 Update 1 and then migrate to SYSPRO 7 Update 1 SQL, before upgrading to SYSPRO 8.
- Migrate to SQL on any of the intermediate versions, before following the upgrade path to reach SYSPRO 8.



Example scenario 1:

If you are currently on SYSPRO 6.1 SQL, you have to upgrade to SYSPRO 7 Update 1 SQL before you can upgrade to SYSPRO 8.

Example scenario 2:

If you are currently on SYSPRO 6.1 ISAM, you could do either of the following:

- Upgrade to SYSPRO 7 Update 1 (ISAM) > Migrate to SYSPRO 7 Update 1 (SQL) > Upgrade to SYSPRO 8.
- Migrate to SYSPRO 6.1 (SQL) > Upgrade to SYSPRO 7 Update 1 (SQL) > Upgrade to SYSPRO 8.

SYSPRO upgrade matrix

The following tables provide you with the sequence of upgrade steps required in order to reach SYSPRO 8, depending on your **current SYSPRO version** and **choice of migration point**:

- Migrate to SQL from ISAM before following the upgrade path:

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Current SYSPRO Version	Steps to Upgrade to SYSPRO 8					
	Upgrade to Encore 4.0	Upgrade to SYSPRO 6	Migrate data to SQL	Upgrade to SYSPRO 6.1	Upgrade to SYSPRO 7 Upd 1	Upgrade to SYSPRO 8
Award 3.2 or prior	1	2	3	4	5	6
Encore 4.0		1	2	3	4	5
SYSPRO 6 ISAM			1	2	3	4
SYSPRO 6 SQL				1	2	3
SYSPRO 6.1 ISAM			1		2	3
SYSPRO 6.1 SQL					1	2
SYSPRO 7 Upd 1 ISAM			1			2
SYSPRO 7 Upd 1 SQL						1

- Follow the upgrade path to SYSPRO 7 Update 1 (ISAM), before migrating to SQL:

Current SYSPRO Version	Steps to Upgrade to SYSPRO 8					
	Upgrade to Encore 4.0	Upgrade to SYSPRO 6	Upgrade to SYSPRO 6.1	Upgrade to SYSPRO 7 Upd 1	Migrate data to SQL	Upgrade to SYSPRO 8
Award 3.2 or prior	1	2	3	4	5	6
Encore 4.0		1	2	3	4	5
SYSPRO 6 ISAM			1	2	3	4
SYSPRO 6 SQL			1	2		3
SYSPRO 6.1 ISAM				1	2	3
SYSPRO 6.1 SQL				1		2
SYSPRO 7 Upd 1 ISAM					1	2
SYSPRO 7 Upd 1 SQL						1

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Installation Types

There are a number of installation permutations that you can use. Some of the common scenarios include:

Type	Description and considerations
Standalone installation	The following is all installed on the same machine: • SYSPRO Application Server software • Microsoft SQL Server software • Data • Client screens This type of installation is typically used for demonstration and / or development purposes.
2-tier installation: **Client / Server**	The SYSPRO client software resides on each client machine. The following all reside on the server: • SYSPRO Application Server software • Microsoft SQL Server software • Data • SYSPRO Communications Service (allowing clients to connect)
3-tier installation: **Client / Server**	The SYSPRO client software resides on each client machine. The SYSPRO Application Server software resides on the dedicated SYSPRO server, together with the SYSPRO Communications Service (allowing clients to connect). Microsoft SQL Server software and data reside on the dedicated database server. All credentials in this environment must be SQL Server Authentication. Windows Authentication is unable to move credentials across two levels of architecture (i.e. client to server and then server to database server).
Terminal Server installation	There are various configurations that could be used for a Terminal Server environment: • It could act as a dedicated server. Instead of running the SYSPRO client software, you would run the standalone SYSPRO shortcut. • It could act as a dedicated client machine where the SYSPRO client software is installed. The application may be published under terminal server providing a SYSPRO icon to each user's workstation. Clicking the icon runs the SYSPRO client. • It could host both the client and server portions of the SYSPRO Software on the same machine. This provides a lockdown method of the SYSPRO Working and Data Files, giving users access via the client side software only.

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System Requirements

Please ensure that you have reviewed and met the following system requirements before proceeding with your SYSPRO 8 journey.

