Insight Tile Definition

SYSPRO 8

Reference Guide

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SYSPRO™

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Insight Tile Definition

Exploring

Where it fits in?

This program lets you create and deploy business insight tiles.

Things you can do in this program include:

- View a list of custom and standard tiles
- Create new text, bar chart or line chart tiles
- Deploy business insight tiles
- Import business insight tiles
- Export existing business insight tiles

Navigation

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

  SYSPRO Programs > Administration > General Setup

Terminology

Business Activity Query (BAQ)

SYSPRO Business Activity Queries are SQL views that are created in the relevant company databases and (because they are defined in SYSPRO) are recognized as data sources. They provide a view into the business data commonly used during the typical business management process. The queries are built and secured in the core ERP system and then surfaced to users via their enterprise reporting and connectivity solutions.

Business insight tiles

Business insight tiles (also called insight tiles or just tiles) are essentially SQL scripts displayed in a tile format within a SYSPRO web view. These tiles are context-driven and let you act instantly on events, facilitating informed business decisions and sound business behavior.

KPIs on tiles can be used to highlight values approaching or exceeding pre-determined objectives or thresholds. This lets you proactively keep an eye on approaching targets. These targets could be a certain value, company-wide goal or a specific target agreed for a person or a role within the organization.

Data source

In the context of SYSPRO Business insight tiles and SYSPRO Business Activity Queries, a data source can be considered as one of the following:

- SYSPRO base table (e.g. InvMaster)

- SYSPRO custom form table (e.g. InvMaster+)

- SYSPRO Business View

- User defined base table (i.e. any base table in the current database that is not part of the standard SYSPRO database)

- User defined custom form table (i.e. any base table defined with a trailing + sign that doesn't form part of the standard custom table definitions)

- User defined views (i.e. any view in the company database that is not defined as a SYSPRO Business View)

Starting

Security

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).

Activities

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

VBScript editing / Design Web Views / Design Customized Panes

Controls whether an operator can edit VBScripts or change customized panes.

It also controls whether an operator can access the **Visual Designer** program (displayed from the sub menu of the ⚙ icon).

This does not apply to importing customized panes, which is controlled by the **Allow to import customized panes** activity.

Configuring

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

Operator Maintenance

SYSPRO Ribbon bar > Setup > Operators

- Tile KPI definition access control

Solving

FAQs

Creating business insight tiles and selecting data sources

How do I create a new text-type business insight tile?

You can either create a new text-type business insight tile from scratch, or copy an existing one and then change the tile details.

In this example, we are concentrating on creating a new text-type business insight tile:

1. Open the **Insight Tile Definition** program (*SYSPRO Programs > Administration > General Setup*).

2. To create a new tile definition, select the **New Tile** function.

   The **Tile Builder** program is displayed:

   a. From the **New Tile** window, configure the following tile details and select **OK**:

      - Tile type - select **Text**

        > ℹ️ You can only select the tile type if you are creating a new tile, as it is inherited from the copied tile.

      - Tile description
      - File name

   b. From the **Tile Properties** pane, configure the following sections:

      - Tile header and parameters

        > ℹ️ In the *SYSPRO Web UI (Avanti)* version, the **Configure parameters** link forms part of the **Tile header** section; whereas in the *SYSPRO Desktop* version, the parameters can be configured at the **Parameters** section.

      - Summary tile
      - Tile preview simulated values

        The variables will be replaced at runtime using the output of the tile summary SQL script.

        > ℹ️ This functionality is only available in the *SYSPRO Desktop* version.

   c. Configure your SQL script:

- Select the **Edit Tile Summary** function to configure the SQL script that is used to render the summary tile values – including the main tile value, together with optional subtitle and footer values.

Or

- Select the **Edit Tile Detail** function to configure the SQL script that is used to render the column values of the detail list view. These values are displayed when clicking on the tile to zoom into the details.

> 💡 You can use the **Edit Tile Summary** option to generate the SQL statement using a simple-to-use interface, or you can use the **Edit Tile Detail** option to define a custom SQL script which provides more flexibility when presenting sophisticated information.

