Oracle
Primavera Unifier
Visualizations User Guide

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Oracle Primavera Unifier Visualizations User Guide

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About This Guide

This guide explains how to use Unifier to view, edit, and modify visualizations in the User mode.

Audience

Project/Shell users/groups with access to visualizations should review this information.

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Using Visualizations

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Visualizations Overview

Video: Using Unifier Visualizations in User Mode (***https://players.brightcove.net/2985902027001/default_default/index.html?videoId=6371183444112***)

Visualizations are an approach to render data in a graphical or pictorial format to help you identify and understand underlying trends and nuances of the data in an intuitive manner. Using various types of charts, grids, and Key Performance Indicators (KPIs) from multiple data sources, project/shell users can manage content, edit, and view visualizations to provide a pictorial representation of critical information and key insights related to record and line-item data from business process (BP) records.

You can begin working with visualizations when Project/Shell Administrators give you access to the Visualizations node in the projects/shells you have access to.

Based on permissions, you can perform specific types of visualization tasks in each project/shell, such as:

- ***Access the Visualizations Log in a Project/Shell (User Mode)*** (on page 8)
- ***Edit Visualizations in Projects/Shells*** (on page 10)
- ***Create or Edit Content Items for Visualizations*** (on page 11)
- ***Remove Content Items From Visualizations in Projects/Shells*** (on page 22)
- ***Rearrange the Visualization Layout*** (on page 22)

Users with access to visualizations in projects/shells in the User mode should review this information.

Permission-Based Visualization Tasks for Project/Shell Users

Visualization users can perform tasks based on their visualization permissions and their access to specific projects/shells. Your Project/Shell Administrator can assign any of the following permissions to perform corresponding visualizations tasks:

- **Manage Content**: You can edit visualizations in a project/shell by creating new content and modifying existing content. By default, you also get modify and view permissions in the User mode.
- **Modify**: You can edit visualizations in a project/shell by modifying only the displayed content. By default, you also get view permission in the User mode.
- **View (Default)**: You can only view visualizations in a project/shell in the User mode.

The following visualization tasks can be performed by users/groups assigned with each permission:

Visualization Tasks	Manage Content Permission	Modify Permission	View Permission
View visualizations	Yes	Yes	Yes
Edit visualizations	Yes	Yes	No
Modify visualization layout and rearrange content items	Yes	Yes	No
Add content items from the content library	Yes	Yes	No
Create and edit content items in the content library	Yes	No	No
Remove content items from the library	Yes	No	No
Edit content items in the layout	Yes	Yes	No
Remove content items from the layout	Yes	Yes	No

Access the Visualizations Log in a Project/Shell (User Mode)

Project/Shell users can access visualizations from the Visualizations node or from a Business Process log node. The Visualization node is visible if your Project/Shell Administrator has assigned visualization permissions in the projects/shells you have access to.

To access the Visualizations log in a project/shell (User mode):

1) Sign in to Unifier with project/shell user credentials.
2) Select the specific project/shell tab and switch to **User** mode. For example, select a tab called Vision Corporation.
3) In the left Navigator, select **Visualizations**.

   or

   Access the **Visualizations** log from a business process log as follows:

   a. In the left Navigator, select **Logs**, and then select a specific business process, such as Contracts.

b. In the selected business process log (right pane), just below the **User** mode indicator, select a specific visualization from the **Visualization** list.

4) On the **Visualizations** page (right pane), the following information is displayed for each visualization:
   - **Name**: Name of the visualization. For example, a visualization called *RFI Summary*.
   - **Description**: (Optional) A short statement that outlines the purpose of the visualization.
   - **Location**: (Optional) The location of the visualization in the left Navigator in the **User** mode.

     If a location is specified, the visualization will display under the selected business process node in the **User** mode. For example, a **Visualizations** list will display in the **Contracts** business process log (right pane).

     (Default) If a location is not specified, the visualizations will display under the **Visualizations** node in the left Navigator.
   - **Last Modified Date**: The most recent date that the visualization was modified.
   - **Last Modified By**: The name of the user who last modified the visualization.
5) (Optional) To further focus on a subset of visualizations displayed in the **Visualizations** log (right pane), select any of the following search filters:
   - **Location**: Select this filter to focus on visualizations in a specific location or node. For example, visualizations in the **Contracts** business process node.
   - **Last Modified Date**: Select this filter and enter a date range to select only those visualizations that were last modified between the selected dates.
   - **Last Modified By**: Select this filter to focus on visualizations modified by a specific user.

