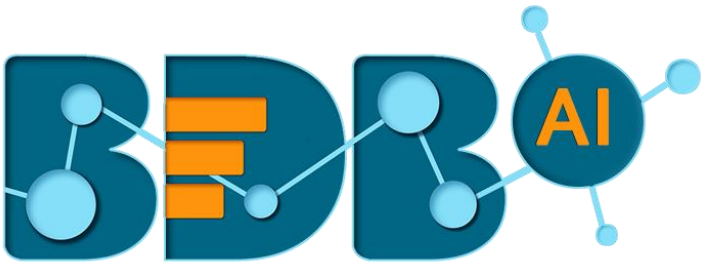

User Guide

Dashboard Designer- 4.3

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1. About this Guide

1.1. Document History

Product Version	Date (Release date)	Description
Dashboard Designer 1.0	June 20th, 2015	First Release of the document
Dashboard Designer 2.0	Feb 18th, 2016	Updated document
Dashboard Designer 2.5	Nov 9th, 2016	Updated document
Dashboard Designer 2.5.3	March 16th, 2017	Updated document
Dashboard Designer 3.0	August 31st, 2017	Updated document
Dashboard Designer 3.2	February 2nd, 2018	Updated document
Dashboard Designer 3.5	April 15th, 2018	Updated document
Dashboard Designer 3.5.1	July 5th, 2018	Updated document
Dashboard Designer 3.6	August 20th, 2018	Updated document
Dashboard Designer 3.7	October 10th, 2018	Updated document
Dashboard Designer 3.8	December 1st, 2018	Updated document
Dashboard Designer 4.0	December 31st, 2018	Updated document
Dashboard Designer 4.2	March 25th , 2019	Updated document
Dashboard Designer 4.3	April 24th, 2019	Updated document

1.2. Overview

This guide covers:

- Explanation and usage of all the menu options
- Connecting to data and creation of dashboards
- Explanation and usage of the dashboard components
- Publishing and sharing of dashboards

1.3. Target Audience

This guide is aimed at users who wish to create and export interactive dashboards by connecting to a wide range of data sources.

1.4. Supported Web Browsers

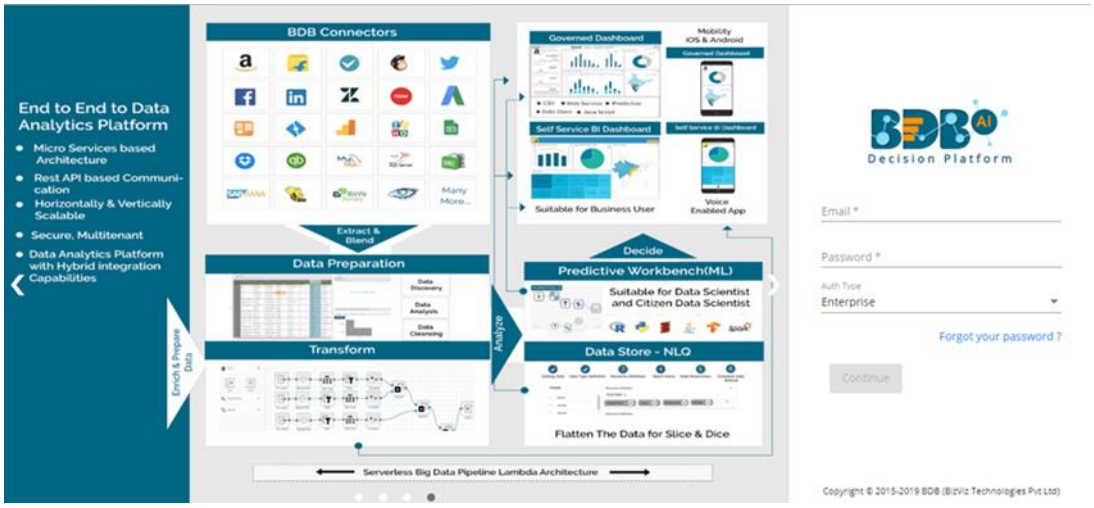
The BDB Platform is a web browser-based application. The users can run the BDB Platform and its various plugins on the below given versions of the browsers:

Mozilla Firefox/ Firefox ESR	**Latest Version**
Microsoft Internet Explorer	11
Microsoft Edge	Latest Version
Apple Safari	10
Google Chrome	Latest Version (recommended web browser)

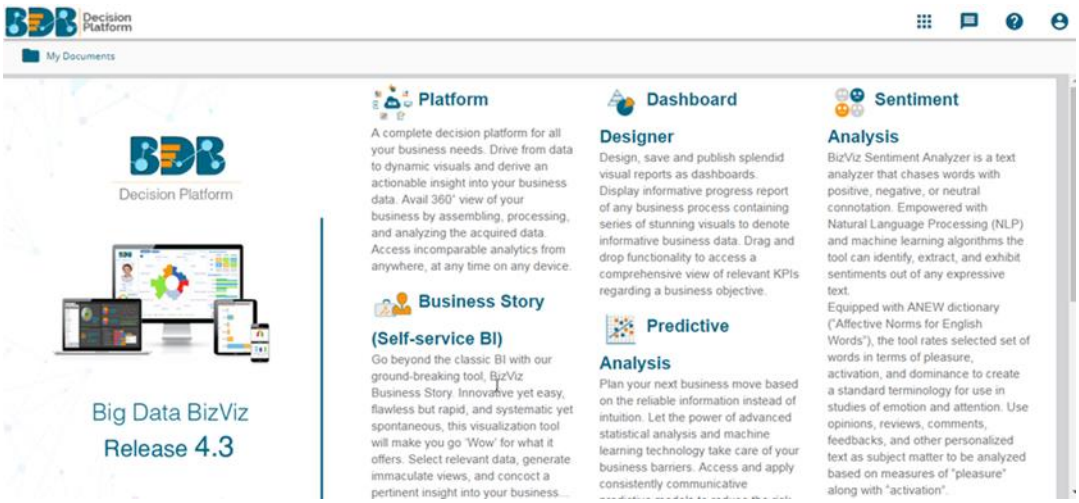
2. Getting Started with BDB Dashboard Designer

This section covers the initial steps to access the BDB Dashboard Designer plugin using the BDB Platform.

i) Open the BDB Enterprise Platform Link: https://app.bdb.ai
ii) Enter your credentials to log in to the platform.
iii) Click the '**Continue**' option.



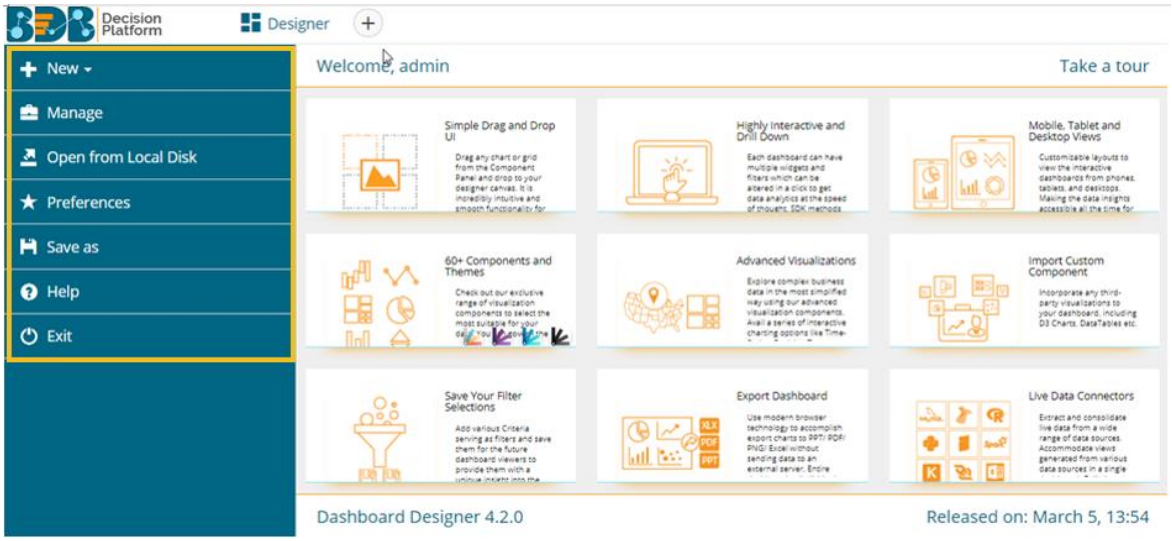
iv) BDB Platform homepage opens.



Note: The above screen opens only for those newly created users who have not yet created any document using the BDB Platform.

v) Click on the '**App**' menu button.
vi) Select the '**Designer**' plugin from the app menu.

vii) A new window opens displaying landing page for the Dashboard Designer.

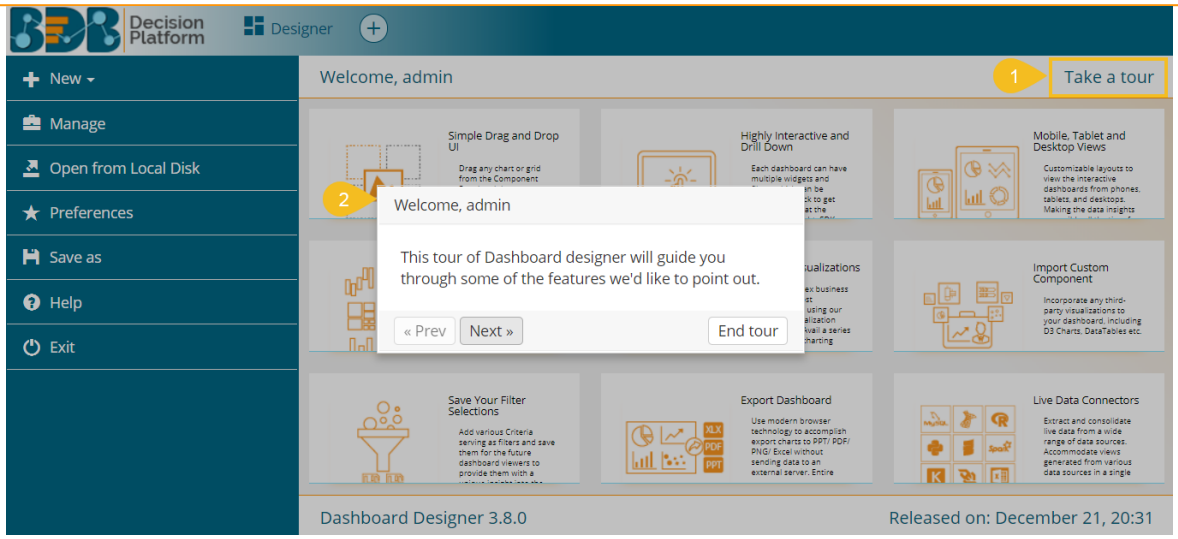


viii) Click the '**Take a tour**' option.

ix) A new window appears initiating the landing page tour.

x) Click the '**Next**' option to move ahead in the guided tour.

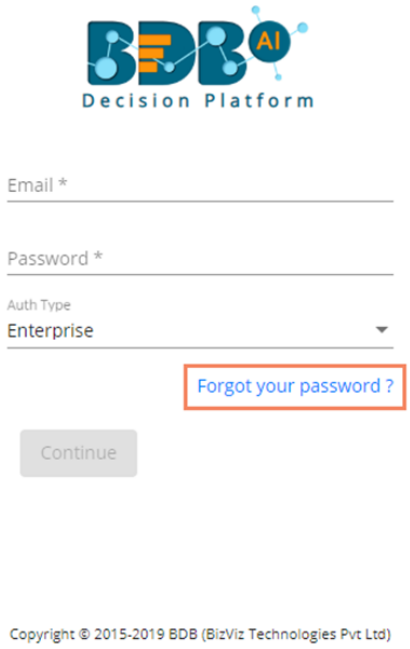
Note: Clicking the '**End tour**' option ends the guided tour for the user.



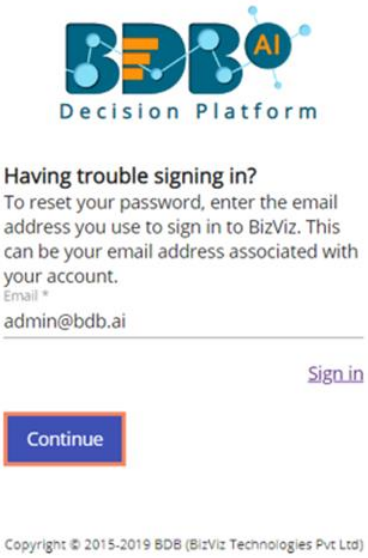
2.1. Forgot Password Option

Users are provided with a choice to change the password on the Login page of the platform.

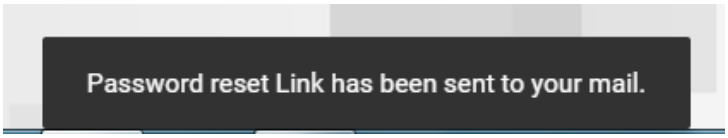
i) Navigate to the Login page.
ii) Click '**Forgot your password?**' option.



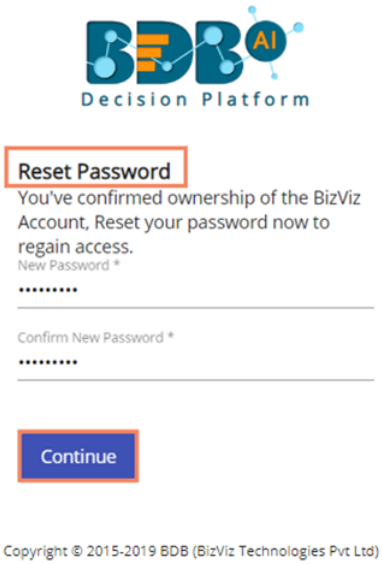
iii) A new window opens.
iv) Provide the email id that is registered with BDB to send the reset password link.
v) Click the '**Continue**' option.



vi) Users may be redirected to select a space in case of multiple spaces under one server link(They need to select a space and click the 'Continue' option once again). If users do not have multiple spaces then, a message appears to notify the user that about the password reset link (The users receive the reset link via their registered email.)



vii) Click the link from your registered email.
viii) Users get redirected to the '**Reset Password**' page to set a new password.
ix) Set a new password.
x) Confirm the newly set password.
xi) Click the '**Continue**' option.

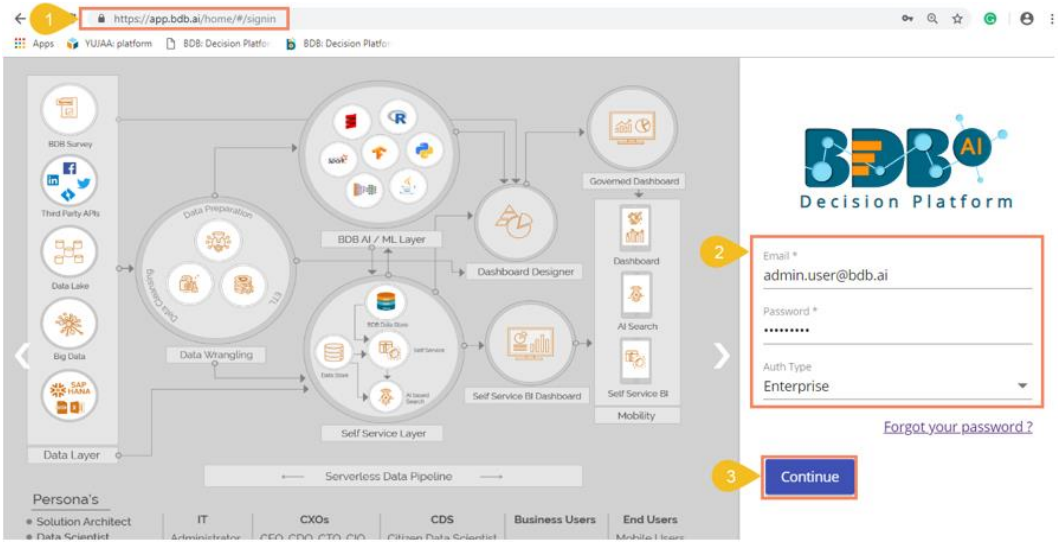


xii) The password for the selected BDB account gets reset.

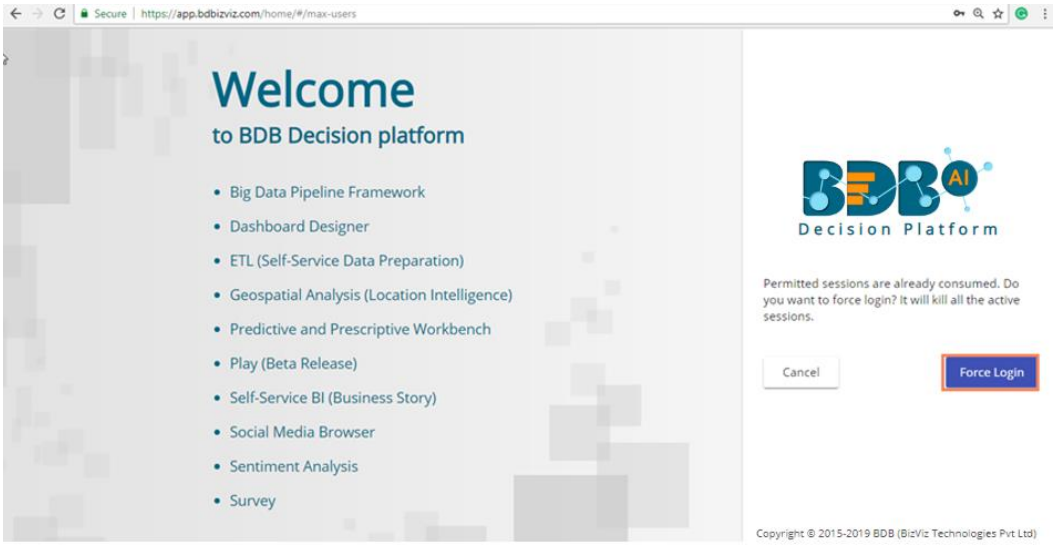
2.2. Force Login

The '**Force Login**' functionality has been introduced to control the number of active sessions up to three. The users can access only 3 sessions at a time when they try to access 4th session a warning message displays to inform that the user has consumed the permitted sessions and a click on the '**Force Login**' would kill all those active sessions.

i) Navigate to the BDB Platform Login page.
ii) Enter the valid credentials to log in.
iii) Click the '**Continue**' option.



iv) The user gets the following message if the user already consumes the permitted active sessions (3 sessions at a time).
v) Click the '**Force Login**' option.

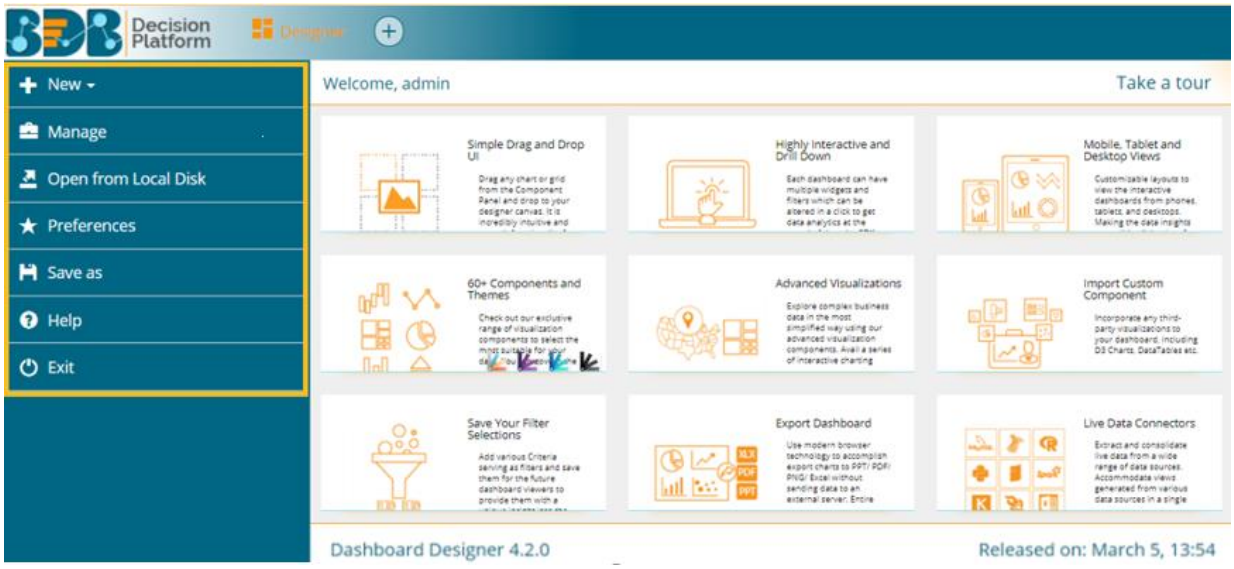


vi) A warning message appears that the currently active sessions get killed for the user and the user has redirected to the log in a page of the BDB Platform.

Note: The user can successfully login to the BDB Platform after selecting the '**Force Login'** option to log in the platform.

3. Dashboard Designer Homepage

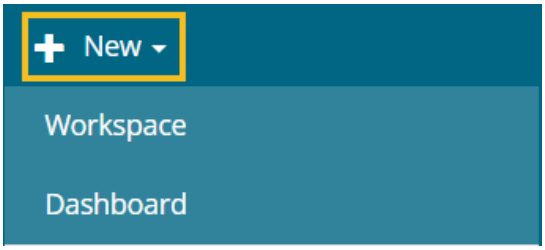
The Designer homepage displays a list of tasks in the left panel that users can perform on a dashboard. The users can add a new Dashboard/Workspace, Manage the existing Dashboard(s)/Workspace(s), set preferences for a dashboard, save the dashboard with a different name or open it from the local disk if saved there and exit the Designer plugin all through this panel.



3.1. New

This option directs users to create a new workspace or dashboard.

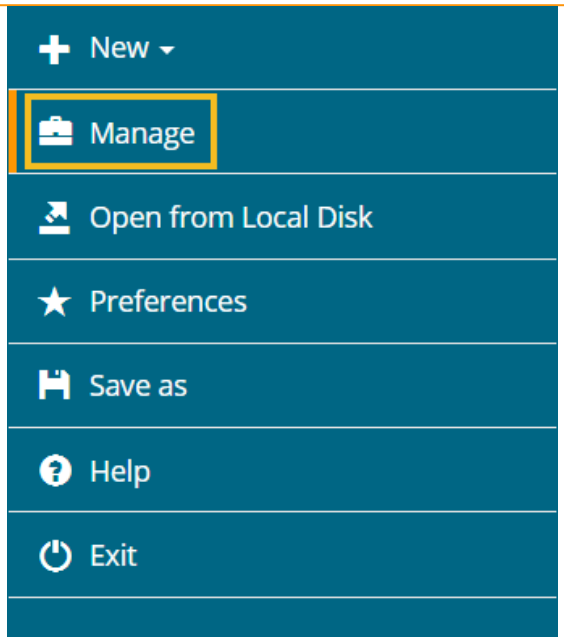
i) Navigate to the Designer homepage.
ii) Click the '**New**' drop-down menu.
iii) Users will be provided with two options:



a. **Workspace**: Clicking this option redirect the users to create a new workspace/place holder for the dashboard.
b. **Dashboard**: By clicking this option the users get redirected on the Designer Canvass to create a new dashboard.

3.2. Manage

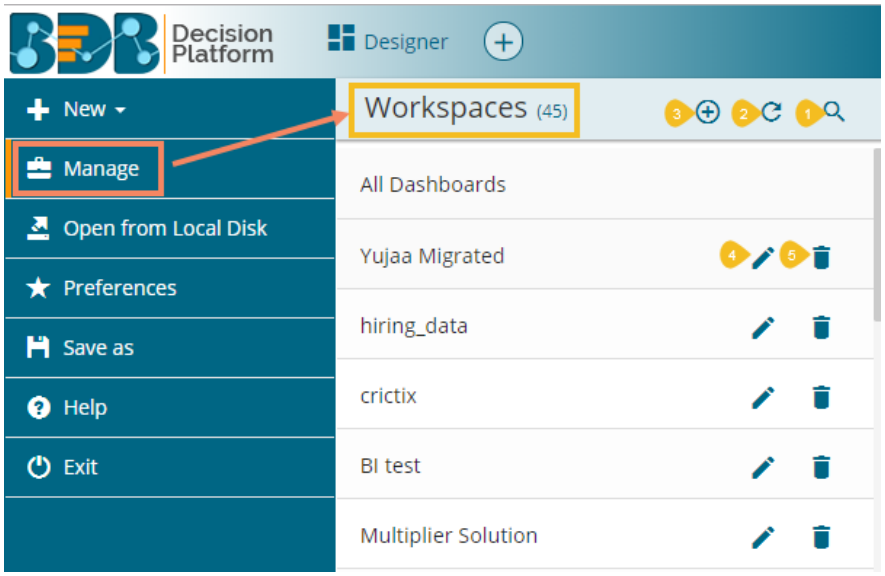
i) Navigate to the Designer home page.
ii) Click the '**Manage**' option.



iii) Users will be directed to manage the following tasks for a Workspace or Dashboard:

a. Tasks for a Workspace

i. Search a Workspace
ii. Add a new Workspace
iii. Reload all the Workspaces
iv. Rename the workspace
v. Delete the Workspace (Trash Workspace)

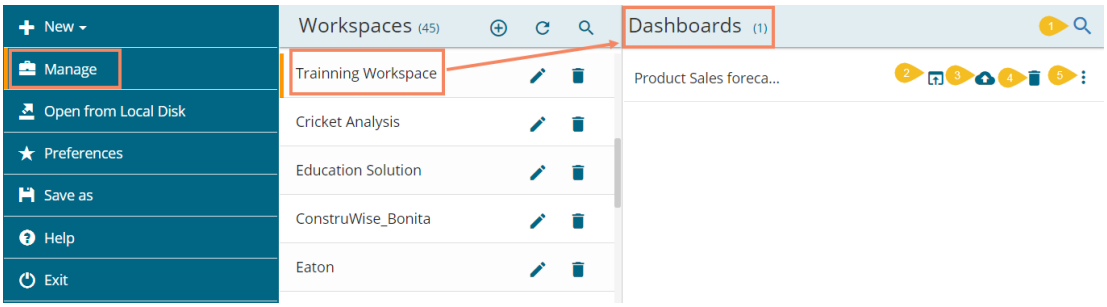


b. Tasks for a Dashboard

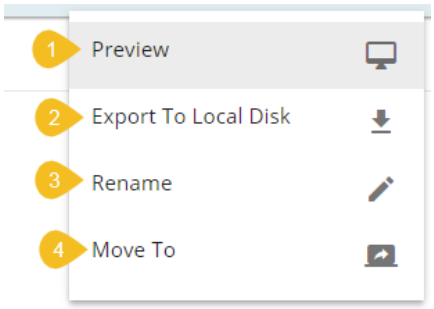
To access the options, the users need to select a dashboard from an existing workspace as displayed in the following image:

i. Search a Dashboard
ii. Open the Dashboard in Designer to Edit or modify
iii. Publish the Dashboard to the portal
iv. Delete the Dashboard

v. Actions- Apply the various actions on a dashboard



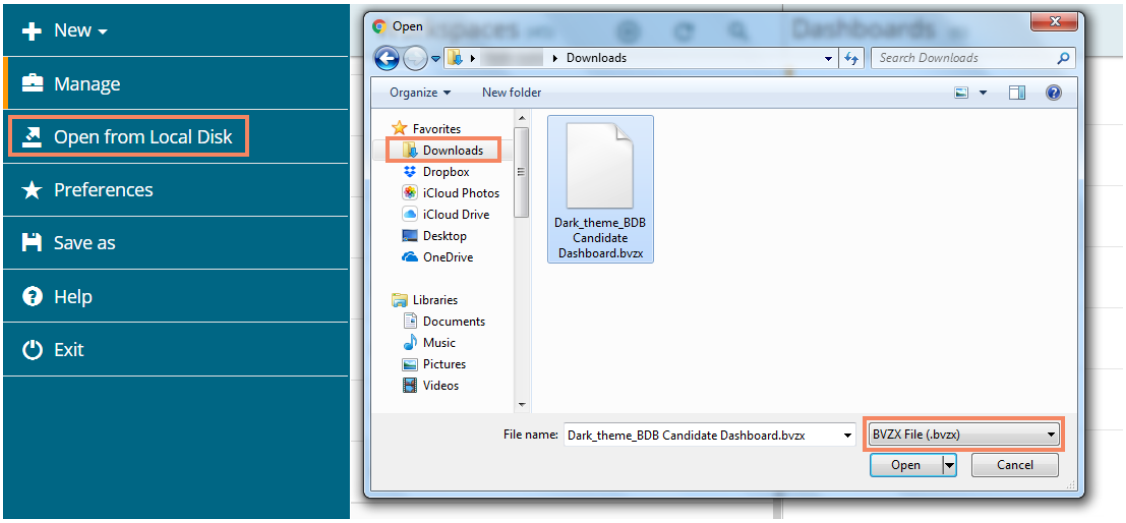
c. Users get the following options while clicking the Action icon provided for a Dashboard.
   i. Preview the dashboard
   ii. Export to Local Disk
   iii. Rename the Dashboard
   iv. Move the Dashboard from one Workspace to another Workspace



Note: The 'Manage' options are explained at detailed under Section 5 (for Workspace) and 12 (for Dashboard) of this document.