Select the **Validate SQL and Close** function to validate and save the SQL script, and return to the **Tile Builder** program.

d. Preview the tile in the **Tile Builder** program.

e. Select the **Save and Close** function to return to the **Insight Tile Definition** program.

3. Assign KPIs by selecting the **Add** hyperlink of the applicable column in the **Tiles** list view.

> 💡 Once the business insight tile has been created, it can be assigned to a workspace using the **Visual Designer** program.

How do I create a new chart-type business insight tile?

You can either create a new chart-type business insight tile from scratch, or copy an existing one and then change the tile details.

In this example, we are concentrating on creating a new chart-type business insight tile:

1. Open the **Insight Tile Definition** program (*SYSPRO Programs > Administration > General Setup*).

2. To create a new chart tile, select the **New Tile** function.

   The **Tile Builder** program is displayed:

   a. From the **New Tile** window, configure the following tile details and select **OK**:

   - Tile type - select **Bar chart** or **Line chart**

   > ℹ️ You can only select the tile type if you are creating a new tile, as it is inherited from the copied tile.

   - Tile description
   - File name

b. From the **Tile Properties** pane, configure the following sections:

- Tile header and parameters

> In the *SYSPRO Web UI (Avanti)* version, the **Configure parameters** link forms part of the **Tile header** section; whereas in the *SYSPRO Desktop* version, the parameters can be configured at the **Parameters** section.

- Chart tile

- Tile preview simulated values

  The variables will be replaced at runtime using the output of the tile summary SQL script.

  > This functionality is only available in the *SYSPRO Desktop* version.

c. Select the **Edit Tile Chart** function to configure the SQL script that is used to render the summary tile values – including the main tile value, together with optional subtitle and footer values.

d. Select the **Validate SQL and Close** function to validate and save the SQL script, and return to the **Tile Builder** program.

  You can then preview the tile.

e. Select the **Save and Close** function to return to the **Insight Tile Definition** program.

3. Exit the **Insight Tile Definition** program.

> Once the business insight tile has been created, it can be assigned to a workspace using the **Visual Designer** program.

How do I copy a text-type business insight tile?

You can either create a new text-type business insight tile from scratch, or copy an existing one and then change the tile details.

In this example, we are concentrating on copying an existing text-type business insight tile:

1. Open the **Insight Tile Definition** program (*SYSPRO Programs > Administration > General Setup*).

2. To copy an existing text tile:

   a. Select the applicable tile in the **Tiles** pane. This launches the **Tile Builder** program.

   b. Select the **Create From** function from the toolbar.

3. The **New Tile** window of the **Tile Builder** program is displayed:

a. Configure the following tile details and select **OK**:

- Tile description
- File name

b. Configure the following sections in the **Tile Builder** program:

- Tile header and parameters

> (i) In the ***SYSPRO Web UI (Avanti)*** version, the **Configure parameters** link forms part of the **Tile header** section; whereas in the ***SYSPRO Desktop*** version, the parameters can be configured at the **Parameters** section.

- Summary tile
- Tile preview simulated values

The variables will be replaced at runtime using the output of the tile summary SQL script.

> (i) This functionality is only available in the ***SYSPRO Desktop*** version.

c. Select the **Edit Tile Summary** function to configure the SQL script that is used to render the summary tile values – including the main tile value, together with optional subtitle and footer values.

Select the **Edit Tile Detail** function to configure the SQL script that is used to render the column values of the detail list view. These values are displayed when clicking on the tile to zoom into the details.

> 💡 You can use the **Edit Tile Summary** option to generate the SQL statement using a simple-to-use interface, or you can use the **Edit Tile Detail** option to define a custom SQL script which provides more flexibility when presenting sophisticated information.

d. Select the **Validate SQL and Close** function to validate and save the SQL script, and return to the **Tile Builder** program.

You can then preview the tile.

e. Select the **Save and Close** function to return to the **Insight Tile Definition** program.

4. Exit the **Insight Tile Definition** program.

> 💡 Once the business insight tile has been created, it can be assigned to a workspace using the **Visual Designer** program.

