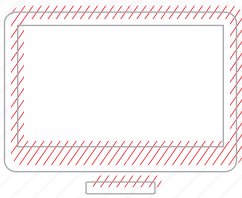
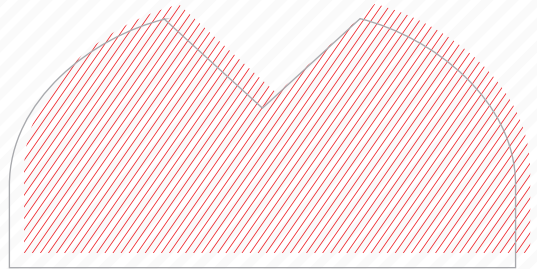
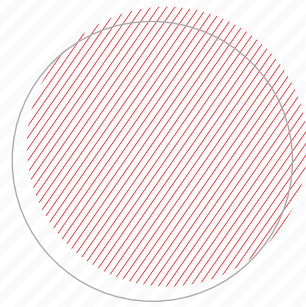
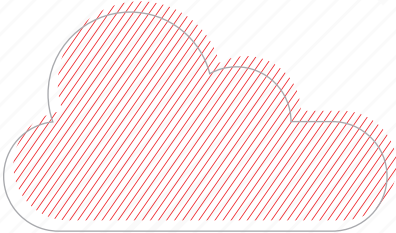
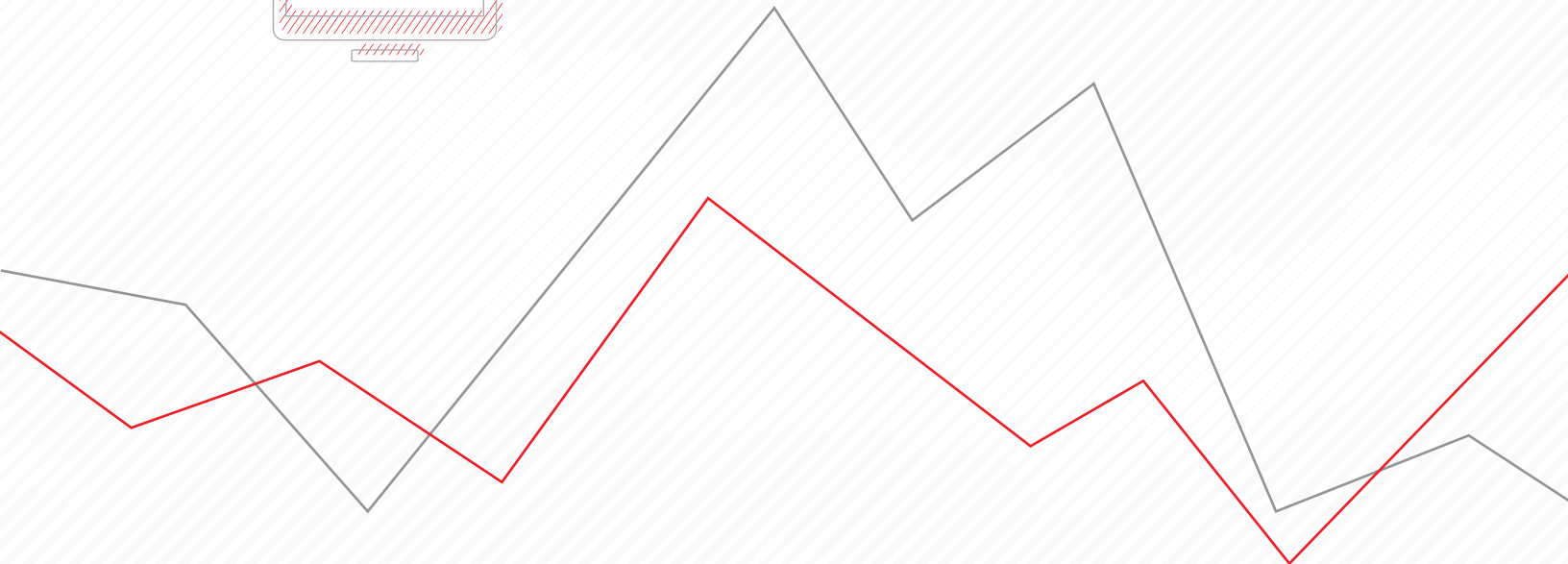


Replicating a Performance Report in Presentation Studio

Exercise Guide



MORNINGSTAR Direct



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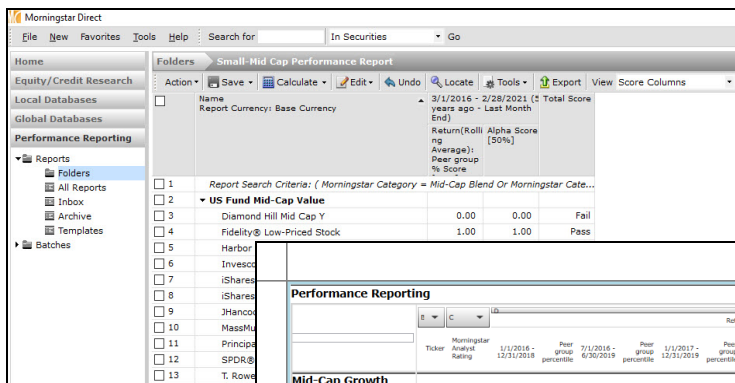
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Replicating a Performance Report in Presentation Studio

Imagine your manager asks you to evaluate how Mid-Cap and Small-Cap funds have performed over various time periods, and to determine how many ranked in the top quartile of their category while also earning a positive Alpha vs. their Morningstar index. This exercise guide shows you how to conduct this analysis in the Performance Reporting module, and how to present it via a Presentation Studio template. The following general sections are covered in this guide:

- ▶ [Creating a Performance Report \(page 5\)](#)
- ▶ [Creating a Performance Report in Presentation Studio \(page 36\)](#)

Overview



Morningstar Direct allows clients to analyze managed products in the Performance Reporting module, while Presentation Studio allows clients to make detailed and elegant reports.

Performance Reporting		Return	Alpha	Rating	Average	Peer Group Score	Small-Mid Total Score											
Ticker	Morningstar Analyst Rating	1/1/2016 - 12/31/2018	Peer group percentile	3/1/2016 - 6/30/2019	Peer group percentile	1/1/2017 - 12/31/2019	Peer group percentile	7/1/2017 - 6/30/2020	Peer group percentile	1/1/2018 - 12/31/2020	Peer group percentile	3/1/2018 - 2/28/2021	Peer group percentile	3/1/2016 - 2/28/2021	Alpha Score	Peer Group Score	Small-Mid Total Score	
Mid-Cap Growth																		
US Discovery Growth A	CHCX	9.87	26	20.55	12	18.19	28	17.94	18	23.96	25	25.57	14	2.87	63.33	1.00	1.00	Pass
Small Growth																		
US Small Cap Growth A	QUAX	12.38	12	24.22	8	21.89	8	19.89	13	27.37	17	30.00	11	8.17	65.00	1.00	1.00	Pass
Nordeen US Small Cap Equity Inst Div	GSVX	6.13	83	8.19	97	6.54	94	5.54	76	11.41	84	16.11	89	-2.35	41.67	0.00	0.00	Fail
Wisdom Small Cap Investor	ARTSX	11.02	31	20.78	14	22.01	7	22.37	8	32.14	4	29.27	14	8.84	65.00	1.00	1.00	Pass
Small Value																		
American Beacon Small Cap Val RS	AVTX	5.14	46	8.60	40	4.23	47	-5.38	54	2.73	38	12.34	42	-2.19	45.00	1.00	0.00	Watch

Creating a Performance Report

Creating a performance report involves the following basic steps:

1. Select the investments (rows) to include on the report.
2. Choose how to group those rows together, such as by Morningstar Category. This makes analysis simpler and specific investments easier to find.
3. Pick the columns to include on the report, both for performance data and any supplemental data points.
4. Apply conditional formatting and a scorecard to highlight your findings.

Because this performance report will ultimately be replicated in Presentation Studio, an additional step will be taken to create custom data points for the scorecard values. This section offers the following exercises:

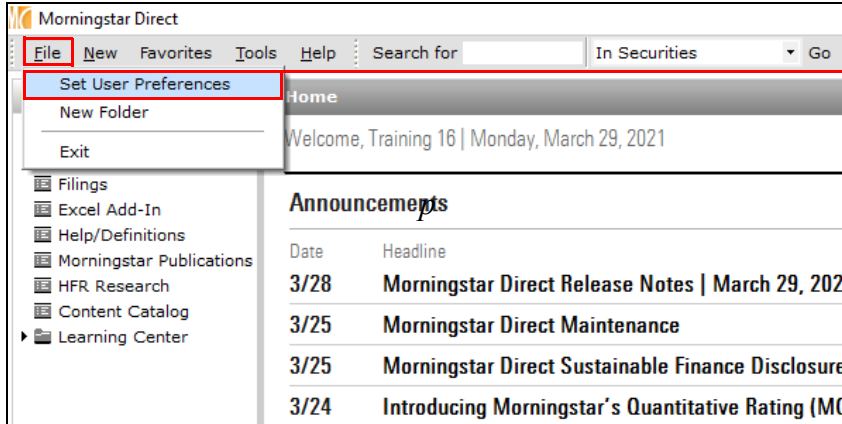
- ▶ [Exercise 1: Review the application's User Preferences and performance report General Settings on page 6](#)
- ▶ [Exercise 2: Create the performance report and select the investments on page 9](#)
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- ▶ [Exercise 9: Apply conditional formatting to a performance report on page 26](#)
- ▶ [Exercise 10: Generate a Scorecard for a set of investments on page 28, and](#)
- ▶ [Exercise 11: Save the Scorecard values as custom data points on page 33.](#)

Overview

Before creating a performance report, it's important to check both the application's User Preferences and the General Settings in the Performance Reporting module, to make any necessary updates before proceeding. Failing to do so could cause unnecessary duplicate work later. To check both of these, do the following:

1. **Log in** to the **desktop access point of Morningstar Direct**.
2. From the menu bar at the top of the Morningstar Direct window, select **File > Set User Preferences**. The Set User Preferences window opens.

Exercise 1: Review the application's User Preferences and performance report General Settings



Select this option from the File menu.

Creating a Performance Report

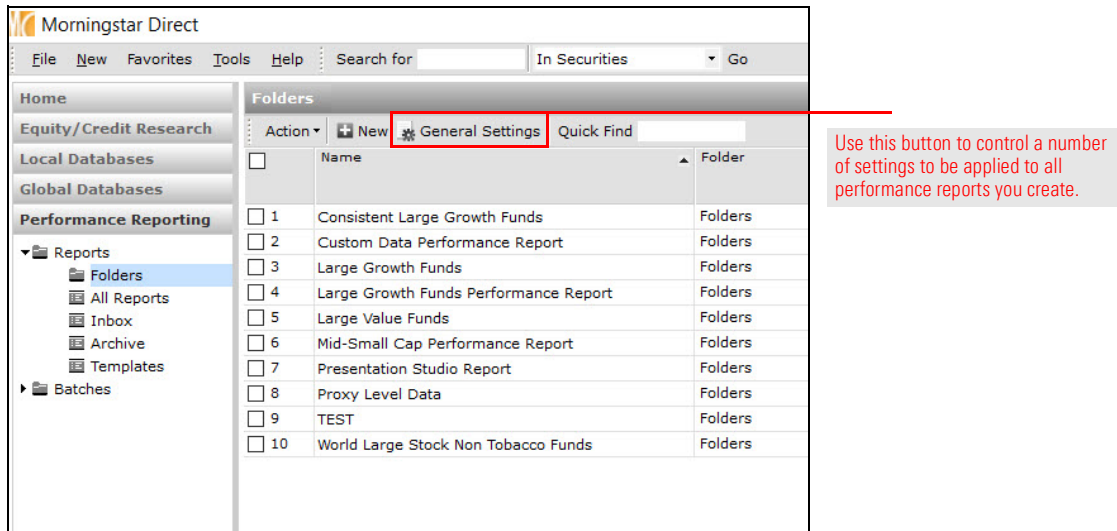
- On the General tab, from the **Custom Peer Group Ranking** drop-down field, be sure **Morningstar Methodology** is selected. This ensures open-end funds and exchange-traded funds in the same Morningstar Category are combined for the sake of calculating peer group rankings.

The screenshot shows the 'Set User Preferences' dialog box with the 'General' tab selected. The 'Custom Peer Group Ranking' dropdown menu is highlighted with a red box and contains the text 'Morningstar Methodology'. A red line extends from the right side of the dropdown to a callout box that says 'Check the value for this field.' Other settings visible include: Decimal places (2), PDF page size (A4), PDF orientation (Portrait selected), Benchmark 1 (S&P 500 TR), Benchmark 2 (empty), Risk-free proxy (USTREAS T-Bill Auction Ave 3 Mon), Currency (US Dollar), Local country/Region (United States), Default universe (Funds (Open End and Exchange Traded Funds)), Return/Price type (Mixed), Language (English), Asset class type (United States Allocation), Save cache files to (C:\Users\dowry\AppData\Local\Morningstar\DIRECT\), Stock Intersect Holding # (500), and checkboxes for Extended performance, Use ETF Proxy for Unavailable Index Portfolios, and Show Morningstar Published Lists & Searches.

