

Pricing Engine

SYSPRO 8

Reference Guide

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Sales Pricing Engine

Exploring

Where it fits in?

The **Sales Pricing Engine** feature simplifies price configuration by supporting a single point of capture and maintenance for all basic pricing methods and includes support for date effectiveness for all pricing methods. It is a new definition for the concept of a price list, providing a single, simple and efficient way to manage all basic pricing methods, including being able to assign multiple price rules to groups of customers using price groups.

Benefits

- Price Management increases back-office efficiencies by providing sales and finance teams with the ability to better implement and support complex price structures and assign multiple price lists to customers, allowing for flexibility in the design of pricing structures.
- The **Sales Pricing Engine** feature caters for customers who need to run date-based multi-level pricing structures and manage different price rules and methods for different sections of their customer base.

It also lets customers set different prices based on a specific attribute of the customer, like customer classes or geographic areas.

- Sales price flexibility is achieved by using price groups which manage price lists for a selection of customers.

Navigation

The programs related to this feature are accessed from the **Program List** of the SYSPRO menu:

- *Program List > Sales Orders > Pricing Engine*

Terminology

Pricing engine

The pricing engine is used to create flexible, multi-level pricing structures to manage a wide variety of price rules and methods. To facilitate this, a customer is linked to a price group which contains price rules. Price rules may refer to price lists or other configurations like invoice discounts or order discount breaks. Price lists can be created for stock codes, product classes, departments and price categories.

A stock code can exist on multiple price lists, which can have different price methods defined (e.g. flat price, price less %, etc.). In addition, multiple price lists can be linked to one price group, where each price list functions as a price rule.

Pricing method

The pricing method determines what price the system must use for a sales order line as well as the discounts applicable to the sales order lines and total merchandise value.

The pricing method for **Contract Pricing** is defined at company level (*Setup Options > Configuration > Distribution > Sales Orders*) and against stock items using the **Stock Code Maintenance** program.

To use the **Sales Pricing Engine**, your **PRICING METHOD** must be defined as **Price groups** at company level (*Setup Options > Configuration > Distribution > Sales Orders*) and the pricing method must be specified against price lists using the **Price List Maintenance** program (not against stock items).

Cost

This indicates the current unit cost of a stocked item (calculated according to the costing method assigned to the warehouse).

Best price

This indicates the lowest sales price available to the customer.

GP%

This denotes the gross profit percentage and is calculated as:

$$\frac{\text{Sales price} - \text{Cost price}}{\text{Sales price}} \times \frac{100}{1}$$

Price group

Price groups are used to assign prices and discounts to commercial entities (e.g. customers, geographic areas or branches).

Price group level

The price group level establishes which price groups must be applied for the company.

FOR EXAMPLE:

If price groups exist for both the customer and geographic area, then this setting determines which price group takes precedence.

Price list

This indicates a listing that comprises of a grouping of stock codes, product classes, departments or price categories. A price method is specified for each price list, which may be a flat price, discounted price, or quantity discounted price.

Starting

Prerequisites

Setup Options

To use this feature, the following setup option(s) must be enabled:

Setup Options > Configuration > Distribution > Sales Orders

- Pricing method
This must be defined as **Price groups**.
- Price group level

Electronic Signatures

To use this feature, the following eSignatures must be defined accordingly in the **Electronic Signature Configuration Setup** program (as this allows for the various functions in the related programs):

- SO Add Price Group
- SO Change Price Group
- SO Delete Price Group
- SO Add Price Group e.net
- SO Change Price Group e.net
- SO Delete Price Group e.net
- SO Add Price Group Rule e.net
- SO Change Price Group Rule e.net
- SO Delete Price Group Rule e.net
- SO Add price list
- SO Change price list
- SO Delete price list
- SO Add price list e.net
- SO Change price list e.net
- SO Delete price list e.net
- SO Add price list details e.net
- SO Change price list details e.net
- SO Delete price list details e.net



This only applies if the **Secure by default** option of your **Global Configuration** in the **Electronic Signature Configuration Setup** program is enabled prior to your updating to **SYSPRO 8 2021 R2**.