How do I copy a chart-type business insight tile?

You can either create a new chart-type business insight tile from scratch, or copy an existing one and then change the tile details.

In this example, we are concentrating on copying an existing chart type business insight tile:

1. Open the **Insight Tile Definition** program (*SYSPRO Programs > Administration > General Setup*).

2. To copy an existing chart tile:

    a. Select the applicable tile in the **Tiles** pane. This launches the **Tile Builder** program.

    b. Select the **Create From** function from the toolbar.

3. The **New Tile** window of the **Tile Builder** program is displayed:

    a. Configure the following tile details and select **OK**:

      - Tile description

      - File name

    b. Configure the following sections:

      - Tile header and parameters

        > ℹ️ In the *SYSPRO Web UI (Avanti)* version, the **Configure parameters** link forms part of the **Tile header** section; whereas in the *SYSPRO Desktop* version, the parameters can be configured at the **Parameters** section.

      - Chart tile

      - Tile preview simulated values

        The variables will be replaced at runtime using the output of the tile summary SQL script.

        > ℹ️ This functionality is only available in the *SYSPRO Desktop* version.

    c. Select the **Edit Tile Chart** function to configure the SQL script that is used to render the summary tile values – including the main tile value, together with optional subtitle and footer values.

      > 💡 You can use the **Edit Tile Summary** option to generate the SQL statement using a simple-to-use interface, or you can use the **Edit Tile Detail** option to define a custom SQL script which provides more flexibility when presenting sophisticated information.

d. Select the **Validate SQL and Close** function to validate and save the SQL script, and return to the **Tile Builder** program.

You can then preview the tile.

e. Select the **Save and Close** function to return to the **Insight Tile Definition** program.

4. Exit the **Insight Tile Definition** program.

> 💡 Once the business insight tile has been created, it can be assigned to a workspace using the **Visual Designer** program.

How do I define the data source for a business insight tile?

1. Open the **Insight Tile Definition** program (*SYSPRO Programs > Administration > General Setup*).

2. Select the **New Tile** function to create a custom tile.

The **Tile Builder** program is launched:

a. Enter the tile details within the **New Tile** window.

b. Select the **Edit Tile Summary** function.

> ℹ️ You can also manually edit the SQL statement by selecting the **Edit Tile Detail** button.

The **Tile Builder - SQL Definition** program is displayed:

   i. Select the **Select data source** function at the **Primary data source** field in the **From** section to indicate the anchor data source. The **Data Sources** program is displayed.

   ii. Highlight the relevant table from the **Data Sources** list view and click on **Select**.

   Once you have selected the data source it is displayed in square brackets next to the **Primary data source** field in the **Tile Builder - SQL Definition** program.

   iii. Select the **Validate SQL and Close** function to exit the **Tile Builder - SQL Definition** program.

c. Select the **Save and Close** function to exit the **Tile Builder** program.

3. Exit the **Insight Tile Definition** program.

How do I specify the data to be used for the business insight tile value?

1. Open the **Insight Tile Definition** program (*SYSPRO Programs > Administration > General Setup*).

2. Create a new custom tile (or select an existing business insight tile) to launch the **Tile Builder** program:

a. Select the **Edit Tile Summary** function to launch the **Tile Builder - SQL Definition** program:

> ℹ️ You can also manually edit the SQL statement by selecting the **Edit Tile Detail** button.

i. Indicate the anchor data source at the **Primary data source** field.

> 💡 You can use the **Select data source** function to search for and select the data source using the **Data Sources** program.

ii. Once the main data source has been defined, select the **Select column** function at the **Value** field.

iii. The **Data Sources** program is launched, from where you can select the relevant column from the **Columns** list view.

Once you have selected the column, the column name is displayed next to the **Value** field in the **Tile Builder - SQL Definition** program.

iv. Select the **Validate SQL and Close** function to exit the **Tile Builder - SQL Definition** program.

b. Select the **Save and Close** function to exit the **Tile Builder** program.