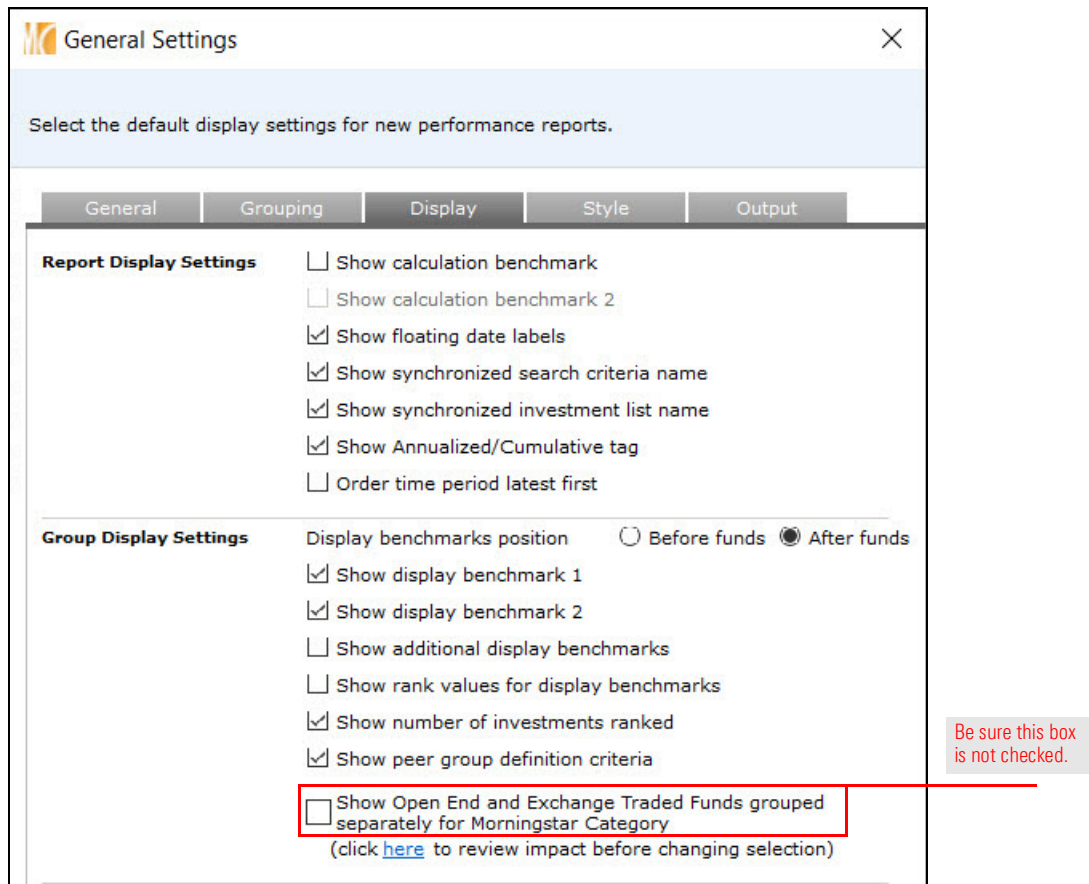
Check the value for this field.

- Click **OK** to close the Set User Preferences window.
- Select the **Performance Reporting** module. The Folders page should be selected by default.

- Click **General Settings**. The General Setting window opens.



- Click the **Display** tab.
- In the Group Display Settings section, be sure the box for **Show Open Fund and Exchange Traded funds grouped separately for Morningstar Category** is **unchecked**.

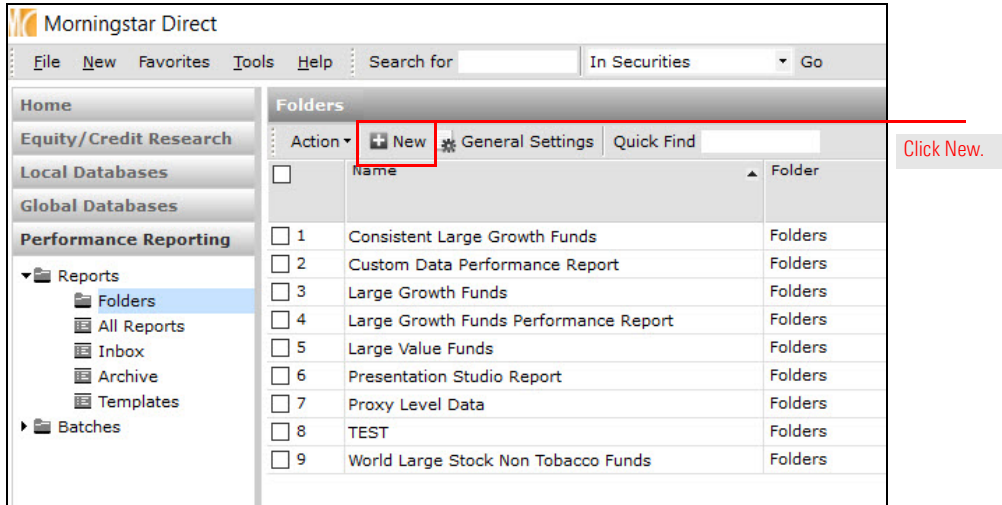


- Click **OK** to close the General Settings window.

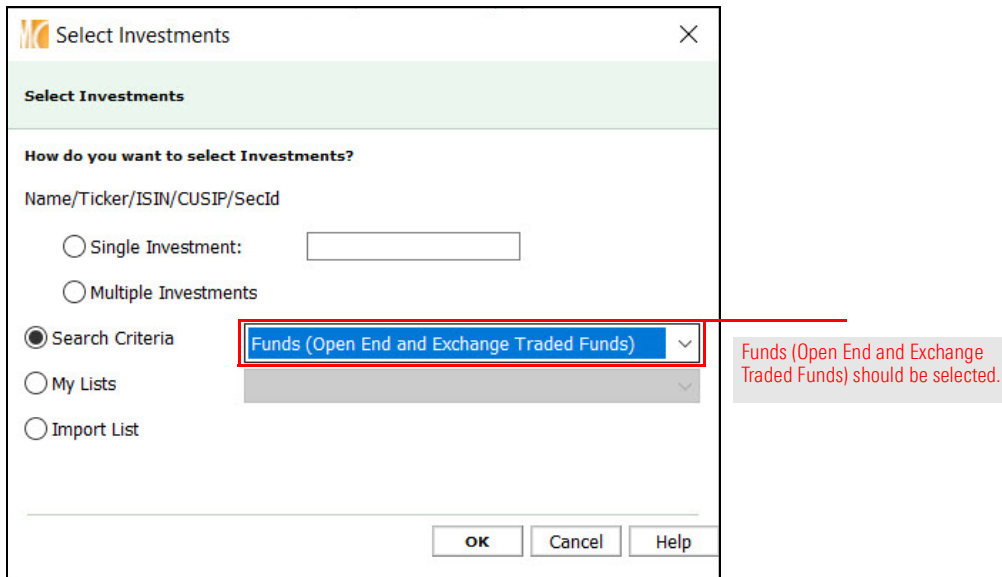
This performance report will be created by selecting certain criteria via a search. To create the performance report, do the following:

Exercise 2: Create the performance report and select the investments

1. The Performance Reporting module should be selected. On the toolbar above the grid, click **New**. The Select Investments dialog box opens.



2. Select **Search Criteria**, then select **Funds (Open End and Exchange Traded Funds)**.



3. Click **OK**. The Search Criteria window opens.

4. From the View Field Name area, select **Alphabetically**.
5. Click the **first row** of the Field Name column, then use the following table to select the criteria and values for the search. Be sure to set the parentheses before the first row, and after the sixth row.

Note: Jump to a particular data point in the list by typing the first few letters of its name.

Rel	(Field	Operator	Value)
	(Morningstar Category	=	U.S. > Mid-Cap Blend	
Or		Morningstar Category	=	U.S. > Mid-Cap Growth	
Or		Morningstar Category	=	U.S. > Mid-Cap Value	
Or		Morningstar Category	=	U.S. > Small Blend	
Or		Morningstar Category	=	U.S. > Small Growth	
Or		Morningstar Category	=	U.S. > Small Value)
And		Share Class Closed to new Inv	Not =	Yes	
And		Oldest Share Class	=	Yes	
And		Inception Date	<	3/1/2016	
And		Morningstar Analyst Rating	>=	Bronze	
And		Prospectus Net Expense Ratio	<	CAT AVG	

6. Click **Run Search** to ensure you see a number of Items Found greater than 0.

Be sure your criteria match the selections here, and click Run Search to ensure you see results.

The screenshot shows the Morningstar Direct search interface. At the top, there are menu options: Open, Insert, Delete, Clear All, Export, PDF, Save As, and Feedback. Below this is a search criteria table with columns: Rel, (, Field Name, Operator, Value, and). The table contains 10 rows of criteria, matching the table provided in the previous block. Below the table, there are search options: View Field Name (By Category selected, Alphabetically), Include (Only Surviving Investments checked, User Defined Primary Class Only), Items Searched (321269), and Items Found (108). A red box highlights the 'Run Search' button. At the bottom, there are 'Help', 'OK', and 'Cancel' buttons.

7. Click **Save As**. The Save As dialog box opens. Saving the search criteria here enables you to use it later, in both the Workspace module and Presentation Studio.
8. Name the search **Small-Mid Cap Performance Report**.
9. Click **OK** to save the search.
10. Click **OK** to close the Search Criteria window. The Group Settings window opens.

By default, when examining the peer group rank performance of funds in a performance report, Morningstar Direct compares the funds only to the others in their group, rather than all potential funds in the corresponding group, such as the Morningstar Category. This section shows you how to change the peer group for a set of funds so all funds from each category are included for comparison purposes when calculating rank values.

Exercise 3: Change the settings for the group

Additionally, it is also important to use a relevant benchmark for both the performance comparison and performance calculations, particularly when Modern Portfolio Theory (MPT) statistics such as Alpha are included. This exercise also covers this change. Finally, only one comparison benchmark will be displayed beneath each group on the report, rather than the default two benchmarks.

To change these settings for a performance report, do the following:

1. Check the **Select All** box above the first row. Having all groups selected ensures the subsequent changes made in this exercise apply to all groups. Without selecting all groups first, these steps would have to be repeated for each row.
2. In the Peer Group column for row 1, click the **Peer Group** icon. The Peer Group dialog box opens.

Check this box to select all groups (and rows within those groups).

Click this icon to change the Peer Group value.

Group Settings

The group settings dialog is used to organize a list of investments into groups for comparison against peer groups and selected benchmarks. It can be defined using existing investment lists or search criteria.

Group By Recently Used Custom Database Search

Available Grouping: Morningstar Category Update

Current Grouping Morningstar Category

⏪ ⏩ ⏴ ⏵ Expand All Report Settings Delete Custom groups Show Benchmarks Add Display

	Display Groups/Investments	# of Investments in Display Group	Peer Group	# of Investments in Peer Group
<input checked="" type="checkbox"/>	1 ▶ US Fund Mid-Cap Value	18	Display Group	<input checked="" type="checkbox"/> 18 S8
<input checked="" type="checkbox"/>	20 ▶ US Fund Small Blend	21	Display Group	<input type="checkbox"/> 21 S8
<input checked="" type="checkbox"/>	42 ▶ US Fund Mid-Cap Growth	21	Display Group	<input type="checkbox"/> 21 S8
<input checked="" type="checkbox"/>	64 ▶ US Fund Mid-Cap Blend	23	Display Group	<input type="checkbox"/> 23 S8
<input checked="" type="checkbox"/>	88 ▶ US Fund Small Value	11	Display Group	<input type="checkbox"/> 11 S8
<input checked="" type="checkbox"/>	100 ▶ US Fund Small Growth	14	Display Group	<input type="checkbox"/> 14 S8

- Click the **Morningstar Category** button.

Peer Group [X]

Define Peer Group Dialog
This dialog is used to define the peer group.

How do you want to define peer group?

Use Display Group
 Search Criteria Open End Funds
 My Lists
 Morningstar Category
 Morningstar Category + Search Criteria Open End Funds

This option will select the relevant category/sector for each grouping

Help [OK] [Cancel]

Use this option to compare the funds from the search to all other funds in their Morningstar Category.

- Click **OK** to close the dialog box. Note how the value in the # of Investments in Peer Group cell has changed.
- In row 1, from the **Display Benchmark 1** drop-down field, select **Morningstar Index**.

Group Settings

Group Settings
The group settings dialog is used to organize a list of investments into groups for comparison against peer groups and selected benchmarks. Peer groups investment lists or search criteria.