   Click **Remove** (**X**) to remove the filter from the **Search** bar.

Based on the visualization permissions assigned to you as Project/Shell users, you can perform certain types of visualization tasks from the **Visualizations** log. For more information, see ***Permission-Based Visualization Tasks for Project/Shell Users*** (on page 7).

Keyboard Navigation

You can use your computer keyboard to navigate through the application. Use the following keyboard shortcuts to access frequently used or important functionality. Note that keyboard shortcuts may change depending on your selected browser, and disabled buttons/fields are skipped.

Common Shortcuts

Action	Windows Shortcut Key	Mac Shortcut Key
Move right through elements in a log/page (right pane)	Press **Tab**	Press **Tab**
Move left through the elements in a log/page (right pane)	Press **Shift+Tab**	Press **Shift+Tab**

Select a current focus element	Press **Spacebar** or **Enter**	Press **Spacebar** or **Enter**

Edit Visualizations in Projects/Shells

Project/Shell users can edit visualizations by using the default content items in the content library. These content items are made available to you by your Project/Shell Administrators if you have the Manage Content permission to create content items in the content library which can then be used in visualizations. For more information, see ***Create or Edit Content Items for Visualizations*** (on page 11).

To edit visualizations in a project/shell (User mode):

1) Sign in to Unifier with project/shell user credentials.
2) Select the specific project/shell tab and switch to **User** mode. For example, select a tab called Vision Corporation.
3) In the left Navigator, select **Visualizations**.

   or

   Access the **Visualizations** log from a business process log as follows:

   a. In the left Navigator, select **Logs**, and then select a specific business process, such as Contracts.
   b. In the selected business process log (right pane), just below the **User** mode indicator, select a specific visualization from the **Visualization** list.
4) In the **Visualizations** log (right pane), click **Create**.
5) In the **Create Visualization** drawer, enter the following information:
   a. In the **Name** field, enter a user-friendly name for the visualization.
   b. (Optional) In the **Description** field, enter a short description of the visualization.
   c. (Optional) From the **Location** list, select the location of the visualization in the left Navigator. For example, select **Document Issues** to display the **Visualizations** node under the **Document Issues** business process in the **User** mode.

      (Default) If a location is not specified, the visualization displays in the **Visualization** node of the project/shell in the **User** mode.
   d. Click **Continue** to select a layout for the visualization.

      Note: You can click **Cancel** in any step to discontinue creating the visualization.
6) In the **Choose layout to start** drawer, select a layout for the visualization. Options include:
   - 1-panel collection
   - 2-panel hero visualization
   - 2-panel side-by-side

- 2-panel vertical collection
- 3-panel auto fit
- 3-panel collection
- 5-panel collection

7) In the selected blank layout page, click **Library**.
8) In the **Library** drawer, select the **Content** tab.

   The **Content** tab displays an alphabetical list of content items that have been made available to you by your Project/Shell Administrator. The following information displays for each content item:

   - The name of the content item.
   - The type of content, such as a KPI card, Bar chart, and so on.
   - The data source used for creating the content item.
   - The published status can be any of the following:
     - **Synced**: Indicates the published content item is in sync with the saved version.
     - **Local**: Indicates the content item has been newly created and is available only in this project/shell.

9) Select a content item, and then click and drag the item onto a block in the visualization layout, Repeat to populate all blocks in the layout. For example, click and drag a stacked Bar chart to the layout.
10) (Optional) Click **Create** if you want to create new content items for the visualization. For more information, see ***Create or Edit Content Items for Visualizations*** (on page 11).
11) Perform any of the following actions in any order:
    - In the **Search** bar, locate a content item by name, data source, view type (such as a Bar chart , Area chart, and so on), or published status.
    - Click **Refresh** ( ) to refresh the list of displayed content items.
    - Select the **Layout** tab to change the visualization layout.
12) Make changes as needed to refine the above selections.
13) After populating the visualization, click **Create**. Return to the **Visualizations** log.

