SYSPRO Harmony (HRMPEN)

SYSPRO 8

Reference Guide

Published: October 2024

SYSPRO™

CONTENTS

SYSPRO Harmony

SYSPRO Harmony

Exploring

Where it fits in?

This program lets you configure and manage the ERP information that you want to track within SYSPRO.

Navigation

This program is accessed from the **Program List** of the SYSPRO menu:

- *SYSPRO Programs > SYSPRO Harmony*

Terminology

Beat

A conversation post within the SYSPRO Harmony platform.

Rule

Rules consist of conditions and actions.

A condition is evaluated and (if true) the **SYSPRO Rules Engine** initiates the defined actions.

Rule action

Actions are executed when the conditions of a rule are met.

> **FOR EXAMPLE:**
>
> These actions range from displaying a Harmony message, to creating a log file in a specific location, or tracking the history of a specific database column.

Starting

Security

Activities

You restrict operator access to *activities* within a program using the **Operator Maintenance** program.

Fields

You can restrict operator access to the *fields* within a program (configured using the **Operator Maintenance** program).

eSignatures

You can restrict access to the eSignature *transactions* within a program at operator, group, role or company level (configured using the **Electronic Signature Configuration Setup** program). Electronic Signatures provide security access, transaction logging and event triggering that gives you greater control over your system changes.

Groups

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).

Passwords

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.

Configuring

The following configuration options in SYSPRO may affect processing within this program or feature, including whether certain fields and options are accessible.

Setup Options

The **Setup Options** program lets you configure how SYSPRO behaves across all modules. These settings can affect processing within this program.

Rules Engine/Harmony System Setup

Setup Options > System Setup > Rules Engine/Harmony

- Rules engine options
  - Rules Engine active company list
- Harmony options
  - Harmony active company list
  - Harmony API service
  - Harmony API service address
- Harmony database connection
  - Harmony authentication
  - Harmony SQL Server name
  - Harmony login
  - Harmony login password
- Harmony purge options
- Harmony data visibility

Solving

Error messages

Harmony is not enabled

Cause

This message is displayed when you try to open the **SYSPRO Harmony** program and the required setup options haven't been configured.

Solution

From the **Rules Engine/Harmony** tab of the **System Setup** program ensure that the following setup options are configured:

- Rules Engine options
- Harmony options
- Harmony database connection
- Harmony purge options
- Harmony data visibility

Connection error during installation of Rules Data Service - TCP Error code 10061

Synopsis

This message is displayed when loading the **SYSPRO Harmony** program, if the services did not install correctly.

Solution

Ensure that the **SYSPRO 8 e.net Communications Load Balancer** is installed and that the SOAP port number used during the install matches that of the **Load Balancer EndPoint** in the **Rules Data Service** install wizard.

Harmony

How do I filter the beats that are displayed?

The **Filter beats** widget provides a dynamic filter which is dependent on *SYSPRO Harmony* data. It *searches* for specific Harmony beats, across all beats in *SYSPRO Harmony*.

Although it excludes customized trends, the filter criteria are based on content that already exists in *SYSPRO Harmony* (i.e. beats that have previously been posted) and is not limited to items you are following.

> The **Filter beats** widget is not shown by default, but can be added to *SYSPRO Harmony* by editing the web view using the Visual Designer.

What are the rules when posting beats?

The following restrictions apply when posting a beat:

- You can't post a blank or empty beat.
- Text is case-sensitive when using the @ symbol and the # (hashtag) to tag users, second and third level drill downs, and customized trends.

> **FOR EXAMPLE:**
>
> #stockcode.a100.price

How do I purge older beats?

The **System Setup** program includes a **AUTOMATICALLY PURGE** option that lets you automatically purge beats after a certain period of time.

> These records are permanently deleted from the database.

Web Views

Why are existing web views not appearing in SYSPRO after updating to the latest release?

Prior to *SYSPRO 8 2019 R1*, any customized web view by operator or role surfaced in both SYSPRO and *SYSPRO Web UI (Avanti)*.

From *SYSPRO 8 2019 R1* onwards you must explicitly state whether a web view is targeted for SYSPRO or *SYSPRO Web UI (Avanti)*.

Because any pre-existing web view is assumed to be for *SYSPRO Web UI (Avanti)*, if you want existing SYSPRO web views to appear in later versions of SYSPRO, you must rename the `.JSON` file to include a `_SYSPRO` extension (e.g. `UX_OperatorCode_ProgramLZ_SYSPRO.JSON`).

The `.JSON` file resides in your `\Base\Settings` folder (or the `Role_xxx` folder if the user interface is configured by role).

You can also rename the file using the **Save as** function from within the Visual Designer. You will be prompted to indicate the type of web view you want to save (i.e. **Avanti** or **SYSPRO Client**).