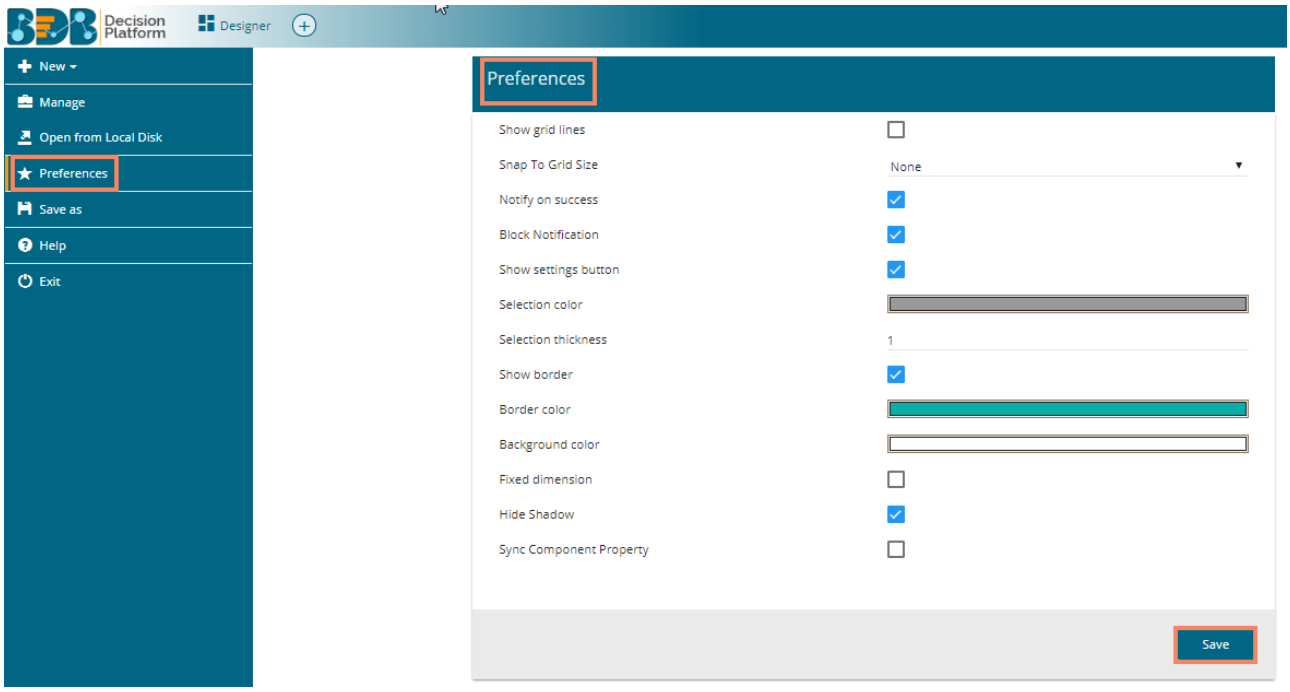
3.3. Open from Local Disk

i) Navigate to the Designer homepage.
ii) Click '**Open from Local Disk**' from the given options.
iii) Users will be directed to open the downloaded files (.bvzx) from the local disk.



3.4. Preferences

i) Navigate to the Designer homepage.
ii) Click the '**Preferences**' option from the left panel.
iii) Users will be directed to set preferences for dashboard canvass.
iv) Set the desired preferences and click '**Save**' option.



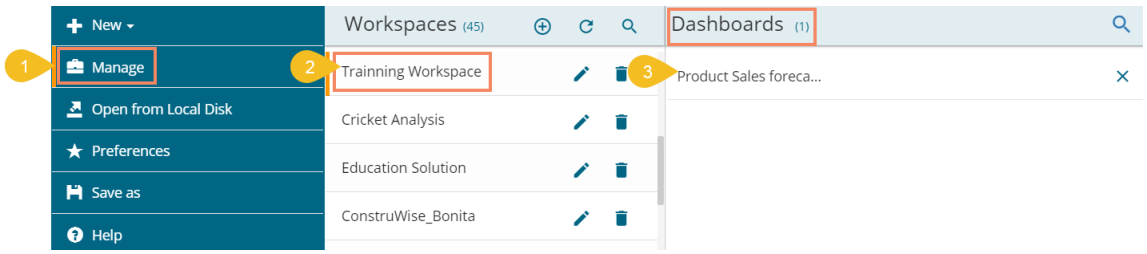
v) The selected preferences will be applied on the dashboard canvass.
vi) The available preferences for a dashboard are as described below:

Property name	Description
Show Grid Lines	Enable this option to display grid lines in the designer area
Snap to Grid Size	Select an option to display the grid size (None/5/10/15)
Notify on Success	Enable this option to get a notification on success
Block Notification	Enable this option to block the notification message
Show Settings Button	Enable this option to display toolbar when any component is selected
Selection Color	Select a color to display when any component when dragged to the canvass
Selection Thickness	Set (increase/decrease) the thickness of the component border
Show Border	Enable this option to display a border on the dashboard
Border Color	Select a border color to display in the Dashboard
Background color	Select a color to display in the dashboard background
Fixed dimension	Enable this option to set fixed height & width of the dashboard
Hide Shadow	Enable this option to hide the shadow of the components
Sync Component Property	Enable this option to synchronize the component property

3.5. Save As

i) Navigate to the Designer homepage.

ii) Open a new dashboard using the 'Manage' option or select an existing dashboard from the list of available dashboards.



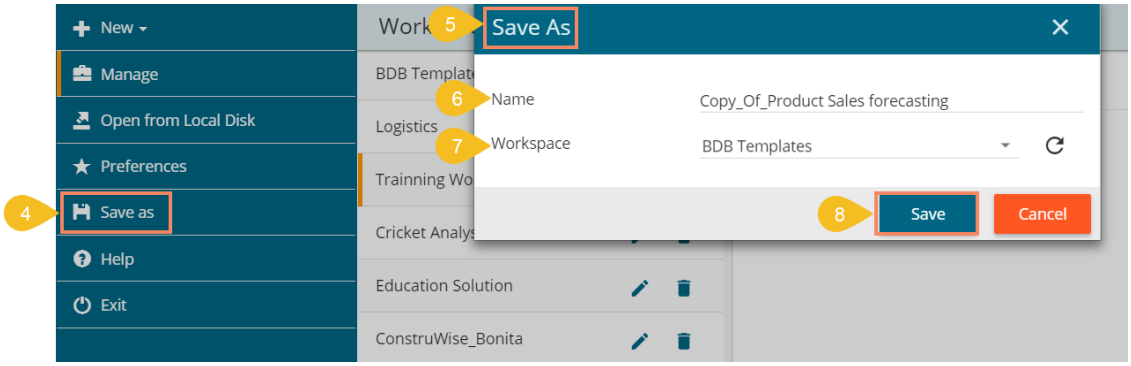
iii) Click the '**Save As**' option from the left panel.

iv) A pop-up window will appear to confirm the action.

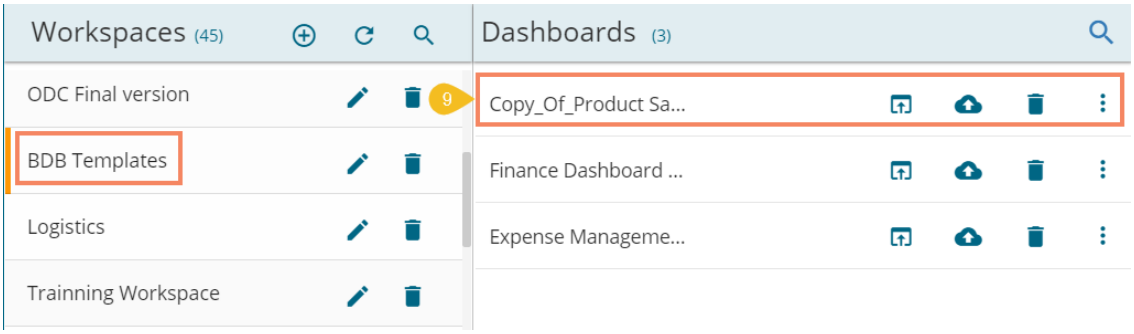
a. Original dashboard name will appear with "Copy_Of" prefix (the users can edit the name as per their wish).

b. Select a workspace from the drop-down menu.

c. Click the '**Save**' option.



v) A copy of the selected dashboard will be saved in the chosen workspace.

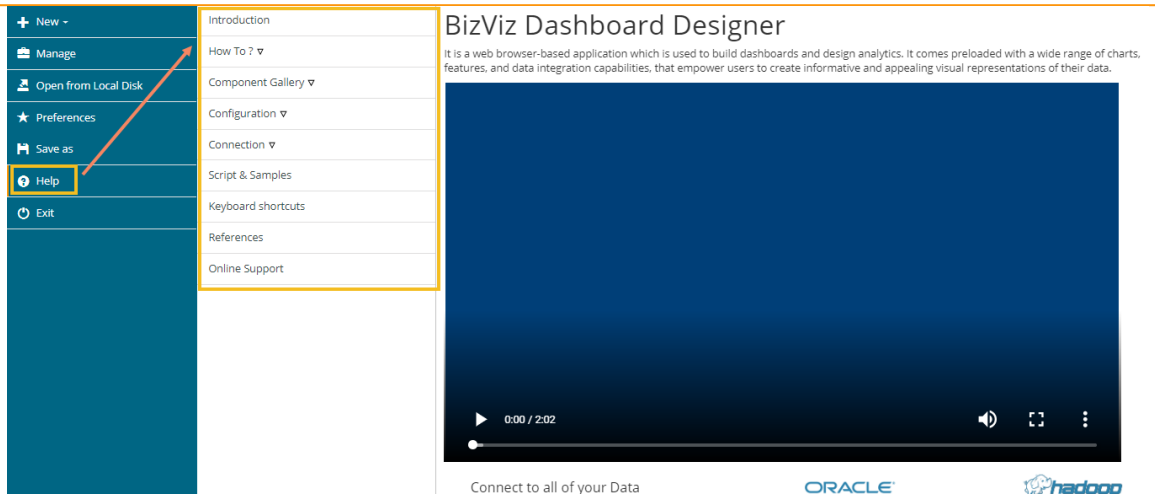


3.6. Help

i) Navigate to the Designer homepage.

ii) Click the '**Help**' option.

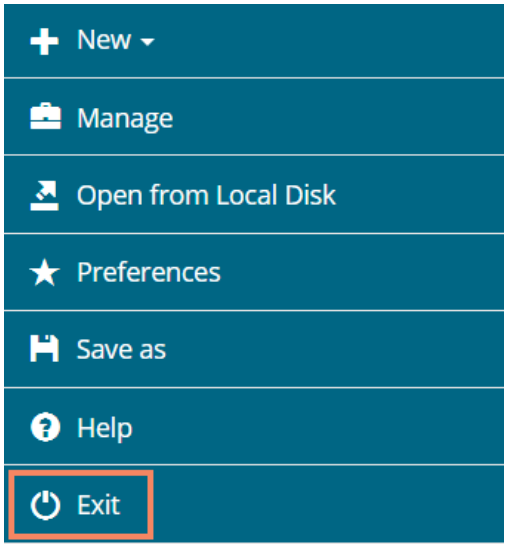
iii) The Help Content to understand the BDB Dashboard Designer plugin appears.



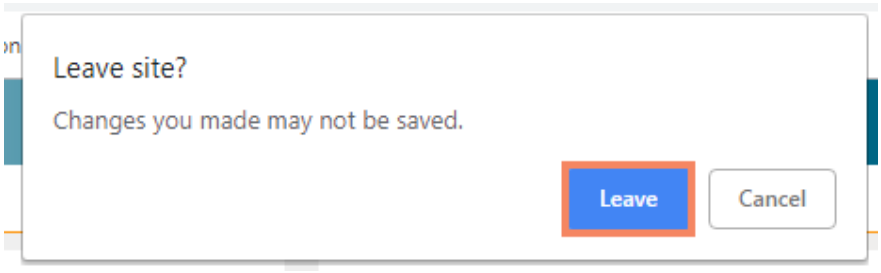
3.7. Exit

i) Navigate to the Designer homepage.

ii) Click the '**Exit**' option.



iii) If work is not saved, users will get an option while closing to leave or cancel the action of exit. Select '**Cancel**' if required to save the work, else choose '**Leave**' to close the designer.



Or

Users will be directed to the BizViz Platform homepage.

Note: Users can also click the **'Close'** button (the 'X' on the right edge) of the Dashboard Designer tab to leave/close designer tab.

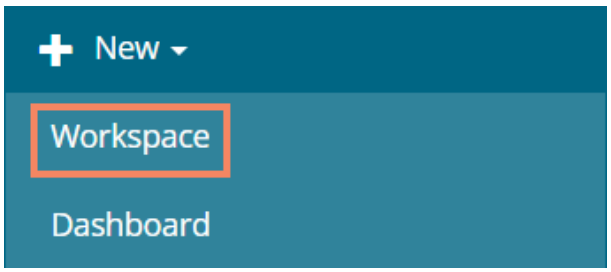
Users will be directed to the BizViz Platform home page after closing the designer application.

4. Workspace

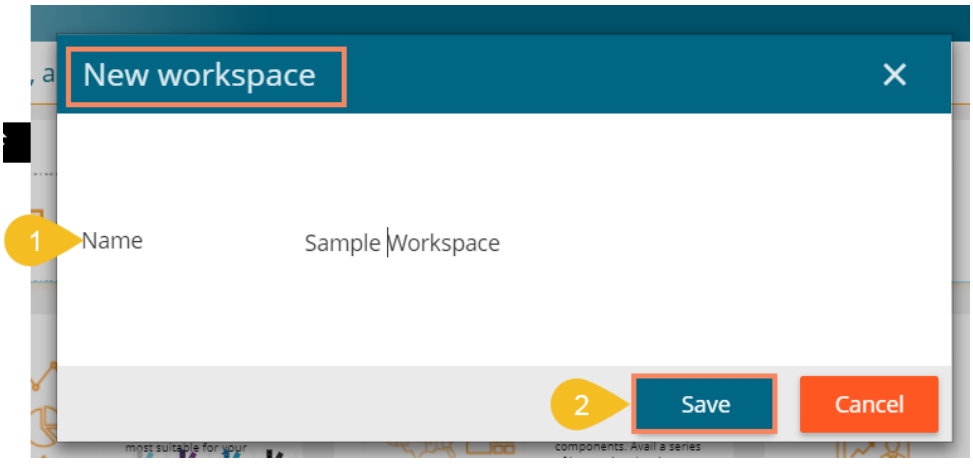
4.1. Creating a Workspace

A Workspace is the place holder where users can save multiple dashboards.

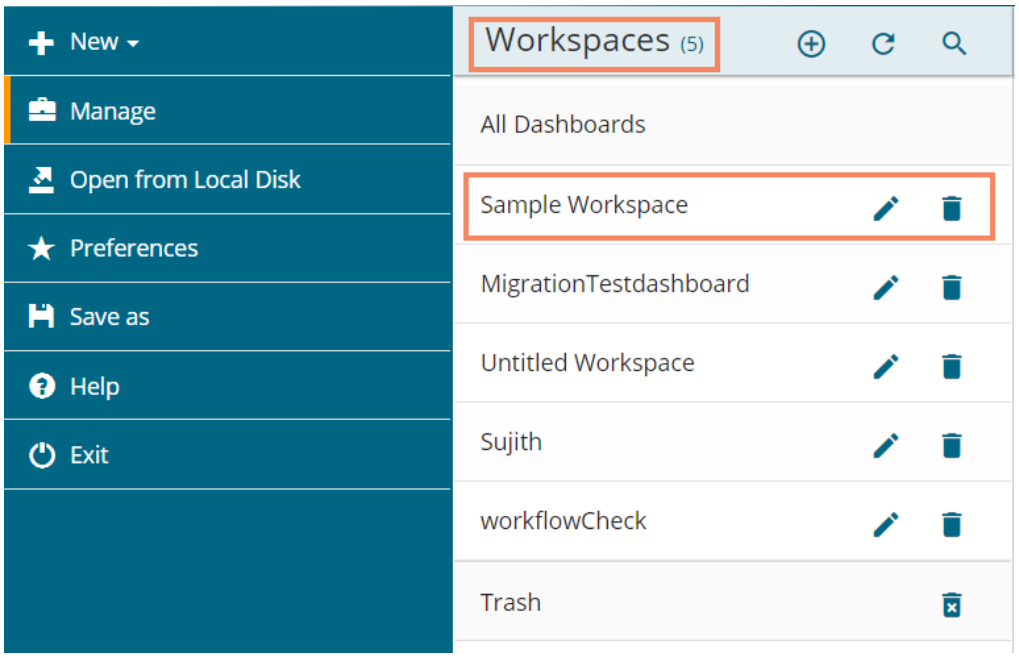
i) Navigate to the Dashboard Designer homepage.
ii) Click '**New**' or Click the '**Add**' option
iii) Click '**Workspace**' from the context menu.



iv) A pop-up window will appear.
   a. **Workspace Name:** Enter a title for the Workspace in the given field.
   b. Click the '**Save**' option.

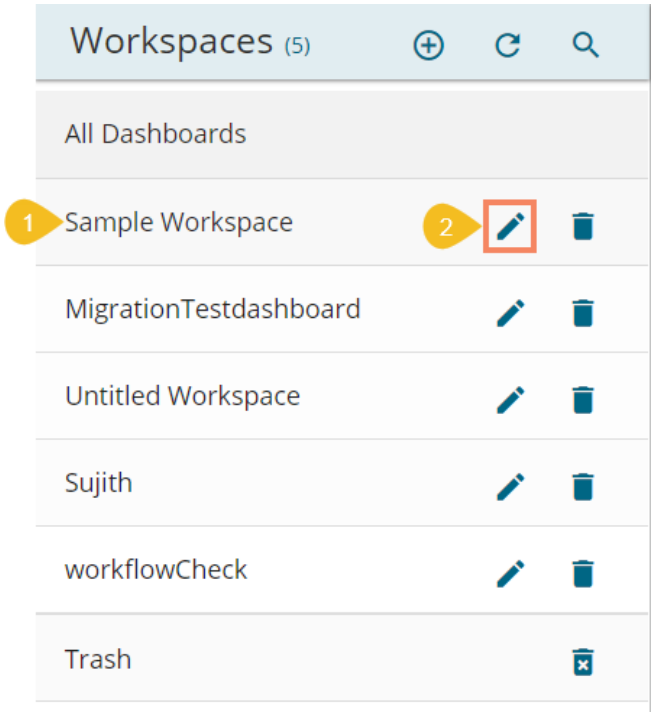


v) The newly created workspace gets saved under the list of the existing **Workspaces**.

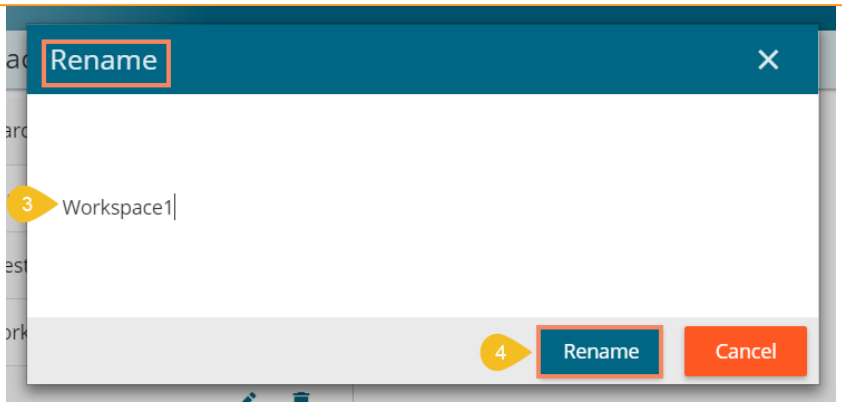


4.2. Renaming a Workspace

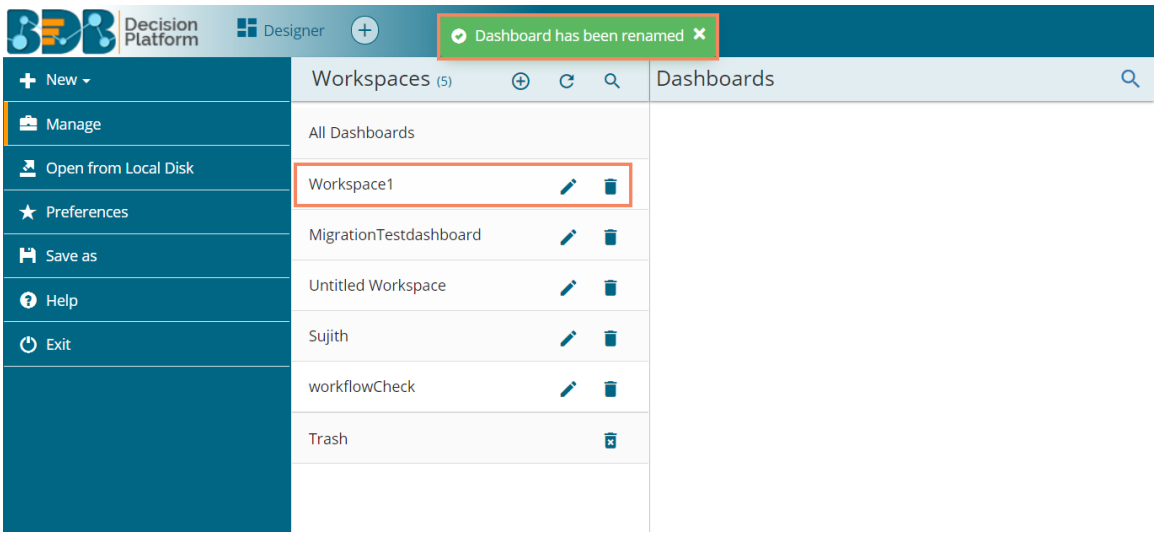
i) Select a workspace from the '**Workspaces**' list.
ii) Click the '**Rename**' icon.



iii) The Rename window appears to assure the action.
   a. Provide a new name for the dashboard.
   b. Click '**Rename**' to save the new name.

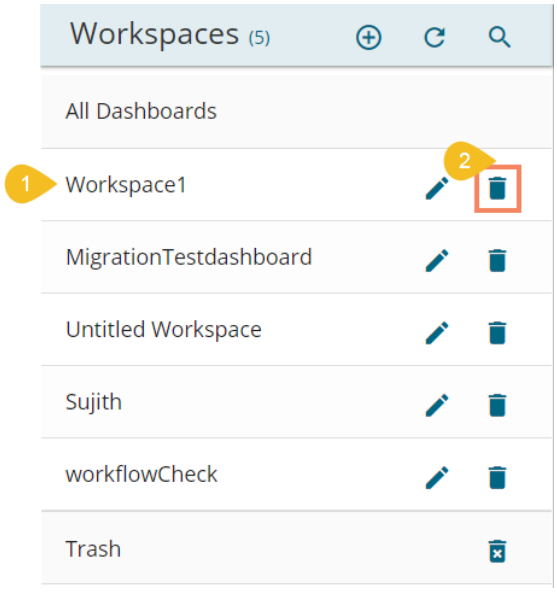


iv) A message appears to assure the success of the renaming action.
v) The selected workspace will be saved with the new name.

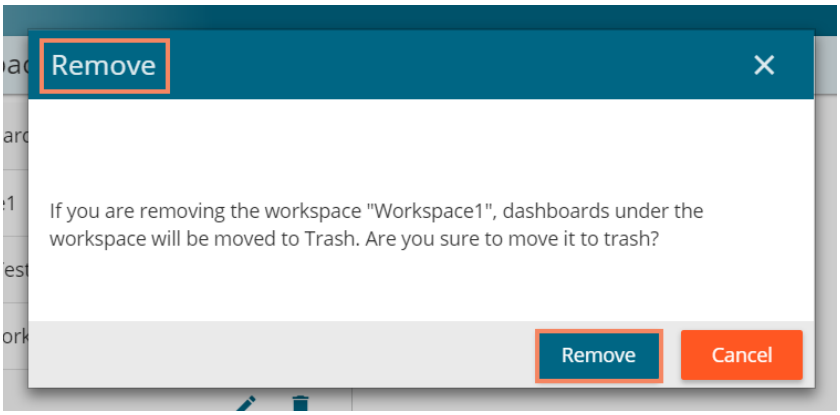


4.3. Deleting a Workspace

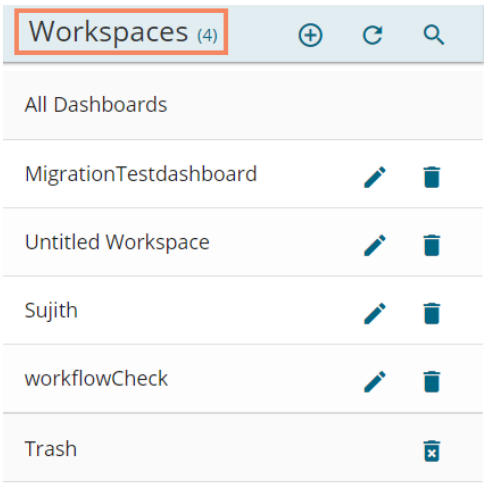
i) Select a workspace from the '**Workspaces**' list.
ii) Click the '**Remove**' icon.



iii) A window will pop-up to confirm the deletion.
iv) Click the '**Remove**' option.

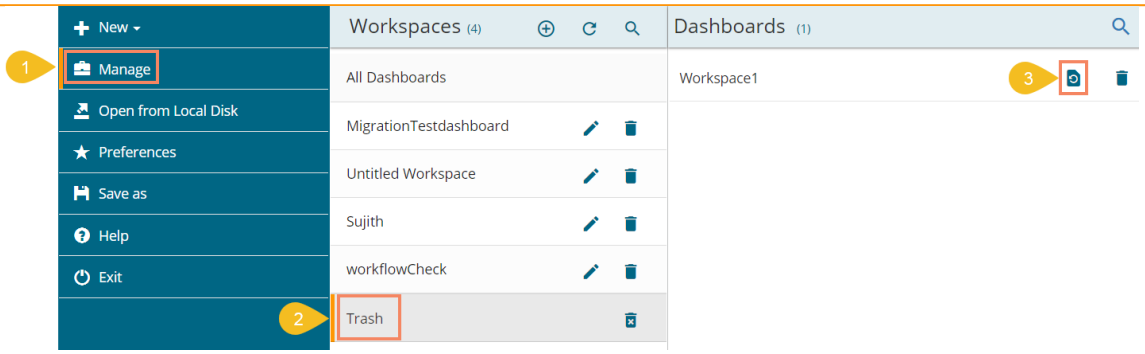


v) The selected workspace will be removed from the list and added to the Trash Workspace.



Note:

a. Removing a workspace will also move all the dashboards saved under it into the trash.
b. Click the '**Reload Workspaces**' icon provided next to the Workspaces list to load all the workspaces again.
c. Click the '**Restore**' icon from the '**Trash**' workspace to restore deleted workspaces.
   i. Click the '**Manage**' option.
   ii. Navigate to the '**Trash**' workspace created under the list of all the workspaces.
   iii. Select a deleted workspace that you want to restore and click the '**Restore**' icon.



d. Click the '**Remove Permanently**' icon from the Trash workspace to delete a workspace or dashboard permanently.