Create or Edit Content Items for Visualizations

Permissions determine whether project/shell users can create or edit visualizations in the User mode.

Project/shell users with the Modify permission can only edit existing visualizations by rearranging content items in a layout or selecting alternate content items from the library they have access to.

Project/Shell users with the Manage Content permission can create content items for visualizations in the content library of a project/shell. The Create page for such content items is initially labeled Local Copy. Upon creating content items, you can click and drag these content items onto the visualization layout. The status of these content items displays as Local to indicate the content item has been newly created and is available only in this project/shell.

You can create the following types of content items:

- ***Create or Edit Area Charts, Bar Charts, and Line Charts for Visualizations in Projects/Shells*** (on page 12)
- ***Create or Edit Bubble Charts for Visualizations in Projects/Shells*** (on page 14)
- ***Create or Edit Pie Charts and Donut Charts for Visualizations in Projects/Shells*** (on page 16)
- ***Create or Edit KPI Cards for Visualizations in Projects/Shells*** (on page 18)
- ***Create or Edit Pivot Grids for Visualizations in Projects/Shells*** (on page 19)
- ***Create or Edit Tables for Visualizations in Projects/Shells*** (on page 20)

Create or Edit Area Charts, Bar Charts, and Line Charts for Visualizations in Projects/Shells

You can create or edit Area charts, Bar charts, and Line charts for visualizations if you have the Manage Content permission to perform this task.

To create or edit Area charts, Bar charts, and Line charts for visualizations in a project/shell (User mode):

1) Sign in to Unifier with project/shell user credentials.
2) Select the specific project/shell tab and switch to **User** mode. For example, select a tab called Vision Corporation.
3) In the left Navigator, select **Visualizations**.

   or

   Access the **Visualizations** log from a business process log as follows:

   a. In the left Navigator, select **Logs**, and then select a specific business process, such as Contracts.
   b. In the selected business process log (right pane), just below the **User** mode indicator, select a specific visualization from the **Visualization** list.
4) In the **Visualizations** log (right pane), select any of the following actions:
   - Click **Create** to add a new visualization in the project/shell. Proceed to step 6.
   - Select a visualization in the log and then click **Edit**. Proceed to step 5.
5) In the **Edit** page, click **Edit** ( )for a content item in the visualization layout; proceed to step 6b.
6) In the **Create** page, specify or update the following information:
   a. From the **Preview Data** list, select an active project or shell and click **Preview Data** to preview the data you can use to create the chart.
   b. From the **Data Source** list, select the data source to use for creating the content item.
   c. From the **View Type** list, select **Area Chart**, **Bar Chart**, or **Line Chart**.
   d. In the **Name** field, enter a name for the chart.
   e. (Optional) In the **Description** field, enter a short description about the chart.
   f. From the **Value** list, select a data element from the data source selected above. Displays **Count** by default.

      For the selected data element in the **Value** list, select any of the following measures:

      - **Average**: The mean of all values of the selected data element.

- **Count**: (Default) The total number of rows of the selected data element.
- **Max**: For numeric fields, displays the highest value. For date fields, displays the maximum date.
- **Median**: The central value among all values of the selected data element.
- **Min**: For numeric fields, displays the lowest value of the selected data element. For date fields, displays the minimum date.
- **Percentage**: A percent of the filtered value from the total of the selected data element.
- **Sum**: Sum of all values of the selected data element.

g. (Optional) From the **Color By** list, select a data element to differentiate using a color code. You can click:
   - **Add Color By** to color-code additional data elements.
   - **Delete** (**x**) to remove a data element from being used for color-coding.
   - **Drag** (═) to reorder data elements selected for color coding. This icon displays only if you have selected more than one data element.

h. From the **Category** list, select a data element that you can use as a category to differentiate the bars in the chart. You can click:
   - **Add Category** to select another data element as a category.
   - **Delete** (**x**) to remove a data element as a category.
   - **Drag** (═) to reorder the data elements selected to categorize the bars in the chart.

i. From the **Data Labels** list, select the location for displaying labels on the Bar chart.