Group By Recently Used Custom Database Search

Available Grouping: Morningstar Category [Update]

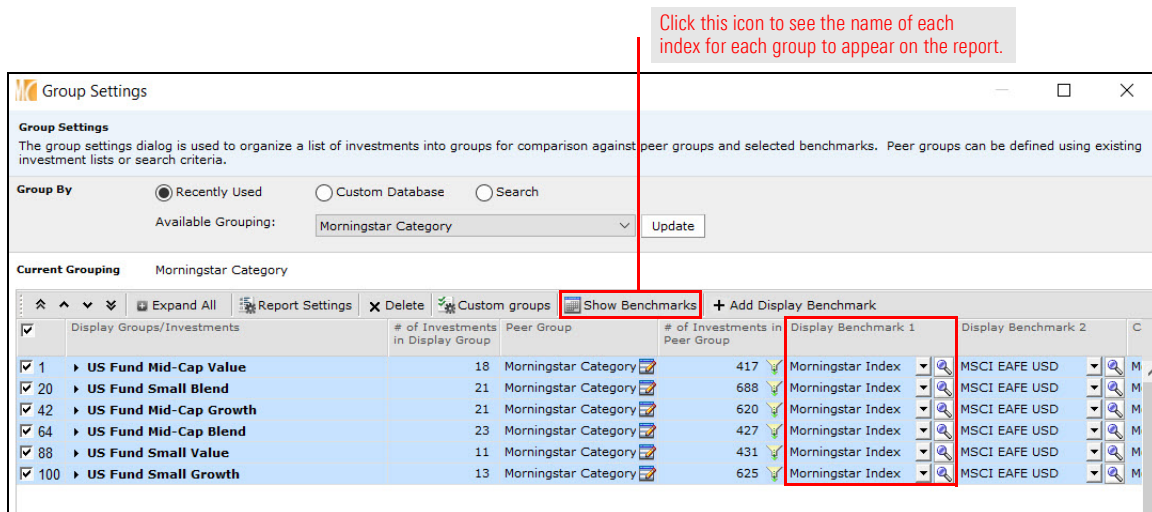
Current Grouping Morningstar Category

Expand All Report Settings Delete Custom groups Show Benchmarks Add Display Benchmark

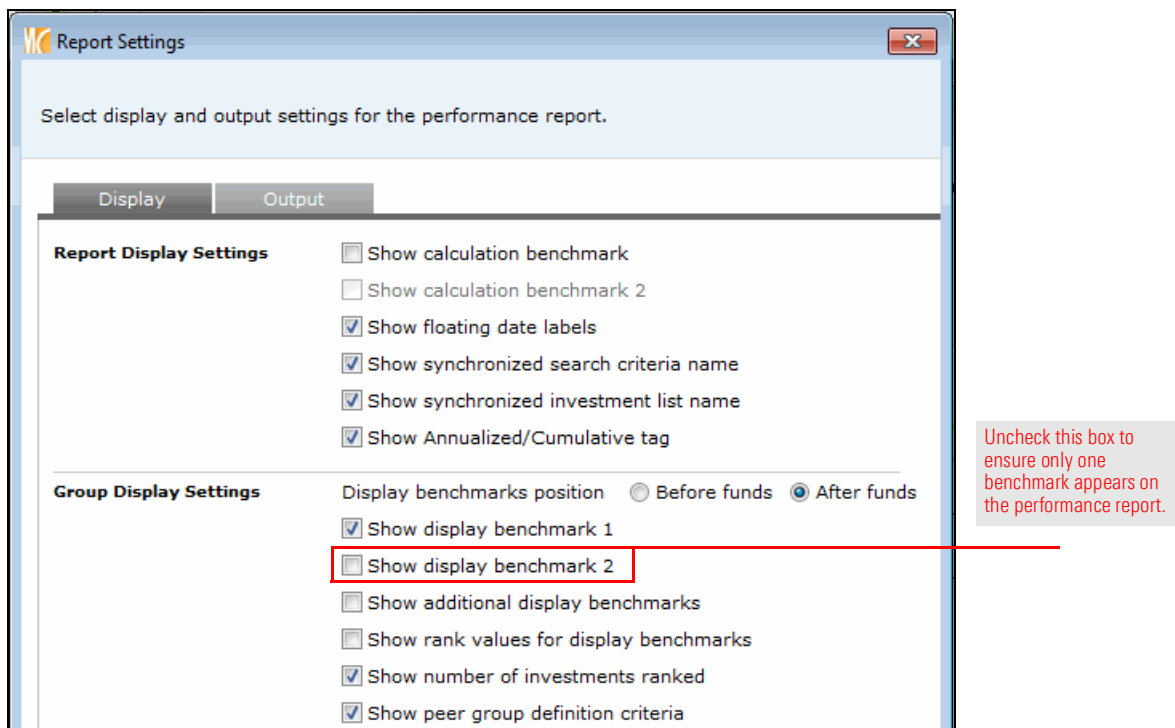
	Display Groups/Investments	# of Investments in Display Group	Peer Group	# of Investments in Peer Group	Display Benchmark 1
<input checked="" type="checkbox"/>	1 ▶ US Fund Mid-Cap Value	18	Display Group	18	Morningstar Index
<input checked="" type="checkbox"/>	20 ▶ US Fund Small Blend	21	Display Group	21	Morningstar Category A
<input checked="" type="checkbox"/>	42 ▶ US Fund Mid-Cap Growth	21	Display Group	21	Morningstar Category I
<input checked="" type="checkbox"/>	64 ▶ US Fund Mid-Cap Blend	23	Display Group	23	MPT Index
<input checked="" type="checkbox"/>	88 ▶ US Fund Small Value	11	Display Group	11	S&P 500 TR
<input checked="" type="checkbox"/>	100 ▶ US Fund Small Growth	13	Display Group	13	S&P 500 TR

Select this option to assign the corresponding Morningstar Index to each category in the performance report.

- To see what the benchmark is for each category, from the toolbar, click **Show Benchmarks**.



- Scroll right to see the Display Benchmark 2 column. By default, both display benchmarks are shown in the performance report. To ensure only the first benchmark is displayed, on the toolbar, click **Report Settings**. The Report Settings dialog box opens.
- To hide Display Benchmark 2, **uncheck** the box for **Show display benchmark 2**.



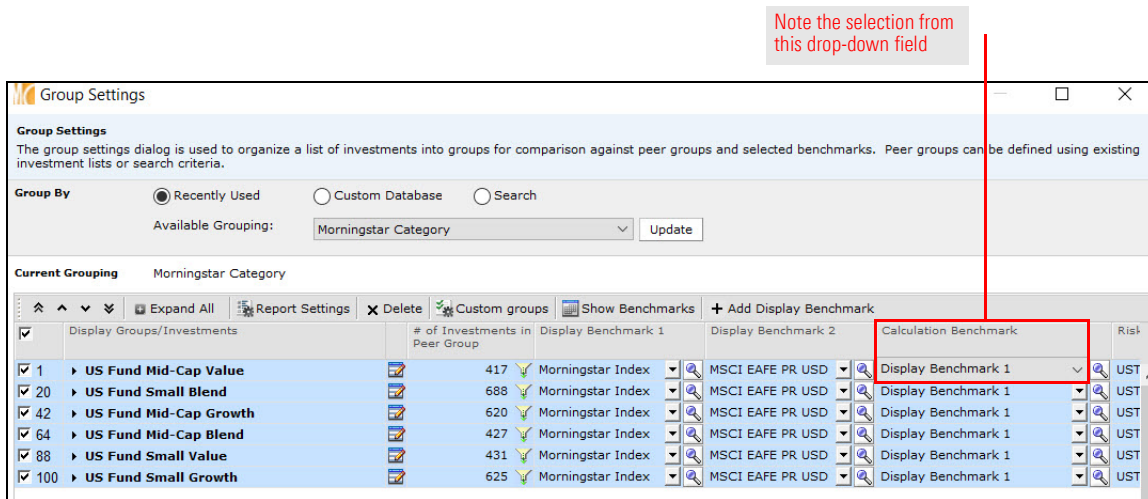
- Click **OK** to close the Report Settings dialog box.

- Next, ensure the proper benchmark is used for calculating the MPT data on the performance report. From the **Calculation Benchmark** drop-down field in row 1, select **Display Benchmark 1**.

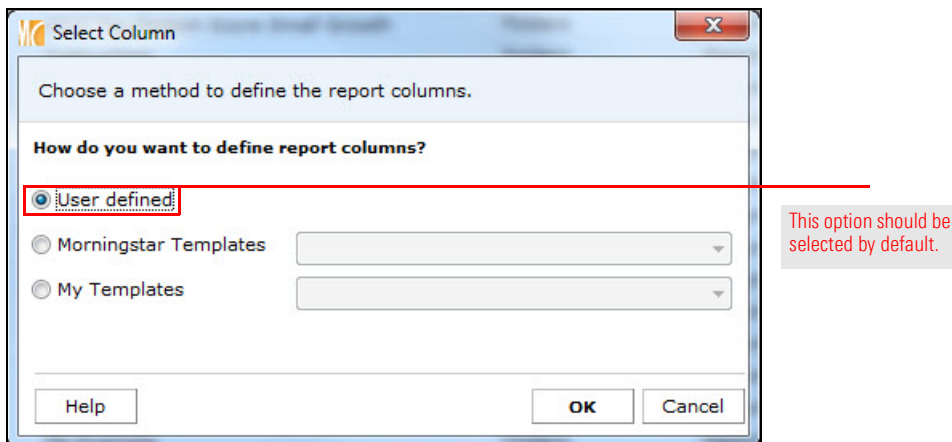
Note: You may need to **scroll right** to see this column.

Selecting Display Benchmark 1 here ensures the following:

- ▶ The same benchmark is used for both display and calculation, and
- ▶ A peer-appropriate index is used for calculations.



- Click **OK** to close the Group Settings window. The Select Column dialog box opens.
- Make sure the option for **User Defined** is selected. This selection allows you to define the report columns.



- Click **OK**. The Performance Column Setup window opens.

One aspect of this performance report is to know if this set of funds has performed consistently well over a set of rolling three-year periods, starting from five years ago through the most recent month-end. This exercise shows you how to set up the time periods for this analysis. Do the following:

Exercise 4: Set the values for the Time Periods tab

1. The Performance Column Setup window should be open, with the Time Periods tab selected. The Start Date and End Date fields reflect a five-year time period by default, but it is a single time period, rather than rolling time periods. In the Time Periods area, select the **Rolling window** option.
2. From the **Window size** drop-down field, select **3 years**.
3. From the **Moving step** drop-down field, be sure **6 months** is selected. The Number of columns field should read **5**.
4. Click **Add Columns**. The time periods for the report are added to the Selected Time Periods area at the bottom of the window.

Performance Column Setup

Time Period Setup
The time periods tab is used to add, edit, or remove time periods to the performance report.

Time Periods | Data Points | Ranks

Time Period

Start Date: 5 years ago | 01/01/2016

End Date: Last Year End | 12/31/2020

Time Periods: Rolling window

Window size: 3 years

Moving step: 6 months

Number of columns: 5 | **Add Columns**

Selected Time Periods

- 1/1/2016 - 12/31/2018 (Rolling 3 years window, 6 months step)
- 7/1/2016 - 6/30/2019 (Rolling 3 years window, 6 months step)
- 1/1/2017 - 12/31/2019 (Rolling 3 years window, 6 months step)
- 7/1/2017 - 6/30/2020 (Rolling 3 years window, 6 months step)
- 1/1/2018 - 12/31/2020 (Rolling 3 years window, 6 months step)

Manage Columns | Settings | Remove | Remove All

Order time period latest first

Help | OK | Cancel

Review the values and settings for the highlighted fields before clicking this button, then confirm the Selected Time Periods are correct.

5. One last time period will be added, to allow the performance report to show the average rolling three-year return over the five-year time span. In the Time Periods area, select the **Single Period** option.
6. Click **Add Columns**.

Note: Do not click OK yet; the Data Points and Ranks tabs still need to be addressed.

Performance Column Setup

Time Period Setup
The time periods tab is used to add, edit, or remove time periods to the performance report.

Time Periods | Data Points | Ranks

Time Period

Start Date: 5 years ago (dropdown) | 03/01/2016 (calendar icon)

End Date: Last Month End (dropdown) | 02/28/2021 (calendar icon)

Time Periods: Single period | Rolling window

Trailing periods | Regular periods from start

Forward extending periods | Regular periods from end

Window size: (dropdown)

Number of columns: 1 | Add Columns

Selected Time Periods

- 1/1/2016 - 12/31/2018 (Rolling 3 years window, 6 months step)
- 7/1/2016 - 6/30/2019 (Rolling 3 years window, 6 months step)
- 1/1/2017 - 12/31/2019 (Rolling 3 years window, 6 months step)
- 7/1/2017 - 6/30/2020 (Rolling 3 years window, 6 months step)
- 1/1/2018 - 12/31/2020 (Rolling 3 years window, 6 months step)
- 3/1/2016 - 2/28/2021 (5 years ago - Last Month End)**

Manage Columns | Settings | Remove | Remove All

Order time period latest first

Help | OK | Cancel

Select this option for the last time period.