5. Designer Canvas

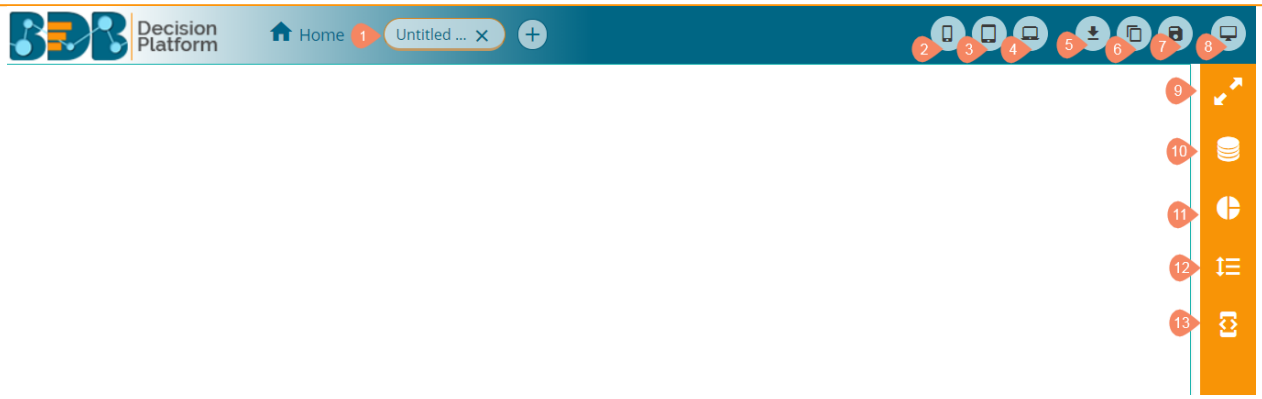
Dashboard Designer space can be understood as a folder that contains Data Source connections, Components, Dashboard Objects, Component Attributes.

Click the '**New**' drop-down icon on the homepage and select the '**Dashboard**' option to access the Designer space/Canvas.

A wide range of filters, charts, and Data grids are available on the Designer space to create a dashboard.

Refer to the following image to understand the various components provided on the Designer Canvas:

1. **Tab:** Place where dashboard design takes place. Drag and drop charts and components here to create dashboards.
2. **Mobile** : Displays Dashboard screen like Mobile device
3. **Tablet** : Displays Dashboard screen like Tablet
4. **Large Screen** : Displays Dashboard screen like Desktop
5. **Save to Local Disk** : Saves the created dashboards to your local disk.
6. **Save to Another Workspace (Save As)** : Saves a copy of the original dashboard to another workspace.
7. **Save (Dashboard)** : Saves the created dashboards in a workspace.
8. **Preview** : Displays the preview mode of the dashboard.
9. **Full Screen** : Maximizes the dashboard for a better view.
10. **Data Connectors** : Connects to a wide range of data sources.
11. **Component Library** : Includes a compelling range of charts, filters, and data grids.
12. **Manage Dashboard Components** : Option used to lock, hide, and order layout of the components on the dashboard.
13. **Component Variables and Script** : Option used to define component scripts.



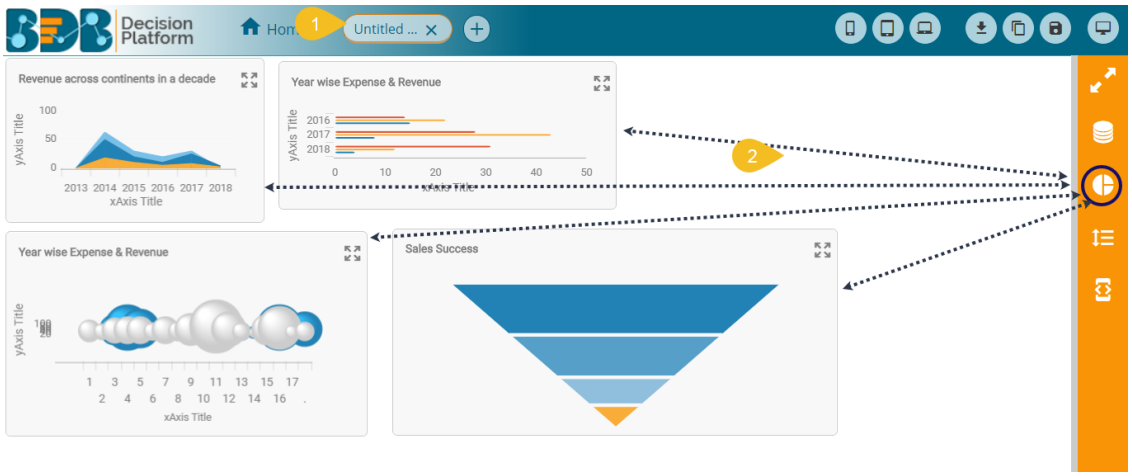
Note:

a. Users will be redirected to the Designer homepage by clicking the '**Home**' option.
b. Using the '**Save As'** option, users can also save a dashboard in the same workspace with a different name.

5.1. Component Group

Users can create component groups and manage the created groups by using the '**Manage Group**' option from the Designer Canvas.

i) Navigate to the Designer Canvas.
ii) Select and drag multiple components to the canvas using the '**Component Library**' icon.

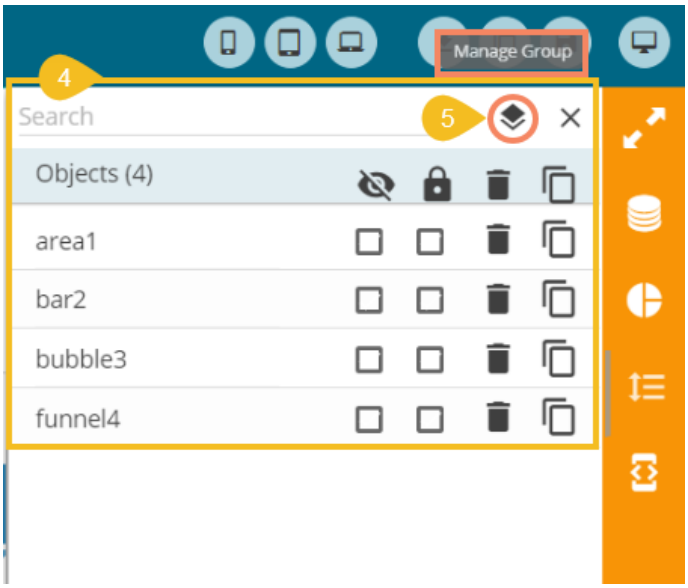


iii) Use the right click on the canvas to avail the '**Dashboard Objects'** option.

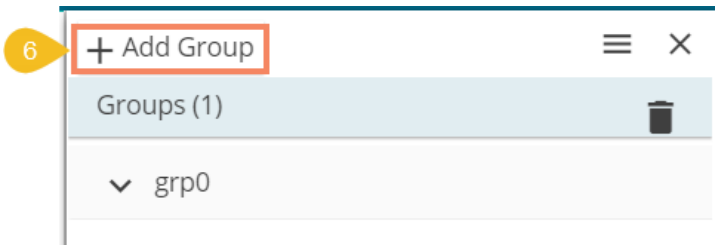
or

Click the '**Manage Dashboard Components'** icon from the canvas menu bar.

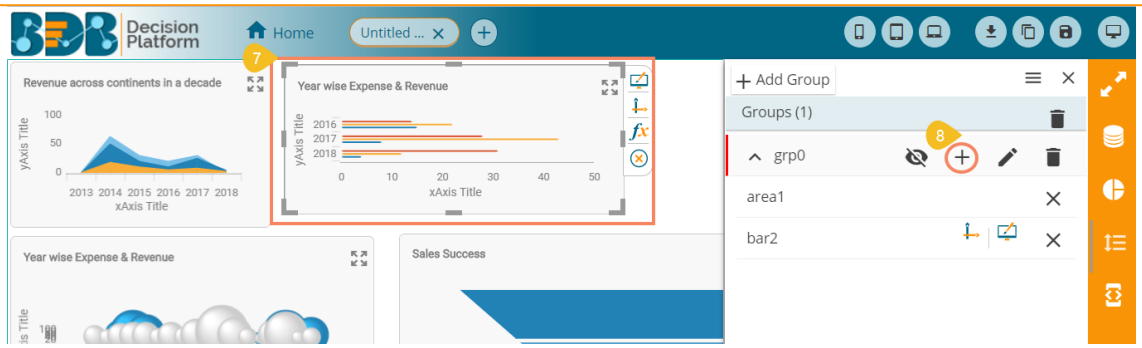
iv) A new panel opens with the dragged components names.
v) Select '**Manage Group**' icon from the panel.



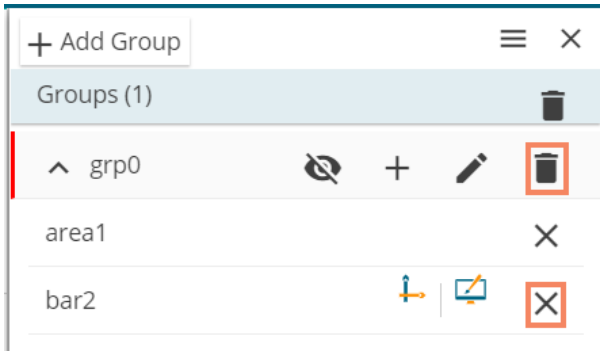
vi) A new window will pop-up to add the group.
vii) Click the '**Add Group**' option to add a new group



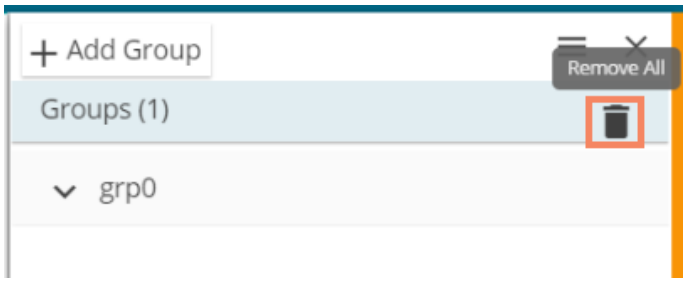
viii) Select the dragged component that you wish to add to the created group
ix) Click the '**Add Selected Component**' + icon to add the selected components to the newly created group



x) To Delete: Click the '**Delete**' option provided next to the group name to delete the group. Click the '**Close**' option provided next to the component to remove the component from the group.



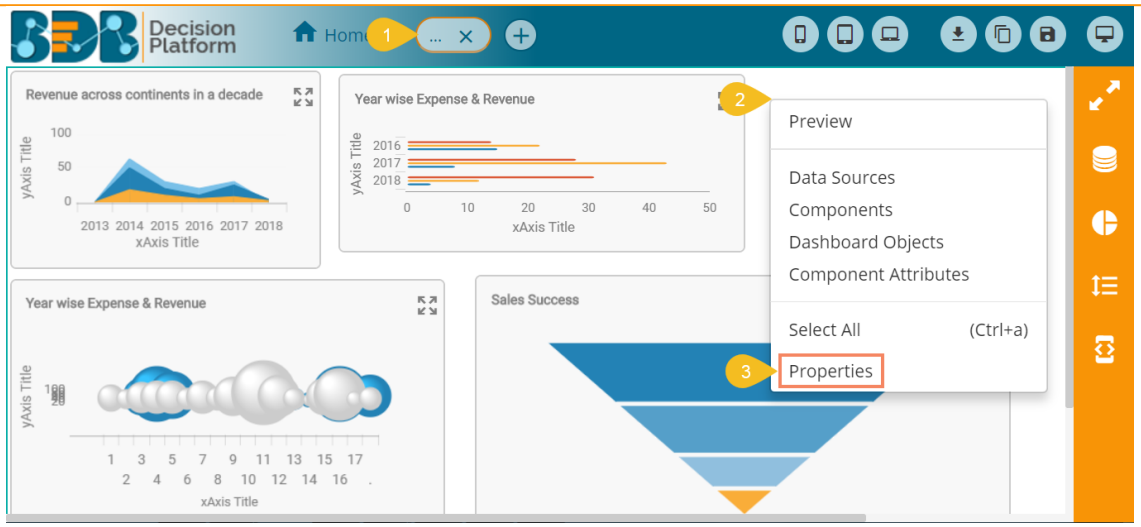
Note: Click the '**Remove All**' icon to delete all the created/added groups.



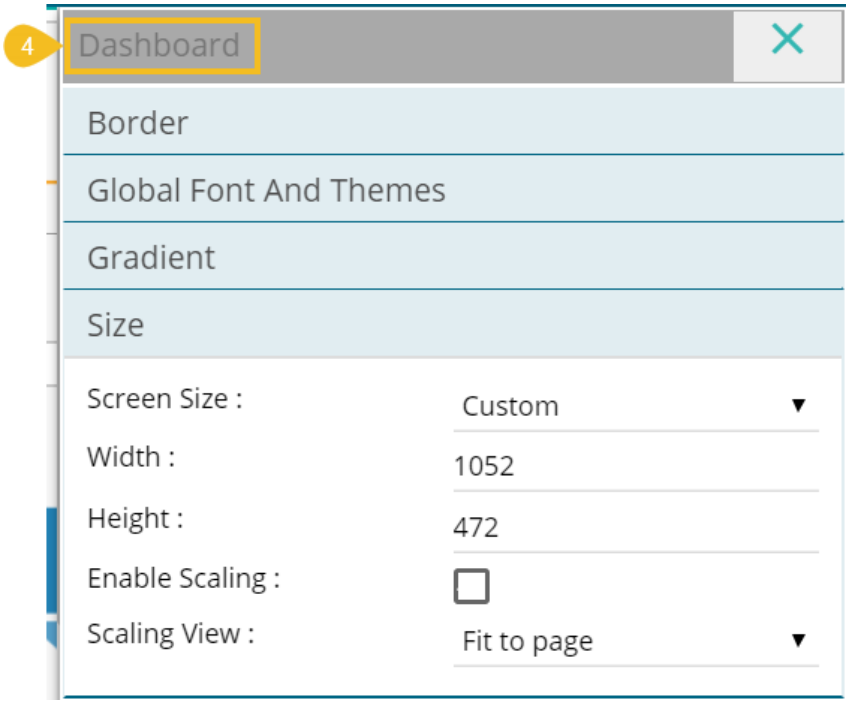
5.2. Canvas Properties

The Designer canvass is provided with specific properties.

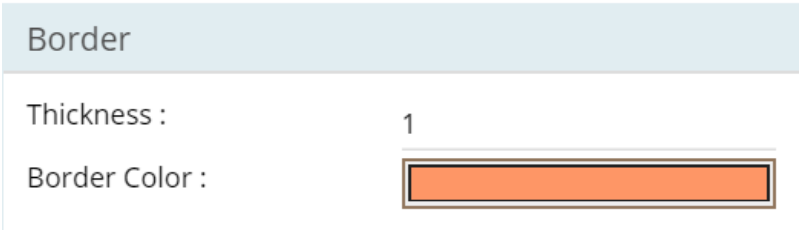
i) Navigate to the Designer canvas.
ii) Use the Right-click anywhere on the canvas.
iii) Select '**Properties**' option from the context menu.



iv) The following Canvas properties will be displayed:

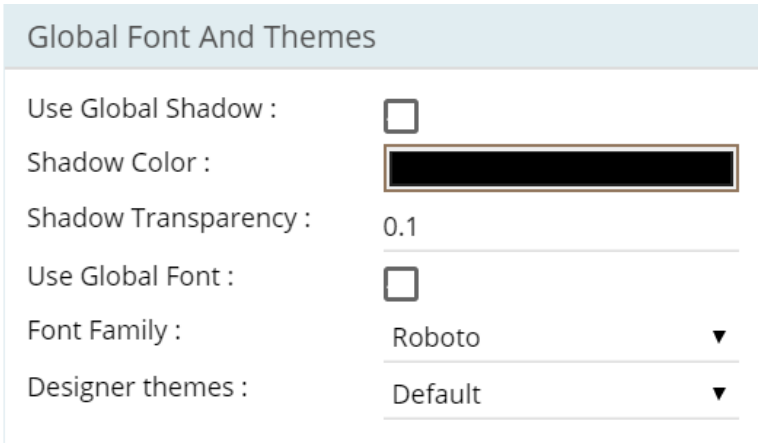


a. Border



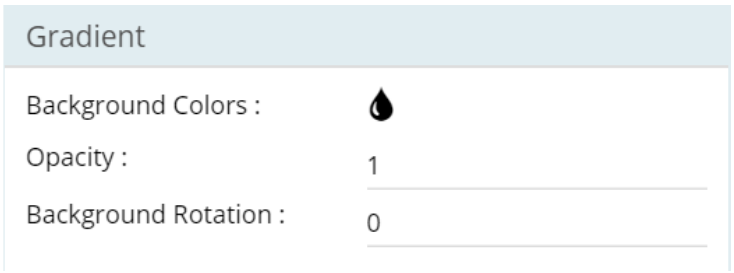
Parameter Name	Description
Thickness	Set border thickness.
Border Color	Select a border color from the menu.

b. Global Font and Themes



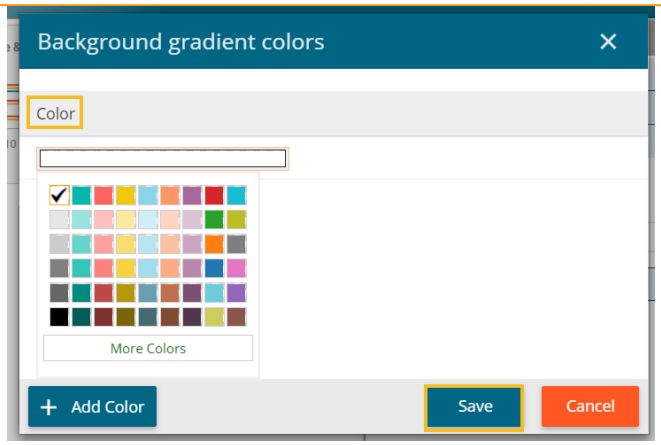
Parameter Name	Description
Use Global Shadow	Enable this option to display global shadow
Shadow Color	Select a color from using the menu
Shadow Transparency	Set the transparency for the shadow
Use Global Font	Enable this option to use the global font.
Font Family	Select a font type from the drop-down menu.
Designer Themes	Select a theme from the drop-down menu.

c. Gradient

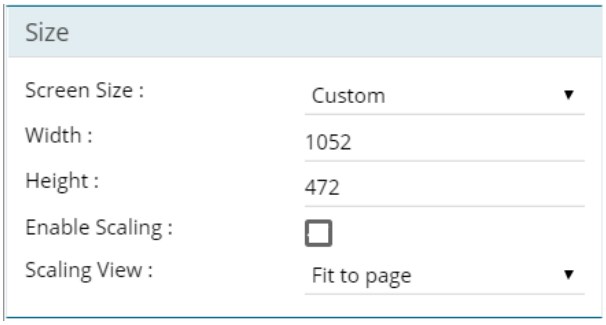


Parameter Name	Description
Background Colors	Users will be directed to select a background color.
Opacity	Set background color opacity.
Background Rotation	Set the value to rotate background color accordingly

Note: By clicking the '**Background Colors**' icon, a new window opens with a menu to select color for the Background gradient colors. The users can select a color using the menu and click the 'Save' option to apply the selected background gradient color.



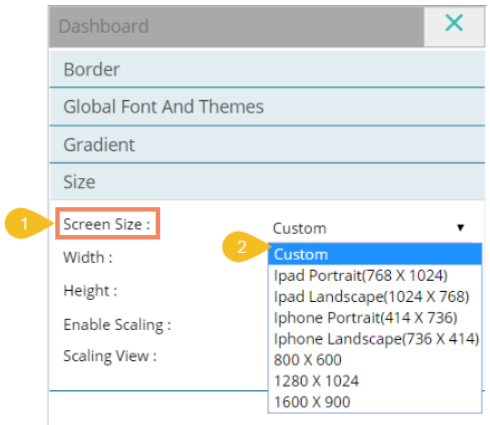
d. Size



Parameter Name	Description
Screen Size	Select an option from the drop-down menu.
Width	Increase/decrease width of the dashboard.
Height	Increase/decrease height of dashboard.
Enable Scaling	Enable this option to display scaling.
Scaling View	Select an option from the drop-down menu (Fit to page/Fit to width/Fit to height/Proportional)

Note: Dashboards screen size can be scaled based on display devices (E.g., Mobile, iPad, and PC).

- Right click on the Dashboard Designer canvas.
- Select Properties.
- Select the desired '**Screen Size**' using the Size properties option.



5.3. Context Menu Properties

This section describes properties applied to multiple components when dragged into the designer canvass and selected.

Steps to Access the Context Menu Properties:

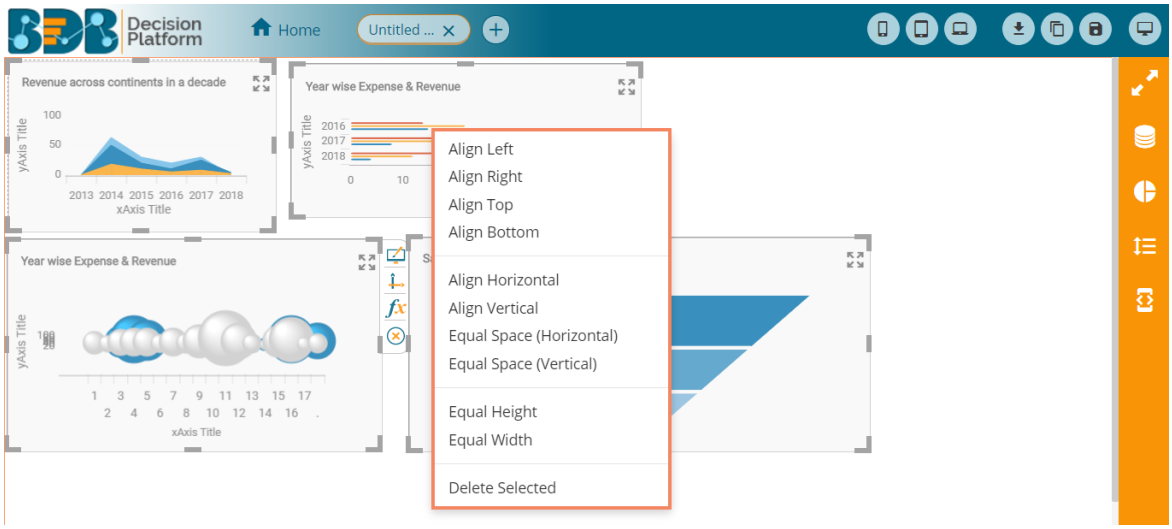
i) Drag multiple components into the designer canvas (At least three components to avail all the properties).

ii) Select multiple components from the canvas. (At least three)

iii) Use right-click to open the context menu.

iv) The following properties will be listed in the context menu:

a. Align Left: All the selected components will be aligned left.
b. Align Right: All the selected components will be aligned right.
c. Align Top: All the selected components will be top aligned.
d. Align Bottom: All the selected components will be bottom aligned.
e. Align Horizontal: All the selected components will be aligned horizontally.
f. Align Vertical: All the selected components will be aligned vertically.
g. Equal Space (Horizontal): All the selected components will have equal space horizontally.
h. Equal Space (Vertical): All the selected components will have equal space vertically.
i. Equal Height: All the selected components will have equal height.
j. Equal Width: All the selected components will have equal width.
k. Delete Selected: To delete the selected components.



6. Connecting to a Data Source

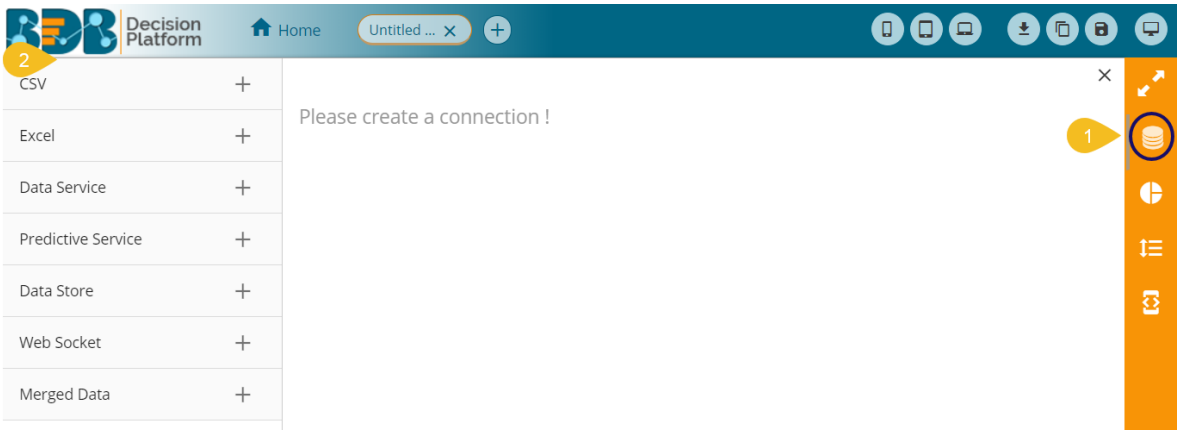
This section explains a step-by-step process to create a connection by using the available data connectors.

i) Click the '**Data Connectors**' icon using the Designer canvas.

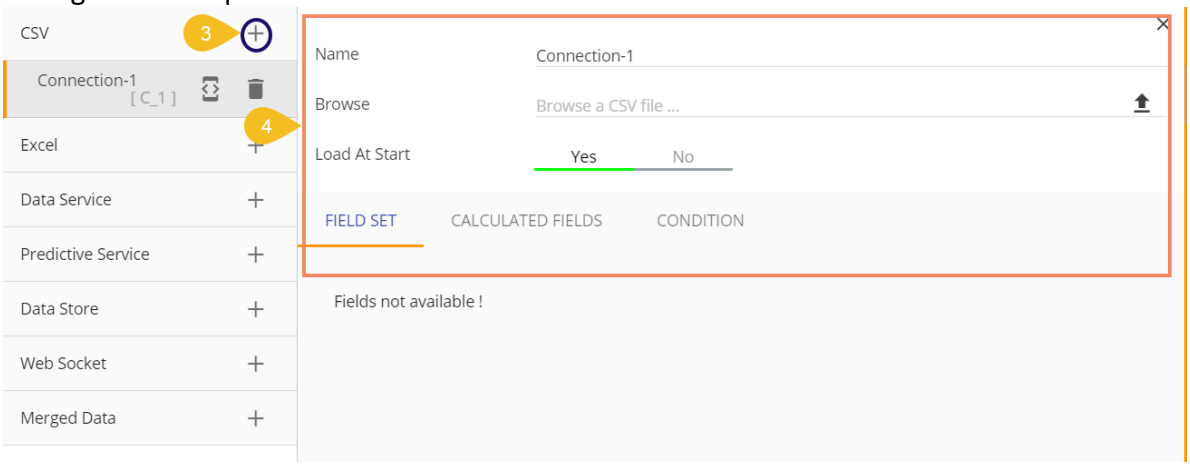
ii) A new screen opens displaying the following data connection options:

a. CSV

b. Excel
c. Web Service
d. Predictive Service
e. Data Store
f. Websocket
g. Merged Data



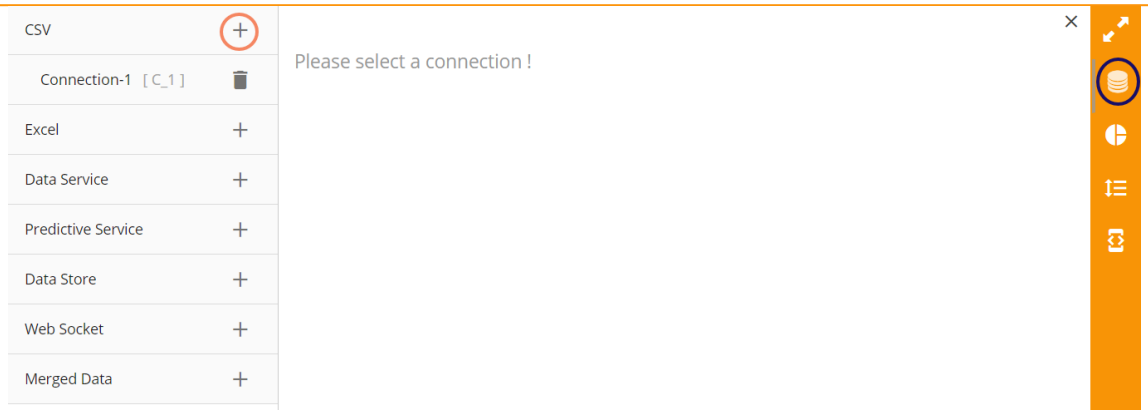
iii) Select a data connection type and click the '**Create New Connection**' icon.
iv) Configure the required details to create a data connection.