Security

You can secure this feature by implementing a range of controls against the affected programs. Although not all these controls are applicable to each feature, they include the following:

- You restrict operator access to *activities* within a program using the **Operator Maintenance** program.
- You can restrict operator access to the *fields* within a program (configured using the **Operator Maintenance** program).
- You can restrict operator access to *functions* within a program using passwords (configured using the **Password Definition** program). When defined, the password must be entered before you can access the function.
- You can restrict access to the eSignature *transactions* within a program at operator, group, role or company level (configured using the **eSignature Setup** program). Electronic Signatures provide security access, transaction logging and event triggering that gives you greater control over your system changes.
- You can restrict operator access to *programs* by assigning them to groups and applying access control against the group (configured using the **Operator Groups** program).
- You can restrict operator access to *programs* by assigning them to roles and applying access control against the role (configured using the **Role Management** program).

Restrictions and Limits

- Only one price group can be defined for each branch if the **PRICE GROUP LEVEL** setup option is defined as **Branch**.

Solving

System messages

Sales order setup pricing method



This program may only be used if the sales order setup pricing method has been set to price groups.

Cause

This message is displayed when you attempt to open any of the following programs before the **PRICING METHOD** setup option has been configured:

- Price List Maintenance
- SO Price Group Order Discounts
- Price Group Maintenance
- Price List Maintenance
- Price Query
- Price List Query
- Price Group Query
- Price List Browse
- Price Group Browse

Solution

Ensure that the **PRICING METHOD** setup option is defined as **Price Groups** within the **Setup Options** program (*Setup Options > Configuration > Distribution > Sales Orders*) before attempting to use any of these programs.

Customer Price Look-up Query

Customer Price Look-up Query ▼ x

This program may not be used if the pricing method has been set to Price Groups.

Cause

This message is displayed when you attempt to open the **Customer Price Query** program if the **PRICING METHOD** setup option is defined as **Price Groups**.