Minimum supported software

- **Microsoft .NET Framework 4.6**
- **Windows Installer 5.0**

  This results in all machines having the latest Windows updates, particularly Windows Server 2008 R2.

- **Microsoft SQL Server 2008 R2** onwards

  Microsoft SQL Server Home edition is not supported.

- **Microsoft PIAs**

  Microsoft's Office Primary Interop Assemblies allow SYSPRO to integrate with line-of-business applications, such as **Word**, **Excel** and **Outlook**. And coupled with **SYSPRO Office Integration** you can surface SYSPRO data inside **Word** and **Excel**.

  Microsoft Outlook PIA's are required if you intend using the SYSPRO Email Client.

- **Java runtime**

  This is required if you use client-side printing.

- **Microsoft IIS** (Internet Information Services) Version 6 onwards
- **Microsoft Windows 7 SP1** onwards (64bit)
- **Microsoft Windows Server 2008 R2** onwards (64bit)
- **Microsoft Office 2010** onwards (32bit)

  SYSPRO 8 integrates to the Microsoft Office suite, and both variants of Microsoft Office 365 (locally installed and cloud version) are supported as standard.

Hardware requirements

For information relating to hardware requirements for running SYSPRO 8, please refer to the **SYSPRO 8 System Requirements - Technical Specification** guide available on the InfoZone.

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SYSPRO 8 Readiness Check

The **SYSPRO 8 Readiness Check** is a diagnostic program that you run on your SYSPRO 7 Update 1 SQL database(s) to identify any issues that may cause the conversion process to fail. It verifies your system environment and company databases to ensure that the conversion to SYSPRO 8 is as simple as possible.

Please ensure that you are on **port 36** to ensure that you have all of the latest enhancements to this program.

If you are currently running SYSPRO 7 Update 1 (ISAM), you can (on a separate environment) migrate your data to SYSPRO 7 Update 1 (SQL) and then run the **SYSPRO 8 Readiness Check**.

You cannot run this program from an ISAM company. All companies must be converted to SQL before they can be converted to SYSPRO 8.

Process

The **SYSPRO 8 Readiness Check** displays a row of information regarding your system-wide database. In addition, an additional row is shown; one for each company. This is determined by reading the company control files (`ADMCTL`) in the `WORK` folder.

Each entry is initially shown with a white flag icon to indicate that it has not yet been validated. You can select multiple entries and then run the validation on these entities.

The **SYSPRO 8 Readiness Check** then performs a number of system and company validation checks.

Ensure that the auto close option is not enabled for any SYSPRO database as this can cause problems when trying to bulk insert or process cross-database updates.

System checks

System check	Description	Importance
SQL version	The **SYSPRO 8 Readiness Check** verifies your current version of SQL. SYSPRO 8 supports SQL versions from 2008 R2 onwards. If you are using an older SQL version, the following error is displayed: `This is an unsupported version of SQL. SQL 2008 R2 is the earliest version supported in SYSPRO 8`	**Critical** Requires addressing prior to conversion
Crystal version	The **SYSPRO 8 Readiness Check** verifies the **System Setup** program (**Reporting** tab) to determine if Crystal 2013 is selected. If you are using an older version of Crystal, the following error is displayed:	**Warning** Requires addressing prior to conversion

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System check	Description	Importance
	`Not supported in SYSPRO 8`	
Microsoft Office Components	The **SYSPRO 8 Readiness Check** doesn't check these components, but will display the following message: `Office components (Excel, Word and Outlook) SOI only supports versions from Microsoft Office 2010 onwards`	**Information only** Any operators required to make use of Microsoft Office components integrated with SYSPRO 8 will need to upgrade their Office suite.
Client Server Communications	If you are using **CCI** as your method of communication between client server, the following error is displayed: `SYSPRO CCI Service Not Supported in SYSPRO 8`	**Warning** This means that when you install SYSPRO 8, you must use the SYSPRO client-server communications service, as CCI is no longer supported.
Custom Form Data Format	If you are using the legacy format for custom form data, the following error is displayed: `Custom forms must be converted to the '+' table format before converting to SYSPRO 8`	**Critical** Requires addressing prior to conversion. Therefore, you must use the Custom Form admin tool to migrate your Custom Form data format.
ISAM file checks for system database	The **SYSPRO 8 Readiness Check** will attempt to open all of the ISAM files that require conversion to SQL in the system database. If there is an error on one or more of these files, the following message is displayed: `One or more system ISAM files require re-indexing before converting to SYSPRO 8` All files with errors are then shown in the listview.	**Critical** Files require reindexing prior to conversion. This will ensure that they are valid before the SYSPRO 8 data migration proceeds.
System database	The **SYSPRO 8 Readiness Check** verifies the existence of any tables that may have the same name as a SYSPRO 8 table to be created. If one or more are found then the following message will appear: `One or more SQL tables exist in the database which are reserved for the ISAM file conversion. These need to be renamed`	**Critical** Requires addressing prior to conversion as it may prevent the correct creation of new tables. You may need to investigate why there is a table in the system-wide database with the same name as a table created when migrating to SYSPRO 8.