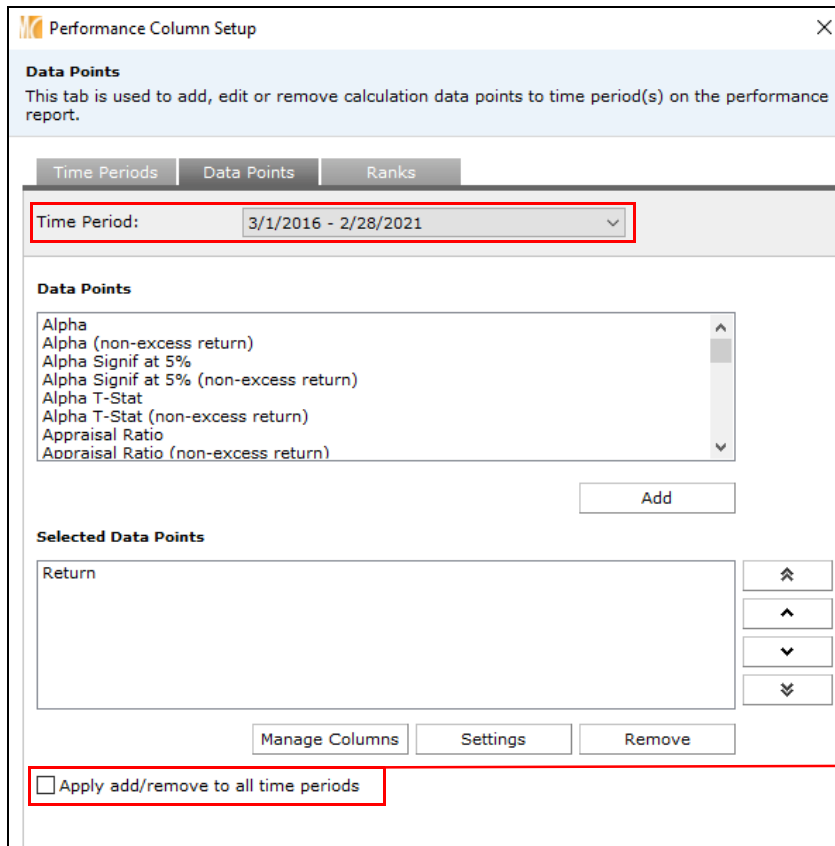
Now that the general return time periods are in place, three last changes are needed before leaving the Performance Column Setup window:

Exercise 5: Set the values for data points and ranks

- ▶ the single period data point needs to be modified to show the three-year rolling return average over this time period
- ▶ Alpha and Batting Average will both be added as data points, and
- ▶ a small adjustment will be made to the Peer Group percentile data point on the report to make the data easier to read.

To make these changes in the Performance Column Setup window, do the following:

1. Select the **Data Points** tab. In the Time Period drop-down field at the top of the tab, note that the earliest three-year rolling time period is selected by default. Also, the Return data point is already displayed in the Selected Data Points area.
2. The first step in adjusting the single time period data point to show the rolling average return is to ensure only that data point is affected by the change about to be made. **Uncheck** the **box** next to **Apply add/remove to all time periods**.
3. From the **Time Period** drop-down field, select the **single five-year time period** (in this case, **3/1/2016 - 2/28/2021**).



Be sure this box is unchecked before selecting the time period at the top of the tab.

- Select the **Return** data point, then click **Settings**. The Data Settings dialog box opens.

Performance Column Setup [X]

Data Points
This tab is used to add, edit or remove calculation data points to time period(s) on the performance report.

Time Periods | **Data Points** | Ranks

Time Period: 3/1/2016 - 2/28/2021

Data Points

- Alpha
- Alpha (non-excess return)
- Alpha Signif at 5%
- Alpha Signif at 5% (non-excess return)
- Alpha T-Stat
- Alpha T-Stat (non-excess return)
- Appraisal Ratio
- Appraisal Ratio (non-excess return)

Add

Selected Data Points

- Return

Manage Columns | **Settings** | Remove

Apply add/remove to all time periods

Select the data point before clicking the Settings button.

5. From the Calculation Window area, select the option for **Rolling Window**.
6. In the **Window size** field, enter **36**.
7. In the **Moving step** field, enter **6**.

Note: In this dialog box, values are entered in months rather than years. Also, the default value for the Statistics field is Average, which is what will be used for this report, but note that other options exist here.

The screenshot shows the 'Data Settings' dialog box with the following configuration:

- Time Period:** 3/1/2016 - 2/28/2021
- Data Points:** Return (with Annualize)
- General Settings:** 365.25
- Display name:** Setting
- Scale:** none
- Reverse sign:** No
- Decimal places:** 2
- Do not display or export this data point
- Calculation:**
 - Currency:** Base Currency
 - Data series:** Monthly Return
 - Return type:** Total Return
 - Investment Scheme:** None
 - Calculation Window:** Single Data Point Rolling Window
 - Window size:** 36 months
 - Moving step:** 6 months
 - Statistics:** Average
- Values To Exclude:** Best 0, Worst 0, From Source Data

A callout box on the right side of the dialog box contains the text: "Be sure the settings match those seen here." A red line connects this callout to the 'Calculation Window' section, which is highlighted with a red border in the screenshot.

8. Click **OK** to close the Data Setting dialog box. Note that (Rolling Average) now appears next to Return in the Selected Data Points area.

9. Next, from the Data Points area, select **Alpha**, then click **Add**.
10. From the Data Points area, select **Batting Average**, then click **Add**.

Performance Column Setup

Data Points
This tab is used to add, edit or remove calculation data points to time period(s) on the performance report.

Time Period: 3/1/2016 - 2/28/2021

Data Points

- Average Absolute Deviation
- Average Drawdown
- Average Gain
- Average Loss
- Batting Average**
- Batting Average (Rolling Returns)
- Bear Beta
- Bear Correlation

Add

Selected Data Points

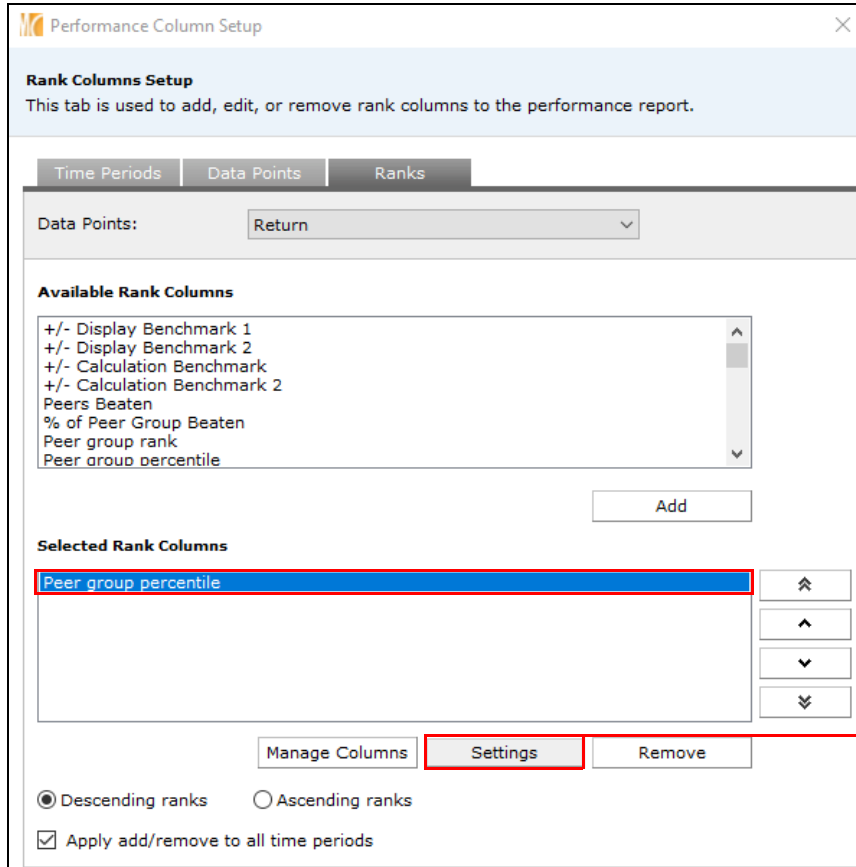
- Return(Rolling Average)
- Alpha
- Batting Average

Manage Columns Settings Remove

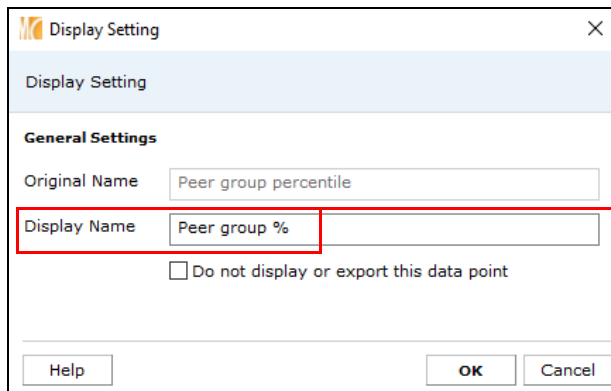
Apply add/remove to all time periods

These two data points will appear only in the last time period on the report.

11. Select the **Ranks** tab.
12. A small change to the one selected data point here may make the data on the report easier to read. Specifically, the word “percentile” will be changed to the “%” sign. Select the **Peer group percentile** data point, then click **Settings**. The Display Setting dialog box opens.



13. In the **Display Name** field, replace the word “percentile” with the % sign

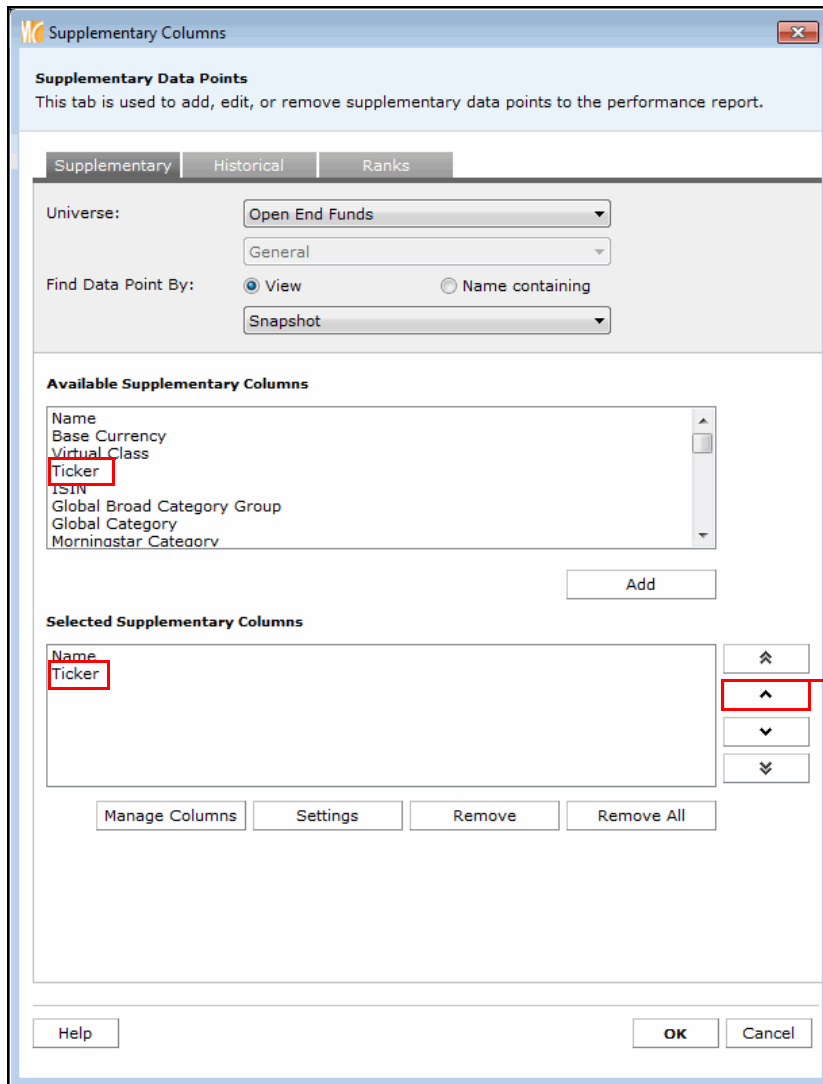


14. Click **OK** to close the Display Setting dialog box.
15. Click **OK** to close the Performance Column Setup window. The Supplementary Columns window opens.