SYSPRO Rules Engine
How do I define a new rule?

1. Open the **Rules Administrator** program in *SYSPRO Web UI (Avanti)*.

2. Select the **Add New Rule** icon (🔄).

3. From the **New Rule** window, enter the following mandatory information:

    a. The **Name** of the new rule.

    b. A **Description** for the rule.

    c. The **Table** in the database to which the rule applies.

    d. Whether the rule applies at company level or system-wide in the **Category** field.

       If at **Company** level, ensure that you enter the relevant company ID at the **Company** field.

    e. Whether the rule should result from an `Insert` (new record), `Update` (changed record) or `Delete` (removed record) in the database.

       Alternatively, you can select **All** to cover all of these transactions.

    Tick the **Enable** checkbox to enable the rule immediately, or save the rule and enable it at a later stage.

    Select the **Add Rule** icon (💾).

4. From the **Rule Information** pane, expand the **Variables** section to apply any additional fields or calculations.

    a. Select the **Add new variable** icon (≡₊).

    b. Indicate the **Name** of the variable so that it becomes usable later in your rule (e.g. `ContactName`).

       > 📝 The **Name** can contain letters, digits, and the underscore character (_) but it can't contain any spaces.
       >
       > The first character of the **Name** must be a letter.

    c. Indicate the **Type** and **Value** of the variable.

    d. Repeat for all variables that you want to apply to the rule.

    e. Select the **Save Rule** icon (💾).

5. From the **Rule Information** pane, expand the **Conditions** section to filter out your transactions.

    a. Select the **Add new condition** icon ( ).

    b. Indicate the details of the required condition.

    c. Repeat for all conditions that you want to apply to the rule.

    d. Select the **Save Rule** icon ( ).

6. From the **Rule Information** pane, expand the **Actions** section to assign the action the rule should perform.

    a. From the **Actions** toolbar, select the required action.

        Add Avanti Notification

        Add Delete Rule

        Add Disable Rule

        Add Emailing Action

        Add Espresso Notification

        Add File Log

        Add Harmony Message

        Add Track History

        Add Workflow Action

    b. Repeat for all actions that you want to apply to the rule.

7. Select the **Save Rule** icon ( ).

Using

Sample Rules

The following Sample Rules are available from the **Rules Administrator** program in **_SYSPRO Web UI (Avanti)_** (located under **SYSPRO Templates**).

You can use these as is, or as templates to customize to your specific requirements.

AP payment cycle (Harmony)

Description	Notify when a payment cycle is run.
Actions	▪ Post Harmony Beat
Sample AI Model	None

AR Invoice Late Payment Predicted

Description	Notify when a late invoice payment is predicted for a customer.
Actions	▪ Post Harmony Beat ▪ Send Avanti Notification
Sample AI Model	CustomerInvoicePayDays

Asset added (Harmony)

Description	Notify when a new asset is added.
Actions	▪ Post Harmony Beat
Sample AI Model	None

Asset changed (Harmony)

Description	Notify when an asset is changed.
Actions	▪ Post Harmony Beat
Sample AI Model	None

Asset deleted (Harmony)

Description	Notify when an asset is deleted.
Actions	▪ Post Harmony Beat

Sample AI Model	None

Cash Book deposit (Harmony)

Description	Notify when a deposit is made to cash book.
Actions	■ Post Harmony Beat
Sample AI Model	None

Cash Book withdrawal (Harmony)

Description	Notify when a withdrawal is made from Cash Book.
Actions	■ Post Harmony Beat
Sample AI Model	None

Credit limit (Harmony)

Description	Notify when a customer falls within 10% of their defined credit limit.
Actions	■ Post Harmony Beat
Sample AI Model	None

Customer on hold (Harmony)

Description	Notify when a customer is placed on hold.
Actions	■ Post Harmony Beat
Sample AI Model	None

Customer order value change (Harmony)

Description	Notify when a defined customer's outstanding order value changes.
Actions	■ Post Harmony Beat
Sample AI Model	None

Delivery note printed (Harmony)

Description	Notify when a delivery note is printed.
Actions	■ Post Harmony Beat
Sample AI Model	None

Delivery received late (Harmony)

Description	Notify when a delivery is received late.
Actions	▪ Post Harmony Beat
Sample AI Model	None

Detail line added to RMA (Harmony)

Description	Notify when a new detail line is added to an RMA.
Actions	▪ Post Harmony Beat
Sample AI Model	None

Dispatch note released for invoicing (Harmony)

Description	Notify when a dispatch note is released for invoicing.
Actions	▪ Post Harmony Beat
Sample AI Model	None

GL account added (Harmony)

Description	Notify when a new general ledger account is added.
Actions	▪ Post Harmony Beat
Sample AI Model	None