3. Exit the **Insight Tile Definition** program.

Using KPIs within business insight tiles
How do I add key performance indicators (KPIs) to a business insight tile?

The following explains how to add key performance indicators to a business insight tile:

1. Open the **Insight Tile Definition** program (*SYSPRO Programs > Administration > General Setup*).

2. From the **Tiles** pane, highlight the tile for which you want to add KPIs.

3. Depending on the level at which the tile must be deployed, select the **Add** or **Edit KPI** hyperlink of the appropriate column:

- **System KPI**

  This lets you add or maintain the tile at system-wide level (i.e. all operators will be able to see the tile).

- **Company KPI**

  This lets you add or maintain the tile at company level (i.e. all operators that have access to the defined company will be able to see the tile).

- **Role KPI**

- This lets you add or maintain the tile at role level (i.e. operators within the defined role(s) will be able to see the tile).

  - **Operator KPI**

    This lets you add or maintain the tile at operator level (i.e. only the operator for whom the tile is created will be able to see the tile).

The **Tile KPI Maintenance** program is launched:

a. From the **Items** pane, select the **Add** or **Edit** function of the **Edit** column.

   The **KPI Properties** pane is then available for editing.

b. Edit the KPI properties as required.

c. Select the **Save** or **Save KPI** function.

d. Exit the **Tile KPI Maintenance** program.

4. Exit the **Insight Tile Definition** program.

Why can't I enter a specific target value when defining KPIs for a tile?

You can't select a target value for **Minimizing** or **Maximizing** type tile goals. You can only use a fixed target value if the selected type goal is defined as **Target Value**.

What happens if I change the icon on an existing business insight tile?

If you change the icon on an existing tile, then the warning icon overrides the existing icon when the warning value has been reached or exceeded.

Similarly, the critical icon will override the warning icon if the critical threshold is reached or exceeded.

Using

Attributes

When adding KPI attributes to a tile using the **Tile KPI Maintenance** program, the tile value is compared to pre-defined thresholds.

When these thresholds are reached or exceeded, the visual appearance of the tile can change. This draws the user's attention, enabling them to take the appropriate action.

Therefore, the following tile attributes can be changed when a threshold is reached or exceeded:

- Main value text color
- Tile background color
- Optional icon and icon color

KPI goals and thresholds

When defining a KPI against a business insight tile, one of the following objectives must be specified for the threshold creation:

- Minimizing
  - The ideal value must be as small as possible.
  - The value can be negative or zero.
  - The tile can have a warning high and a critical high threshold.
- Maximizing
  - The ideal value must be as large as possible.
  - The tile can have a warning low and a critical low threshold.
- Target value
  - The ideal tile value is fixed to a predefined value.
  - The value has high and low thresholds.
  - The warning and critical values lie within a range.
  - The tile can have a warning high and a critical high threshold, for both high and low values.

Warning and Critical Thresholds

You can define the warning and critical thresholds and indicate whether the value only has to be reached or exceeded.

- When the warning threshold is reached or exceeded, a certain set of attributes is applied (e.g. an orange background).

- When a critical threshold is reached or exceeded, another set of attributes is applied (e.g. a red background).

> If no threshold is reached, the original tile attributes (defined at the time of creating the tile) are used.

KPI levels

KPIs against business insight tiles can be created for a number of different levels:

- **System KPI**

  This lets you add or maintain the tile at system-wide level (i.e. all operators will be able to see the tile).

- **Company KPI**

  This lets you add or maintain the tile at company level (i.e. all operators that have access to the defined company will be able to see the tile).

- **Role KPI**

  This lets you add or maintain the tile at role level (i.e. operators within the defined role (s) will be able to see the tile).

- **Operator KPI**

  This lets you add or maintain the tile at operator level (i.e. only the operator for whom the tile is created will be able to see the tile).

Hints and Tips

- Columns in a list view are sometimes hidden by default. You can reinstate them using the **Field Chooser** option from the context-sensitive menu (displayed by right-clicking a header column header in the list view). Select and drag the required column to a position in the list view header.