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System check	Description	Importance
	`or deleted before converting to SYSPRO 8` All tables with issues are then shown in the listview.	

Database collation	If (prior to the migration) your database's collation was configured as case insensitive the migration may result in errors, as information contained in the ISAM files is case sensitive.
	
	For example: You may have two stock codes of `ABC` and `abc`; this will cause the conversion to fail with a duplicate entry in the `InvMaster` table.
	
	Therefore the **SYSPRO 8 Readiness Check** verifies that the collation for the system database is case sensitive. This is achieved by scanning the collation name for `_CI` which implies case insensitive.
	
	If the collation for the database is not case sensitive then the following error is shown:
	
	`Database collation.`
	
	`The database collation 'xxxxxxxxx' is case insensitive. This must be changed to a case sensitive collation before converting to SYSPRO 8.` (Where `xxxxxxxx` is the current collation)
		Critical
		
		Requires addressing prior to conversion.
		
		You can change the collation on a database by using either of the following methods:
		
		• **SQL Server Management Studio** (SSMS)
		
		• Using **Transact-SQL** script
		
		It is important to note that changing the collation using a script is NOT applied to existing tables and columns, but will only be applied to entities added subsequent to the change.
		
		For detailed information on how to do this using either method: *Set or Change the Database Collation*
		
		Alternatively, you can change the database collation to a Case Sensitive collation (`_CS` in the name), or to a binary collation (_BIN2 in the name).
		
		For example:
		
		`Latin1_General_BIN2`
		
		or
		
		`Latin1_General_CS_AS`

Database compatibility level	A compatibility level that is less than `100` is not supported in SYSPRO 8, therefore the **SYSPRO 8 Readiness Check** verifies the compatibility level of your SQL database.
	
	If the compatibility level for the database is found to be less than `100` then the following error is shown:
	
	`Database compatibility level`
	
	`The compatibility level of 'nn' is not supported in SYSPRO 8.`
		Critical
		
		Requires addressing prior to conversion.
		
		You can change the compatibility level on a database by using either of the following methods:
		
		• **SQL Server Management Studio** (SSMS)
		
		• Using **Transact-SQL** script
		
		For detailed information on how to do this using either method:

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System check	Description	Importance
	For further information regarding compatibility levels: *Understanding SQL Server Compatibility Levels*	*View or Change the Compatibility Level of a Database*

Custom programs	The **SYSPRO 8 Readiness Check** reviews the following areas to establish whether any custom COBOL programs are called:
	Custom COBOL programs are those that are not defined in `IMPPRG.IMP` as a standard SYSPRO program.
	• Document Flow Manager
	• Electronic Signatures
	• Task Items
	If any are found the following warning message is displayed, along with details as to where they are defined:
	`Custom programs`
	`Custom programs are in use. Please ensure that a compatible version is available before converting to SYSPRO 8.`
		Critical
		Requires addressing prior to conversion.
		Please speak to your third party vendor to ensure that there is a version of the software which is compatible with SYSPRO 8.

Company checks

The following checks are performed on each of the companies selected:

System check	Description	Importance
C-ISAM	If the company selected is validated as being C-ISAM, the following error message is displayed: `Company must be converted to SQL before converting to SYSPRO 8`	**Critical** Requires addressing prior to conversion. No further checks are made.
SYSPRO version	If the company selected is validated as being on a version of SYSPRO prior to **SYSPRO 7 Update 1**, the following error message is displayed: `Company must be converted to SYSPRO 7 Update 1 before converting to SYSPRO 8`	**Critical** Requires addressing prior to conversion. No further checks are made.