GL Period Change (Harmony)

Description	Notify when a change is made to the defined GL Period.
Actions	▪ Post Harmony Beat
Sample AI Model	None

Harmony Beat for everything (Harmony)

Description	Notify on every transaction that occurs.
Actions	▪ Post Harmony Beat
Sample AI Model	None

Harmony for all changes to database (Harmony)

Description	Notify on all changes made to the database.
Actions	▪ Post Harmony Beat
Sample AI Model	None

Invoice 10% difference (Harmony)

Description	Notify when there is more than a 10% difference on an invoice payment.
Actions	▪ Post Harmony Beat
Sample AI Model	None

Job deleted for no customer (Harmony)

Description	Notify when a job with no customer defined is deleted.
Actions	▪ Post Harmony Beat
Sample AI Model	None

Job deleted (Harmony)

Description	Notify when a job is deleted.
Actions	▪ Post Harmony Beat
Sample AI Model	None

Job received late for no customer (Harmony)

Description	Notify when a job with no customer defined is received late.
Actions	▪ Post Harmony Beat
Sample AI Model	None

Job received late (Harmony)

Description	Notify when a job is received late.
Actions	▪ Post Harmony Beat
Sample AI Model	None

Job received short for no customer (Harmony)

Description	Notify when a job with no customer defined is short-received.
Actions	▪ Post Harmony Beat
Sample AI Model	None

Job received short (Harmony)

Description	Notify when a job is short-received.
Actions	▪ Post Harmony Beat
Sample AI Model	None

LCT shipment might arrive late

Description	Notify if a shipment's arrival is potentially more than 10 days late.
Actions	▪ Post Harmony Beat ▪ Send Avanti Notification
Sample AI Model	`LctDaysLate`.

Limited promotion 5% from expiring (Harmony)

Description	Notify if a promotion is close to expiring.
Actions	▪ Post Harmony Beat
Sample AI Model	None

Line received on RMA (Harmony)

Description	Notify when an RMA line is received.
Actions	▪ Post Harmony Beat
Sample AI Model	None

New bin added (Harmony)

Description	Notify when a new bin is added.
Actions	▪ Post Harmony Beat

Sample AI Model	None

New BOM added (Harmony)

Description	Notify when a new bill of material is added.
Actions	▪ Post Harmony Beat
Sample AI Model	None

New job created for no customer (Harmony)

Description	Notify when a new job is created with no customer defined against the job.
Actions	▪ Post Harmony Beat
Sample AI Model	None

New job created (Harmony)

Description	Notify when a new job is created.
Actions	▪ Post Harmony Beat
Sample AI Model	None

New lost sale (Harmony)

Description	Notify when a sale is lost.
Actions	▪ Post Harmony Beat
Sample AI Model	None

New movement (Harmony)

Description	Notify when there is a new movement.
Actions	▪ Post Harmony Beat
Sample AI Model	None

New RMA created (Harmony)

Description	Notify when a new RMA is created.

Actions	■ Post Harmony Beat
Sample AI Model	None

New sales order (Harmony)

Description	Notify when a new sales order is loaded.
Actions	■ Post Harmony Beat
Sample AI Model	None

New stock code added

Description	Notify when a new stock code is added to the inventory list.
Actions	■ Post Harmony Beat ■ Send Avanti Notification
Sample AI Model	None

New stock code added (Harmony)

Description	Notify whenever a new stock code is added.
Actions	■ Post Harmony Beat
Sample AI Model	None

Over issue to a job (Harmony)

Description	Notify when there is an over issue to a job.
Actions	■ Post Harmony Beat
Sample AI Model	None

Price change on sales order (Harmony)

Description	Notify when there is a price change on a sales order.
Actions	■ Post Harmony Beat
Sample AI Model	None

Purchase order receipt rej at receiving (Harmony)

Description	Notify when a purchase order receipt is rejected during the receiving process.
Actions	■ Post Harmony Beat
Sample AI Model	None

Sales order line added (Harmony)

Description	Notify when a new sales order line is added.
Actions	■ Post Harmony Beat
Sample AI Model	None

Stock code added warehouse allocation (Harmony)

Description	Notify when a new stock code is added to a defined warehouse.
Actions	■ Post Harmony Beat
Sample AI Model	None

Stock code price change (Harmony)

Description	Notify when the price of a stock code changes.
Actions	■ Post Harmony Beat
Sample AI Model	None

Stock issued to job (Harmony)

Description	Notify when stock is issued to a job.
Actions	■ Post Harmony Beat
Sample AI Model	None

Stock scrapped at receiving (Harmony)

Description	Notify if stock received from a supplier is scrapped during the receipt process.
Actions	■ Post Harmony Beat