Solution

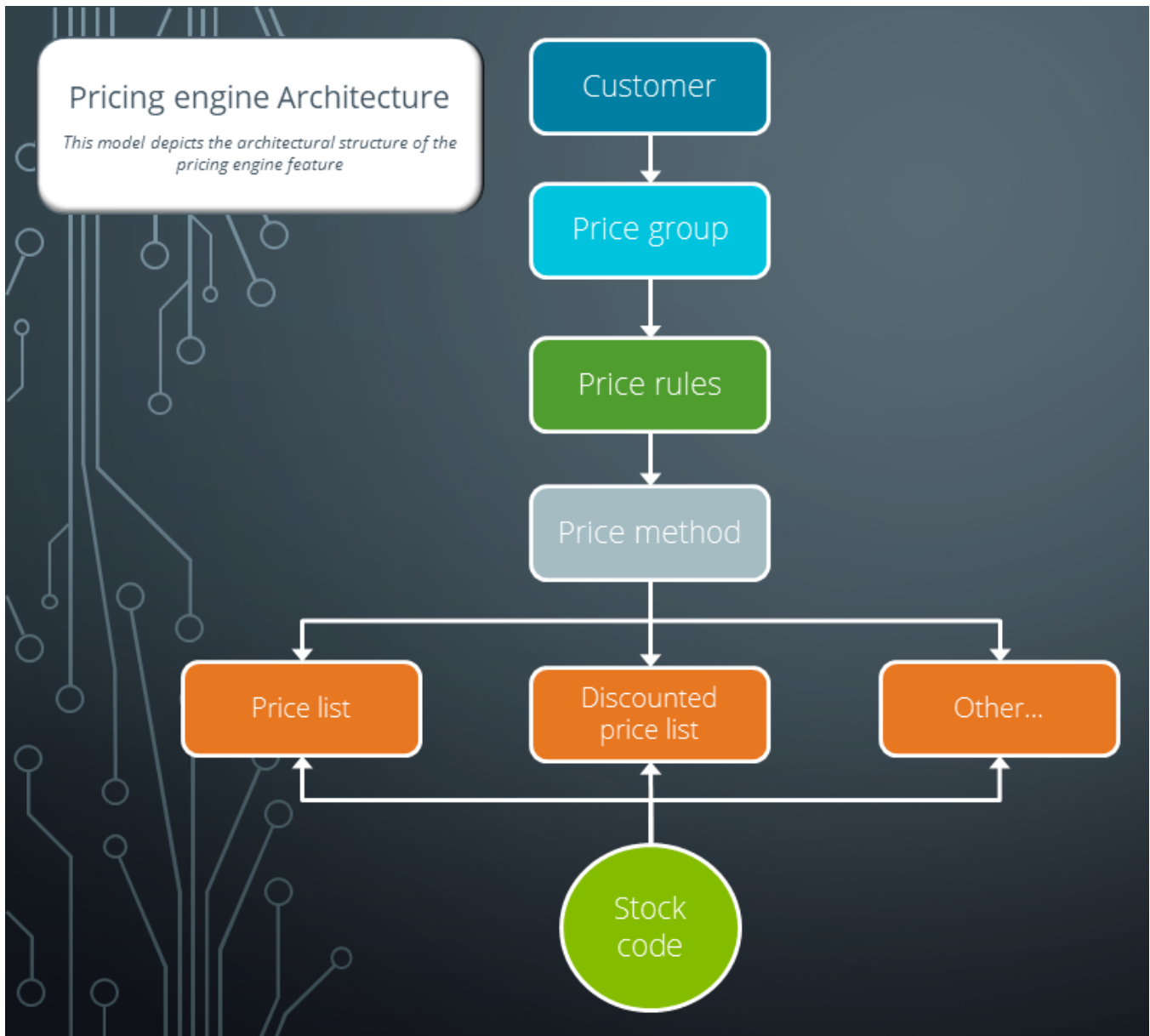
This program can't be accessed when the Sales Pricing Engine is used.

Ensure that the **PRICING METHOD** setup option is defined as **Manual, Simple** or **Extended** (*Setup Options > Configuration > Distribution > Sales Orders*) before attempting to use this program.