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System check	Description	Importance
Company database existence	If the company database doesn't exist, the following error message is displayed: `Company database does not exist in the SQL instance`	**Critical** Requires addressing prior to conversion. No further checks are made.
Company control file	If the **SYSPRO 8 Readiness Check** encounters a problem accessing the control file, the following error message is displayed: `Error accessing the company control file`	**Critical** This is highly unlikely but must be addressed prior to conversion. Reindexing should resolve the issue.
Web based applications	If the company is licensed for Web based applications, a row with the following informational message is displayed: `Not supported in SYSPRO 8`	**Information only** Legacy web-based apps not supported in SYSPRO 8.
Preactor	If the company is licensed for Preactor, a row with the following informational message is displayed: `Not supported in SYSPRO 8`	**Information only** Preactor integration is not available in SYSPRO 8.
DFM	If the company has DFM installed, the following informational message is displayed: `Before converting to SYSPRO 8 ensure that no documents are currently queued for DFM`	**Information only** This is a reminder to ensure that all documents have been processed before starting the SYSPRO 8 migration.
ISAM file checks for company database	The **SYSPRO 8 Readiness Check** will attempt to open all of the ISAM files that are to be converted to SQL in each company database. If there is an error on one or more of them, the following error message is displayed: `One or more company ISAM files require reindexing before converting to SYSPRO 8` All files with errors are then shown in the listview.	**Critical** Files require reindexing prior to conversion
Company database tables	The **SYSPRO 8 Readiness Check** checks for the existence of any tables that may have the same name as new tables in SYSPRO 8.	**Critical** Requires addressing prior to conversion as it may prevent the correct creation of new tables

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System check	Description	Importance
	If one or more are found, the following error message is displayed: `One or more SQL tables exist in the database which are reserved for the ISAM file conversion. These need to be renamed or deleted before converting to SYSPRO 8` All tables with issues are then shown in the listview.	
Lot archive files	While these files do not need to be converted at the time of upgrading to SYSPRO 8, it is advisable that these be reindexed prior to upgrading. The **SYSPRO 8 Readiness Check** will attempt to open these files and if they fail the following error message is shown: `One or more Lot Archive files are either not found or require reindexing before converting to SYSPRO 8` Each file with issues is then included in the listview.	**Critical / Warning** If these files are not found this is only a warning message, as they can be made available and converted once you are in SYSPRO 8. However, if one or more of these files require reindexing, then this is critical and needs to be addressed prior to converting.
Sales order, ECC BOM and WIP Job archive files	These files do not need to be converted at the time of upgrading to SYSPRO 8. There is no reindexing for these files, therefore the **SYSPRO 8 Readiness Check** just ensures that they are available and will display the following message if any files are not found: `One or more archive files not found` Each file not found is then included in the listview.	**Warning** If these files are not found, you can make them available and convert once you are in SYSPRO 8
Database collation	If (prior to the migration) your database's collation was configured as case insensitive the migration may result in errors, as information contained in the ISAM files is case sensitive. *For example:* You may have two stock codes of `ABC` and `abc`; this will cause the conversion to	**Critical** Requires addressing prior to conversion. You can change the collation on a database by using either of the following methods: • **SQL Server Management Studio** (SSMS)

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System check	Description	Importance

	fail with a duplicate entry in the `InvMaster` table.
	
	Therefore the **SYSPRO 8 Readiness Check** verifies that the collation for the system database is case sensitive. This is achieved by scanning the collation name for `_CI` which implies case insensitive.
	
	If the collation for the database is not case sensitive then the following error is shown:
	
	`Database collation.`
	
	`The database collation 'xxxxxxxxx' is case insensitive. This must be changed to a case sensitive collation before converting to SYSPRO 8.` (Where `xxxxxxxx` is the current collation)
		• Using **Transact-SQL** script
		
		It is important to note that changing the collation using a script is NOT applied to existing tables and columns, but will only be applied to entities added subsequent to the change.
		
		For detailed information on how to do this using either method: *Set or Change the Database Collation*
		
		Alternatively, you can change the database collation to a Case Sensitive collation (`_CS` in the name), or to a binary collation (_BIN2 in the name).
		