In the Performance Column Setup window, return-related data points were selected (Return, Alpha, and Batting Average). In this exercise, the Supplementary Columns window is used to select other data points for the performance report. That is, data points not directly related to performance. Namely, Ticker and Morningstar Analyst Rating will be included. To include a fund’s ticker symbol and Morningstar Analyst Rating on the performance report, do the following:

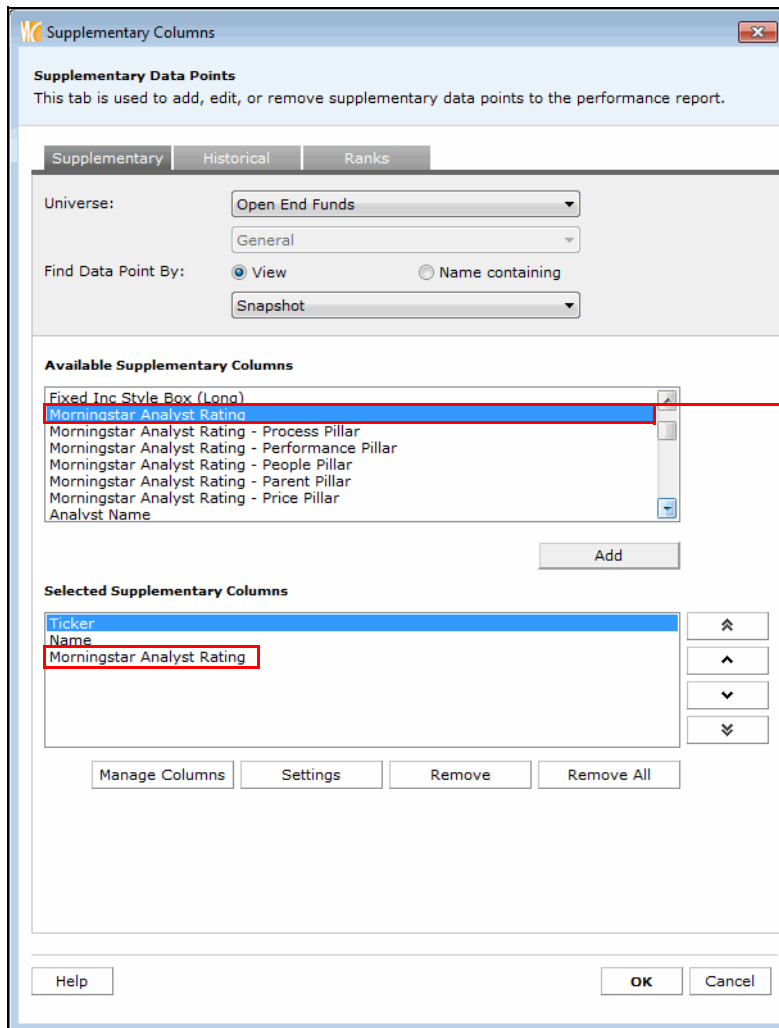
Exercise 6: Select data points in the Supplementary Columns window

1. On the Supplementary tab, in the Available Supplementary Columns list, **double-click Ticker** to move it to the Selected Supplementary Columns list.
2. The order of items in the Selected Supplementary Columns list is the order in which they will be shown in the performance report. Select **Ticker** and click the **up arrow** to move it above Name. In the performance report, the Ticker column will now be displayed before the Name column.



Select a data point, then use these buttons to change their position on the report.

3. Scroll down in the Available Supplementary Columns list, and **double-click** Morningstar Analyst Rating.



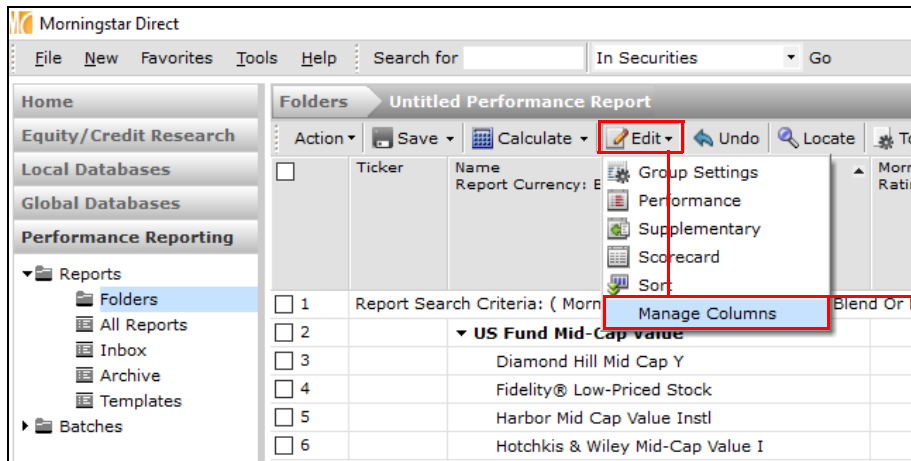
Be sure to double-click the Morningstar Analyst Rating, not the Morningstar Rating

4. Click **OK** to close the Supplementary Columns window. The performance report is displayed in the grid.

Now that the parameters for the performance report are set, it is nearly ready to be saved. One last tweak, however, is needed. Note that the word “percentile” was not replaced with the % sign in each time period. This is easily fixed, and then the report can be saved. Do the following:

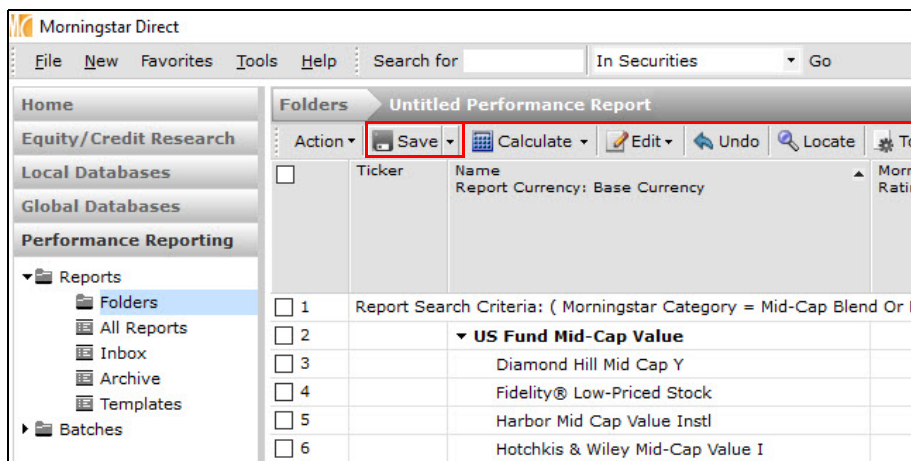
Exercise 7: Save the performance report

1. From the toolbar about the grid, click **Edit > Manage Columns**. The Manage Columns dialog box opens.



Select this option from the Edit icon's menu.

2. **Hover the cursor** over the row where **Peer group %** appears, then click **Apply change to all**. Note how the name changes for all related fields on the report.
3. Click **OK** to close the Manage Columns dialog box.
4. On the toolbar above the grid, click **Save**. The Save Report dialog box opens.



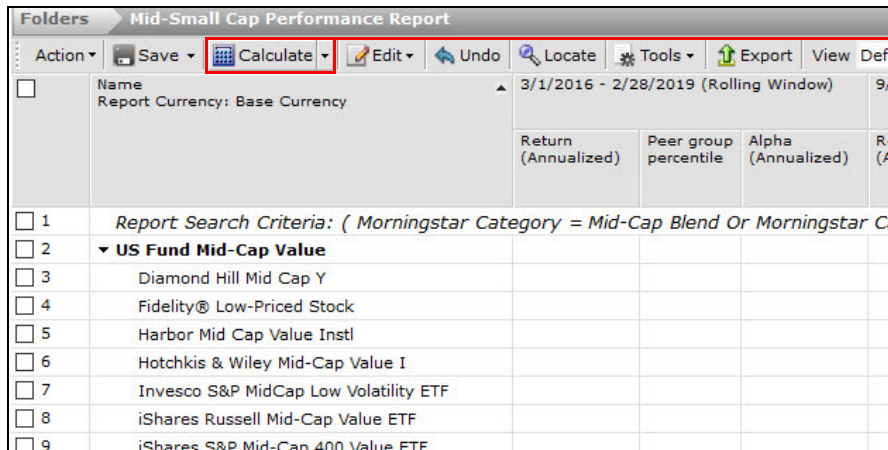
Click this icon to save the performance report.

5. Name the report **Small-Mid Cap Performance Report**.
6. Click **OK**.

Only the Name column is populated; the other data columns are blank. A performance report must be calculated to display data in those columns. To calculate the report, do the following:

Exercise 8: Calculate the performance report

1. On the toolbar above the grid, click **Calculate**. During the calculation, the performance report closes and the Folders page is displayed.



Click this icon to calculate the performance report.

2. When the Report Calculation Complete alert opens, click **Yes** to view the report. The grid is now filled with data.

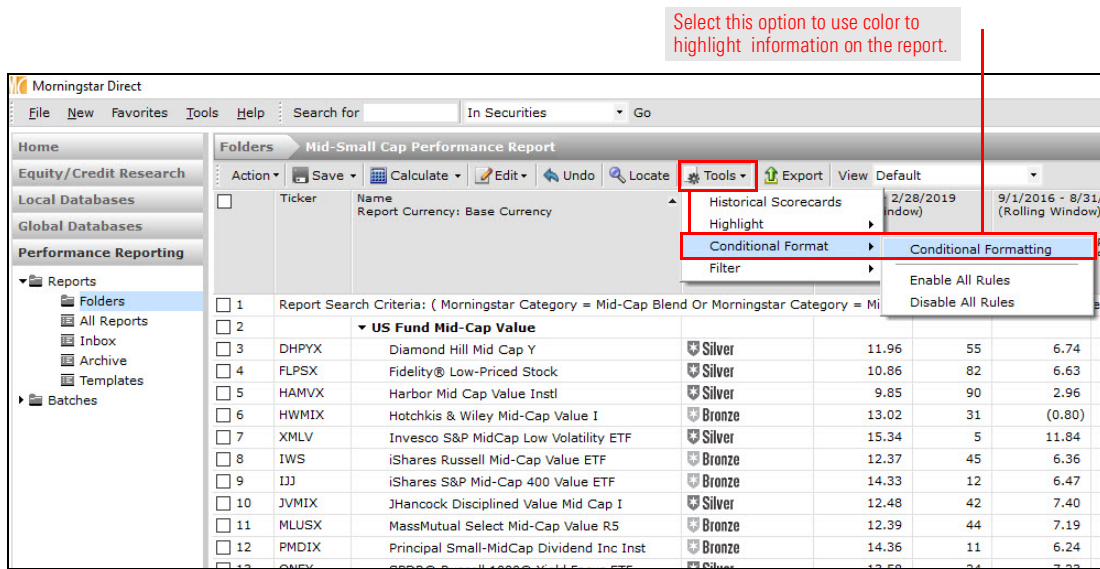
The information in the performance report is great, but it can be a bit difficult to read without some additional formatting. The conditional formatting feature in the Performance Reporting module allows users to add color to a row, cell, or column to enhance the interpretation of the data.

Exercise 9: Apply conditional formatting to a performance report

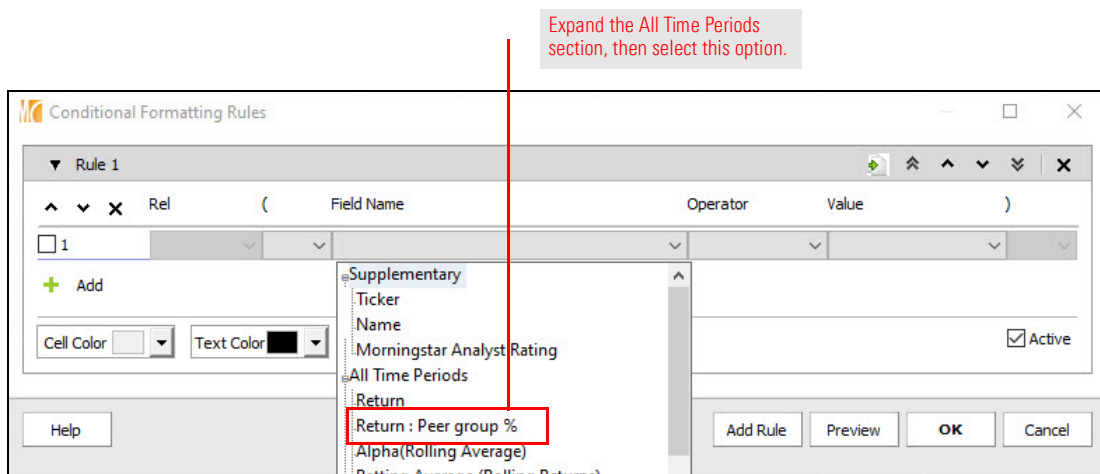
In this exercise, users will apply a color to the Peer group % column to call out the times when each fund was in the top quartile of its category across the various time periods shown.

To apply conditional formatting to a performance report, do the following:

1. On the toolbar above the grid, click **Tools > Conditional Format > Conditional Formatting**. The Conditional Formatting Rules dialog box opens.



2. From the **Field Name** drop-down field, expand the **All Time Periods** section then select **Return: Peer group %**.



- From the **Operator** drop-down field, select **<=**.
- In the **Value** field, type **25**.
- From the **Cell Color** drop-down field, select **Green**.
- Click **Preview** to ensure the rule is working as expected.