   Common options are:
   - **Auto**: The default data label display setting for all types of charts.
   - **Center**: The data label displays in the center of an Area chart, Bar chart, or Line chart.
   - **None**: The data labels do not display in the chart.

   For Area charts and Line charts, the following additional options display:
   - **Above Marker**: The data label displays above the marker point.
   - **Below Marker**: The data label displays below the marker point.
   - **Before Marker**: The data label displays before the marker point.
   - **After Marker**: The data label displays after the marker point.

   For Bar charts, the following additional options display:
   - **Inside Bar Edge**: The data label displays on the inside edge in a Bar chart.
   - **Outside Bar Edge**: The data label displays on the outside edge in a Bar chart.

j. From the **Orientation** list, select the orientation as either **Horizontal** or **Vertical** (default).

k. In the **Stacked** field, slide right to create a stacked Bar chart or slide left (default) to create an unstacked Bar chart.

l. In the **Show Category Axis Title** field, slide right to display the label of the data element you selected for the X-axis (see step h).

m. In the **Show Value Axis Title** field, slide right to display the label of the data element you selected for the Y-axis (see step f).

n. Make changes as needed to refine your selections.

7) After making all changes, you can click:
   - **Create** if you created an Area chart, Bar chart, or Line chart and return to the **Edit** page.
   - **Update** to confirm all the changes made to the edited content item and return to the **Edit** page.
8) In the **Edit** page, click **Save** to update the visualization with any created or edited content.

Create or Edit Bubble Charts for Visualizations in Projects/Shells

You can create or edit Bubble charts for visualizations if you have the Manage Content permission to perform this task.

To create or edit Bubble charts for visualizations in a project/shell (User mode):

1) Sign in to Unifier with project/shell user credentials.
2) Select the specific project/shell tab and switch to **User** mode. For example, select a tab called Vision Corporation.
3) In the left Navigator, select **Visualizations**.

   or

   Access the **Visualizations** log from a business process log as follows:

   a. In the left Navigator, select **Logs**, and then select a specific business process, such as Contracts.

   b. In the selected business process log (right pane), just below the **User** mode indicator, select a specific visualization from the **Visualization** list.
4) In the **Visualizations** log (right pane), select any of the following actions:
   - Click **Create** to add a new visualization in the project/shell. Proceed to step 6.
   - Select a visualization in the log and then click **Edit**. Proceed to step 5.
5) In the **Edit** page, click **Edit** ( )for a Bubble chart in the visualization layout. Proceed to step 6b.
6) In the **Create** or **Edit** page, specify or update the following information:

   a. From the **Preview Data** list, select an active project or shell and click **Preview Data** to preview the data you can use to create the chart.

   b. From the **Data Source** list, select the data source to use for creating the content item.

   c. From the **View Type** list, select **Bubble Chart**.

   d. In the **Name** field, enter a name for the bubble chart.

   e. (Optional) In the **Description** field, enter a short description about the bubble chart.

   f. (Required) From the **Size By** list, select a data element to use as the criteria to size the bubble from the data source selected above. Displays **Count** by default.

   For the selected data element in the **Size By** list, select any of the following measures:
   - **Average**: The mean of all values of the selected data element.
   - **Count**: (Default) The total number of rows of the selected data element.

- **Max**: For numeric fields, displays the highest value. For date fields, displays the maximum date.
- **Median**: The central value among all values of the selected data element.
- **Min**: For numeric fields, displays the lowest value of the selected data element. For date fields, displays the minimum date.
- **Percentage**: A percent of the filtered value from the total of the selected data element.
- **Sum**: Sum of all values of the selected data element.

g. (Required) From the **X Axis** list, select a data element.

   For the selected data element in the **X-Axis** list, select any of the following measures:

   - **Average**: The mean of all values of the selected data element.
   - **Count**: (Default) The total number of rows of the selected data element.
   - **Max**: For numeric fields, displays the highest value. For date fields, displays the maximum date.
   - **Median**: The central value among all values of the selected data element.
   - **Min**: For numeric fields, displays the lowest value of the selected data element. For date fields, displays the minimum date.
   - **Percentage**: A percent of the filtered value from the total of the selected data element.
   - **Sum**: Sum of all values of the selected data element.

h. (Required) From the **Y Axis** list, select a data element.