		For example:
		
		`Latin1_General_BIN2`
		
		or
		
		`Latin1_General_CS_AS`

Database compatibility level	A compatibility level that is less than `100` is not supported in SYSPRO 8, therefore the **SYSPRO 8 Readiness Check** verifies the compatibility level of your SQL database.
	
	If the compatibility level for the database is found to be less than `100` then the following error is shown:
	
	`Database compatibility level`
	
	`The compatibility level of 'nn' is not supported in SYSPRO 8.`
	
	For further information regarding compatibility levels: *Understanding SQL Server Compatibility Levels*
		Critical
		
		Requires addressing prior to conversion.
		
		You can change the compatibility level on a database by using either of the following methods:
		
		• **SQL Server Management Studio** (SSMS)
		
		• Using **Transact-SQL** script
		
		For detailed information on how to do this using either method: *View or Change the Compatibility Level of a Database*

Custom programs	The **SYSPRO 8 Readiness Check** reviews the following areas to establish whether any custom COBOL programs are called: Custom COBOL programs are those that are not defined in `IMPPRG.IMP` as a standard SYSPRO program.	**Critical** Requires addressing prior to conversion. Please speak to your third party vendor to ensure that there is a version of the software which is compatible with SYSPRO 8.

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System check	Description	Importance

	• Electronic Signatures
	• Events
	• Task Items
	• Triggers
	• Workflows
	If any are found the following warning message is displayed, along with details as to where they are defined:
	`Custom programs`
	`Custom programs are in use. Please ensure that a compatible version is available before converting to SYSPRO 8.`	

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Data Backup

1. **Re-index ISAM files**

   To ensure that the backup files are as clean as possible, you can choose to re-index your ISAM files prior to creating a backup of the SYSPRO folders.

2. **Verify database integrity**

   Prior to any backups, it is recommended that you verify the database integrity by running the **SQL Server Diagnostic** program and selecting to view tables, indexes and columns.

   This ensures that any issues detected by the **SQL Server Diagnostic** program can be resolved prior to creating the backup.

3. **Backup of SQL Server databases**

   Using Microsoft's **SQL Server Management Studio** or backup tool of your choice, ensure that you backup all of your SYSPRO databases, including system-wide and company specific databases, etc.

   Also ensure that any third party databases, which in any way are related to SYSPRO, are also backed up.

4. **Backup of SYSPRO folders**

   As a precautionary measure, ensure to create a backup of all files and folders that contain data, or customization of any type, before proceeding with the installation.

   This includes the following folders that contain ISAM files that will be migrated to SQL during the data migration process:

   - `WORK`
   - `DATA`

   Ensure that the backup can be restored in the event of any problems encountered during the conversion process.

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Pre-installation Checks

As part of your preparation for installing SYSPRO 8, please ensure the following:

1. Confirm your SYSPRO companies have been migrated to SQL:

   If you are upgrading from SYSPRO 7 Update 1 and your company data has been migrated to SQL, then you can migrate directly to SYSPRO 8.

   If you are on any prior releases you have to upgrade version-by-version until you reach SYSPRO 7 Update 1.

   All company data needs to be in SQL before you can upgrade to SYSPRO 8.

2. Ensure that you have access to a SYSPRO Administrator user name and password (e.g. `ADMIN`).
3. Ensure that you have access to a SQL Server Administrative user name and password (e.g..'`sa`').

   This user must have the following administrative permissions enabled:

   - Create and Drop entities (such as databases, tables, columns, etc.) for all SYSPRO databases
   - Issue BULK INSERT statement

4. Confirm you have a valid SYSPRO license:

   Ensure that you have valid licenses for the software you will be installing. In particular, ensure that your new SYSPRO 8 license is valid for the modules you will be using.

5. Run financial checks on your existing SYSPRO 7 system:
   - Ensure all pending transactions are posted to General Ledger.
   - Ensure all modules are in the same period.
   - Run a **Balance** function in all modules and retain reports for balancing purposes after the installation.
   - Print distribution reports and retain reports for reference purposes after the installation.
   - Print the **At a Glance** information for all modules. This can be used to confirm balances once you have completed the installation and conversion.