Using

Process

Pricing engine architecture

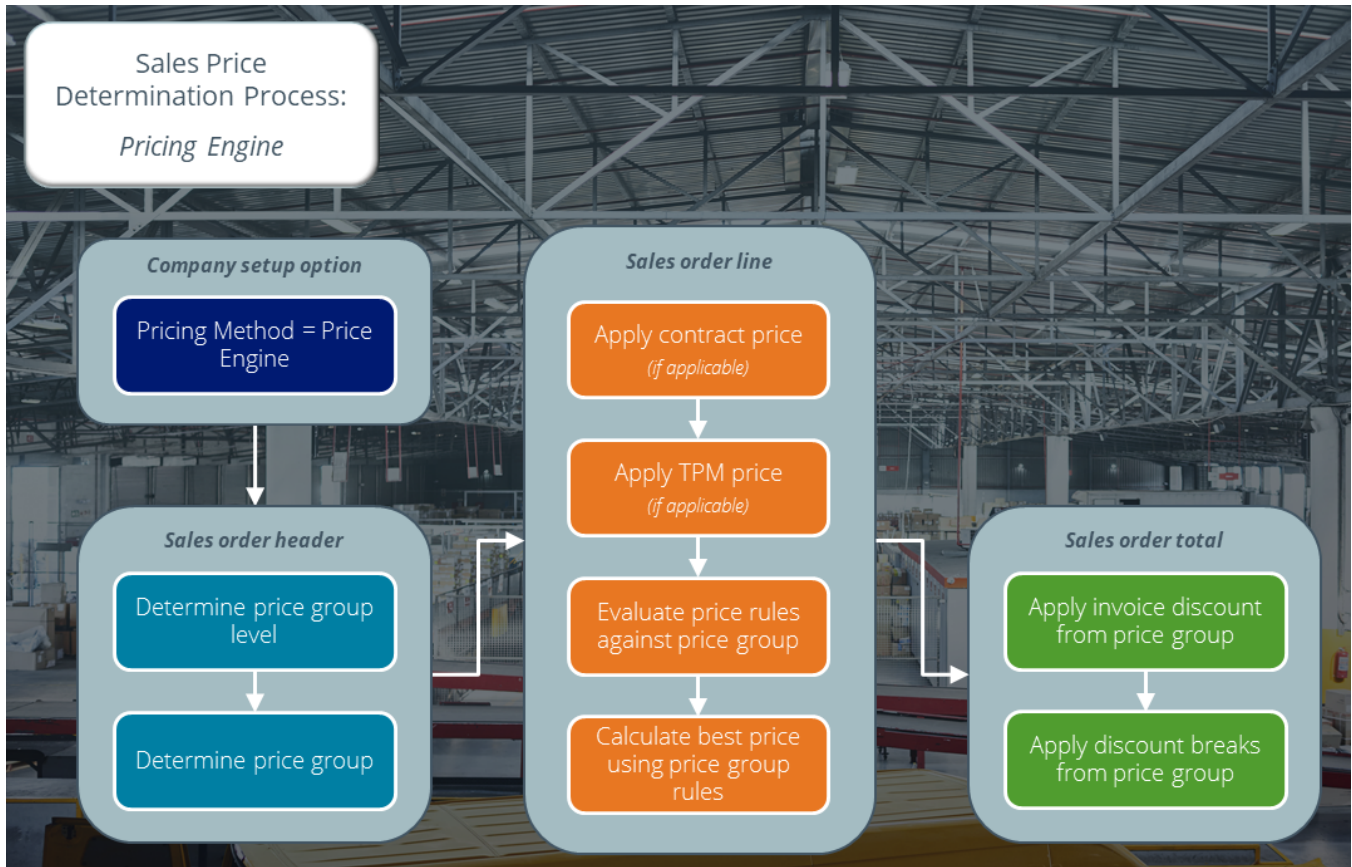


Considerations:

- Customers are either linked directly to a price group or via their branch, customer class, geographic area, or a custom form.
- A price group contains price group rules that can be configured using price lists, invoice discounts, order quantity discount breaks, or manual pricing.


- The price list is controlled by effective dates and based on a price method (e.g. flat price, price list less %, quantity discount breaks, etc.).
- A stock code can exist on multiple price lists and various price lists can be linked to a price group.

Sales price determination process



Considerations:

- Sales order header:
 - The price group on the sales order header is used to determine the best price.
 - The price group level can be overwritten before adding sales order lines, but is governed by electronic signatures.
 - The price group can be overwritten before adding sales order lines, if the **PRICE GROUP LEVEL** setup option is defined as **Customer** or **Custom form**. This is governed by electronic signatures.
 - If the branch / geographic area is changed on the sales order header and **PRICE GROUP LEVEL** is defined as **Branch** or **Geographic area**, the price group is updated to align with the new branch / geographic area.

- Sales order line:
 - The system first determines whether contract pricing or trade promotions are applicable. If these are not configured, the best price for the stocked line is calculated using price group rules.
 - The price group rule and the price can be overwritten, but is governed by electronic signatures.
 - The *contract price* is applied if a contract is linked to a customer directly or via a buying group.
 - The *TPM price* is applied if a qualifying TPM price break is defined.
 - If the **Discount Type** for TPM price breaks is defined as **Price** in the **TPM Prices** program, then the TPM price takes precedence over the pricing engine price.
 - If the **Discount Type** for TPM price breaks is defined as **Discount** in the **TPM Prices** program, then the TPM price is calculated using the discount % and applying it to the pricing engine price.
 - The following occurs when the system evaluates price rules against the price group:
 - The order or document date on the sales order is compared to the start and expiry dates of price rules to confirm that the price rule is effective.
-  You can specify whether the order date or document date is used at the **Date basis** field in the **Price Group Rules** list view of the **Price Group Maintenance**.
- Only price lists that have the same currency as the customer are taken into account.
 - If the stock code doesn't exist on any of the price rules, the list price is applied.
- Invoice discounts and order quantity discount breaks are calculated on the sales order total and applied when the sales order is invoiced.