- Press CTRL+F1 within a list view or form to view a complete list of functions available.

Referencing

Menu and Toolbar

Exit

This exits the program.

⟳ Refresh View

This refreshes the list of business insight tiles and their KPIs.

Filter KPI Where Used

This lets you filter the business insight tiles displayed in the **Tiles** list view to only show those that are currently in use (i.e. tiles that are part of the Where Used list).

> 💡 Select the **View** hyperlink in the **Where used** column to determine who uses the tile and in what context it is used.
>
> The number in brackets after **View** shows how many times the tile has been used.

Filter Custom Tiles

This lets you filter the business insight tiles displayed in the **Tiles** list view to only show custom-built tiles.

⟡ New Tile

This lets you create a new business insight tile using the **Tile Builder** program.

▦ Import

This lets you import an insight tile using the **Tile Builder - Import** program.

⤢ Export

This lets you export an insight tile using the **Tile Builder - Export** program.

Tile KPI Definition

This pane displays a list of standard tiles that are shipped with SYSPRO, as well as any custom tiles defined (if applicable).

> 💡 The tiles are grouped by category for ease of use.

Column	Description
Tile	This indicates the tile description. Select the tile description to view the standard tile definition in read-only mode using the **Tile Builder** program. From here you can do the following: - View the SQL query script by selecting the **Edit Tile Summary** function. - View the SQL script that makes up the detail of the tile by selecting the **Edit Tile Detail** function. - Create a new tile using the existing tile information by using the **Create From** function.
Tile name	This indicates the name of the tile.
Where used	This indicates if the tile is currently in use (i.e. has been deployed). The number of instances throughout the system in which the tile is used is displayed in brackets behind the **View** link. > 💡 If the tile is in use, you can select the **View** hyperlink to display the **Tile Where Used** pane from where you can view more information.
System KPI	The **Add** hyperlink opens the **Tile KPI Maintenance** program from where you can add the tile at system-wide level (i.e. all operators will be able to see the tile). If the tile has already been added, select the **Edit KPI** hyperlink to edit the existing KPI properties using the **Tile KPI Maintenance** program.
Company KPI	The **Add** hyperlink opens the **Tile KPI Maintenance** program from where you can add the tile at company level (i.e. all operators that have access to the defined company will be able to see the tile). If the tile has already been added, select the **Edit KPI** hyperlink to edit the existing KPI properties using the **Tile KPI Maintenance** program.

Column	Description
Role KPI	The **Add** hyperlink opens the **Tile KPI Maintenance** program from where you can add the tile at role level (i.e. operators within the defined role(s) will be able to see the tile). If the tile has already been added, select the **Edit KPI** hyperlink to edit the existing KPI properties using the **Tile KPI Maintenance** program.
Operator KPI	The **Add** hyperlink opens the **Tile KPI Maintenance** program from where you can add the tile at operator level (i.e. only the operator for whom the tile is created will be able to see the tile). If the tile has already been added, select the **Edit KPI** hyperlink to edit the existing KPI properties using the **Tile KPI Maintenance** program
Custom	This indicates whether the tile is a **Standard** tile that was shipped with the software, or a **Custom** tile that has been created manually. ⓘ This displays **AI tile** if the tile is an Artificial Intelligence tile.
Tile ID	This indicates the unique, 6-character tile identification code.
Tile Type	This indicates the type of the tile: ■ Text ■ Bar chart ■ Line chart
Development	A tick mark or **Yes** in this column indicates that the tile is still being developed (i.e. it isn't available to use yet and can only be viewed by the person who is creating the tile).

Tile Where Used

Column	Description
Source	This indicates the source of the tile (i.e. for which level the tile was created).
Operator/Role	This indicates the operator or role description where the tile is used.
Operator/Role code	This indicates the operator or role code where the tile is used.
Type	This indicates the type of tile (e.g. program).
View	This indicates the view where the tile is displayed.
Program	This indicates the name of the program where the tile is displayed.
Program description	This indicates the description of the program where the tile is displayed.
Definition file	This indicates the file path of the tile's definition file.

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