6. Log out all users:

   i.e. SYSPRO operators and e.net users.

7. Stop all SYSPRO services.

   This step is only required if you are upgrading to SYSPRO 8 and not running parallel to SYSPRO 7.

8. Check port numbers assigned to services:

   As part of the installation process for existing sites, a number of services will need to be reinstalled.

   During the installation you have the option to either assign new ports or use the existing SYSPRO 7 ports. Reasons why you would select to use the SYSPRO 7 ports include:

   - SYSPRO 8 services can reuse the assigned firewall rules
   - SYSPRO 8 Clients can connect to the same SYSPRO Communication Endpoint to save time
   - SRS Printing will just work as it will use the same port number.

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When these services are reinstalled, you will need to review any connection issues as the new default port numbers might have changed (e.g. either reinstate the original port number or update the configuration of any calling applications to reflect the new port number).

9. Verify third party products to ensure that the product or application is available and compatible with SYSPRO 8.

   In addition, ensure that you have the appropriate installation and licensing information required (particularly relating to SYSPRO 8).

10. Disable SYSPRO users from logging into each company, until after installation and migration is complete.

Customization

SYSPRO 8 Windows Client Interface

The vast majority of Customization and Power Tailoring will work unchanged after migrating to SYSPRO 8. However, as the scope for customization is vast and could have been developed in a 'non-version independent' way, we recommend that your customizations are tested post migration to SYSPRO 8.

The use of VBScripts to customize the user interface will work, as long as the appropriate parameters and variables were used.

Calling business objects using the standard `CallBo` function will also work unchanged.

SYSPRO Avanti

Many of the VBScript and e.net customization, and other Power Tailoring Customization, will work unchanged in the SYSPRO Avanti interface.

However, if the customizations incorporated components specifically developed for the .NET framework (such as a .NET user control) this will not automatically work in the SYSPRO Avanti interface as it makes use of HTML5 and JavaScript - languages specific to a web UI instead of a windows client UI.

In all cases where you intend to use both interfaces, it is recommended that the customizations are tested in both user interfaces.