Sample AI Model	None

Stock take completed (Harmony)

Description	Notify when a stock take is completed for a defined warehouse.
Actions	▪ Post Harmony Beat
Sample AI Model	None

Supplier added (Harmony)

Description	Notify when a new supplier is added.
Actions	▪ Post Harmony Beat
Sample AI Model	None

Supplier delivery received short (Harmony)

Description	Notify if a supplier's delivery is short-received.
Actions	▪ Post Harmony Beat
Sample AI Model	None

Supplier on hold (Harmony)

Description	Notify if a supplier is placed on hold.
Actions	▪ Post Harmony Beat
Sample AI Model	None

When contact details changed (Harmony)

Description	Notify if contact details are changed and includes what the new details are.
Actions	▪ Post Harmony Beat
Sample AI Model	None

When delivery will be short delivered (Harmony)

Description	Notify if an expected delivery will be short-supplied.

Actions	■ Post Harmony Beat
Sample AI Model	None

When new promotion added (Harmony)

Description	Notify when a new promotion is added.
Actions	■ Post Harmony Beat
Sample AI Model	None

When POD captured for delivery (Harmony)

Description	Notify when a proof of delivery is captured.
Actions	■ Post Harmony Beat
Sample AI Model	None

WIP after stock scrapped at inspection (Harmony)

Description	Notify if stock is scrapped during an inspection process.
Actions	■ Post Harmony Beat
Sample AI Model	None

WIP Material Cost

Description	Notify when the actual material cost exceeds the expected material cost.
Actions	■ Post Harmony Beat ■ Send Espresso Notification ■ Send Avanti Notification
Sample AI Model	None

Hints and Tips

- Customize the widgets that you want to view by using the Visual Designer, which is available from the gear 🔧 icon.

Referencing

Profile

This pane displays information related to your user:

- User beats, summarized and categorized by their sentiment
- Objects being followed
- Followers

Missed events

This pane displays beats that have been added since your last login, allowing you to catch up on things you may have missed.

Beats

This pane displays beats which you have selected to follow, or may be interested in.

Beats are displayed using a weighting, based on their popularity and what you follow. They contain the following information:

- Location and basic information regarding the user that posted a beat
- Number of replies to each beat
- Number of times a beat is admired
- Number of shares per beat
- Attachments contained within beats

Trending chart

This pane provides a visual representation of items that are trending currently, in the form of a bubble chart.

How much a particular item is trending is indicated by the size of the bubble (i.e the bigger the bubble, the more that item is trending).

These bubbles are interactive and allow you to drill down to more detail, which is reflected in the **Trending Detail** pane.

In addition, the color of the bubble portrays the general sentiment around that item's activity:

- Green reflects a positive sentiment
- Grey reflects a neutral sentiment
- Red reflects a negative sentiment

> The darker shades of green or red indicate a more positive or negative sentiment, respectively.

Currently Trending

This pane displays a list of items currently trending, along with the number of beats per item.

> You can also select to *follow* or *unfollow* items from this list.

Reply to beat

This lets you reply to a particular beat.

In and around

This section highlights all recent database activities (e.g. beats being added) such as items that have been mentioned, users that have posted numerous beats, etc.

> **FOR EXAMPLE:**
>
> #StockCode.A100 has been mentioned a number of times.

> You can also select to *follow* or *unfollow* items from this list.

Following List

This pane displays a list of all the items that you have selected to follow.

Add Beat

This lets add a new beat.

Available functions include:

- Tag items using the # tag
- Tag other users using the # tag
- Add attachments
- Make use of suggestive text

Trending Detail

This displays more detail regarding the selected topic in the **Trending chart** pane.

The **Trending chart** indicates the importance of subtopics relative to the enclosing topic.

This **Trending detail** pane then displays the most relevant properties when the selected bubble relates to a key field.

Follow items

This lets you follow items or topics by right-clicking the item and selecting the **Follow** option.

Filter beats

The **Filter beats** widget provides a dynamic filter which is dependent on *SYSPRO Harmony* data. It *searches* for specific Harmony beats, across all beats in *SYSPRO Harmony*.

Although it excludes customized trends, the filter criteria are based on content that already exists in *SYSPRO Harmony* (i.e. beats that have previously been posted) and is not limited to items you are following.

> The **Filter beats** widget is not shown by default, but can be added to *SYSPRO Harmony* by editing the web view using the Visual Designer.

Start with this

This pane lets you use predefined start phrases when composing beats.

The following phrases are shipped as standard with the product and are stored in the HrmLinguistics table of your system-wide database:

- Does anyone have information about...
- I am concerned about...
- Can someone follow up regarding...
- There is interesting behavior on...
- Please can you review...

SYSPRO

www.syspro.com