   For the selected data element in the Y**-Axis** list, select any of the following measures:

   - **Average**: The mean of all values of the selected data element.
   - **Count**: (Default) The total number of rows of the selected data element.
   - **Max**: For numeric fields, displays the highest value. For date fields, displays the maximum date.
   - **Median**: The central value among all values of the selected data element.
   - **Min**: For numeric fields, displays the lowest value of the selected data element. For date fields, displays the minimum date.
   - **Percentage**: A percent of the filtered value from the total of the selected data element.
   - **Sum**: Sum of all values of the selected data element.

i. (Optional) From the **Color By** list, select one or more data elements to measure using a color-code. You can:

   - Click **Add Color By** to color-code another data element.
   - Click **Delete** (**x**) to remove a data element from being color-coded.
   - Click **Drag** (═) to reorder the data elements selected for color coding. Displays only if you have selected more than one data element.

j. From the **Category** list, select a data element to use as a category to differentiate the bars in the chart. You can:

   - Click **Add Category** to select another data element as a category.
   - Click **Delete** (**x**) to remove a data element as a category.

- Click **Drag** (═) to reorder the data elements selected to categorize the bars in the chart.

k. From the **Data Labels** list, select the location for displaying labels on the chart. Choices include:

The following options display:

- **Auto**: The default data label display setting for all types of charts.
- **Center**: The data label displays in the center of each data point on an Area chart, Bar chart or Line chart.
- **Above Marker**: The data label displays above the marker point.
- **Below Marker**: The data label displays below the marker point.
- **Before Marker**: The data label displays before the marker point.
- **After Marker**: The data label displays after the marker point.
- **None**: The data labels do not display on the chart.

l. In the **Show X Axis Title** field, slide right to display the label of the data element you selected for the X-axis (See step g).

m. In the **Show Y Axis Title** field, slide right to display the label of the data element you selected for the Y-axis (See step h).

n. Make changes as needed to refine the above selections.

7) After making all changes, you can click:
   - **Create** if you created a Bubble chart and return to the **Edit** page.
   - **Update** to confirm all the changes made to the edited Bubble chart, and return to the **Edit** page.
8) In the **Edit** page, click **Save** to update the visualization with any created or edited content.

Create or Edit Pie Charts and Donut Charts for Visualizations in Projects/Shells

You can create or edit Pie charts and Donut charts for visualizations if you have the Manage Content permission to perform this task.

To create or edit Pie charts and Donut charts for visualizations in a project/shell (User mode):

1) Sign in to Unifier with project/shell user credentials.
2) Select the specific project/shell tab and switch to **User** mode. For example, select a tab called Vision Corporation.
3) In the left Navigator, select **Visualizations**.

   or

   Access the **Visualizations** log from a business process log as follows:

   a. In the left Navigator, select **Logs**, and then select a specific business process, such as Contracts.

   b. In the selected business process log (right pane), just below the **User** mode indicator, select a specific visualization from the **Visualization** list.
4) In the **Visualizations** log (right pane), select any of the following actions:
   - Click **Create** to add a new visualization in the project/shell. Proceed to step 6.
   - Select a visualization in the log and then click **Edit**. Proceed to step 5.

5) In the **Edit** page, click **Edit** ( )for a Pie chart or Donut chart in the visualization layout. Proceed to step 6b.
6) In the **Create** or **Edit** page, specify or update the following information:
   a. From the **Preview Data** list, select an active project or shell and click **Preview Data** to preview the data you can use to create the chart.
   b. From the **Data Source** list, select the data source to use for creating the content item.
   c. From the **View Type** list, select **Pie Chart**.
   d. In the **Name** field, enter a name for the bubble chart.
   e. (Optional) In the **Description** field, enter a short description about the bubble chart.
   f. From the **Value** list, select a data element from the data source selected above. Displays **Count** by default.