Note the highlighted values for this rule.

Conditional Formatting Rules

Rule 1

Rel	(Field Name	Operator	Value)
1		Return : Peer group percentile	<=	25	

+ Add

Cell Color: Green Text Color: Black Bold Column Or Active

Help Add Rule Preview OK Cancel

- Click **OK** to close the Conditional Formatting Rules dialog box.
- Click **Save** to preserve this change to the performance report.

The previous exercise showed how to apply conditional formatting to assess which funds performed well across different time periods. While conditional formatting is helpful, it still is not immediately clear which funds are both repeatedly top-quartile funds, and generated positive Alpha during this time period.

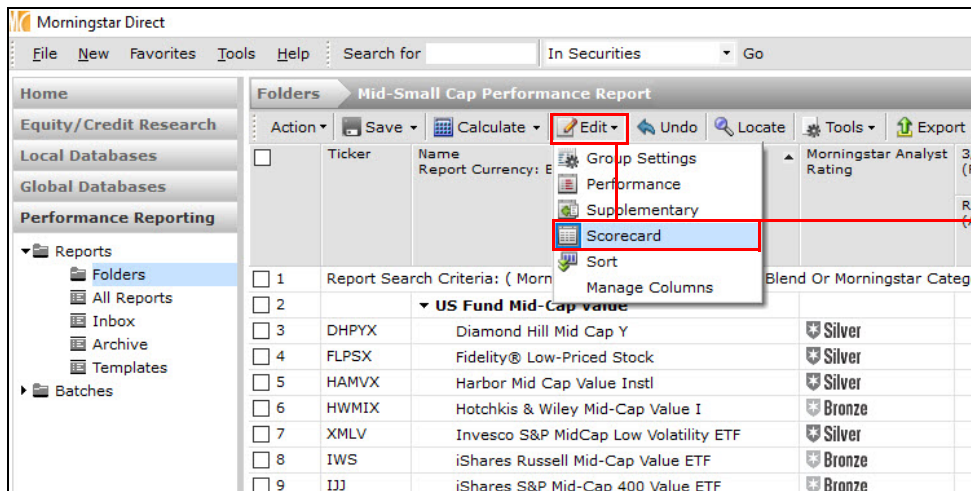
Exercise 10: Generate a Scorecard for a set of investments

Such a calculation can be done with the Scorecard feature. New columns will be added to the right of the five-year Peer Group % column, and the Alpha column. A Total Score column summarizing these two scores will also appear to the right of the report.

Once a user adds a scorecard to a performance report, it needs to be recalculated.

To create a Scorecard for this report, do the following:

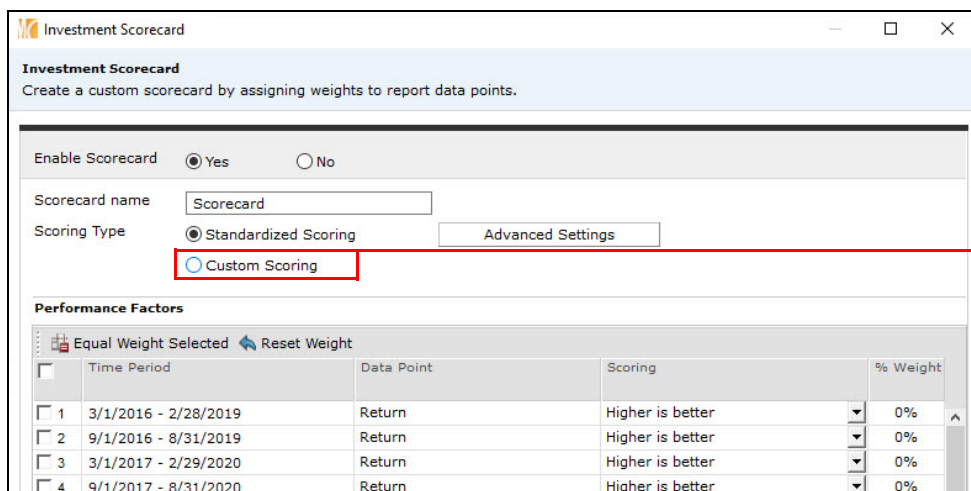
1. On the toolbar above the grid, from the **Edit** drop-down field, select **Scorecard**. The Investment Scorecard dialog box opens.



Select this option from the Edit icon's menu.

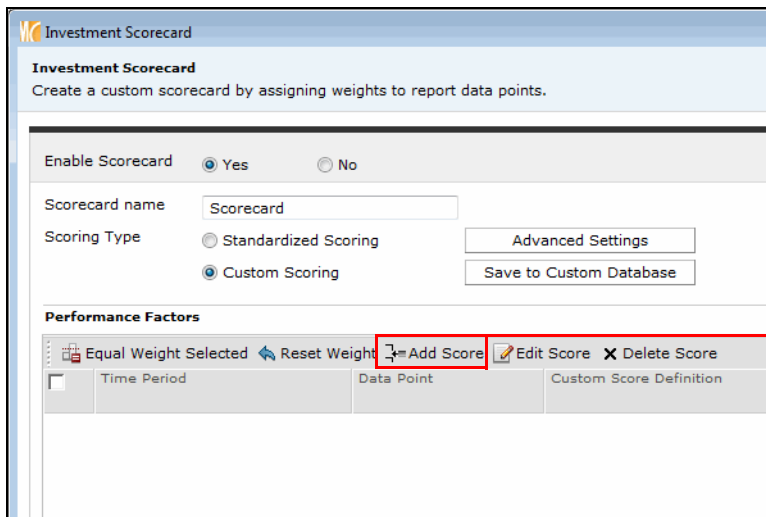
2. In the Scoring Type area, select the **Custom Scoring** option.

Note: When the Performance Reporting alert opens related to all formatting being lost, click **Yes**.



Select this option to create a custom score.

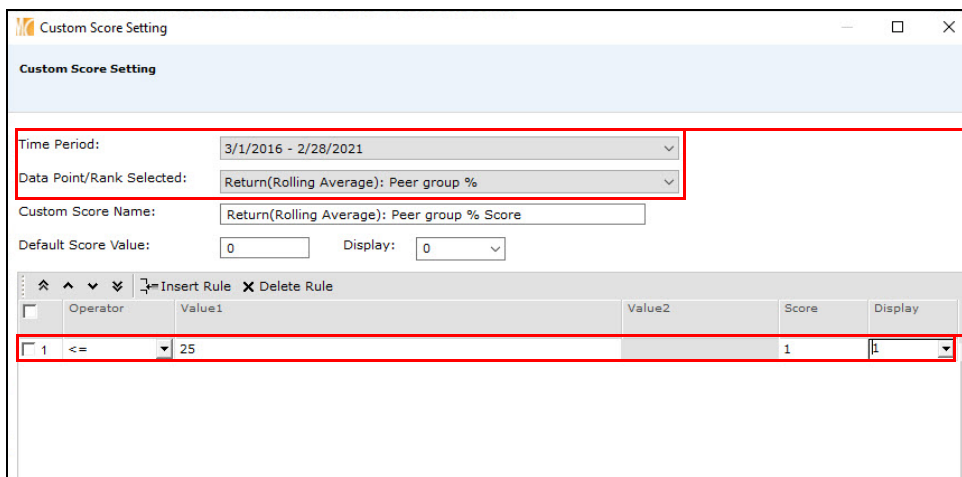
- In the Performance Factors area, on the toolbar, click **Add Score**. The Custom Score Setting dialog box opens.



Click this icon to create a custom scorecard.

- From the **Time Period** drop-down field, select the **five-year time period** (in this case, **3/1/2016 - 2/28/2021**).
- From the **Data Point/Rank Selected** drop-down field, select **Return (Rolling Average) Peer Group %**.
- In row 1, enter the following values:

Operator	Value1	Score	Display
<=	25	1	1



Be sure to select the correct values from these fields.

Note the selections and entries for this rule.

- Click **OK** to close the Custom Score Setting dialog box.

8. The next step is to add a score for Alpha. Click **Add Score**.
9. From the **Time Period** drop-down field, again select the **five-year time period**.
10. From the **Data Point/Rank Selection** drop-down field, select **Alpha**.
11. In row 1, enter the following values:

Operator	Value1	Score	Display
>	0	1	1

The screenshot shows the 'Custom Score Setting' dialog box. At the top, the title is 'Custom Score Setting'. Below the title bar, there are several fields: 'Time Period' (dropdown menu showing '3/1/2016 - 2/28/2021'), 'Data Point/Rank Selected' (dropdown menu showing 'Alpha'), 'Custom Score Name' (text input field containing 'Alpha Score'), 'Default Score Value' (text input field containing '0'), and 'Display' (dropdown menu showing '0'). Below these fields is a table with columns: Operator, Value1, Value2, Score, and Display. The table has one row with the following values: Operator '>', Value1 '0', Value2 (empty), Score '1', and Display '1'. Red boxes highlight the 'Time Period' and 'Data Point/Rank Selected' dropdowns, and the first row of the table. Red lines connect these highlighted areas to callout boxes on the right.

Be sure to select the correct values from these fields.

Note the selections and entries for this rule.

12. Click **OK** to close the Custom Score Setting dialog box.

13. Finally, a Total Score can be added to combine the two previous scores. Click **Add Score**.
14. From the Time Period drop-down field, select **Score**.
15. In row 1-3, enter the following values:

☞ Note: To add rows, click the **Insert Rule** icon on the toolbar above the rules grid.

Operator	Value1	Display
=	2	Pass
=	1	Watch
=	0	Fail

Custom Score Setting

Time Period: Score

Data Point/Rank Selected: Total Score

Custom Score Name: Total Score

Default Display: 0

	Operator	Value1	Value2	Score	Display
1	=	2			Pass
2	=	1			Watch
3	=	0			Fail

Be sure to select the correct values from these fields.

Note the values for each row.

16. Click **OK** to close the Custom Score Setting dialog box.

- In the Investment Scorecard window, type **50** in the **% Weight** column for the two individual score rows.

Investment Scorecard
Create a custom scorecard by assigning weights to report data points.

Enable Scorecard Yes No

Scorecard name:

Scoring Type: Standardized Scoring Custom Scoring

Performance Factors

Equal Weight Selected

	Time Period	Data Point	Custom Score Definition	% Weight	
<input type="checkbox"/>	1	Total Score	Total Score	Equal To 2 Display = Pass; Equal To 1 Display =	
<input type="checkbox"/>	2	3/1/2016 - 2/28/2021	Return(Rolling Average):	Less Than Or Equal To 25 Display = 1	50%
<input type="checkbox"/>	3	3/1/2016 - 2/28/2021	Alpha Score	Greater Than 0 Display = 1	50%

Total: 100%

Score Settings

Data Point Score Time Period Score Total Score Weighted Score

Weighted Score Ranks

Peer Group Rank Display Group Rank List Rank Peer Group Percentile Display Group Percentile List Percentile Peer Group Quartile Display Group Quartile List Quartile

Be sure to populate these fields as shown.

- Click **OK** to close the Investment Scorecard window.
- On the toolbar above the grid, click **Save**, then click **Calculate**.
- When the confirmation message opens, click **Yes** to view the report.
- To see only the scores, from the toolbar, select **View > Score Columns**.

Morningstar Direct

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Batches

Folders: Small-Mid Cap Performance Report

Action Save Calculate Edit Undo Locate Tools Export View Score Columns

Name Report Currency: Base Currency

3/1/2016 - 2/28/2021 (5 Total Score years ago - Last Month End)

Return(Rolling Average): Peer group % Score

Alpha Score (50%)

Report Search Criteria: (Morningstar Category = Mid-Cap Blend Or Morningstar Cate...