Affected programs

The following indicates areas in the product that may be affected by implementing this feature:

Setup programs

Price List Maintenance

Program List > Sales Orders > Pricing Engine > Setup

This program lets you create and maintain price lists for a range of stock codes using a basic pricing method (e.g. flat price, price list less %, etc.).

SO Price Group Order Discounts

Program List > Sales Orders > Pricing Engine > Setup

This program lets you define percentage discount breaks for price groups and price group/product class combinations.

Order discount breaks are based on the value or the quantity of the order processed within the **Sales Order Entry** program.

Price Group Maintenance

Program List > Sales Orders > Pricing Engine > Setup

This program lets you create and maintain price groups that are used to manage the pricing for a customer, branch, geographic area, customer class or custom form field.

You can then configure price group rules against a price group.

Stock Code Maintenance

Program List > Inventory > Setup

The following fields are disabled when maintaining a stock code if your **PRICING METHOD** setup option is defined as **Price Groups**:

- List price code
- List price
- List price basis
- Currency
- Pricing method fields

This information is then obtained from the **Price List Maintenance** program.

Customers

Program List > Contact Management > Setup

- The following fields are disabled if your **PRICING METHOD** setup option is defined as **Price Groups**:
 - Auto price code selection
 - Price category / code table
 - Invoice discounts
 - Invoice line discount sections
- The **Price group** and **Price group description** fields at the **General information** indicate to which price group the customer is linked.

Dispatch Note Maintenance

Program List > Sales Orders > Dispatch Notes > Transaction Processing

The **Price group information** is displayed at the **Dispatch Note Details** pane.

Transaction Processing programs

Sales Order Entry

Program List > Sales Orders > Sales Order Processing

- The price group can be selected at the **Order Header** pane.
- The price group rule is displayed within the **Entered Order Lines** list view but can be changed if required.
- The best price is displayed at the **Unit price** field in the **Entered Order Lines** list view. This is calculated by the SO PRICING BEST PRICE QUERY¹ business object using the price group selected at the sales order header, and the stock code and quantity entered on the sales order line.

SO Header Maintenance

Program List > Sales Orders > Sales Order Processing

The price group can be selected within the **Invoice** pane.

¹Business object: SORQPQ

Quick Sales Order Entry

Program List > Sales Orders > Sales Order Processing

- The price group can be selected within the **Quote Header** pane.
- The price group rule is displayed within the **Order Lines** pane but can be changed if required.

Sales Order Entry Express

Program List > Sales Orders > Sales Order Processing

- The price group can be selected within the **Order Header** pane.
- The price group rule is displayed at the **Sales Order Lines Capture** pane but can be changed if required.
- The best price is displayed at the **Price** field within the **Sales Order Lines Capture** pane. This is calculated by the `SO PRICING BEST PRICE QUERY`¹ business object using the price group selected at the sales order header, and the stock code and quantity entered on the sales order line.

SO Single Level BOM

- The price group rule is displayed at the **Price group rule** field in the **Component Lines** pane.
- The **Price code** field is disabled when the Sales Pricing Engine is used.

Point of Sale Entry

Program List > Sales Orders > Counter Sales > Transaction Processing

When using the Sales Pricing Engine, the price is calculated by the `SO PRICING BEST PRICE QUERY`² business object using the price group, stock code and quantity.

Quotations

Program List > Quotations > Quotations Processing

When using the Sales Pricing Engine, the price is calculated by the `SO PRICING BEST PRICE QUERY`³ business object using the price group, stock code and quantity.