      For the selected data element in the **Value** list, select any of the following measures:
      - **Average**: The mean of all values of the selected data element.
      - **Count**: (Default) The total number of rows of the selected data element.
      - **Max**: For numeric fields, displays the highest value. For date fields, displays the maximum date.
      - **Median**: The central value among all values of the selected data element.
      - **Min**: For numeric fields, displays the lowest value of the selected data element. For date fields, displays the minimum date.
      - **Sum**: Sum of all values of the selected data element.
   g. (Optional) From the **Color By** list, select one or more data elements to measure using a color code. You can click:
      - **Add Color By** to color-code another data element.
      - **Delete** (**x**) to remove a data element from being color-coded.
      - **Drag** ( ) to reorder the data elements selected for color-coding. Displays only if you have selected more than one data element.
   h. From the **Data Labels** list, select the location for displaying labels on the bar chart. Choices include:

      The following options display:
      - **Auto**: The default data label display setting for all types of charts.
      - **Center**: The data label displays in the center of each data point on an Area chart, Bar chart or Line chart.
      - **Above Marker**: The data label displays above the marker point.
      - **Below Marker**: The data label displays below the marker point.
      - **Before Marker**: The data label displays before the marker point.
      - **After Marker**: The data label displays after the marker point.
      - **None**: The data labels do not display in the chart.
   i. In the **Donut** field, slide right to display the pie chart shaped as a donut chart.
   j. Make changes as needed to refine the above selections.
   k. After making all changes, click any of the following buttons:
      - **Create Draft** to save the chart in **Draft** status and return to the **Content** log.

- **Update Draft** if you are editing an existing chart in **Draft** status.
- **Cancel** to delete the chart. You will lose all unsaved changes made to the chart.
- **Publish** to make the chart available to your users for visualizations and return to the **Content** log.

7) After making all changes, you can click:
   - **Create** if you created a Pie chart or Donut chart and return to the **Edit** page.
   - **Update** to confirm all the changes made to the edited charts and return to the **Edit** page.
8) In the **Edit** page, click **Save** to update the visualization with any created or edited content.

Create or Edit KPI Cards for Visualizations in Projects/Shells

You can create or edit KPI cards for visualizations if you have the Manage Content permission to perform this task. A maximum of eight KPIs can be included in a visualization.

To create or edit KPI cards for visualizations in a project/shell (User mode):

1) Sign in to Unifier with project/shell user credentials.
2) Select the specific project/shell tab and switch to **User** mode. For example, select a tab called Vision Corporation.
3) In the left Navigator, select **Visualizations**.

   or

   Access the **Visualizations** log from a business process log as follows:

   a. In the left Navigator, select **Logs**, and then select a specific business process, such as Contracts.
   b. In the selected business process log (right pane), just below the **User** mode indicator, select a specific visualization from the **Visualization** list.
4) In the **Visualizations** log (right pane), select any of the following actions:
   - Click **Create** to add a new visualization in the project/shell. Proceed to step 6.
   - Select a visualization in the log and then click **Edit**. Proceed to step 5.
5) In the **Edit** page, click **Edit** ( )for a KPI card in the visualization layout. Proceed to step 6b.
6) In the **Create** or **Edit** page, specify or update the following information:
   a. From the **Preview Data** list, select an active project or shell and click **Preview Data** to preview the data you can use to create or update the card.
   b. From the **Data Source** list, select the data source to use for creating the content item.
   c. From the **View Type** list, select **KPI Card**.
   d. In the **Name** field, enter a name for the KPI card.
   e. (Optional) In the **Description** field, enter a short description about the KPI card.
   f. From the **Value** list, select a data element from the data source selected above. Displays **Count** by default.

      For the selected data element in the **Value** list, select any of the following measures:
      - **Average**: The mean of all values of the selected data element.

- **Count**: (Default) The total number of rows of the selected data element.
- **Max**: For numeric fields, displays the highest value. For date fields, displays the maximum date.
- **Median**: The central value among all values of the selected data element.
- **Min**: For numeric fields, displays the lowest value of the selected data element. For date fields, displays the minimum date.
- **Sum**: Sum of all values of the selected data element.

g. From the **Period** list, select a data element to measure time for the data element selected in the previous step. Select any of the following to further specify the time period:

- **No Period**: (Default) Does not display a measure of time on the KPI card.
- **Today**: Displays today's date in the format based on the user's preferences.
- **Current Month**: Displays the month and the year in the format, MONTH YYYY.
- **Current Year**: Displays the year on the KPI card in the format, YYYY.
- **Current Quarter**: Displays the year on the KPI card in the format, Q<#> YYYY.

h. Make changes as needed to refine the above selections.