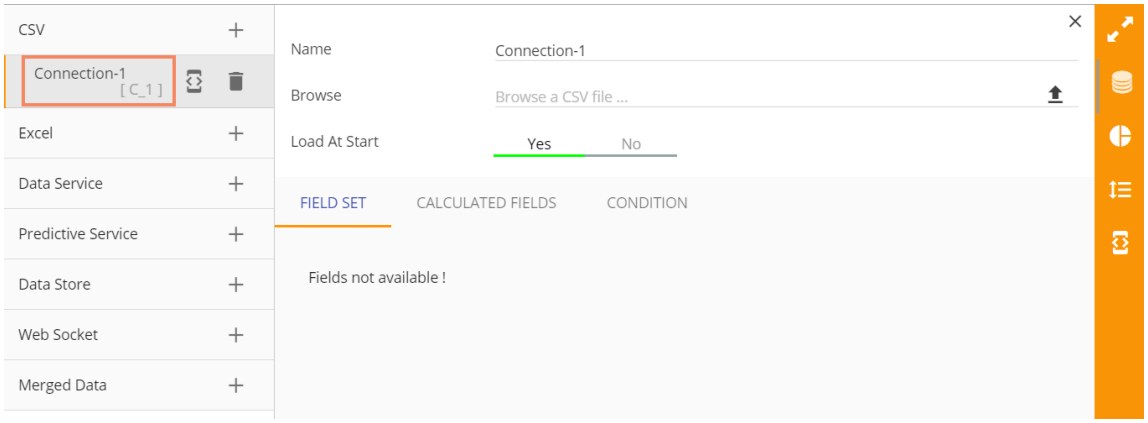
6.1. Connecting to a CSV File

Click the **'Data source'** icon provided to the right side of the canvas, and view the database connectivity options.

i) Click the '**Data Connectors**' icon to display all the available data connector types.
ii) Click the '**Create New Connection**' icon + provided next to the '**CSV**' option.
iii) A new connection gets added under the CSV connection type.



iv) Click the connection to display the connection specific details.



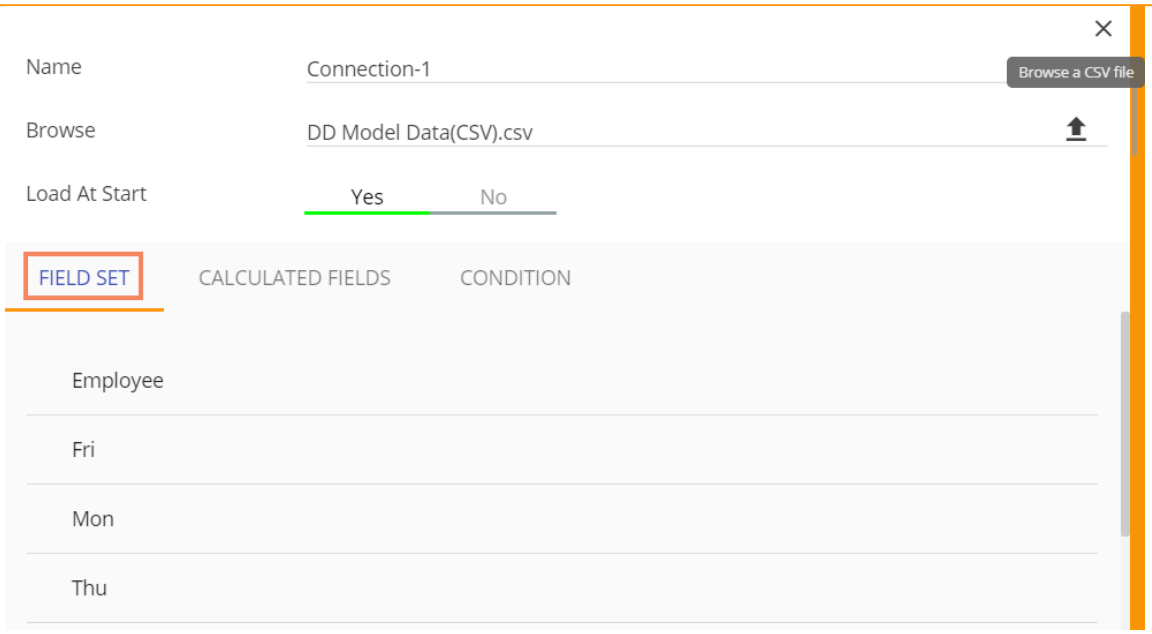
v) Configure the following information:

a. **Name:** Name the connection.

b. **Browse:** Click the '**Browse**' icon to browse a CSV file.

c. **Load at Start:** Enable this option to get the updated data from the data source before loading into charts.

vi) The '**FIELD SET**' tab displays all the fields after establishing the data connection.

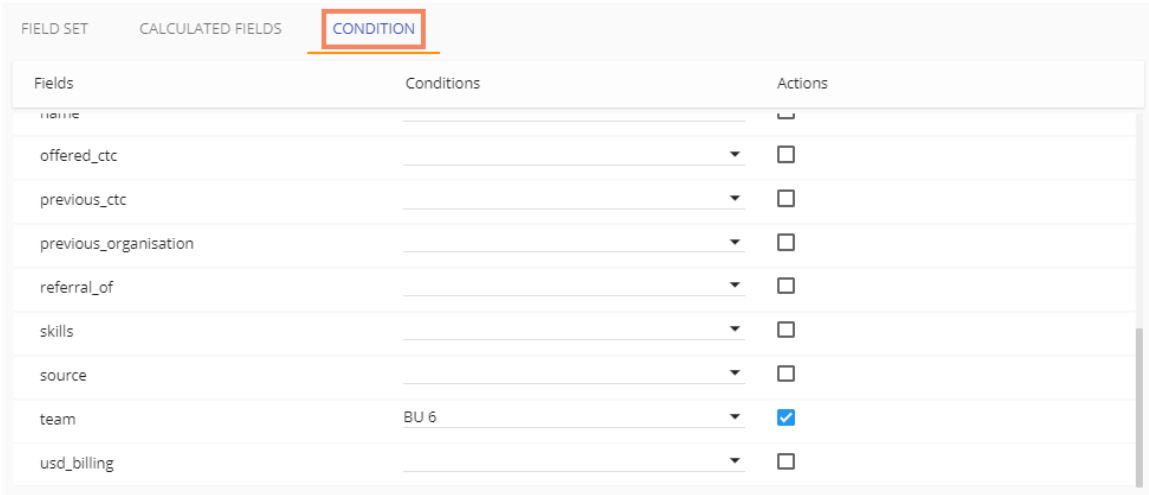


6.1.1. Condition

i) Select the '**Condition**' tab.

ii) Provide a condition to be applied as a filter on the selected data by check marking the box.

E.g., As displayed in the following image, '**BU 6**' has been selected from the '**team**' field. Hence, only data related to the team BU 6 will be pulled from the data source.



6.1.2. Calculated Field

The users can add a calculated field by using this tab.

i) Navigate to the Data Connectors page

ii) Create a connection by selecting a specific Data Connector type

iii) Connect to the desired data source to access the available fields

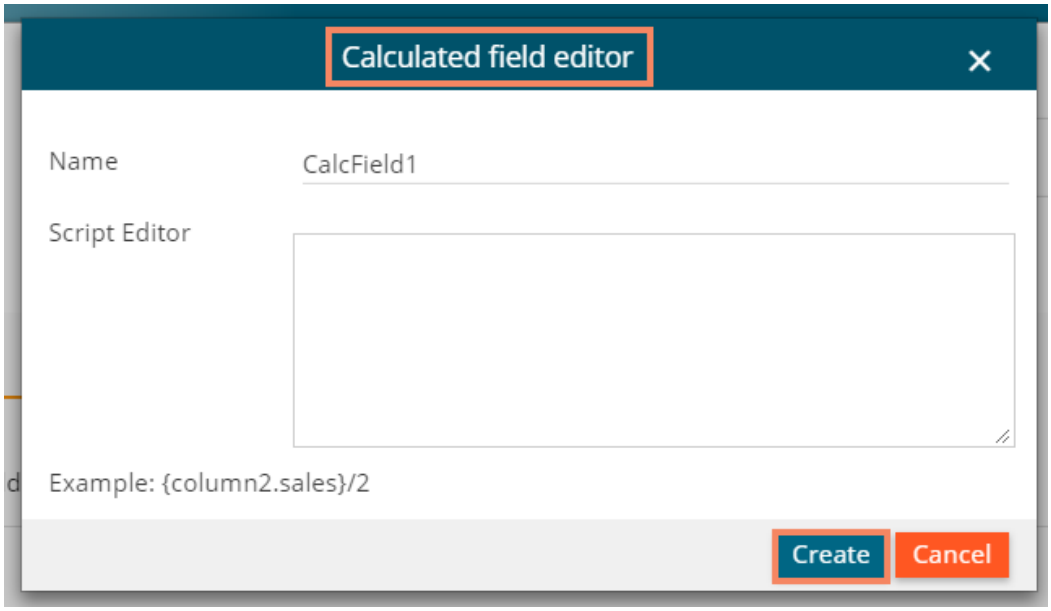
iv) Click the 'Calculated Field' tab

v) The Calculated Field Editor window opens

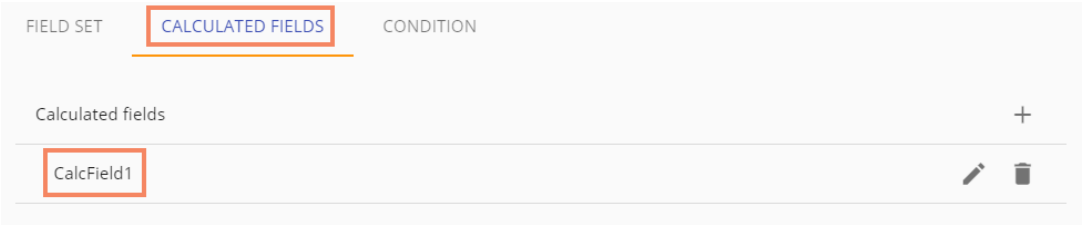
   a. Provide a name for the calculated field

   b. Use the Script Editor to insert the desired calculation through SDK script

c. Click the '**Create**' option to create the calculated field



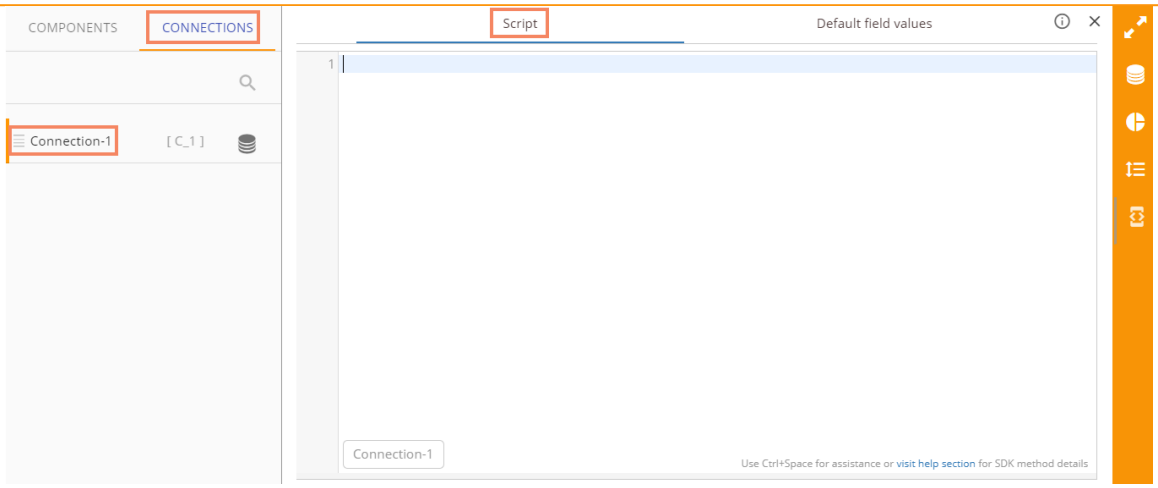
vi) The newly created calculated field gets added under the 'CALCULATED FIELDS' tab.



6.1.3. Script on Load for a Data Connection

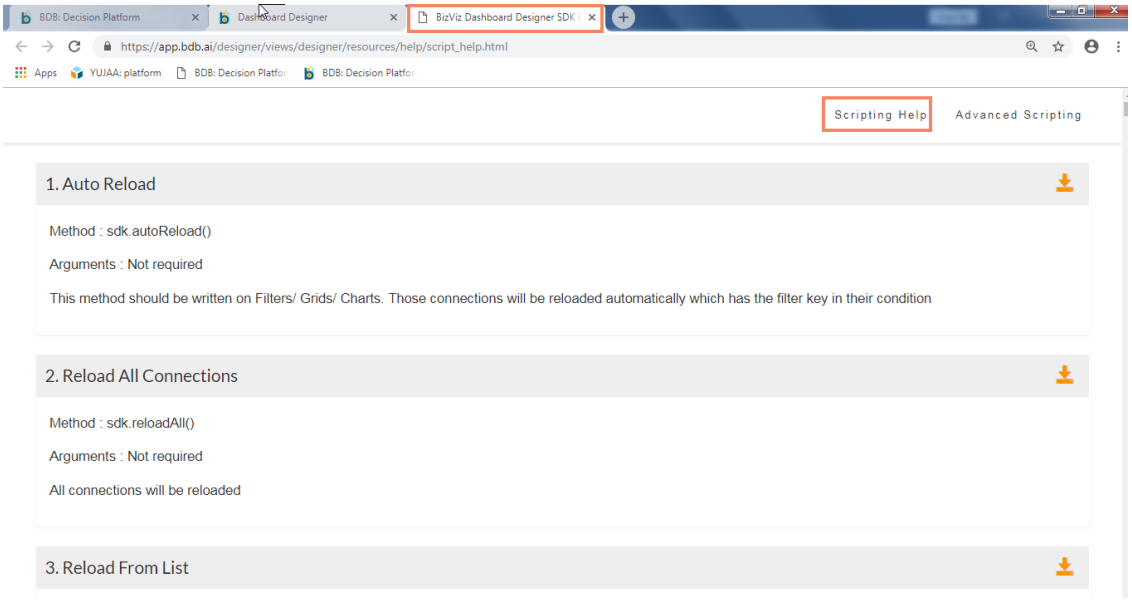
The users can apply their modifications or preferences at the connection level using the Scripting window to get the modified data.

i) Navigate to the Data Connectors page
ii) Select a Data Connector type
iii) Create a new Connection and configure it
iv) Select the '**Script on Load**' icon provided next to the connection to trigger a script to produce some action on the data connection.

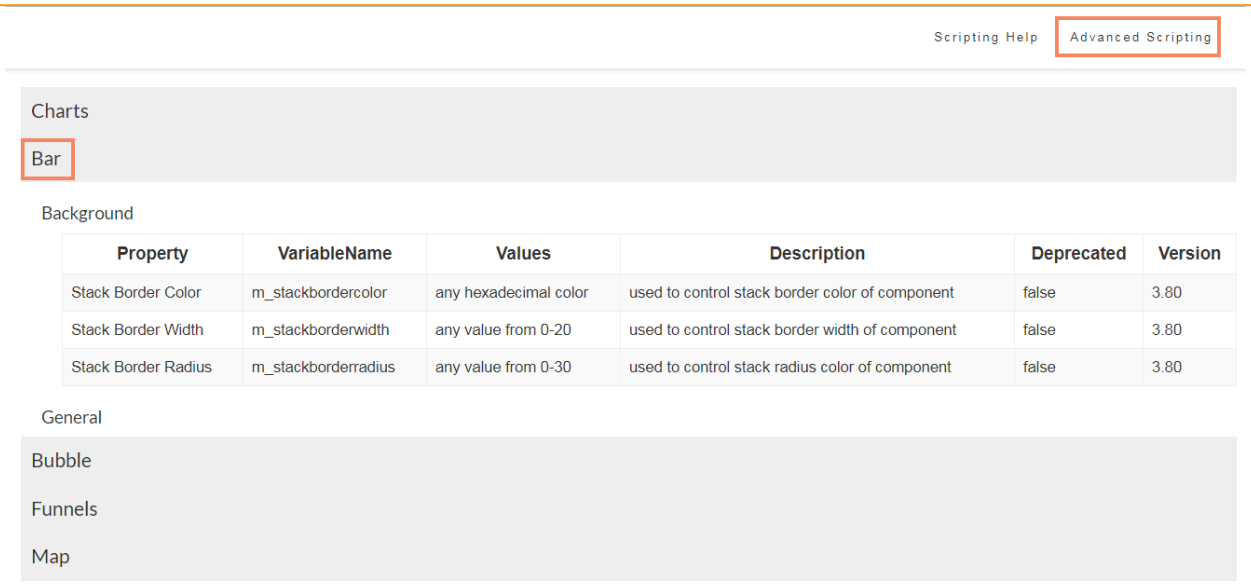


Note:

a. Click the information icon from the Script on Load page to display the Scripting Help.



b. Click the '**Advanced Scripting**' option to display the chart wise advance scripts.

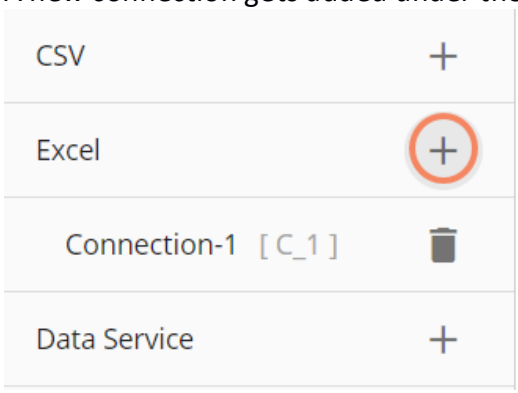


6.2. Connecting to an Excel File

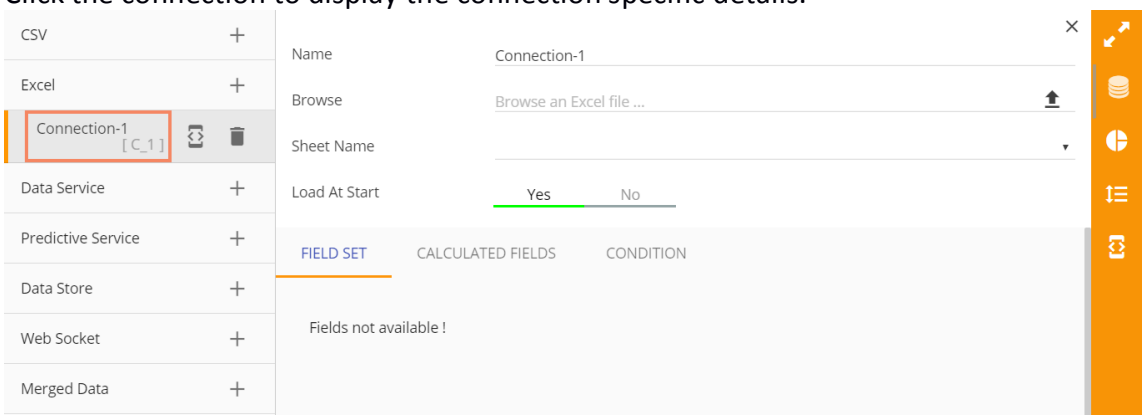
i) Click the '**Data Connectors**' icon to display all the available data sources.

ii) Click the '**Create New Connection**' icon provided next to the '**Excel**' option.

iii) A new connection gets added under the Excel connection type.



iv) Click the connection to display the connection specific details.



v) Configure the following information:

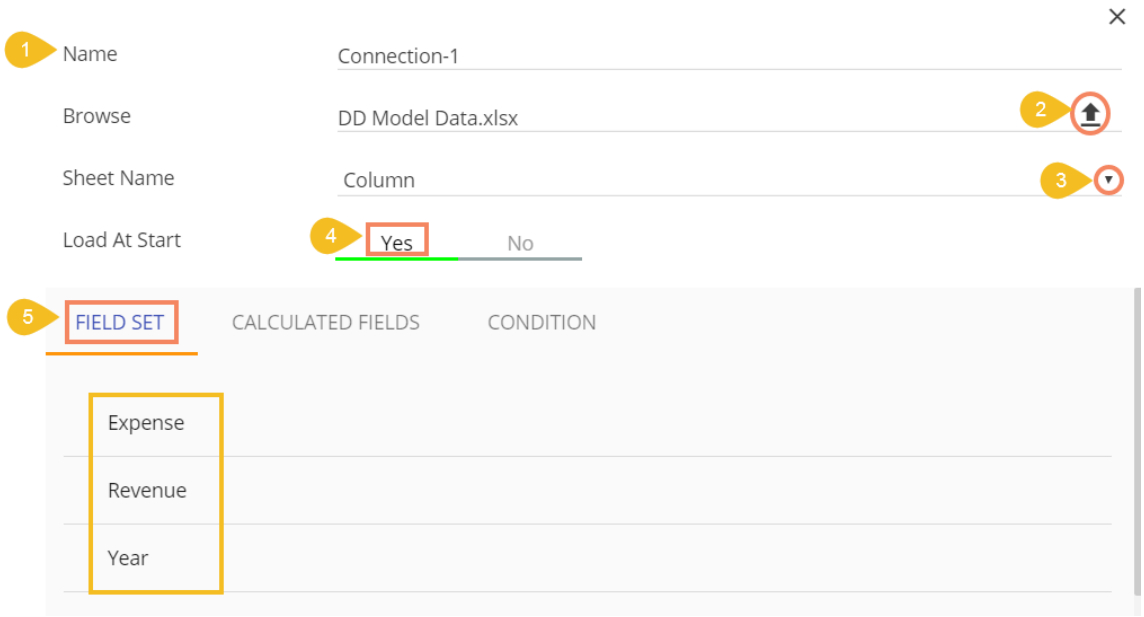
a. **Name:** Name the connection.

b. **Browse:** Click the '**Browse**' icon to browse an Excel file.

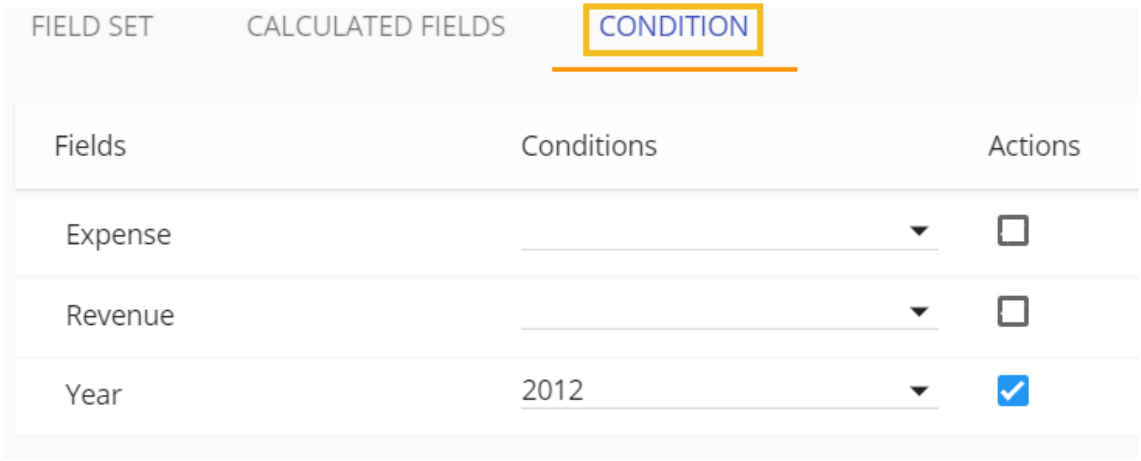
c. **Sheet Name:** Select a specific sheet using the drop-down menu

d. **Load at Start:** Enable this option to get the updated data from the data source before loading into charts.

vi) The '**FIELD SET**' tab displays all the fields after establishing the data connection.



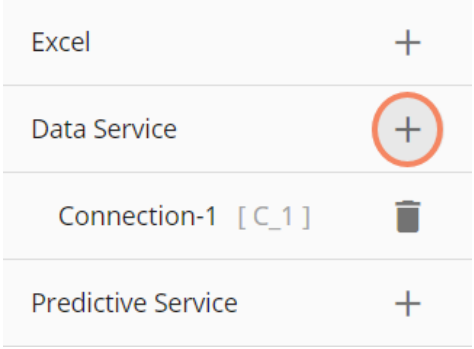
vii) Select the '**Condition**' tab and provide a condition to be applied as a filter on the selected data by check marking the box.
E.g., As displayed in the following image, '**2012**' has been selected from the '**Year**' field. Hence, only data related to the year 2012 will be pulled from the data source.



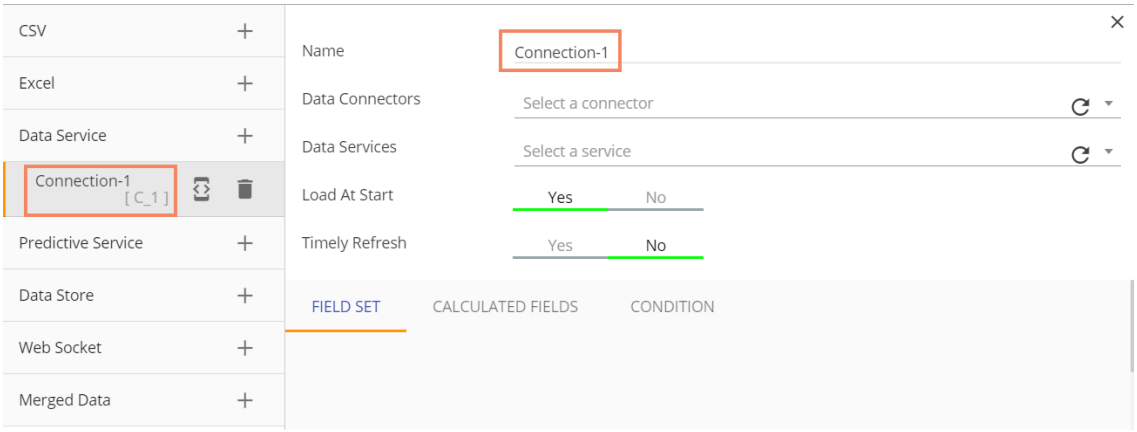
viii) Select the '**Script on Load**' option to trigger a script to produce some action on the connection.

6.3. Connecting to a Data Service

i) Click the '**Data Connectors**' icon to display all the available data sources.
ii) Click the '**Create New Connection**' + icon provided next to the '**Data Service**' connector.
iii) A new connection gets added under the Data Service connector type.



iv) Click the connection to display the connection specific details.



v) Configure the following information:

a. **Name:** Name the connection.
b. **Data Connectors:** Select a data source from the drop-down menu.
c. **Data Services:** Select a data service from the drop-down menu.
d. **Load at Start:** Enable this option to get up-to-date data / pull the updated data from the data source before loading into charts.
e. **Timely Refresh:** Enable this option to get the refreshed data.
f. **Refresh Interval:** Set the time for refresh interval. (This field will appear only when the '**Timely Refreshed**' field has been enabled.)

vi) The '**FIELD SET**' tab displays all the fields after establishing the data connection.

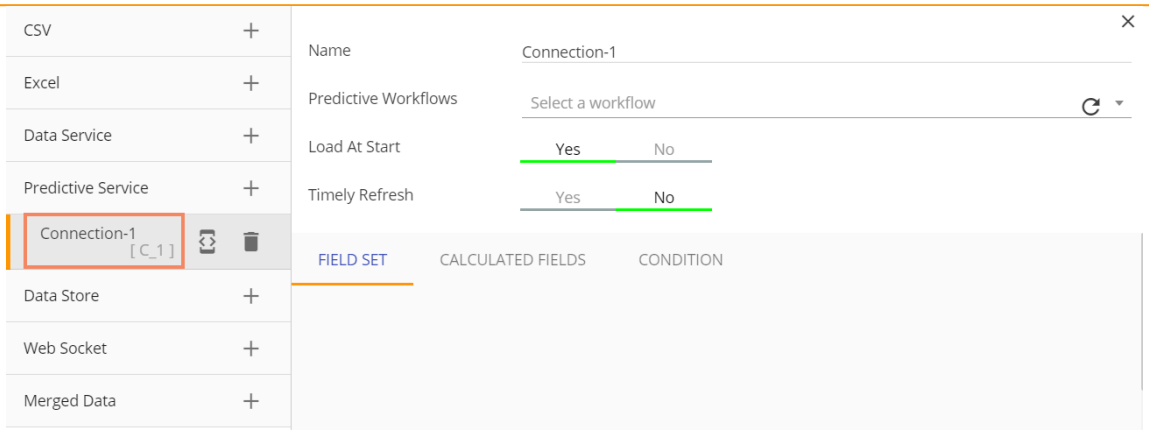
Note:

a. The users can filter the targeted data set using the '**CONDITION**' option and trigger a script to produce some action on the connection part using the '**Script on Load**' icon.
b. Click the '**Reload Data Sources**' icon to reload the existing data connectors.
c. Click the '**Refresh Service**' icon to refresh all the available data services.