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SYSPRO 8 Considerations

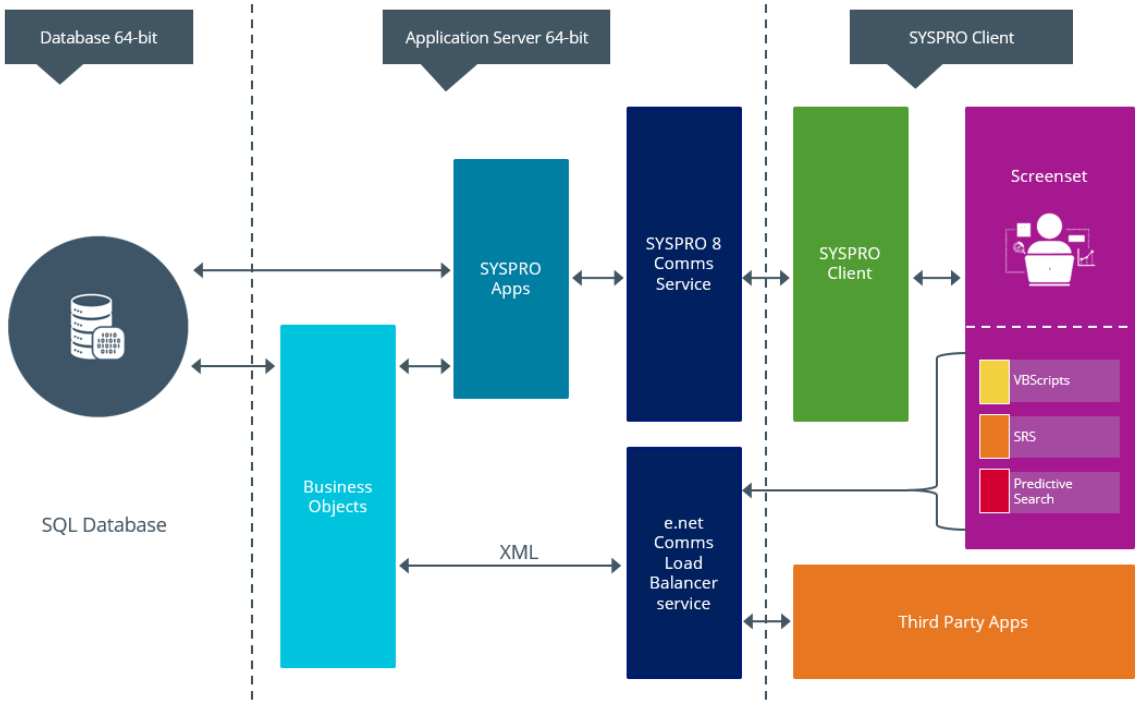
Architecture

e.net Communication Load Balancer service

As SYSPRO 8 strives towards sophisticated simplicity, we have enhanced how the client-server and e.net environments work:

- The **SYSPRO 8 Communications Service** is used for client-server communications, as this is a faster, more secure, 64-bit and firewall friendly communication method.
- Specific client components (e.g. VBScript, SRS, Predictive search, etc.) use the **SYSPRO 8 e.net Communications Load Balancer** service to call the relevant business objects.

  This is a more secure, scalable, robust, 64-bit method of running e.net business objects.
- All third party apps access SYSPRO via the **SYSPRO 8 e.net Communications Load Balancer** service.



Architecture enhancements

Various improvements have been made to the architecture of SYSPRO 8 in order to future-proof the product and plan for innovative development.

For detailed information on each of these improvements, please refer to the *Architecture Enhancements SYSPRO 8 Preview Guide*.

Document Flow Manager

SYSPRO 8 includes major architectural changes to the **Document Flow Manager** (DFM). These include:

- Services installs
- Re-architected .Net Services
- Using Microsoft SQL Server for message queuing

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- Improved user-interfaces for all DFM applications

For more detailed information, please refer to the **SYSPRO 8 Document Flow Manager** reference guide.

SQL Server authentication

Description of change:	In SYSPRO 8, the **System Setup** program has been changed with regard to how you connect to SQL Server. Previously (in SYSPRO 7) there were 3 options: • SQL authentication (Operator login+pass) • SQL authentication (ADMIN login+pass) • Windows authentication In SYSPRO 8, we have simplified this into 2 options: • SQL authentication • Windows authentication The new simplified **SQL authentication** option results in the **SQL Server standard user information** entries being used by default. SYSPRO 8 also lets you override this at operator level (using the **Operator Maintenance** program, which has new options allowing specific operators to have their own SQL Server user name and passwords).
Reason:	Simplified system setup and the ability for customers to trace SQL Server usage by SQL logins.

VBScripts to use CallBo function rather than 'enetguid' variable

Description of change:	When creating a VBScript in SYSPRO 7 and prior versions, a special variable named `enetguid` was available. This legacy variable was required in older VBScripts when you wanted to invoke an e.net business object. This logic was superseded several versions ago, by allowing you to use the simpler **CallBo** function call to invoke e.net business objects. Therefore, if you have previously used the `enetguid` variable, you will be required to recode your VBScript to use the **CallBo** function.
Reason:	Simpler process

Business Objects

Custom Form Query

Description of change:	From SYSPRO 8, only authorized operators will be able to run direct calls to the **Custom Form Query** business object (`COMQFM`). However, operators who run calls to the **Custom Form Query** business object via another business object (e.g. `INVQRY` - **Inventory Query**) are unaffected.
Reason:	Improved security

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Technologies and features no longer supported in SYSPRO 8

SYSPRO 8 is not only about focusing on SQL Server for improved scalability and availability and future-proofing your systems, but also simplifying the system where possible.

Therefore, some options have been simplified and/or removed as part of this process.

In all cases, the options that remain provide for improved scalability, performance, availability and/or security.

The new **SYSPRO 8 Readiness Check** program (run from within SYSPRO 7) performs a number of validation checks when determining if your system is ready to be upgraded to SYSPRO 8, and will check and advise on some of these technologies that are no longer supported.

SQL Connections

Removed:	Connecting to Microsoft SQL Server using an ODBC DSN
Reason:	Prevents setup requirements and resulting issues with native ODBC drivers
Replaced by:	SQL Server connection strings Already the preferred option in SYSPRO 7.

Custom Form data format

Removed:	Support for a single table storing all custom form data
Reason:	Poor scalability, poor data accessibility and poor performance as data grows
Replaced by:	Separate tables per master table Already the preferred option in SYSPRO 7.