7) After making all changes, you can click:
   - **Create** if you created a KPI card and return to the **Edit** page.
   - **Update** to confirm all the changes made to the edited KPI card, and return to the **Edit** page.
8) In the **Edit** page, click **Save** to update the visualization with any created or edited content.

Create or Edit Pivot Grids for Visualizations in Projects/Shells

You can create or edit Pivot grids for visualizations if you have the **Manage Content** permission to perform this task.

To create or edit Pivot grids for visualizations in a project/shell (User mode):

1) Sign in to Unifier with project/shell user credentials.
2) Select the specific project/shell tab and switch to **User** mode. For example, select a tab called Vision Corporation.
3) In the left Navigator, select **Visualizations**.

   or

   Access the **Visualizations** log from a business process log as follows:

   a. In the left Navigator, select **Logs**, and then select a specific business process, such as Contracts.

   b. In the selected business process log (right pane), just below the **User** mode indicator, select a specific visualization from the **Visualization** list.
4) In the **Visualizations** log (right pane), select any of the following actions:
   - Click **Create** to add a new visualization in the project/shell; proceed to step 6.
   - Select a visualization in the log and then click **Edit**. Proceed to step 5.
5) In the **Edit** page, click **Edit** ( )for a Pivot Grid in the visualization layout. Proceed to step 6b.
6) In the **Create** or **Edit** page, specify or update the following information:

a. From the **Preview Data** list, select an active project or shell and click **Preview Data** to preview the data you can use to create or update the pivot grid.
b. From the **Data Source** list, select the data source to use for creating the content item.
c. From the **View Type** list, select **Pivot Grid**.
d. In the **Name** field, enter a name for the Pivot grid.
e. (Optional) In the **Description** field, enter a short description about the Pivot grid.
f. From the **Value** list, select a data element from the data source selected above. Displays **Count** by default.

   For the selected data element in the **Value** list, select any of the following measures:
   - **Average**: The mean of all values of the selected data element.
   - **Count**: (Default) The total number of rows of the selected data element.
   - **Max**: For numeric fields, displays the highest value. For date fields, displays the maximum date.
   - **Median**: The central value among all values of the selected data element.
   - **Min**: For numeric fields, displays the lowest value of the selected data element. For date fields, displays the minimum date.
   - **Sum**: Sum of all values of the selected data element.

g. From the **Columns** list, select a data element to create columns for the Pivot grid.
h. (Optional) Click **Add Columns** to include additional column tiers in the Pivot grid.
i. From the **Rows** list, select a data element to create rows for the Pivot grid.
j. (Optional) Click **Add Rows** to include additional row tiers in the Pivot grid.
k. Make changes as needed to refine the above selections.

7) After making all changes, you can click:
   - **Create** if you created a pivot grid and return to the **Edit** page.
   - **Update** to confirm all the changes made to the edited pivot grid and return to the **Edit** page.
8) In the **Edit** page, click **Save** to update the visualization with any created or edited content.

Create or Edit Tables for Visualizations in Projects/Shells

You can create or edit tables for visualizations if you have the Manage Content permission to perform this task.

To create or edit tables for visualizations in a project/shell (User mode):

1) Sign in to Unifier with project/shell user credentials.
2) Select the specific project/shell tab and switch to **User** mode. For example, select a tab called Vision Corporation.
3) In the left Navigator, select **Visualizations**.

   or

   Access the **Visualizations** log from a business process log as follows:

   a. In the left Navigator, select **Logs**, and then select a specific business process, such as Contracts.

   b. In the selected business process log (right pane), just below the **User** mode indicator, select a specific visualization from the **Visualization** list.