6.4. Connecting to a Predictive Service

i) Click the '**Data Connectors**' icon to display all the available data sources.
ii) Click the '**Create New Connection**' + icon provided next to the '**Predictive Service**' connector.
iii) A new connection gets added under the Predictive Service connector type.

iv) Click the connection to display the connection specific details.



v) Configure the following information:

a. **Name:** Name the connection.

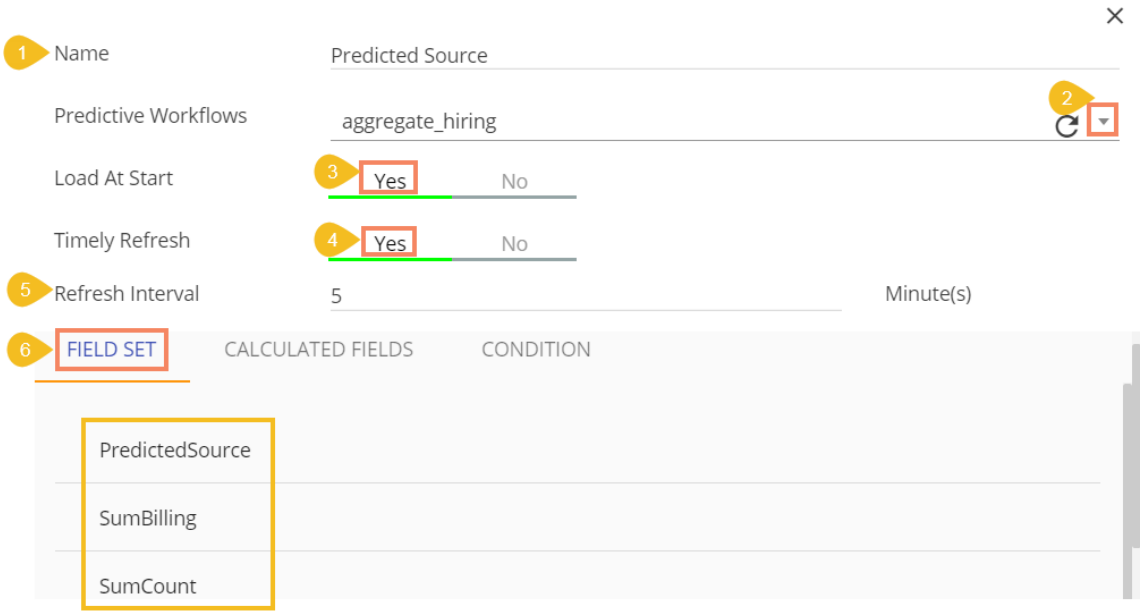
b. **Predictive Workflows:** Select a deployed Predictive Workflow from the drop-down menu.

c. **Load at Start:** Enable this option to get up-to-date data / pull the updated data from the data source before loading into charts.

d. **Timely Refresh:** Enable this option to get the refreshed data.

e. **Refresh Interval:** Set the time for refresh interval. (This field will appear only when the '**Timely Refreshed**' field has been enabled.)

vi) The '**FIELD SET**' tab displays all the fields after establishing the data connection.



Note:

a. The users can filter the targeted data set using the '**CONDITION**' option and trigger a script to produce some action on the connection part using the '**Script on Load**' icon.

b. Click the '**Refresh Workflows**' icon to refresh the deployed Predictive Workflows.

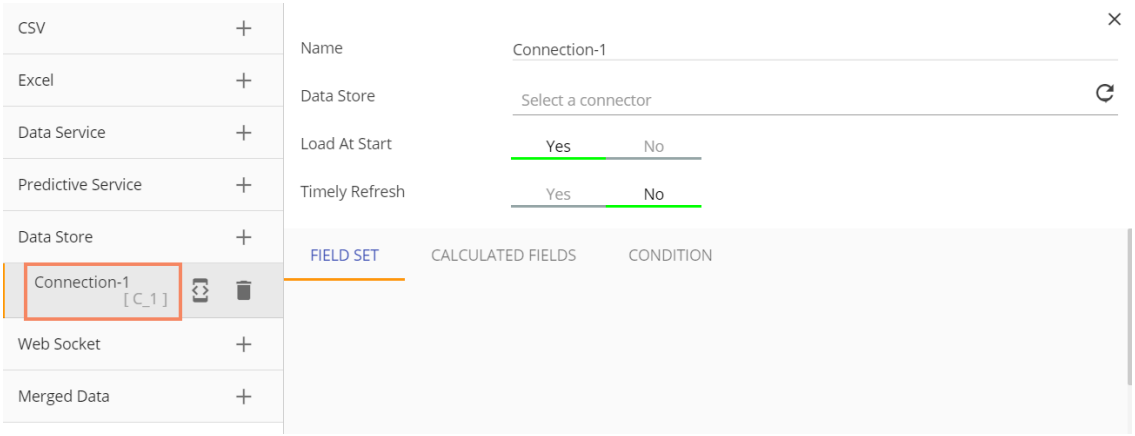
6.5. Connecting to a Data Store

i) Click the '**Data Connectors**' icon to display all the available data sources.

ii) Click the '**Create New Connection**' icon provided next to the '**Data Store**' connector.

iii) A new connection gets added under the Data Store connector type.

iv) Click the connection to display the connection specific details.



v) Configure the following information:

a. **Name:** Provide a name for the connection.

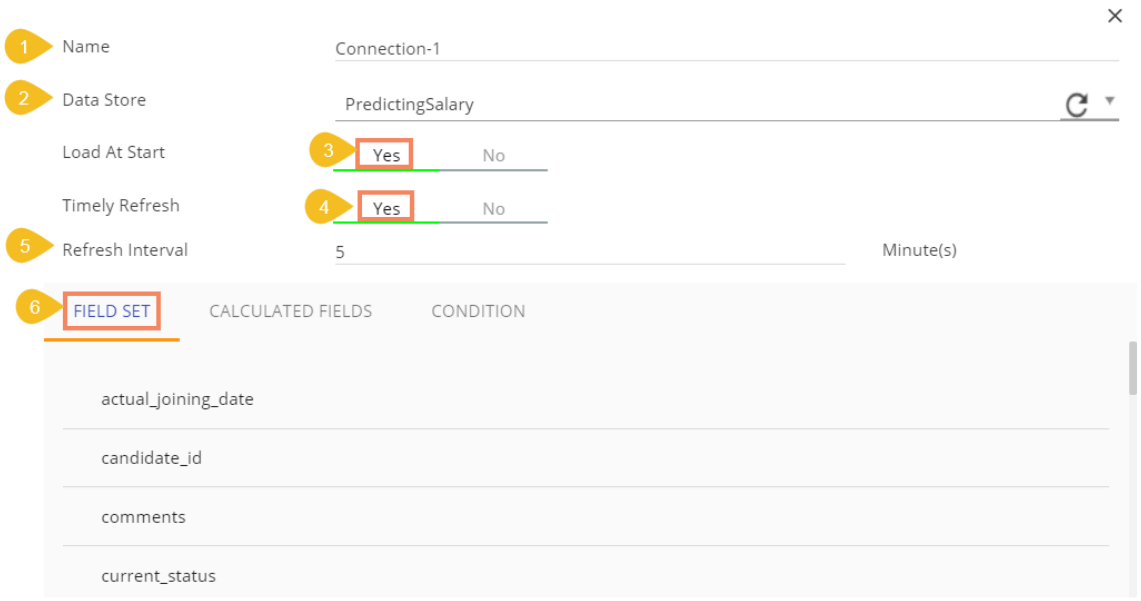
b. **Data Store:** Select a data store from the drop-down menu.

c. **Load at Start:** Enable this option to get up-to-date data / pull the updated data from the data source before loading into charts.

d. **Timely Refresh:** Enable this option to get the refreshed data.

e. **Refresh Interval:** Set the time for refresh interval. (This field will appear only when the '**Timely Refreshed**' field has been enabled.)

vi) The '**FIELD SET**' tab displays all the fields after establishing the data connection.

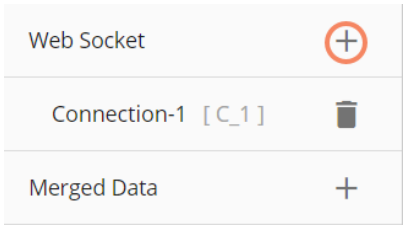


Note:

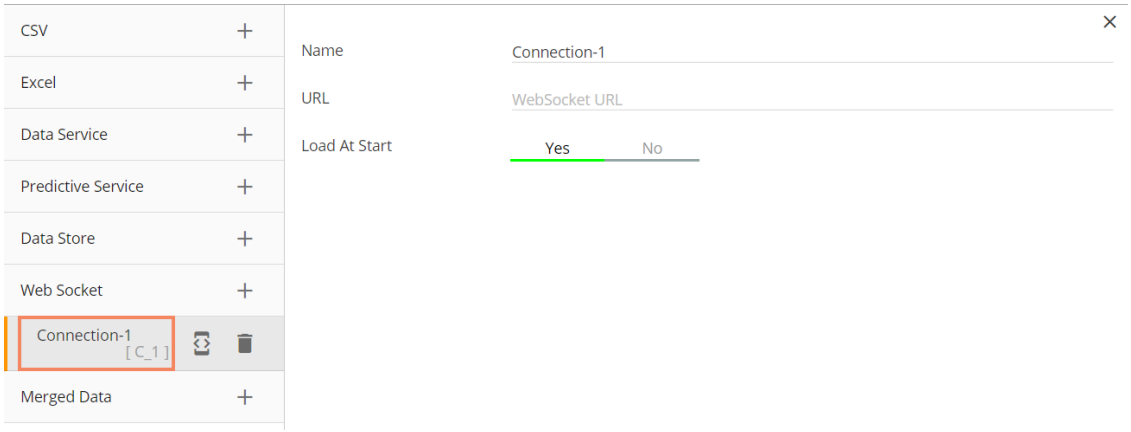
a. The users can filter the targeted data set using the '**CONDITION**' option and trigger a script to produce some action on the connection part using the '**Script on Load**' icon.
b. Click the '**Refresh Data Stores**' icon to refresh the available Data Stores.

6.6. Connecting to a Websocket

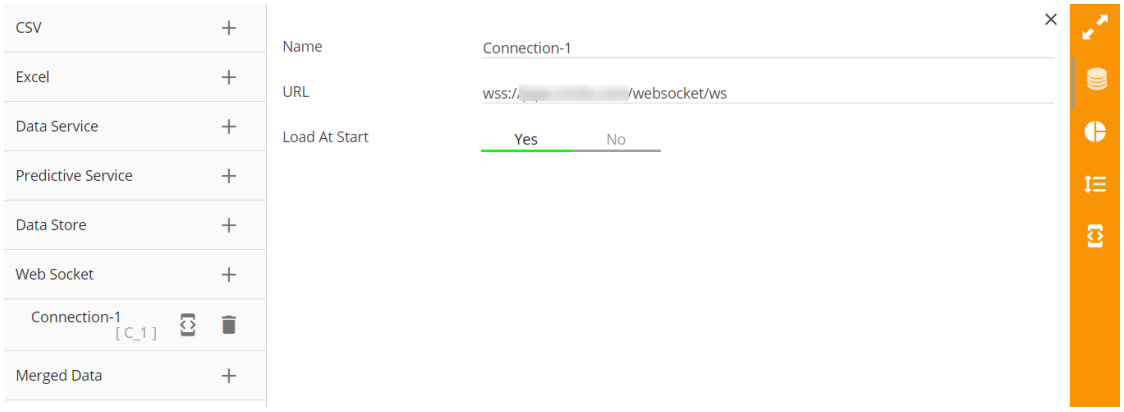
i) Click the '**Data Connectors**' icon
ii) Click the '**Create New Connection**' icon provided next to the '**Websocket**' connector.
iii) A new connection gets added under the Data Store connector type.



iv) Click the connection to display the connection specific details.



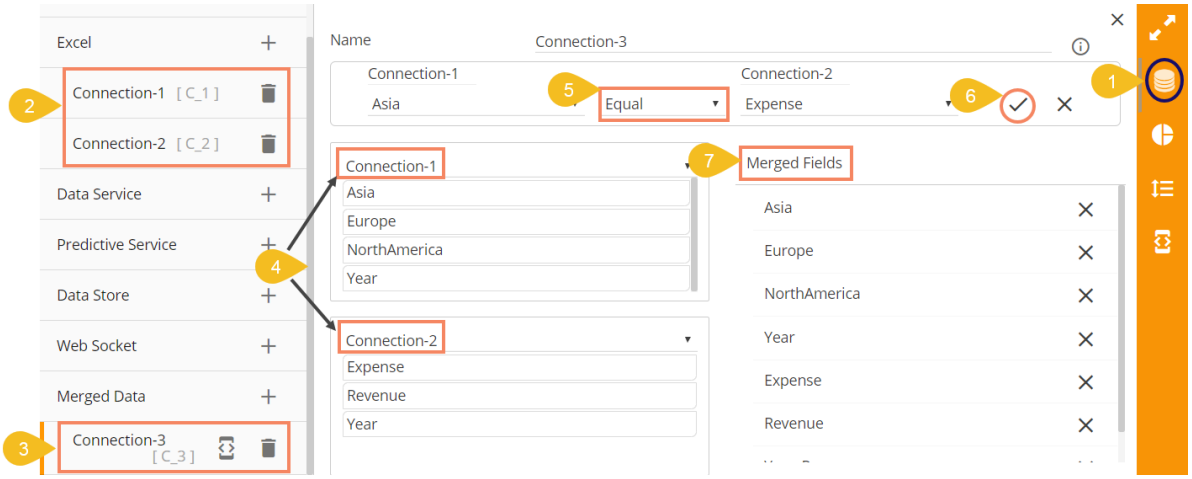
v) Configure the following information:
   a. **Name:** Provide a name for the connection
   b. **URL:** Enter a URL link
   c. **Load at Start**: Enable this option to get up-to-date data / pull the updated data from the data source before loading into charts.



vi) The websocket connection gets established.

6.7. Connecting to a Merged Data

i) Click the '**Data Connectors**' icon
ii) Create new connections using any data connector option (In this case, Excel connections are created. E.g., Connection-1, Connection-2)
iii) Create a connection under the '**Merged Data**' connector. (E.g., Connection-3)
iv) Configure the new connection created for Merged data by mapping the created Excel connections.
v) Define a condition via the drop-down menu in the Criteria space. (E.g. '**Equal**' or '**Not Equal**')
vi) Click the '**Create Criteria**' icon.
vii) The Merged Fields displays all the data fields from the merged connections.



Note:

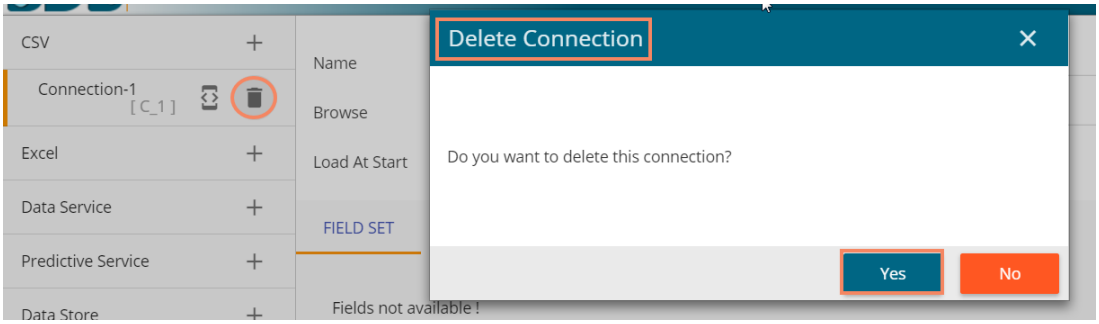
a. Users can remove the fields added to the merged data connection using the '**Remove**' ✕ icon.

b. After clicking the 'Create Criteria' icon, the created criteria gets added to space.

6.7.1. Deleting a Data Connection

The users can delete a created connection using the following steps:

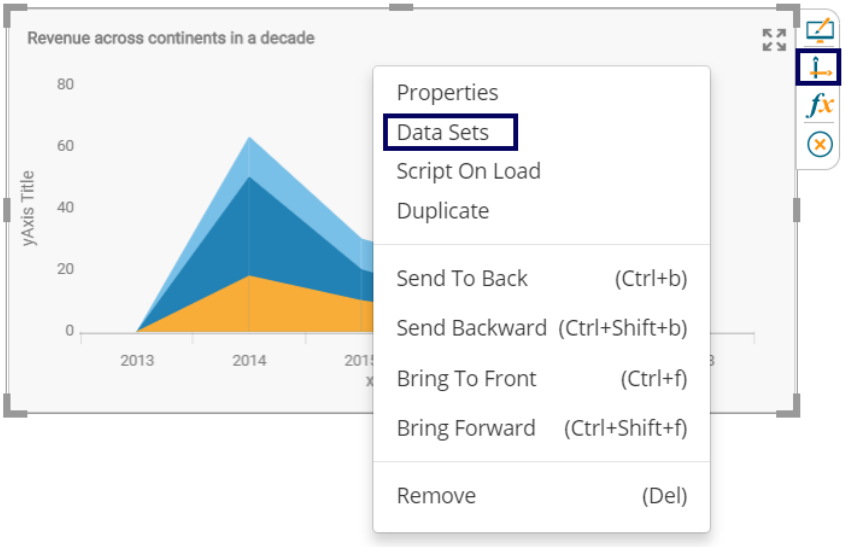
i) Navigate to the Data Connector page.
ii) Select a data connection.
iii) Click the '**Delete**' icon.
iv) A message window appears to assure the action.
v) Click the '**Yes**' option to delete the connection.



vi) The selected data connection gets deleted from the Data Connectors page.

6.7.2. Connecting Data Set Connection to a Dashboard Component

i) Navigate to the Dashboard Canvas.
ii) Select and drag a dashboard component into the canvas.
iii) Click the '**Data Set**' icon
OR
Right click on the dashboard component and click the '**Data Sets**' option.

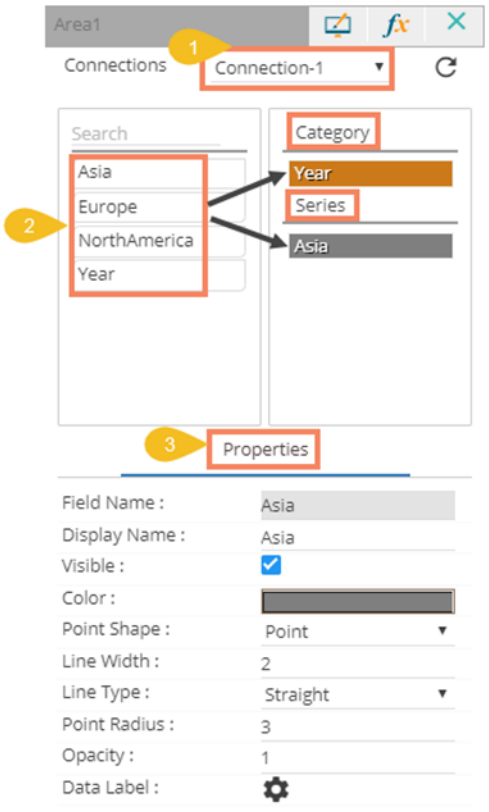


iv) Users will be directed to the **Dataset Palette**.

6.7.2.1. Dataset Palette

The Dataset Palette is the window that can be used to configure the dataset fields of a component. Each field has several properties which can be set using this palette.

a. Map a data connection using the drop-down menu. (Ref. '**Connecting to a Data Source**' section)
b. Drag and drop the required fields as described below:
   1. **Category**: it takes the fields selected as dimensions for the component.
   2. **Series:** it takes the fields selected as measures for the component.
c. Configure the '**Properties**' displayed at the bottom of the window.



6.7.2.2. Indicator Tab

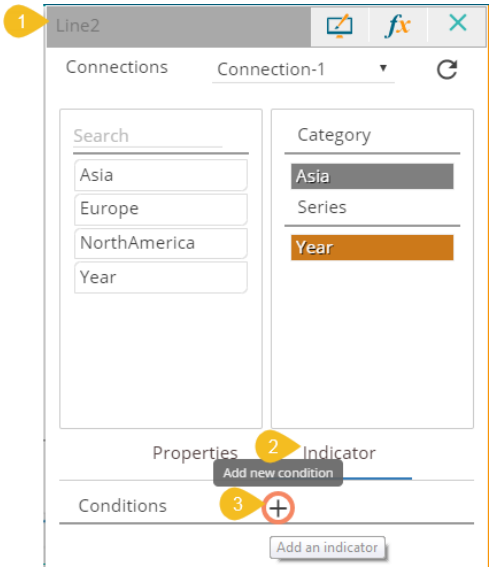
The Dataset Palette displays Indicators tab together with Properties for some components like

Line, Grid. The users can add various data conditions by using the Indicator tab.

i) Navigate to the Dataset Palette for the selected range of the charting components that contains Indicator tab.

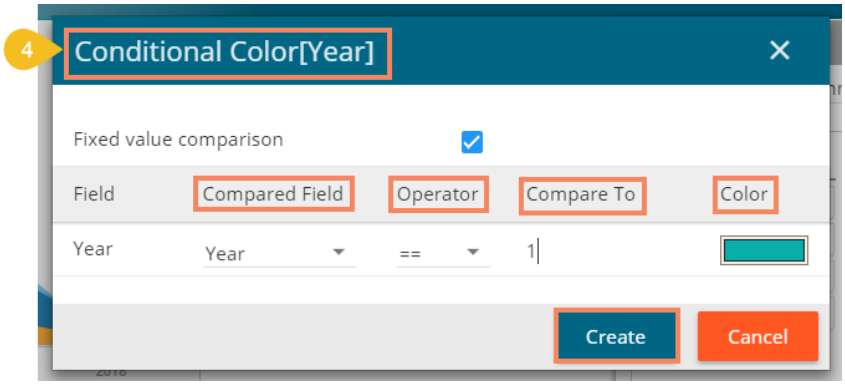
ii) Navigate to the Indicator tab.

iii) Click the '**Add new Condition**' icon.

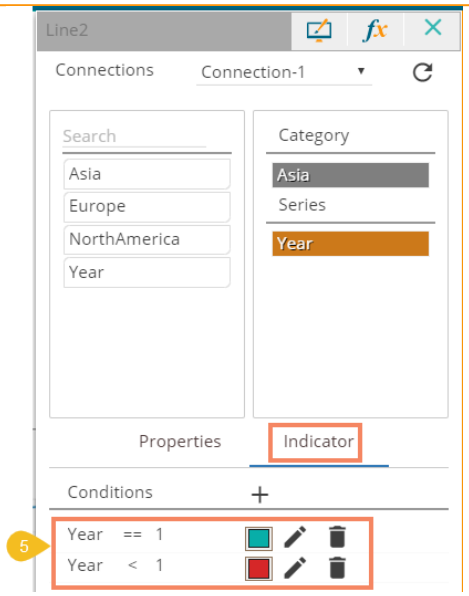


iv) The Conditional Color window appears

1. Choose a condition by selecting a compared field, Operator, Compare to fields
2. Set a color for the condition
3. Click the '**Create**' option



v) The created Conditions gets added to the Indicator tab

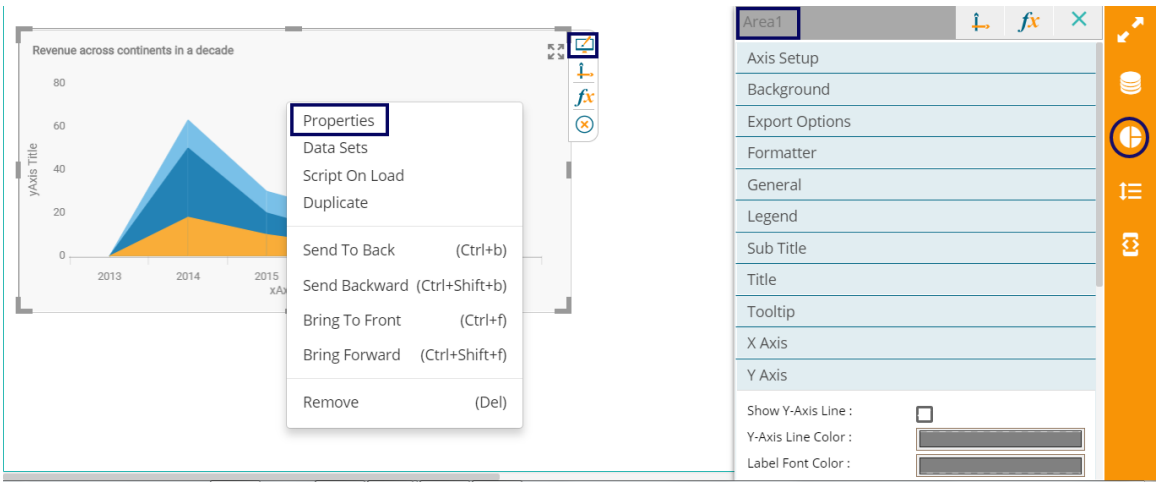


7. Components

The components are the elements like charts, tables, gauges, metrics which are used to create a dashboard. Users need to drag and drop the components in the canvas and connect them with a data source. Each component contains appearance properties to be configured which differs as per the component type.

This category includes properties that focus on the appearance of a component.

i) Navigate to the Designer Canvas.
ii) Click the '**Component Library**' icon from the right edge of the window.
iii) Select and drag a component in the canvas.
iv) Click the '**Properties**' icon
OR
Use Right-click on a component and click the '**Properties**' option.
v) The Appearance Properties of the dragged component gets displayed on the right side of the screen.



Note: The component properties are explained at length in a separate document.

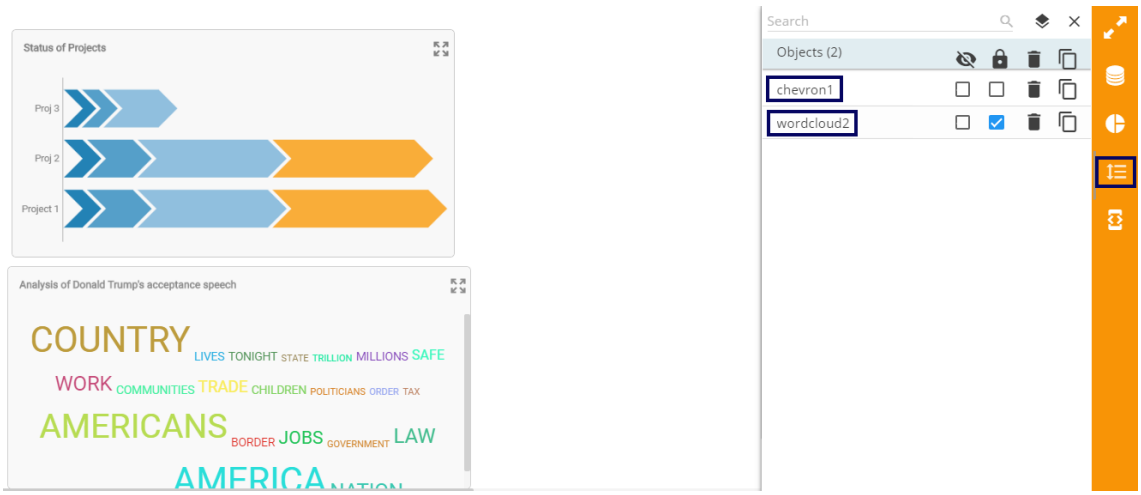
8. Dashboard Objects

Every component in the dashboard is considered as an object. Object browsers have properties which are used to lock, hide, delete, duplicate, and arrange components on the dashboard.

8.1. Manage Dashboard Components

Every component which is dragged into the canvas will have its properties displayed in the Manage Component browser window. Click the '**Manage Dashboard Components**' icon to display the browser window for the dragged Designer components.

E.g. The following image displays two components on the Dashboard (i.e., Chevron and Wordcloud), so the object properties related to those components are displayed in a panel right side. Enable checkmarks in the checkboxes or click on the concerned icon to perform the related action.