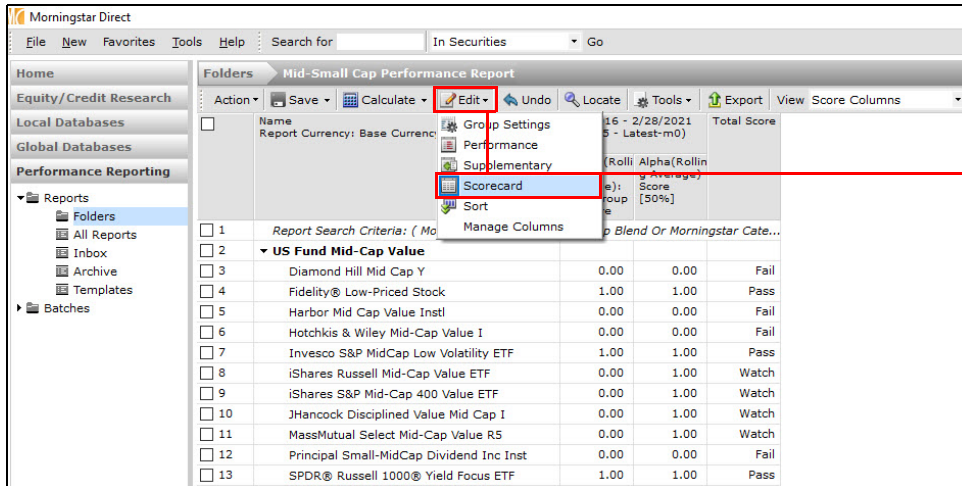
	Name	Return	Alpha Score	Peer group % Score	Score
<input type="checkbox"/>	1	Report Search Criteria: (Morningstar Category = Mid-Cap Blend Or Morningstar Cate...			
<input type="checkbox"/>	2	US Fund Mid-Cap Value			
<input type="checkbox"/>	3	Diamond Hill Mid Cap Y	0.00	0.00	Fail
<input type="checkbox"/>	4	Fidelity® Low-Priced Stock	1.00	1.00	Pass
<input type="checkbox"/>	5	Harbor Mid Cap Value Instl	0.00	0.00	Fail
<input type="checkbox"/>	6	Invesco S&P MidCap Low Volatility ETF	1.00	1.00	Pass
<input type="checkbox"/>	7	iShares Russell Mid-Cap Value ETF	0.00	1.00	Watch
<input type="checkbox"/>	8	iShares S&P Mid-Cap 400 Value ETF	0.00	1.00	Watch
<input type="checkbox"/>	9	JHancock Disciplined Value Mid Cap I	0.00	1.00	Watch
<input type="checkbox"/>	10	MassMutual Select Mid-Cap Value R5	0.00	1.00	Watch
<input type="checkbox"/>	11	Principal Small-MidCap Dividend Inc Inst	0.00	0.00	Fail
<input type="checkbox"/>	12	SPDR® Russell 1000® Yield Focus ETF	1.00	1.00	Pass
<input type="checkbox"/>	13	T. Rowe Price Mid-Cap Value	0.00	1.00	Watch

Select this option to isolate the Score columns.

The Custom Scorecard was the last piece needed to complete the performance report. To replicate this report in Presentation Studio, however, the Scorecard columns and values need to be saved as custom data points. This exercise shows users how to do that work. Do the following:

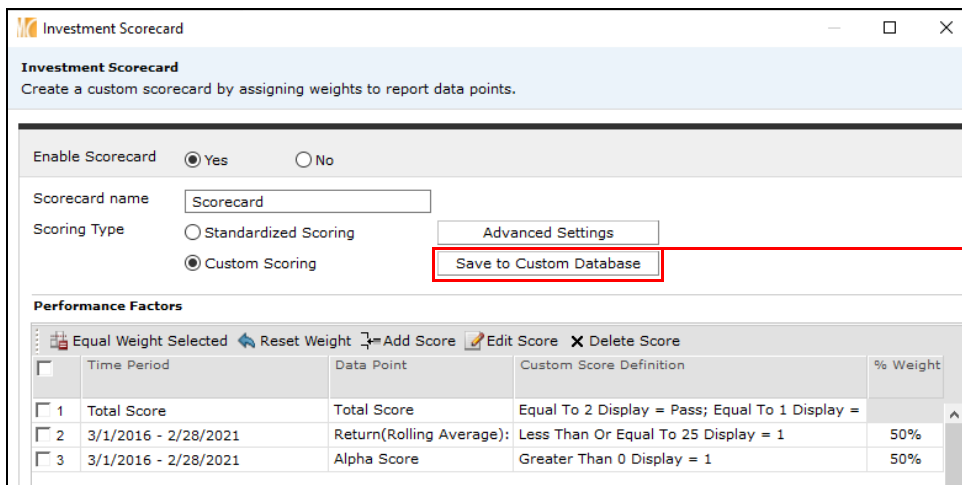
Exercise 11: Save the Scorecard values as custom data points

1. From the toolbar, click **Edit > Scorecard**.



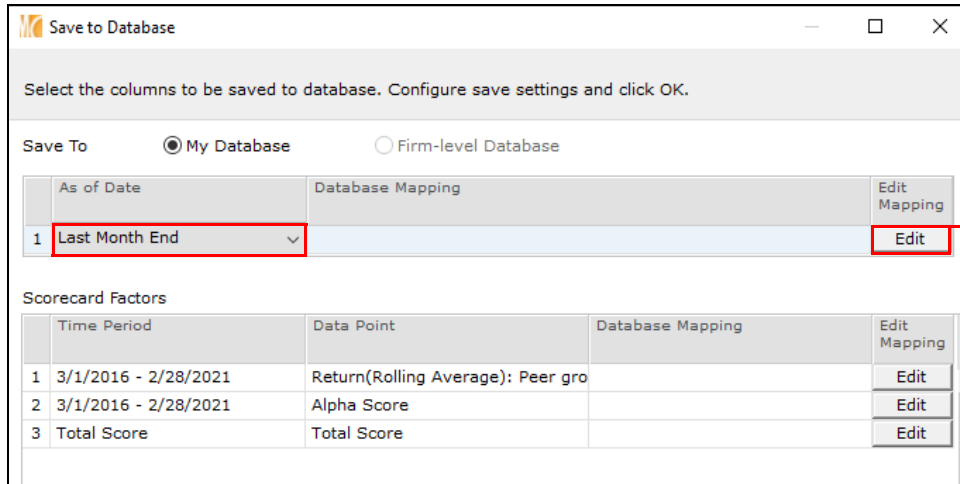
Select this option from the Edit menu.

2. Click **Save to Custom Database**. The Save to Database dialog box opens.



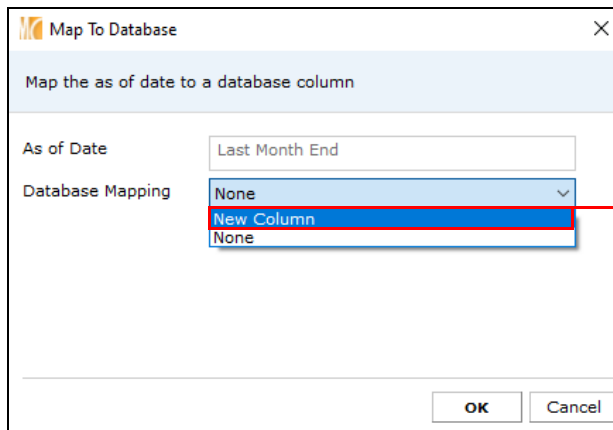
Click Save to Custom Database.

- The option for **Only save latest scores should be selected**. Click **OK**. The Save to Database dialog box opens.
- From the **As of Date**, select **Last Month End**.
- To map the As of Date to a custom data point, click **Edit** in the Edit Mapping column for that row. The Map to Database dialog box opens.



Update the As of Date, then click this button.

- From the **Database Mapping** drop-down field, select **New Column**. The New Column dialog box opens.



Be sure to select this option.

- Name the column **Total Score Date** then click **OK** to close the New Column dialog box.
- Click **OK** to close the Map to Database dialog box.
- Repeat steps 5-8 for each of the next two score columns: Click **Edit**, map the data point to a **New Column**, and give it a **name** per the following table:

Note: Leave the option selected for Raw Score for each data point.

For this data point...	Use this name...
Return(Rolling Average) Peer group score	Peer Group Score
Alpha(Rolling Average) Score	Alpha Score

10. For the Total Score data point, a slight change needs to be made compared to the other data points. Click **Edit** for that row.
11. For Field, select the **Display Text** option.
12. For Database Mapping, select **New Column**.

Map To Database

Map the scorecard factor to a database column

Time Period: Total Score

Data Point: Total Score

Field: Raw Score Display Text

Database Mapping: New Column

OK Cancel

Note the highlighted areas.

13. Name the column **Small-Mid Cap Total Score** then click **OK** to close the New Column dialog box.
14. Click **OK** to close the Save to Database dialog box.
15. Click **OK** to close the Investment Scorecard window. The Performance Report opens.
16. From the toolbar, click **Calculate**.

Note: Calculate the Performance Report after saving the custom data points for the custom data to populate.

Creating a Performance Report in Presentation Studio

Now that a Performance Report has been created, the next step is to replicate (as closely as possible) the Performance Report using Presentation Studio.

Overview

The following exercises are covered in this section:

- ▶ [Exercise 12: Modify the Group settings on page 37](#)
- ▶ [Exercise 13: Create a Presentation Studio report on page 40](#)
- ▶ [Exercise 14: Update the Time Period Setup on page 47](#)
- ▶ [Exercise 15: Save the Presentation Studio template on page 50](#)
- ▶ [Exercise 16: Add the Peer group percentile values on page 51](#)
- ▶ [Exercise 17: Add additional performance data points on page 53](#)
- ▶ [Exercise 18: Add the Score columns on page 57](#)
- ▶ [Exercise 19: Apply Conditional Formatting on page 59](#)
- ▶ [Exercise 20: Format the Workbook for easier reading on page 61, and](#)
- ▶ [Exercise 21: Add all rows to the report and produce a PDF on page 63.](#)

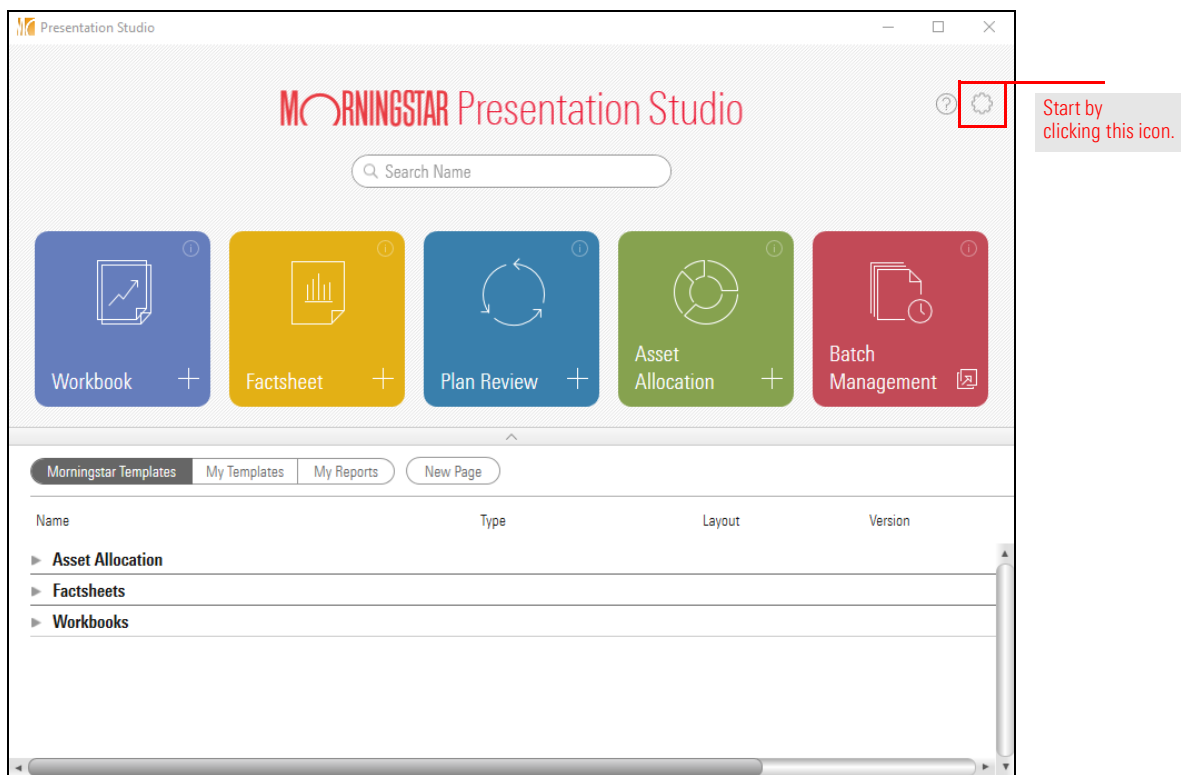
A key aspect of creating the performance report was setting the Grouping values correctly, including selecting the Display and Calculation benchmarks. In Presentation Studio, this modification is made in two places: first, the peer group settings are created at the module level, then they applied to the specific table used in the template.

Exercise 12: Modify the Group settings

To create a peer group setting for performance reports in Presentation Studio, do the following:

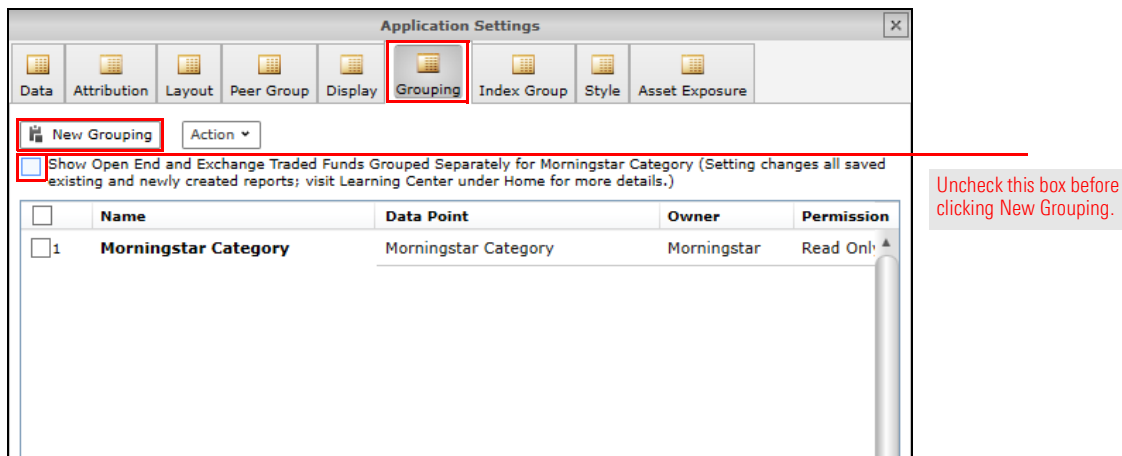
1. Click the **Presentation Studio** module. Presentation Studio opens in a separate window.
2. In the upper-right corner, click the **Application Settings** icon. The Application Settings window opens.