Client-Server communication technology

Removed:	Client-server communication using legacy 'CCI' technology
Reason:	Inappropriate port handling over a firewall, and poor resilience when reduced network stability
Replaced by:	**SYSPRO Communications service** using Microsoft 'WCF' technology Already the preferred option in SYSPRO 7.

Web-based applications

Removed:	Web-based applications using the legacy HTML interface
Reason:	Very limited functionality and no customization available, based on legacy technologies
Replaced by:	SYSPRO Espresso mobile solutions provides functionality available in the web-based applications, is highly customizable, provides off-line functionality, etc.

SAP Crystal 2008

Removed:	Support for SAP Crystal 2008
Reason:	Crystal 2008 is no longer supported by the OEM vendor
Replaced by:	The new version to use is SAP Crystal 2013

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ISAM

Removed:	Support for ISAM data format
Reason:	Lower performance, increased file system usage, poor data integrity, etc.
Replaced by:	Microsoft SQL Server provides enterprise-strength Data Integrity, Security, Scalability, Availability, Simplicity and Performance that can be accessed by all popular querying and reporting tools.

Preactor integration

Removed:	Preactor integration is no longer supported in SYSPRO 8
Replaced by:	**SYSPRO's Manufacturing Operations Management** (SYSPRO MOM) is a complete solution for manufacturing companies that covers all of the following aspects and more: • Scheduling • Planning • Equipment • Employees • Dashboards

Encore.dll via e.net Communications Service

Removed:	Direct calls to `Encore.dll` are no longer available.
Reason:	Directly referencing `Encore.dll` using COM / DCOM limits applications to 32-bit, as well as limiting SYSPRO's future expandability. In addition, any third party applications which reference the SYSPRO DLL's directly make it difficult for SYSPRO to easily enhance the system without requiring each third party application to also be changed. Web Services are still supported. Therefore developers who have previously used Web Services will work unchanged.
Replaced by:	Using the **SYSPRO 8 e.net Communications Load Balancer** service de-couples applications from the e.net 64-bit library and provides excellent scalability and performance. Additional benefits: • No limitation of being tied into a specific technology (e.g. 32-bit, etc.) • The system is more robust as any failures do not prevent the system from continuing on the other threads. • The system is multi-threaded and has a significantly improved performance under load • Third party applications can reside on any server / computer that has access to the endpoint.

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Next Process Step

You have begun your journey to the infinite benefits of SYSPRO 8. The next step is to install SYSPRO 8 together with the required software components.

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Further Information

Installation Reference Guides

To make your journey to achieving the infinite benefits of SYSPRO 8 as simple as possible, please refer to the following guides:

1. **SYSPRO 8 Pre-installation - Upgrade** (A pre-installation guide for **existing** SYSPRO 7 update 1 users)
2. **SYSPRO 8 Pre-installation - First Time Install** (A pre-installation guide for **new** SYSPRO 8 users)
3. **SYSPRO Installer**
4. **SYSPRO 8 Data Migration**
5. **SYSPRO 8 Post Installation**

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Additional resources

Reference Guides

SYSPRO's Reference Guides are primarily module-based and cover aspects of the user interface at program level. This includes detailed field and function explanations as well as notes and warnings regarding the usage of an application program within SYSPRO. These guides also extend to feature topics within the system (e.g. Tax, Security, Language Translation, etc.) and include implementation considerations. Please refer to the SYSPRO *InfoZone* for details on how to obtain these guides (`http://infozone.syspro.com/support`).

Support

SYSPRO's *InfoZone* provides up-to-date information about the product as well as more advanced tutorials for registered users.

Newsletter

As part of SYSPRO's ongoing commitment to keeping you informed about the latest product developments, a regular newsletter is distributed to the SYSPRO community. The newsletter covers many aspects of SYSPRO ranging from product enhancements to support-related information, known issues and useful tips. You can subscribe to this newsletter from the SYSPRO *InfoZone*.

Forums

SYSPRO provides a number of active on-line *forums* for you to engage in various discussions about the product.

Contact us

The Technical Authoring team comprises: Freya Nell, Carol Hart, Monique MacNaught and Even Nesset. Send us your comments to help us improve the standard of our reference guides.

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