8.1.1. Dashboard Object Properties

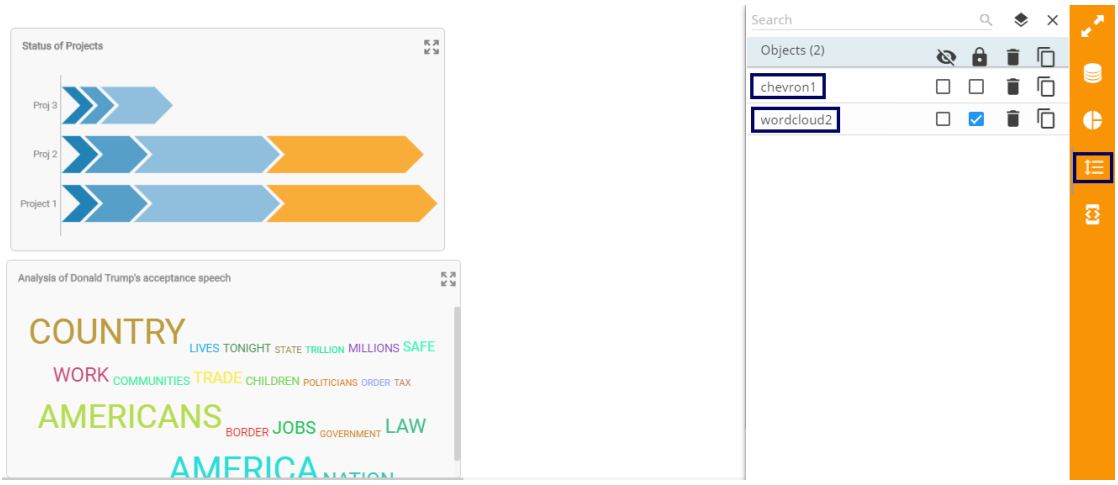
i) **Hide All** : By clicking on this icon all the components which are present in the dashboard will be hidden. Users can hide the individual components by enabling the checkbox provided next to the name of the component.

ii) **Lock All** : By clicking on this icon all the components which are present in the dashboard will be locked, i.e., means components cannot be moved from one place to another. Users can lock the components individually by enabling the checkbox provided next to the name of the component.

iii) **Remove** : By Clicking on this icon all the components which are present in the dashboard can be deleted. Users can delete the components individually by clicking the remove icon provided next to the name of the component.

iv) **Duplicate** : By clicking on this option duplicate component gets produced on the canvas.

v) **Search:** When the component number increase in the dashboard it will be difficult for users to find out the desired component. The '**Search**' bar can be used then to search for the desired components.



9. Data Drill-Down

To drill down deeper into data, the users require to use attributes and values of the components that have been dragged onto the canvas. The data drill-down functionality can be achieved in the following ways:

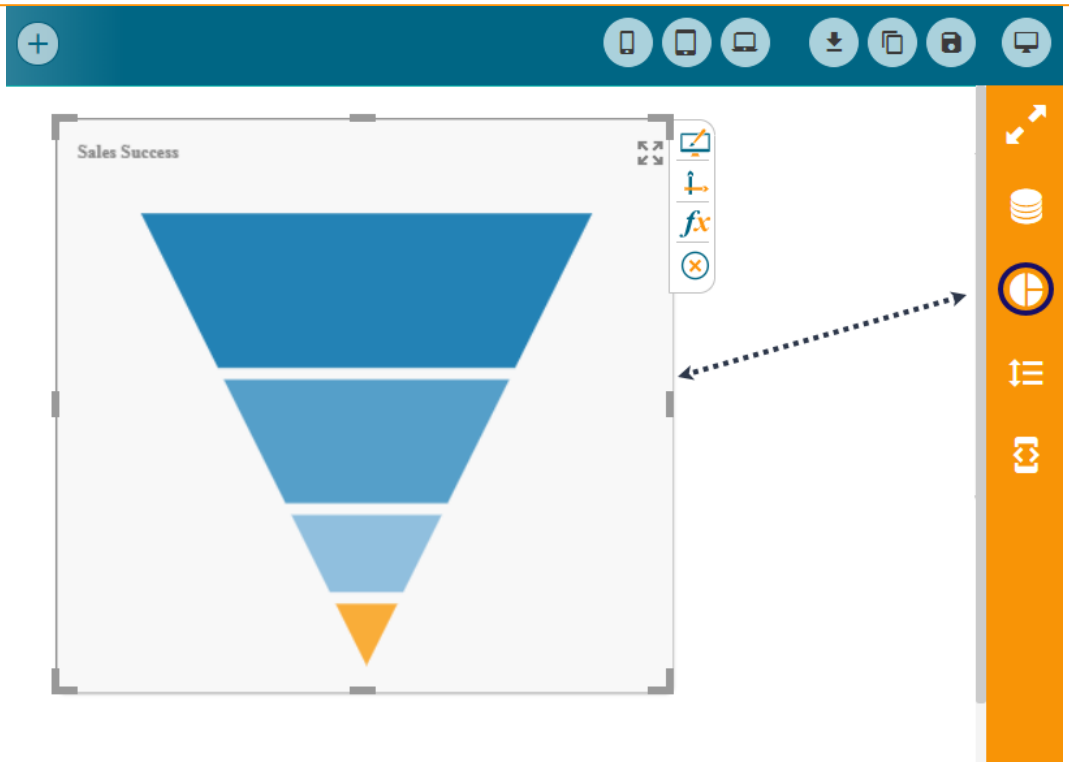
a) Passing Default Values (Manual Filter)
b) Performing Dynamic Filtering (through SDK methods)

9.1. Passing Default Values

This section aims to explain how to pass default values in the charts.

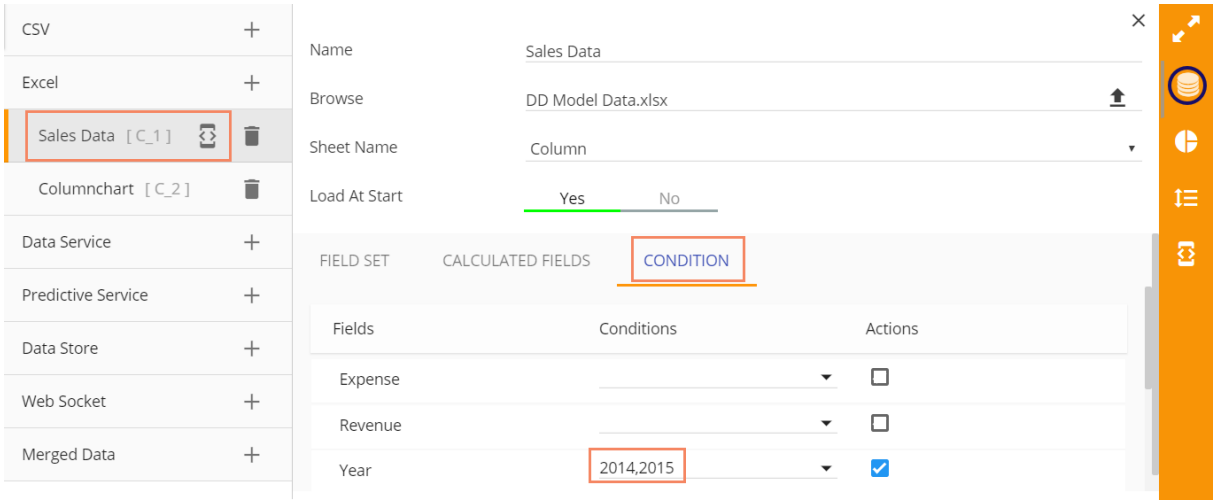
E.g., Assume that we have Sales data of some organization. In this example, we would pass only data of **the years 2014 and 2015**. In the given scenario, we need to perform the following steps:

i) Select a charting component and drag it into the canvas. (in this case, we have dragged a funnel chart)



ii) Connect an Excel data source of sales data. (**Refer to section 7.2. for creating a data source connection using Excel File**).

iii) Click on Funnel chart's data source connection and select the '**Condition**' tab and provide input as '**2014, 2015**' in the condition textbox (as shown below)



iv) Click the '**Preview**' icon to view the results.

v) Only data for the years 2014 and 2015 get displayed as per the given condition.

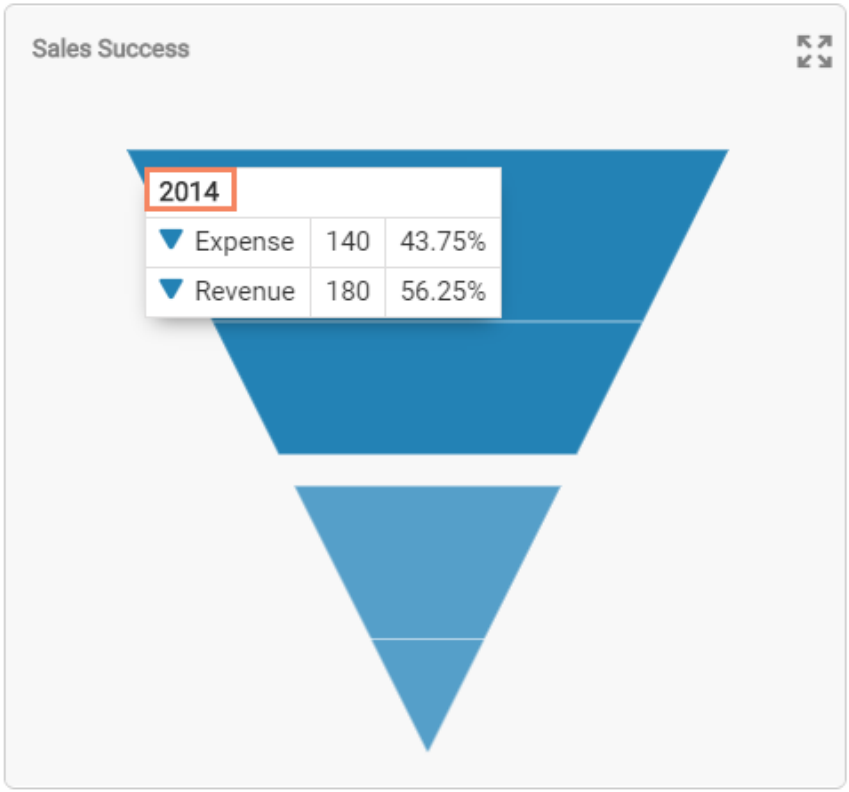

Sales Success
2014
Expense 140 43.75%
Revenue 180 56.25%

Fig-1

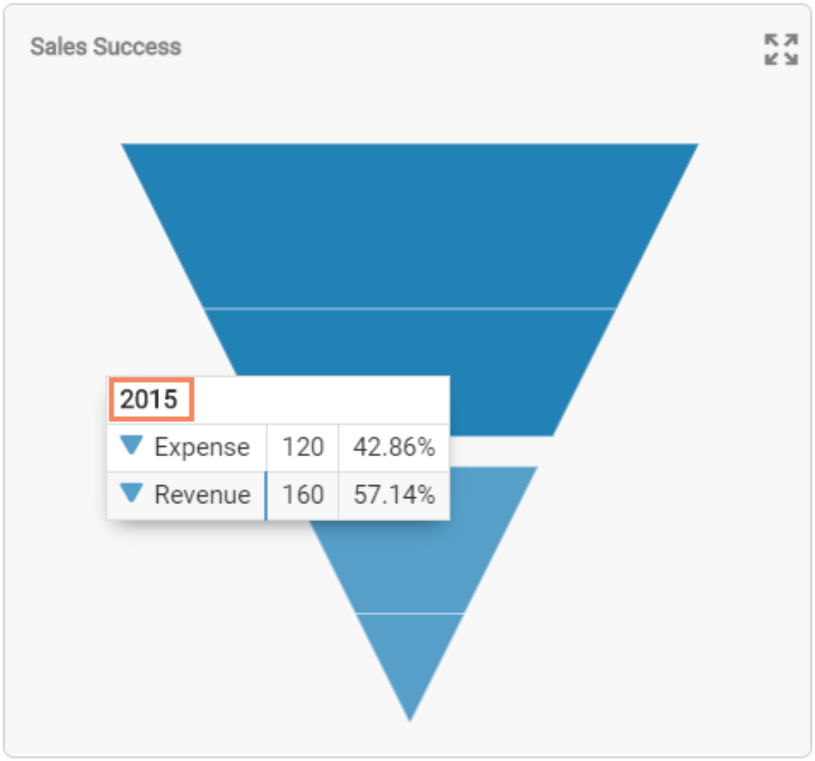

Sales Success
2015
Expense 120 42.86%
Revenue 160 57.14%

Fig-2

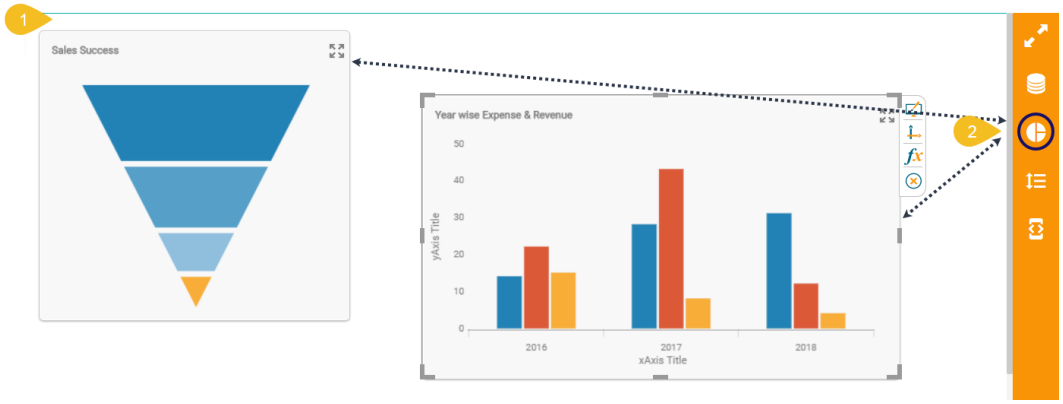
9.2. Performing Dynamic Filtering

This section explains how to perform dynamic filtering using filters and charts. Every component has some attributes and values which can be seen in **'Component Attributes'** window. By passing values of one component into another component, dynamic filtering is achieved.

Scenario: Performing dynamic filtering using a Funnel chart to Column chart

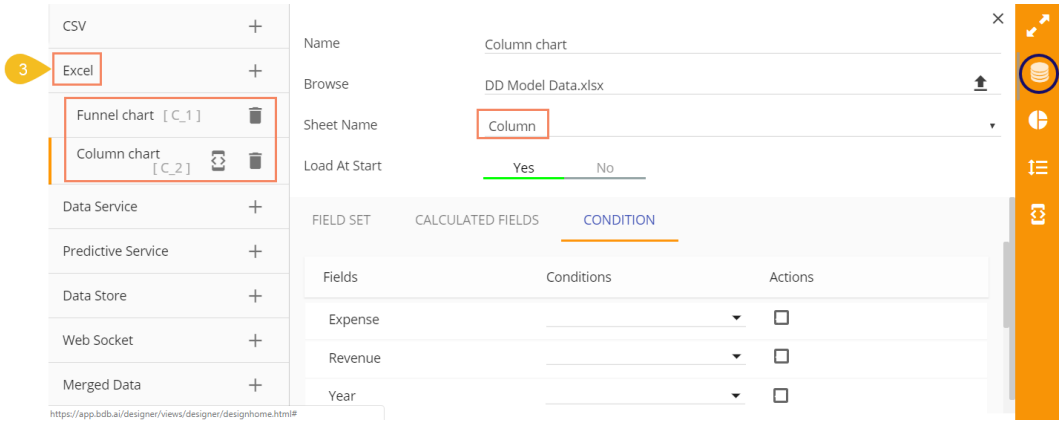
i) Navigate to the Designer canvas.

ii) Drag two charting components to the designer canvas using the '**Component Library**' icon (In this case, Funnel and Column charts are dragged to the canvas).



iii) Connect an Excel data source of sales data. (**Refer to section 7.2. for creating a data source connection using Excel File**).

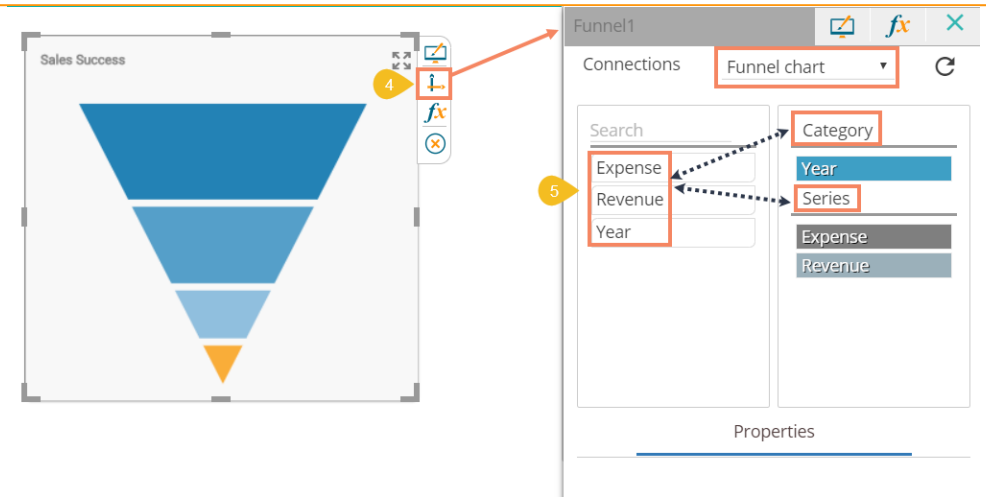
Note: Use a single data set for both the connections so that they contain the same data while using the data drill.



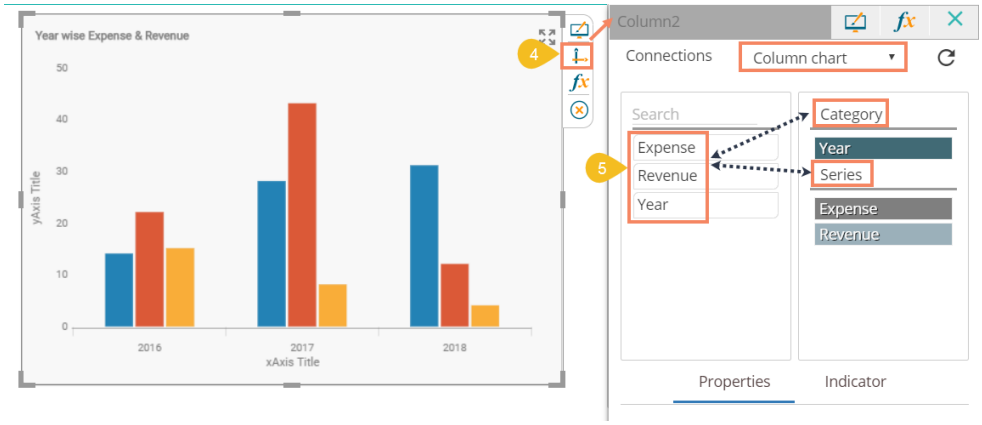
iv) Connect the created data connectors to the respective charting components using the Data Set icon.

v) Configure the required Dataset Palette fields as shown below:

a. Do the required configurations for the Funnel chart-



b. Do the required configuration for the Column chart-



vi) Click the **'Component Variables and Script'** icon provided to the right side of the canvas.

vii) Select the Funnel component.

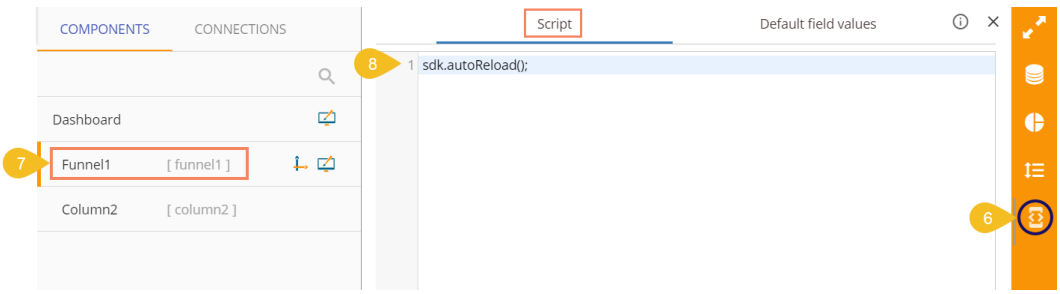
viii) Follow the below mentioned steps to write the function name:

a. Type '**sdk.**' in the given space.

b. Use '**Ctrl+Space**' keys.

c. A function list appears.

d. Select the auto reload function from the pop-up list and use double clicks to add it in the script tab.



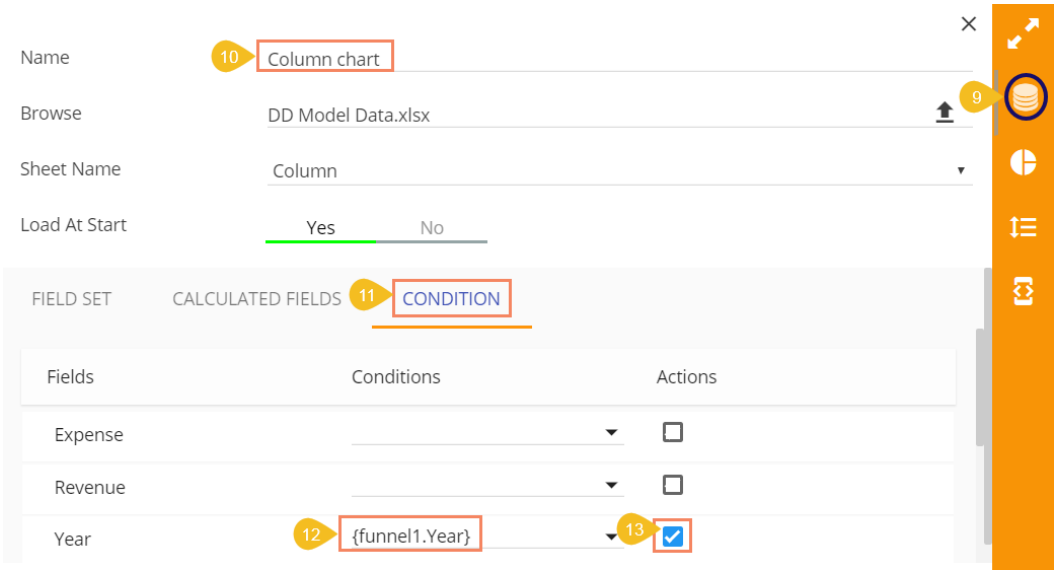
ix) Select the '**Data Source**' icon

x) Select the data connection details displayed for the Column chart on the right side of the window.

xi) Click the **'Condition'** option.

xii) Select the field name using which filtering will be performed (E.g., In this case, using **'Year'** field we are performing the drill-down action) and pass the condition that connects the Column chart with the Funnel chart (E.g., In this case, {funnel1.year} is used).

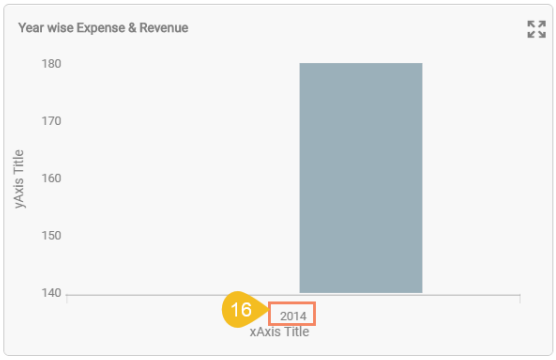
xiii) Enable the **'Actions'** checkbox. (as shown in the following image)



xiv) Click the '**Preview**' icon to open the preview mode for the concerned components.

xv) Select a specific year value using the Pie-chart.

xvi) The sales information of the selected year displays via the Column chart.

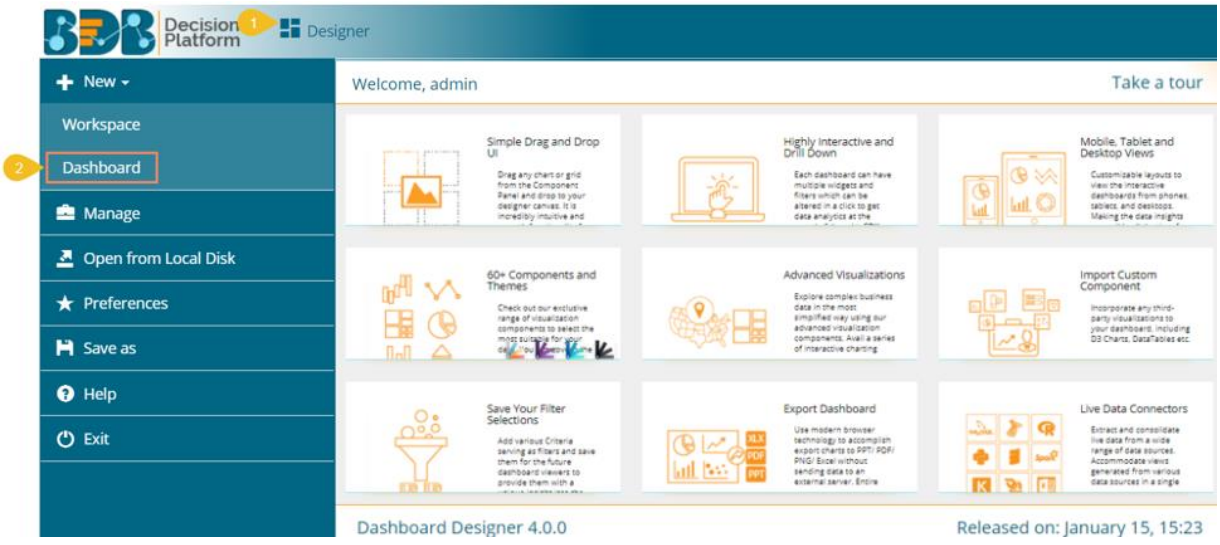


10. Scripting Window

BDB offers scripting mechanism in the Designer plugin to help the users experience next level of customization in dashboard creation. BDB offers script support at the component level to display the intended UI actions and at the data connection level to apply data related back-end changes. The scripting mechanism makes the creation of complex dashboards easy and quick. The users require basic scripting knowledge to create dashboards using the BDB Designer tool.

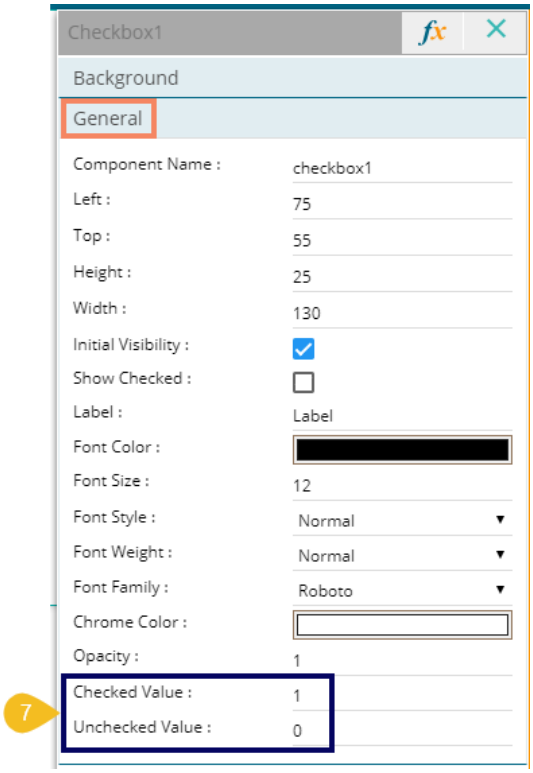
This section aims to provide a basic understanding of writing scripts and their functionality.
Scenario: We wish to have a checkbox which when enabled displays a column chart, and when disabled, shows an area chart. This concept is called **Dynamic Visibility**.

i) Navigate to the Designer homepage.
ii) Select the '**Dashboard**' option using the **New** drop-down menu to create a new dashboard.



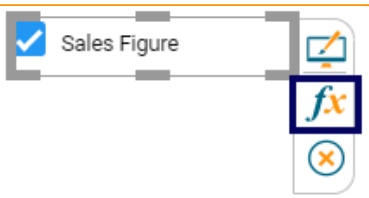
iii) The dashboard canvass opens for the Untitled Dashboard.
iv) Click the '**Component Library**' icon.
v) Drag and drop the '**Checkbox**,' '**Column Chart**', and '**Area Chart**' components into the canvas.
vi) Click on the '**Properties**' icon next to the Checkbox component.

vii) Set **Checked Value to '1'** and **Unchecked Value to '0'** (as shown below) using '**General**' properties tab of the Checkbox component.