¹Business object: SORQPQ

²Business object: SORQPQ

³Business object: SORQPQ

Part Billings

Program List > Work in Progress > Job Postings

The **Customer price** option at the **Stocked lines to be valued at** field takes the price group into consideration if no contract or TPM price exists.

Dispatch Note Header

The **Price group information** is displayed at the **Dispatch Details** pane.

SO Order Discount Break Calculation

The program uses the [SorPriceDisc](#) table (instead of [SorDiscCusQty](#)) to apply order and product class discount breaks on sales order lines.

Stock Code Copy

The **Copy price entries** option copies the entries of all price lists where the **Price method** is defined as **Flat price**.

Import programs

Sales Order Import

Program List > Business-to-Business Trading

When using the Sales Pricing Engine, the price is calculated by the `SO PRICING BEST PRICE QUERY`¹ business object using the price group, stock code and quantity.

Report programs

SO Discount Breaks for Price Groups

Program List > Sales Orders > Reports

This program lets you generate a report that displays information on price groups and their associated price group rules.

Query programs

Price Query

Program List > Sales Orders > Pricing Engine

This program lets you view pricing information to determine the best price and alternatives for a customer, price group and price list.

¹Business object: SORQPQ

Price List Query

Program List > Sales Orders > Pricing Engine

This program lets you view price lists and their associated detail lines.

Price Group Query

Program List > Sales Orders > Pricing Engine

This program lets you view rules defined against a price group, as well as the customers that are linked to that group.

Price Query by Stock Code

This program lets you view pricing information to determine the best price and alternatives for a customer, price group or price list.

Price Group Rule Query

This program lets you view a list of price group rules from which one can be selected and applied to a sales order.

Customer Query

Program List > Accounts Receivable

The price group details are displayed at the **Customer Information** pane.

Inventory Query

Program List > Inventory

Select the **Show** hyperlink at the **Price Query** field to view price rules defined against a price group, as well as the customers that are linked to that group.

Sales Order Query

Program List > Sales Orders

The **Price group information** is displayed at the **Order Header** pane and the **Price group rule** field at the **Details Lines** list view.

Browse programs

Price List Browse

Program List > Sales Orders > Pricing Engine > Browsers

This program lets you browse and view details of existing price lists.

Price Group Browse

Program List > Sales Orders > Pricing Engine > Browsers

This program lets you browse and view details of existing price groups.

Affected business objects

Setup objects

SO Pricing Engine Price Group Setup

The `SO PRICING ENGINE PRICE GROUP SETUP`¹ business object lets you create price group records.

SO Pricing Engine Price Group Rules Setup

The `SO PRICING ENGINE PRICE GROUP RULES SETUP`² business object lets you create price group rule records.

SO Price List Header Maintenance

The `SO PRICE LIST HEADER MAINTENANCE`³ business object lets you create list price header records.

SO Price List Detail Maintenance

The `SO PRICE LIST DETAIL MAINTENANCE`⁴ business object lets you create price list detail records.

Query objects

SO Pricing Price Query

The `SO PRICING PRICE QUERY`⁵ business object lets you query the best price details per stock code (and other prices available in a price group) for a specific customer.

SO Price List Query

The `SO PRICE LIST QUERY`⁶ business object lets you query a price list, with the option to see all associated stock codes and calculated prices.

¹Business object: SORSPG

²Business object: SORSPR

³Business object: SORSPH

⁴Business object: SORSPD

⁵Business object: SORQPP

⁶Business object: SORQPR

SO Pricing Best Price Query

The `SO PRICING BEST PRICE QUERY`¹ business object lets you calculate the best price for a given stock code and price group.

SO Price Group Discount Breaks Query

The `SO PRICE GROUP DISCOUNT BREAKS QUERY`² business object lets you query order discount breaks for price groups created by the **SO Price Group Order Discounts** program.

¹Business object: SORQPQ

²Business object: SORQCB



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