4) In the **Visualizations** log (right pane), select any of the following actions:
   - Click **Create** to add a new visualization in the project/shell. Proceed to step 6.
   - Select a visualization in the log and then click **Edit**. Proceed to step 5.
5) In the **Edit** page, click **Edit** ( )for a table in the visualization layout, Proceed to step 6b.
6) In the **Create** or **Edit** page, specify or update the following information:
   a. From the **Preview Data** list, select an active project or shell and click **Preview Data** to preview the data you can use to create or edit the table.
   b. From the **Data Source** list, select the data source to use for creating the content item.
   c. From the **View Type** list, select **Table**.
   d. In the **Name** field, enter a name for the table.
   e. (Optional) In the **Description** field, enter a short description about the table.
   f. From the **Columns** list, select a data element to create columns for the table.
   g. (Optional) Click **Add Columns** and select a data element to include additional columns in the table.
   h. From the **Group By** list, select a data element to organize the information based on a specific characteristic. For example, group RFIs based on the RFI reasons.
   i. Make changes as needed to refine the above selections.
7) After making all changes, you can click:
   - **Create** if you created a table and return to the **Edit** page.
   - **Update** to confirm all the changes made to the edited table and return to the **Edit** page.
8) In the **Edit** page, click **Save** to update the visualization with any created or edited content.

Edit Content Items in the Visualization Layout

Apart from editing content items you add to the Library, you can also edit content items on the visualization layout page if you have Manage Content or Modify permission to perform this task.

To edit content items from visualizations in a project/shell (User mode):

1) Sign in to Unifier with project/shell user credentials.
2) Select the specific project/shell tab and switch to **User** mode. For example, select a tab called Vision Corporation.
3) In the left Navigator, select **Visualizations**.

   or

   Access the **Visualizations** log from a business process log as follows:

   a. In the left Navigator, select **Logs**, and then select a specific business process, such as Contracts.
   b. In the selected business process log (right pane), just below the **User** mode indicator, select a specific visualization from the **Visualization** list.
4) In the **Visualizations** log (right pane), select a visualization and click **Edit**.
5) In the **Edit** page, select a content item *in the visualization layout* and click **Edit** ( ).

6) Make changes to the content item and then click **Update**.

   The status of the content item displays as **Not Synced**.

   Note: The changes made to the content item is specific to this instance of the visualization. These changes will not be the default for this content item.

Remove Content Items From Visualizations in Projects/Shells

You can remove content items from the visualization layout as needed if you have Modify and/or Manage Content permission to perform this task.

To remove content items from visualizations in a project/shell (User mode):

1) Sign in to Unifier with project/shell user credentials.
2) Select the specific project/shell tab and switch to **User** mode. For example, select a tab called Vision Corporation.
3) In the left Navigator, select **Visualizations**.

   or

   Access the **Visualizations** log from a business process log as follows:

   a. In the left Navigator, select **Logs**, and then select a specific business process, such as Contracts.
   b. In the selected business process log (right pane), just below the **User** mode indicator, select a specific visualization from the **Visualization** list.
4) In the **Visualizations** log (right pane), select a visualization and click **Edit**.
5) In the **Edit** page, select a content item in the visualization layout and click **Remove** (**X**).

Rearrange the Visualization Layout

You can edit visualizations by adding content items from the library onto the visualization layout and rearranging content items on the visualization layout as needed if you have Modify or Manage Content permissions to perform this task.

To rearrange visualizations in a project/shell (User mode):

1) Sign in to Unifier with project/shell user credentials.
2) Select the specific project/shell tab and switch to **User** mode. For example, select a tab called Vision Corporation.
3) In the left Navigator, select **Visualizations**.

   or

   Access the **Visualizations** log from a business process log as follows:

   a. In the left Navigator, select **Logs**, and then select a specific business process, such as Contracts.
   b. In the selected business process log (right pane), just below the **User** mode indicator, select a specific visualization from the **Visualization** list.
4) In the **Visualizations** log (right pane), select a visualization and click **Edit**.

5) In the **Edit** page, perform any of the following actions:
    - Click and drag a content from the **Content** tab of the **Library** to add content items in the visualization layout.
    - Click and drag a content item on the visualization layout to rearrange content items.
    - Click **Refresh** ( ) to update the list of content items in the **Content** tab.
    - Select an alternative layout from the **Layout** tab of the **Library**.
6) Make changes as needed to refine the above selections.
7) After populating the visualization, click **Save** and return to the Visualizations log.