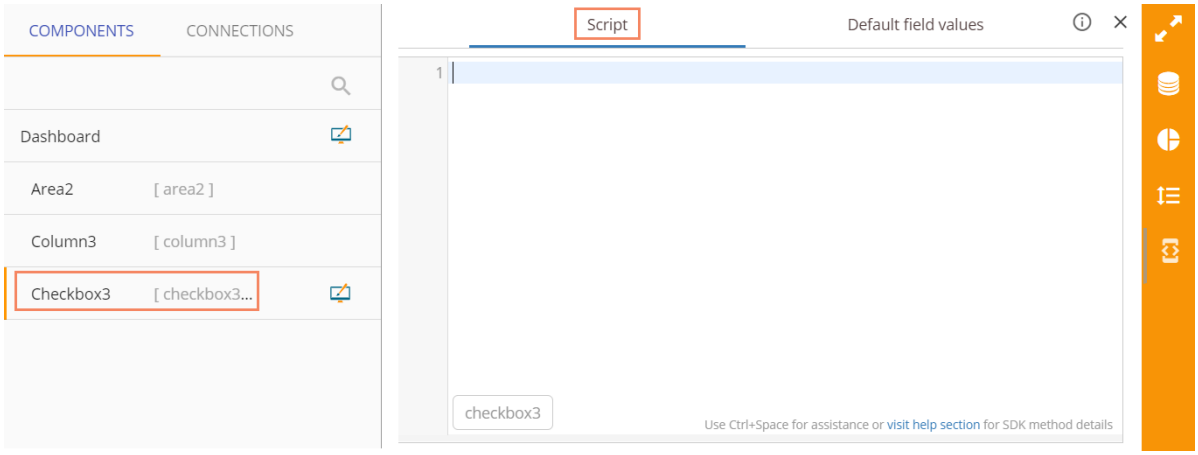


viii) Create data connections for the Column chart and Area chart. (**Ref. Connecting Data Set Connection to a Dashboard Component**).

ix) Click on the **'Script on Load'** icon fx provided next to the Checkbox component.

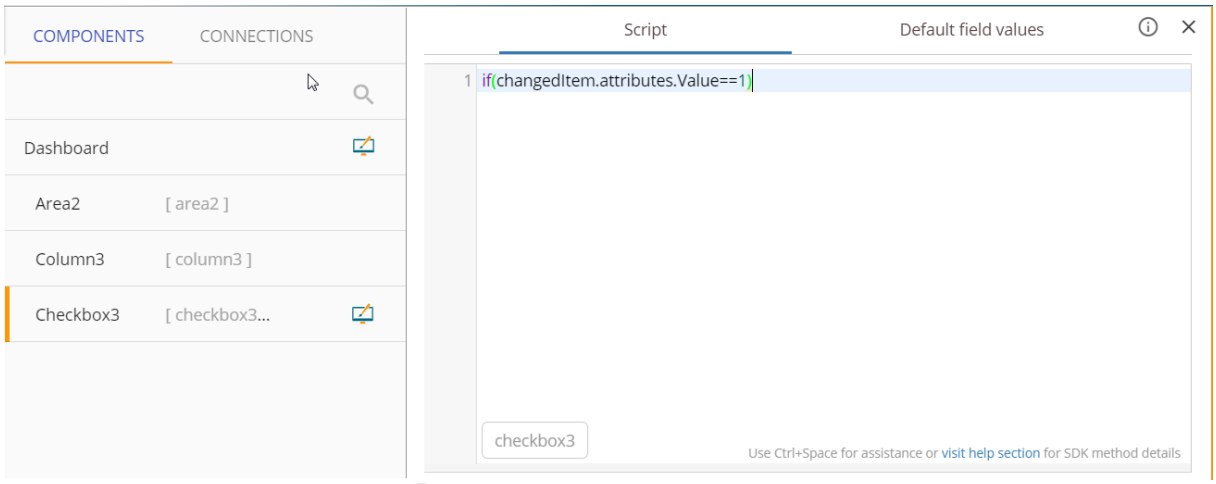


x) The script window for the Checkbox component opens

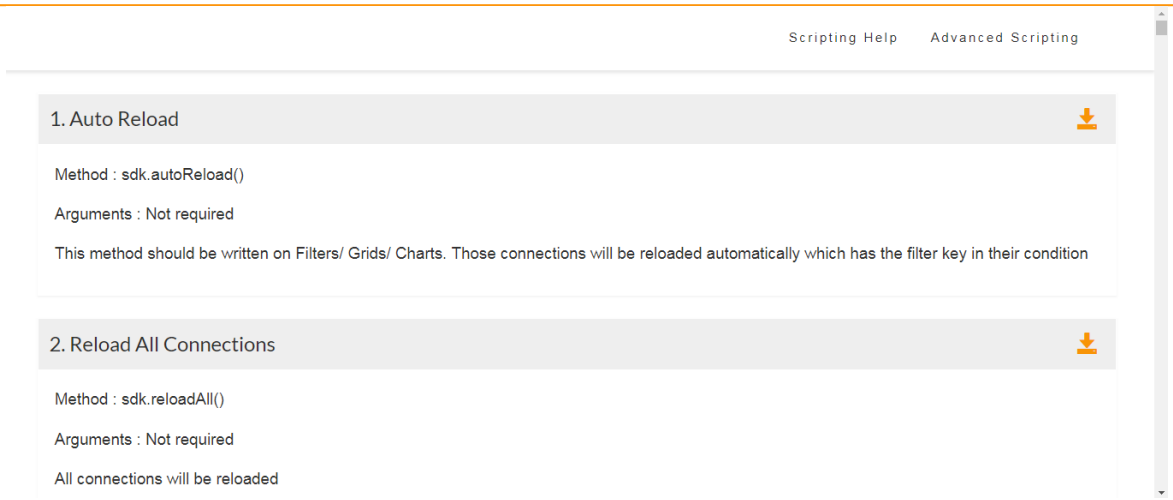


xi) Write the relevant script for the action mentioned above as explained in the following steps:

a. Write the if statement for the script following the order of "changedItem.attributes.Value"
b. Pass 'Value==1' (In other words, it suggests that checkbox is enabled)

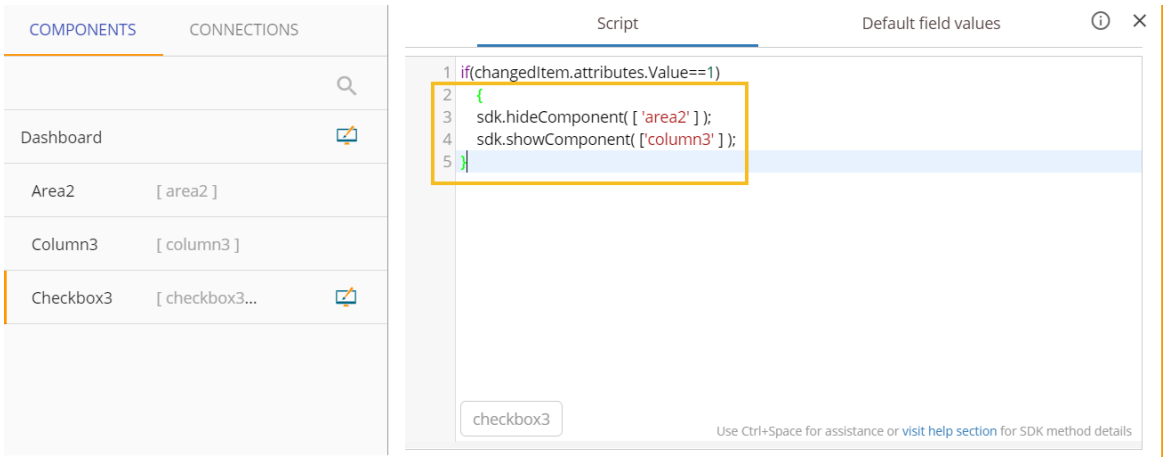


c. Either click the '**Help**' icon ⓘ or use '**Ctrl+Space'** keys to get the assistance in writing the script.
d. The '**Designer Scripting Help**' window opens.

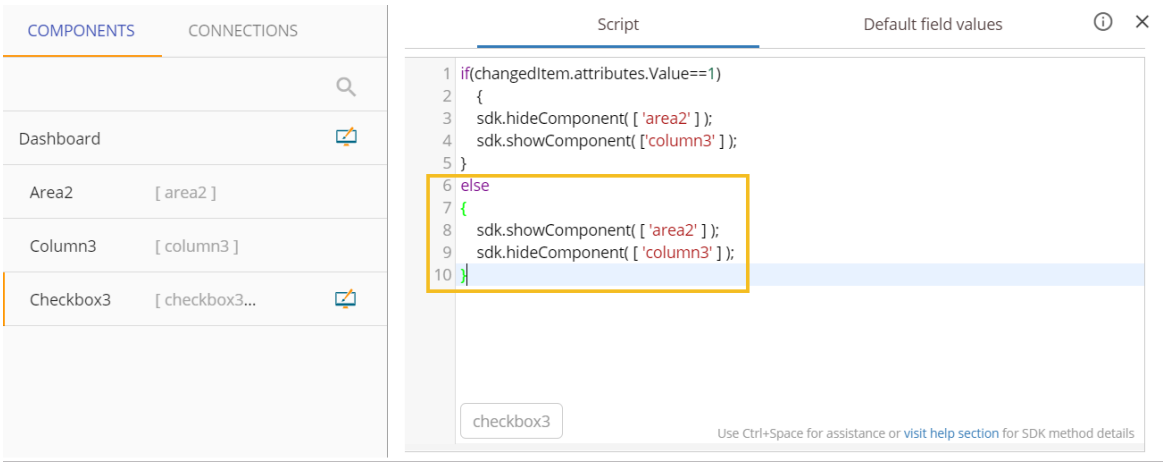


e. Select the '**Show and Hide**' function as per the requirement from the Designer Scripting Help window.

f. If the '**Value == 1**' (in other words, if the Checkbox is enabled) the Column chart should be displayed. For this to occur,
g. Place the '**Show Component**' function under the '**if**' function.
h. Pass Area chart value to the '**Show Component**' function.
i. Pass Column chart value to the '**Hide Component**' function to make sure that the Column chart will be hidden when the Area chart is displayed.

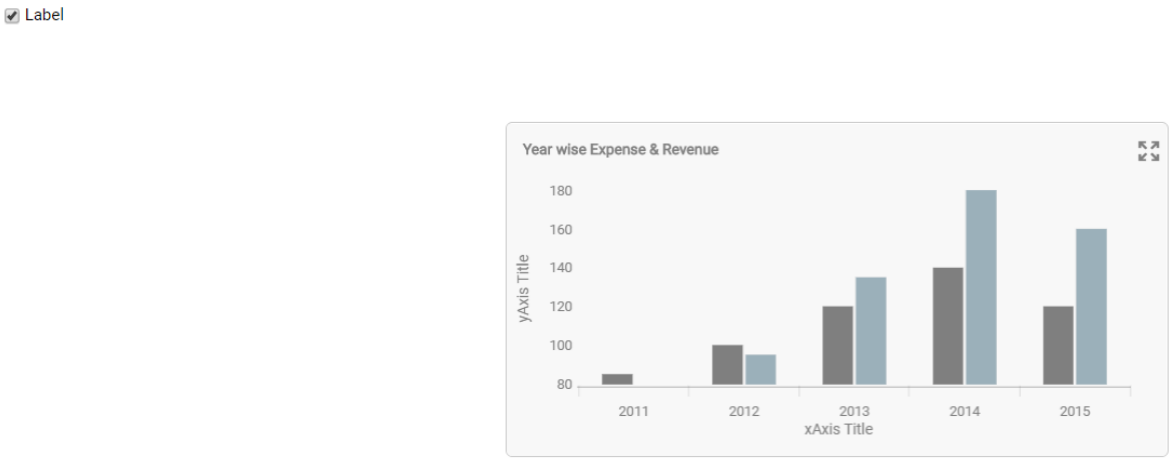


j. If the '**Value == 0**' (in other words, if the checkbox is disabled), we need to do the reverse of the function that we used earlier. So that when users uncheck Check Box, the '**Area chart**' will be displayed and '**Column chart**' will be hidden.
To accomplish this, users need to write the highlighted portion of the script:

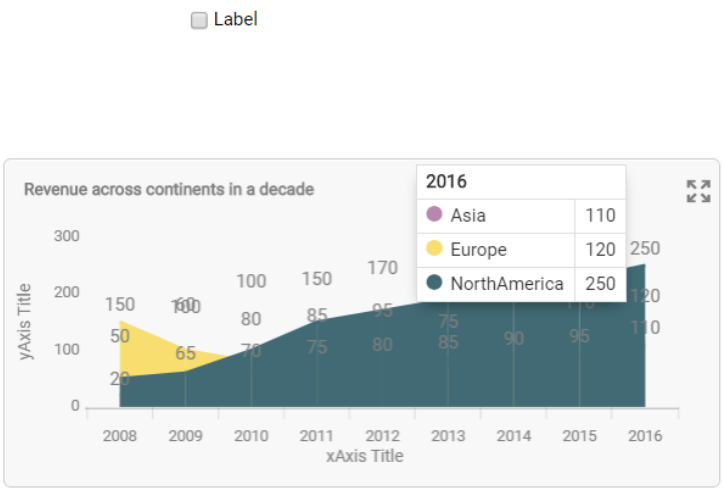


xii) After entering the above script successfully, click the '**Preview**' icon to view the results.

xiii) In the below screen capture, since the '**Checkbox**' is checked, the '**Column chart**' is displayed.



xiv) By unchecking the '**Checkbox**' displays the '**Area chart**.'



11. Managing Options

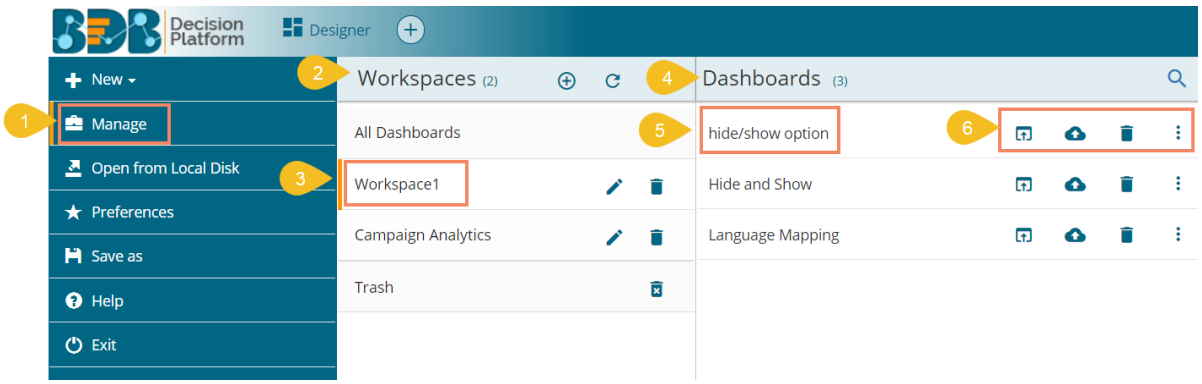
Manage and share your work with others. This section explains how to edit, save, and publish the dashboards created by users.

Generally created dashboards are saved under a workspace. Based upon requirement the users can edit the dashboards by adding some modifications and saving them to the disk. This tutorial explains how to edit, open, and save dashboards.

Created dashboards will be shared among the users for a purpose. There are options provided to move and publish dashboards.

The Below given description helps you how to access those options in the Designer.

i) Navigate to the Designer homepage.
ii) Click the '**Manage**' option.
iii) A list of '**Workspaces**' gets displayed.
iv) Choose a workspace.
v) Displays a list of all the saved dashboards under the selected workspace.
vi) Options provided next to a dashboard name can be used to manage or move that dashboard.



Options provided to a Dashboard:

Option	Name	Description
	Open in Designer	To open a created dashboard in the designer canvas.
	Publish to Portal	To publish a created dashboard onto the portal.
	Remove	To remove the dashboard from the list of saved dashboards.
	Actions	To provide more actions to be applied to the selected dashboard.

Explaining the Actions Menu:

Option	Name	Description
	Preview	Opens preview for the selected dashboard
	Export to Local Disk	Exports the dashboard to a local disk
	Rename	Renames the dashboard
	Move To	Moves the dashboard

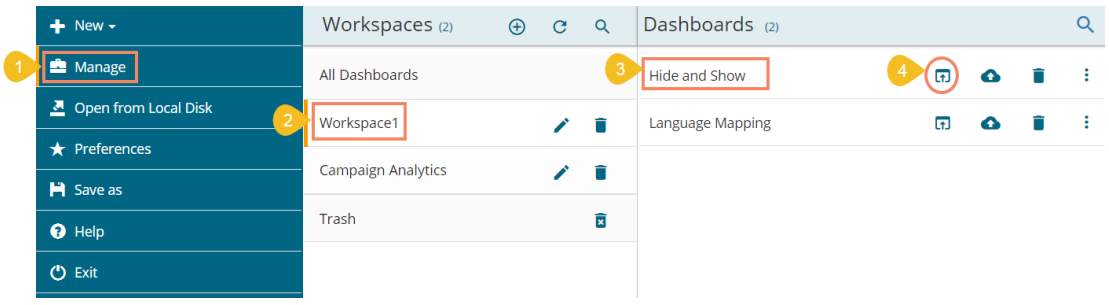
Note: Users can also use the '**Manage**' option to manage the created workspaces.

i) Click the '**Rename**' icon provided next to a workspace to rename the workspace.
ii) Click the '**Trash**' icon to remove a workspace from the list.

11.1. Opening a Dashboard

The users can open the desired dashboard into the designer workspace once they have created and saved it to a workspace.

i) Click the '**Manage**' option on the Designer homepage.
ii) Select and click on a workspace from the list of Workspaces.
iii) Select a Dashboard from the list of all the saved dashboards under the selected workspace.
iv) Click the '**Open in Designer**' icon.



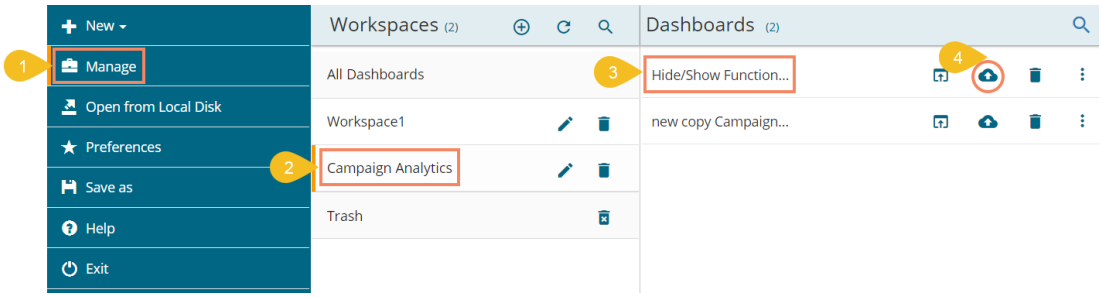
v) The selected dashboard opens in the designer workspace.

Note: The users can also open a dashboard in the designer canvas by using double clicks on the dashboard name from the list of saved dashboards.

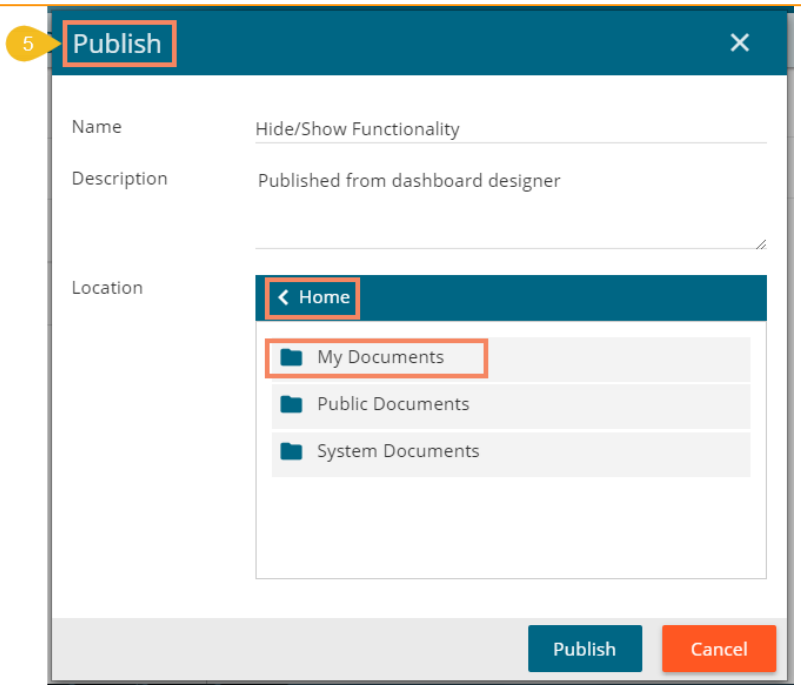
11.2. Publishing a Dashboard

Dashboards need to be published for end-users to access them. This section explains the steps to publish dashboards.

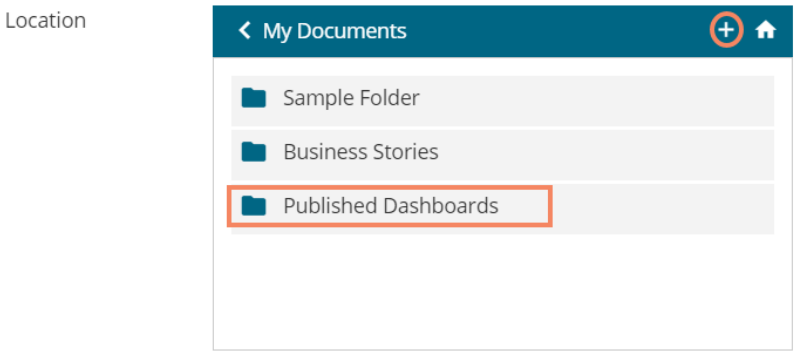
i) Click the '**Manage**' option on the Designer homepage.
ii) Select and click on a workspace from the list of Workspaces.
iii) Select a Dashboard from the list of all the saved dashboards under the selected workspace.
iv) Click the '**Publish to Portal**' icon.



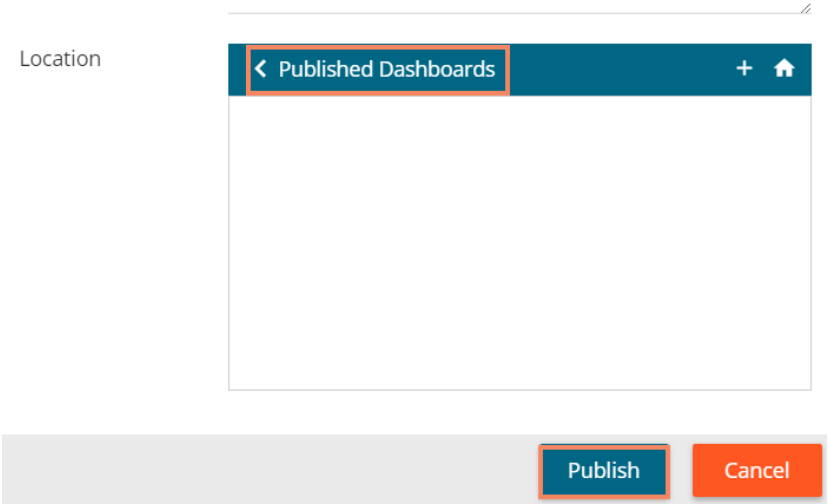
v) A pop-up window appears to assure the action.
   a. Dashboard name and description get displayed in the pop-up window.
   b. Select a location using the following steps:
      i. Choose a Documents space



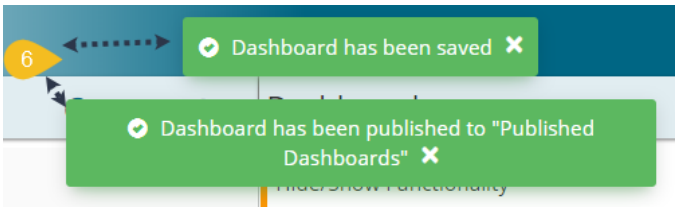
ii. Choose a folder or create a new folder (E.g., Published Dashboards is a newly added folder using the + icon).



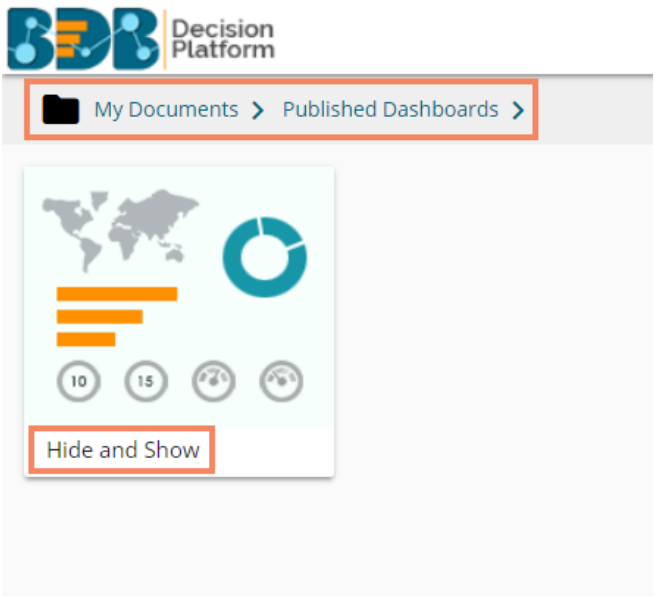
iii. Navigate to the '**Published Dashboards**' folder.
iv. Click the '**Publish**' option to confirm the action.



vi) Two success messages appear to assure the completion of the action.

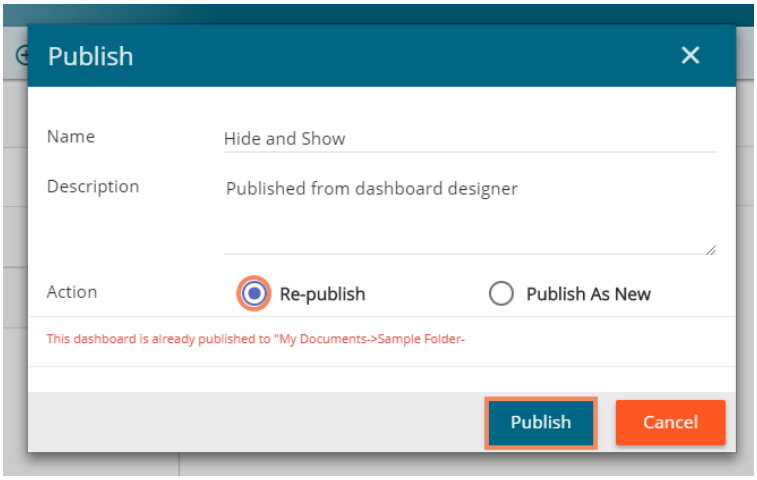


vii) The selected dashboard gets published in the desired place.



Note: For the published dashboard, the below given pop-up window will appear while clicking the '**Publish to Portal**' icon.

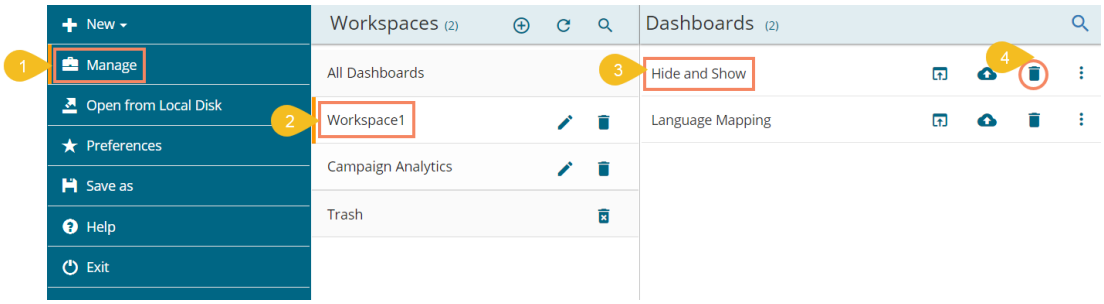
i) Select an option out of '**Re-Publish**' or '**Publish As New**.'
ii) Click '**Publish**' to complete the action.



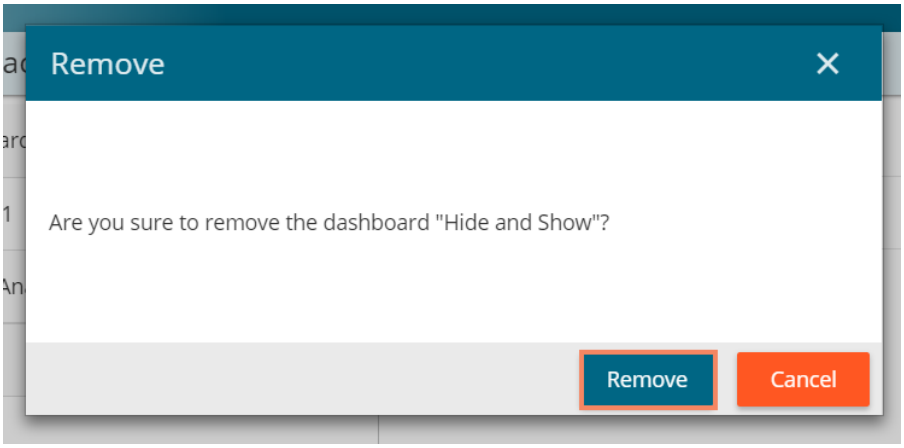
11.3. Deleting a Dashboard

Users can delete a dashboard by following the steps explained over here.

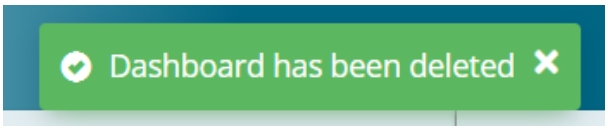
i) Click the '**Manage**' option on the Dashboard Designer home page.
ii) Select and click on a workspace from the list of all the Workspaces.
iii) Select a Dashboard from the list of all the created dashboards under the selected workspace.
iv) Click the '**Delete**' icon.



v) A pop-up window appears to confirm the deletion.
vi) Select the '**Remove**' option from the pop-up window.



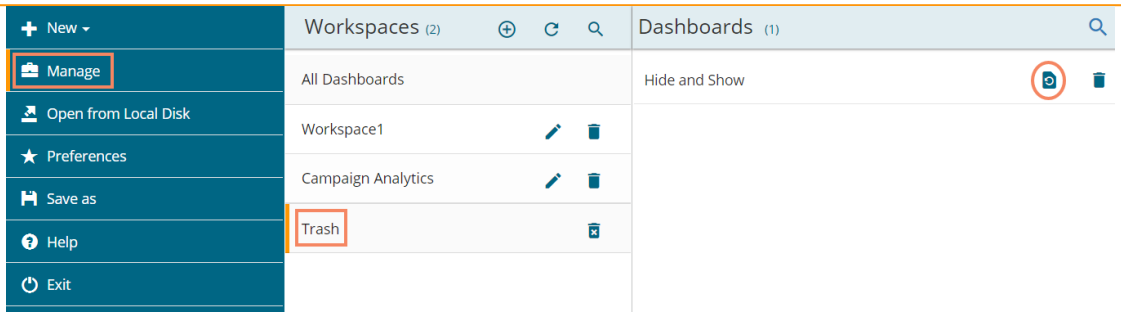
vii) The selected dashboard gets removed from the list.
viii) A message appears to notify the completion of the action.



11.3.1. Restoring the Deleted Dashboard

By default, the dashboard gets moved to the Trash Workspace. The users can open the Trash Workspace and restore the dashboard to the desired workspace.

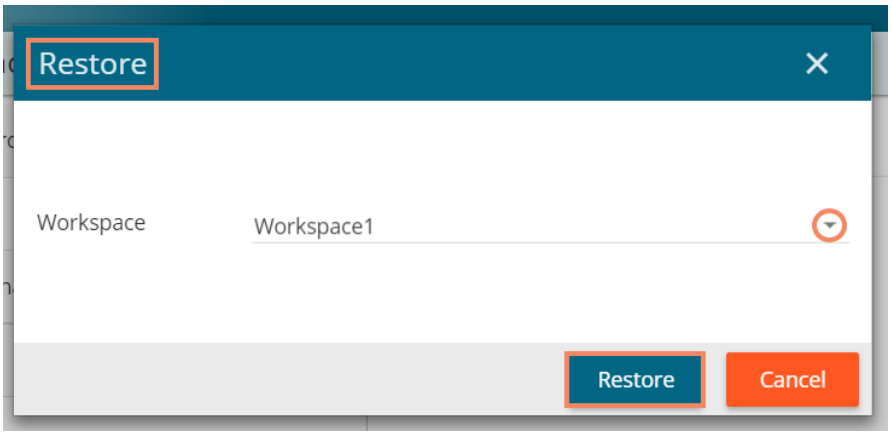
i) Click the '**Manage**' option from the Designer homepage.
ii) Navigate to the '**Trash**' workspace created under the list of all the workspaces.
iii) Select a deleted dashboard that you want to restore and click the '**Restore**' icon.



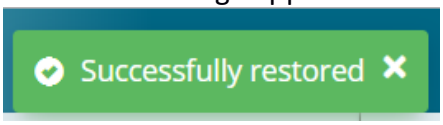
iv) A new window appears.

i. Select a workspace using the drop-down menu.

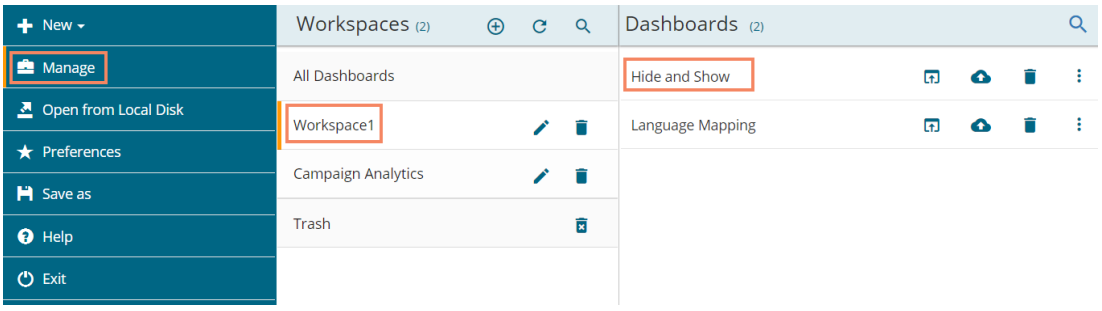
ii. Click the '**Restore**' option.



v) A success message appears to assure the restoration.



vi) The dashboard gets restored to the selected workspace.



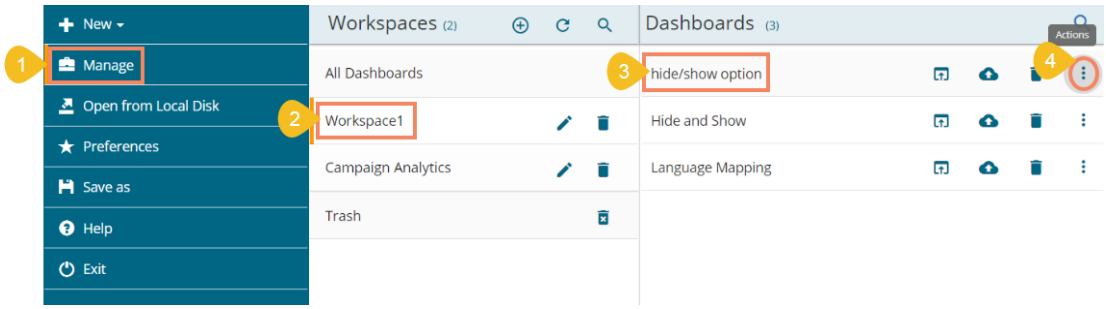
11.4. Actions

The Actions menu contains some more options like Preview, Export to Local Disk, Rename and Move to that can be applied on the dashboards.

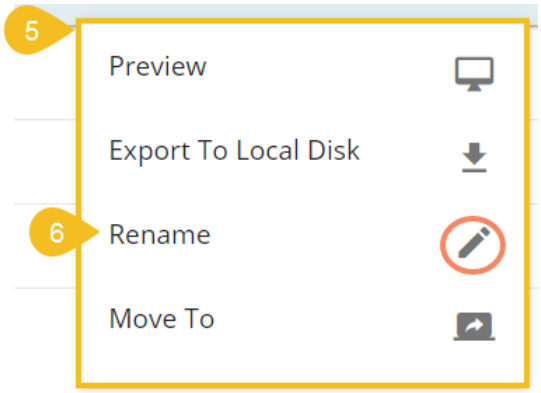
11.4.1. Renaming a Dashboard in Designer

Previously created dashboards can be renamed using this option. This part provides stepson how to rename an existing dashboard.

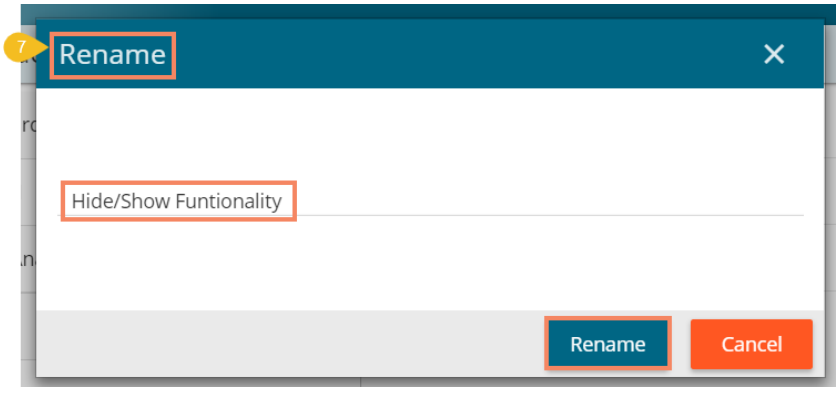
i) Click the '**Manage**' option on the Designer homepage.
ii) Select and click on a workspace from the list of Workspaces.
iii) Select a Dashboard from the list of all the saved dashboards under the selected workspace.
iv) Click the '**Actions**' ⋮ icon.



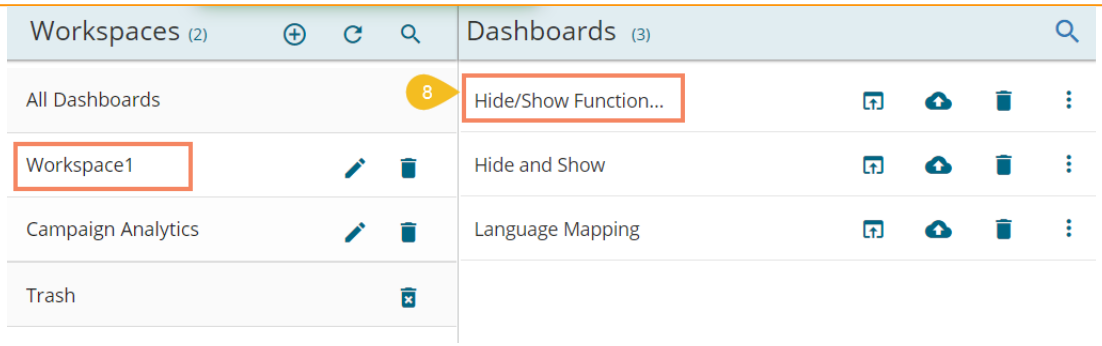
v) A context menu opens by clicking the '**Actions**' option.
vi) Click the '**Rename**' ✎ icon



vii) A new window appears to rename the dashboard.
   a. Enter a new name for the selected dashboard.
   b. Click the '**Rename**' option to save the new name.



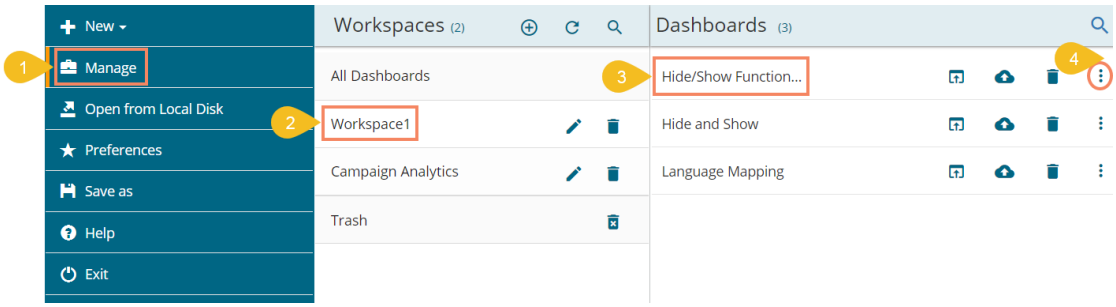
viii) The selected dashboard gets renamed successfully.



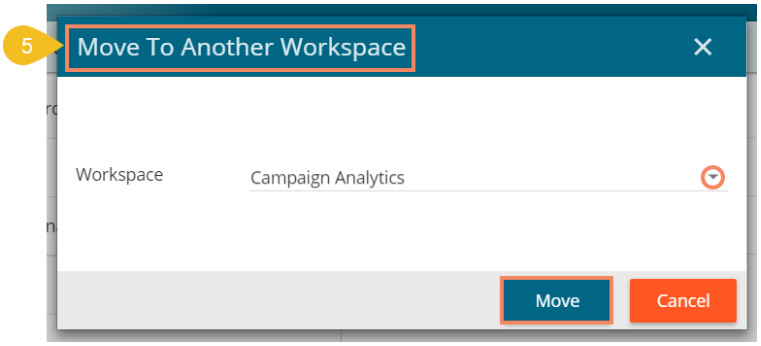
11.4.2. Moving a Dashboard

Users can move the created dashboards from one workspace to other using this option. This section explains steps to move dashboards.

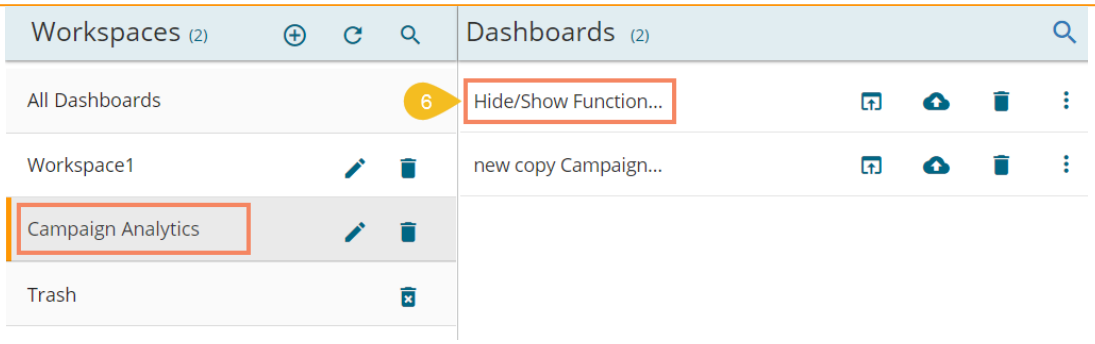
i) Click the '**Manage**' option on the Dashboard Designer homepage.
ii) Select and click on a workspace from the list of all the Workspaces.
iii) Select a Dashboard from the list of all the created dashboards under the selected workspace.
iv) Click the '**Actions**' ⋮ icon.



v) A pop-up window appears to assure the action.
   a. Select a Workspace from the drop-down menu.
   b. Click the '**Move**' option to move the selected dashboard into the desired workspace.



vi) The dashboard gets moved to the selected Workspace.

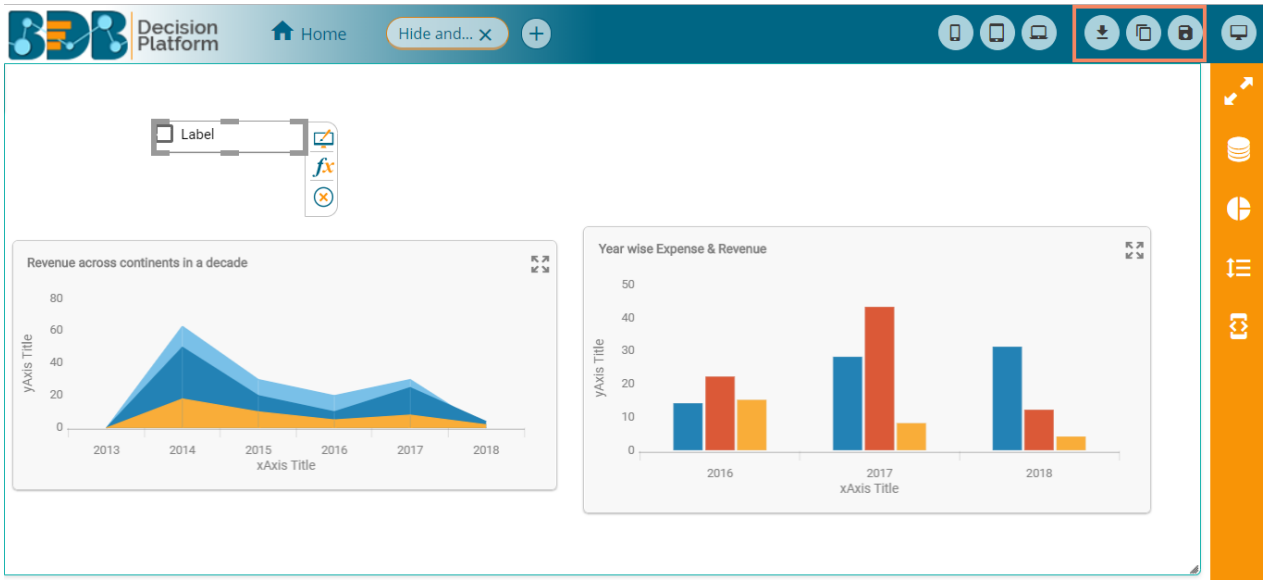


Note: Other two options provided under Actions are explained as below:

a. The '**Preview**' option opens the selected dashboard in the preview mode.
b. The '**Export to Local Disk**' option can export/download the dashboard to the local disk.

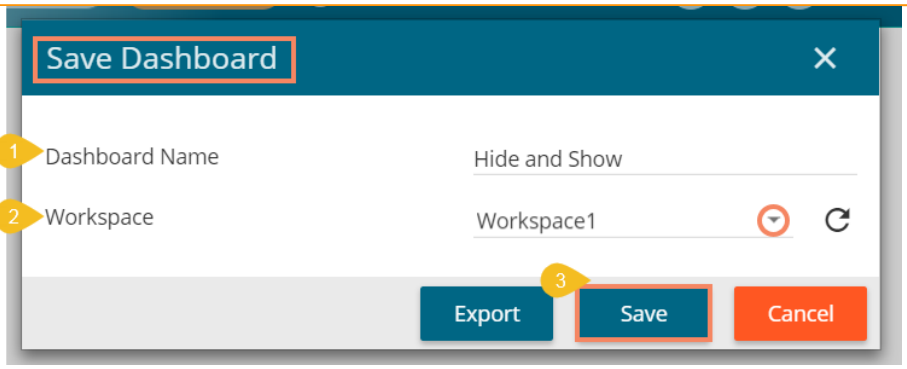
12. Saving a Dashboard

Users are provided with multiple options to save a dashboard. All the '**Save**' options are provided on the Header menu bar provided on the Designer Workspace. This section explains all the available options to save a dashboard.

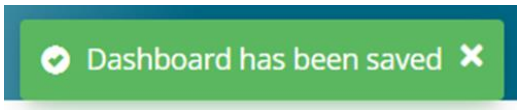


12.1. Save

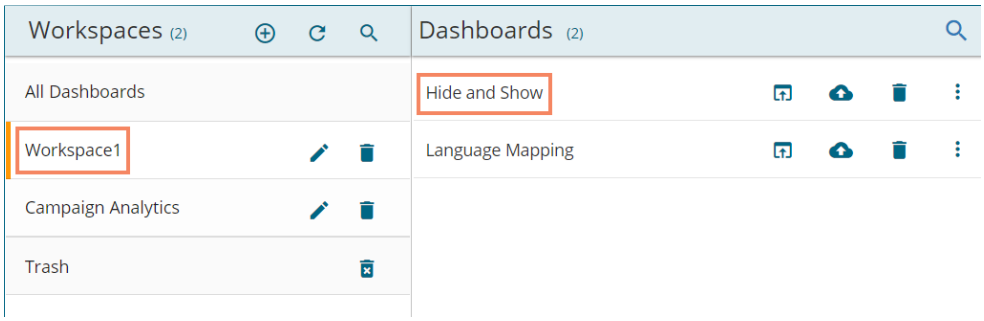
i) Click the '**Save**' icon from the Designer canvas header menu.
ii) A pop-up window appears with the following details:
   a. Dashboard Name: Name of the selected dashboard gets displayed.
   b. Workspace: Select a workspace via the drop-down menu.
   c. Click the '**Save**' option.



d. A success message appears to assure the same.



e. The dashboard gets saved to the selected workspace.



Note: Click the '**Export**' option from the Save Dashboard window to download the selected dashboard.

12.2. Save to Another Workspace

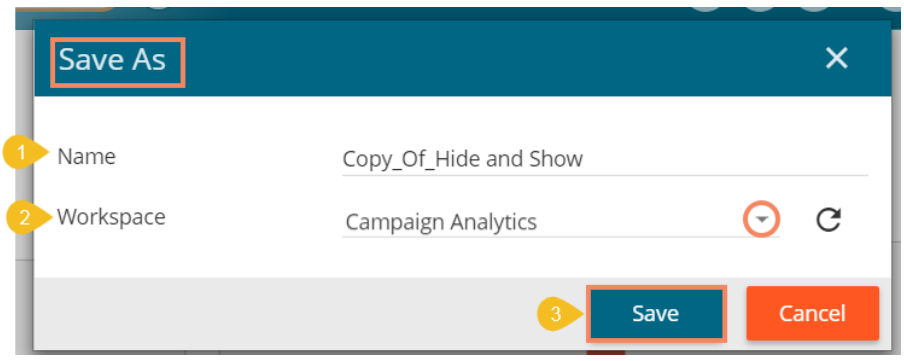
i) Click the '**Save to Another Workspace**' icon from the Designer canvas header menu.

ii) The '**Save As**' pop-up window appears asking to save a copy of the selected dashboard.

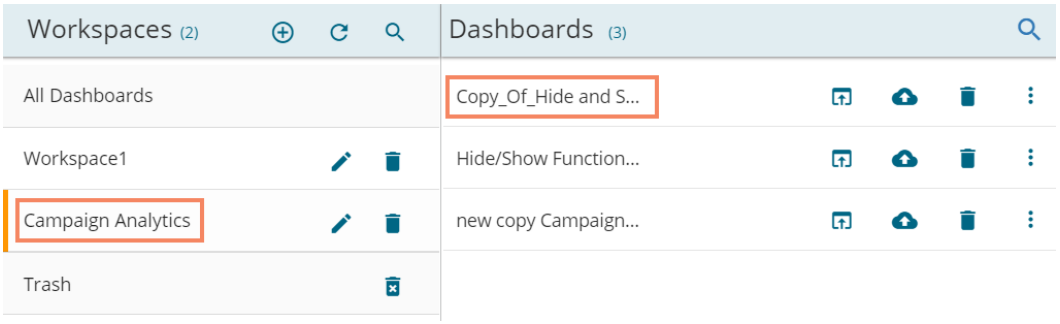
a. Name: The dashboard name gets displayed as '**Copy_of_ the original Dashboard Name**.'

b. Workspace: Select a workspace from the workspace drop-down menu.

c. Click the '**Save'** option.



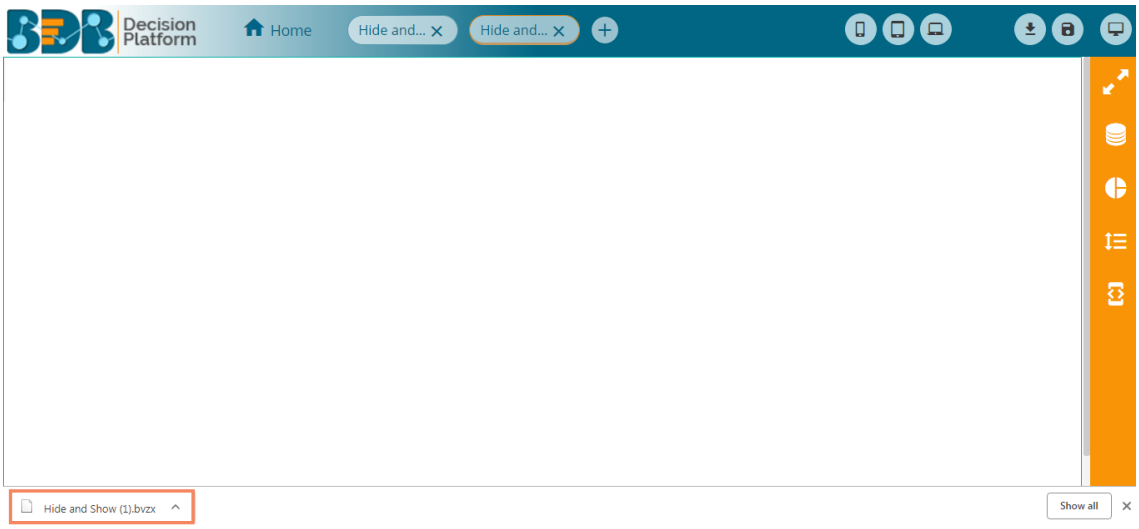
iii) A copy of the selected dashboard gets saved in another workspace.



12.3. Save to Local Disk

Dashboard which is created by users can be saved to local disk via **'Save to Local Disk'** option.

i) Click the '**Save to Local Disk**' icon from the Designer canvas header menu.
ii) The selected dashboard will be saved to the local system.



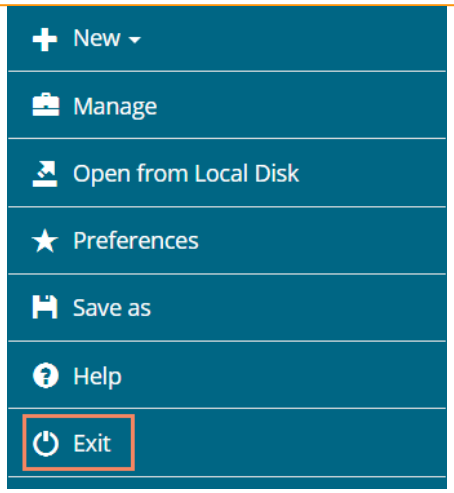
13. Signing Out

The signing out process for the Designer involves two level as described below:

Closing the BizViz Dashboard Designer:

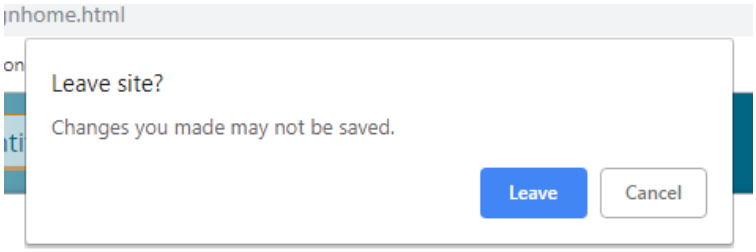
Once you have completed creating a dashboard, save your work and use one of the following options to close the Designer.

- Click the **'Exit'** option provided on the Designer homepage.



- Click the **'Close'** button (the 'X' on the right edge) of the Dashboard Designer tab

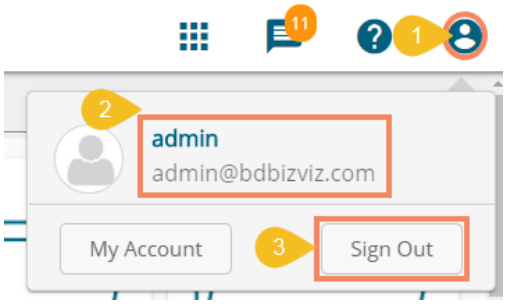
If you have not saved your work, you will be given the option to stay on the page or leave. If you have not yet saved your work, select 'Stay on Page' and then save your work before exiting the page.



- Steps to Sign Out from the BDB Platform.

The following steps describe how to log out from the BDB Platform.

i) Click the '**User**' icon on the Platform homepage.
ii) The details of the logged in user appears.
iii) Click the '**Sign Out**' option.



iv) The user successfully signs off from the **BDB Platform.**

Note: Clicking on the '**Sign Out**' option redirects the user back to the **Log in** page of the BDB platform.