Note: Any changes made here will impact all future Presentation Studio templates you create.

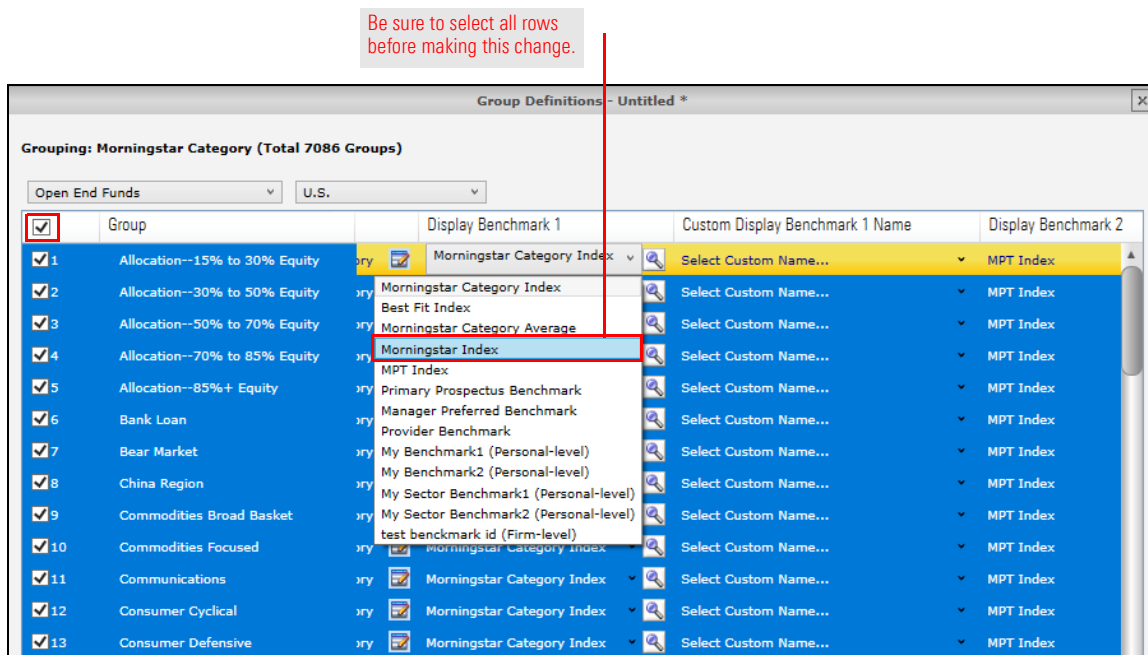


3. Select the **Grouping** tab. Although Morningstar Category is the default grouping option and that is what was used on the performance report created earlier, not all the underlying settings are correct.
4. **Uncheck** the box at the top for **Show Open End and Exchange Traded Funds Grouped Separately for Morningstar Category**.

- Click **New Grouping**. The New Grouping Definition dialog box opens.

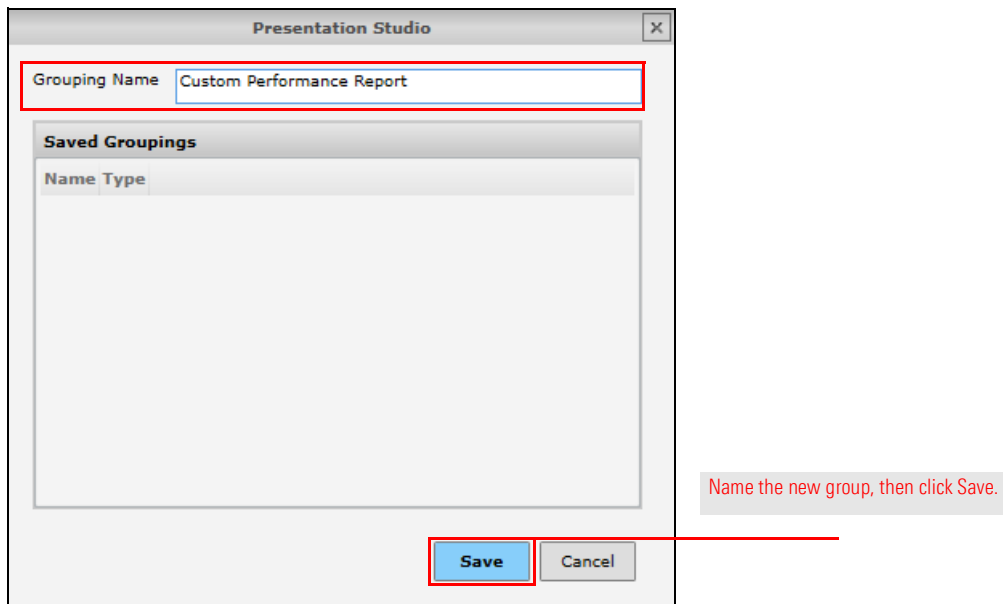


- Morningstar Category is the default selection. Click **OK**. The Group Definitions window opens.
- In the top left corner, click the **Select All** check box.
- From the **Display Benchmark 1** field, select **Morningstar Index**.



- Scroll right** to confirm the Calculation Benchmark 1 field is set to Display Benchmark 1. This will mirror the settings from the performance report.
- Click **OK** to close the Group Definitions window. The Presentation Studio dialog box opens.

11. In the **Grouping Name** field, enter **Custom Performance Report**, then click **Save**.

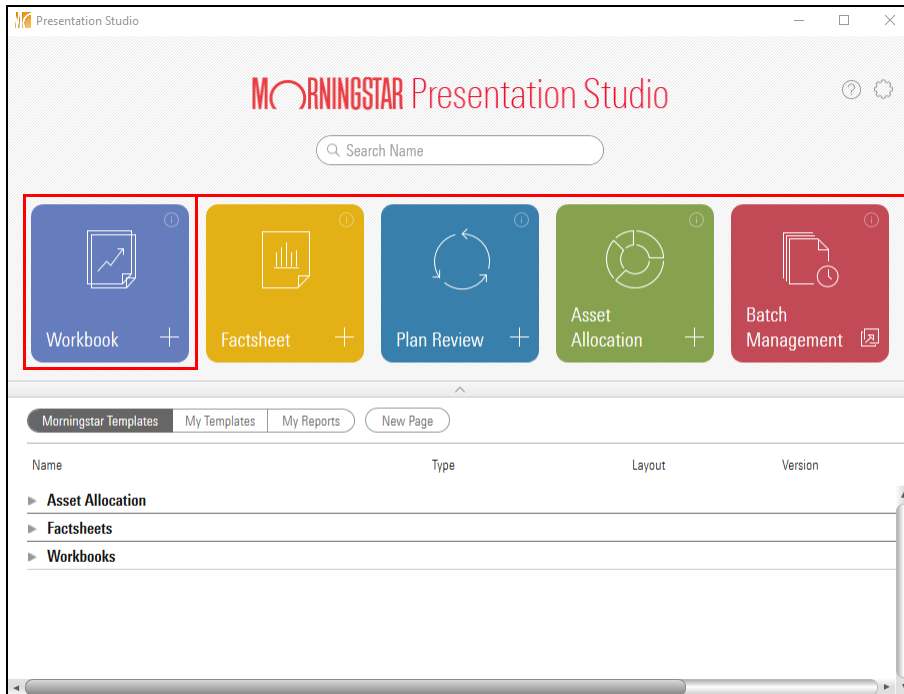


12. Click **OK** to close the Application Settings window.

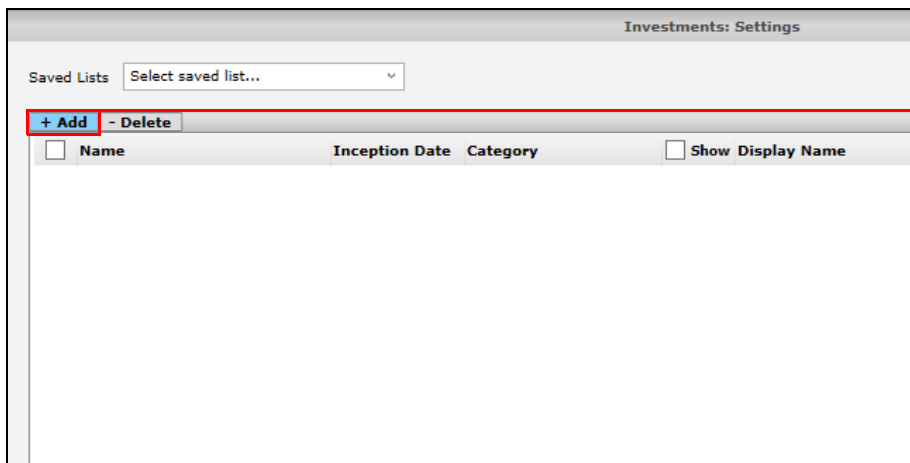
Users can create a presentation studio report by using a Morningstar template or by creating their own workbook or factsheet. To create the report, do the following:

Exercise 13: Create a Presentation Studio report

1. Click **Workbook**. The Create New Workbook dialog box opens.



2. The option for New Workbook is selected by default. Click **OK**. The Investments: Settings window opens.
3. Click **Add**. The Find Investments dialog box opens.



4. From the Within options, select **My Searches**.
5. From the My Searches drop-down field, select **Small-Mid Cap Performance Report**.
6. Click **Go**, then click **Add All**.

Note: Although all investments are being selected here, only a handful will initially be selected for inclusion on the template; later, all investments will be shown.

7. Click **OK** to close the Find Investments dialog box.

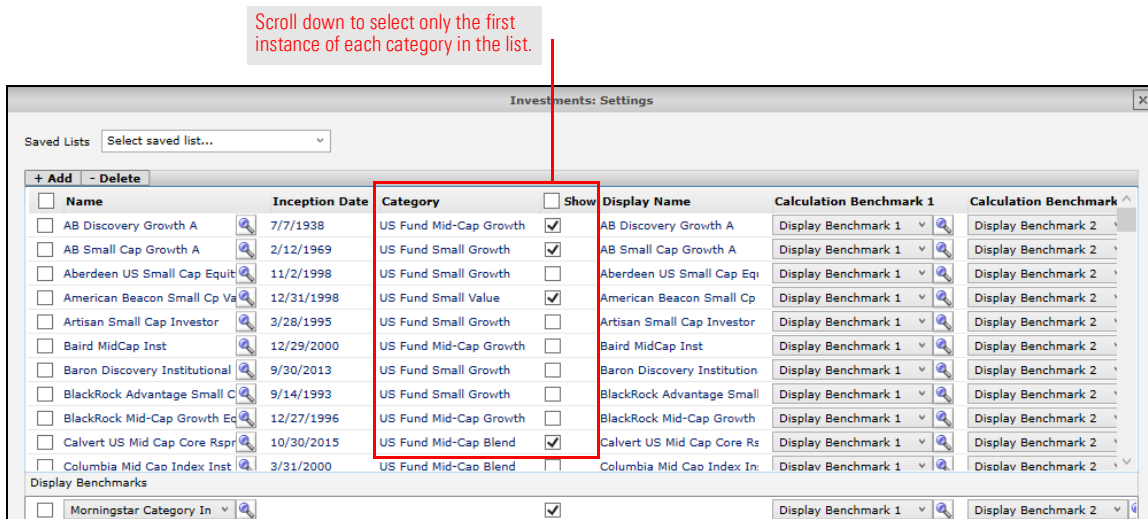
The screenshot shows the 'Find Investments' dialog box with the following configuration:

- Within:** My Searches
- Find By:** Name (dropdown), Begins with, Contains, Include Only Surviving Investments
- Available Records:** Total records: 108. List includes: AB Discovery Growth A, AB Small Cap Growth A, Aberdeen US Small Cap Equity Inst Svc, American Beacon Small Cp Val R5, Artisan Small Cap Investor, Baird MidCap Inst.
- Selected Records:** Total records: 108. List includes: VY® JPMorgan Small Cap Core Equity S, Westwood Quality SmallCap Fund Inst, WisdomTree US MidCap Dividend ETF, WisdomTree US SmallCap Dividend ETF, Xtrackers Russell US Multifactor ETF.

Use the highlighted areas to ensure all investments from the search are available for the report.

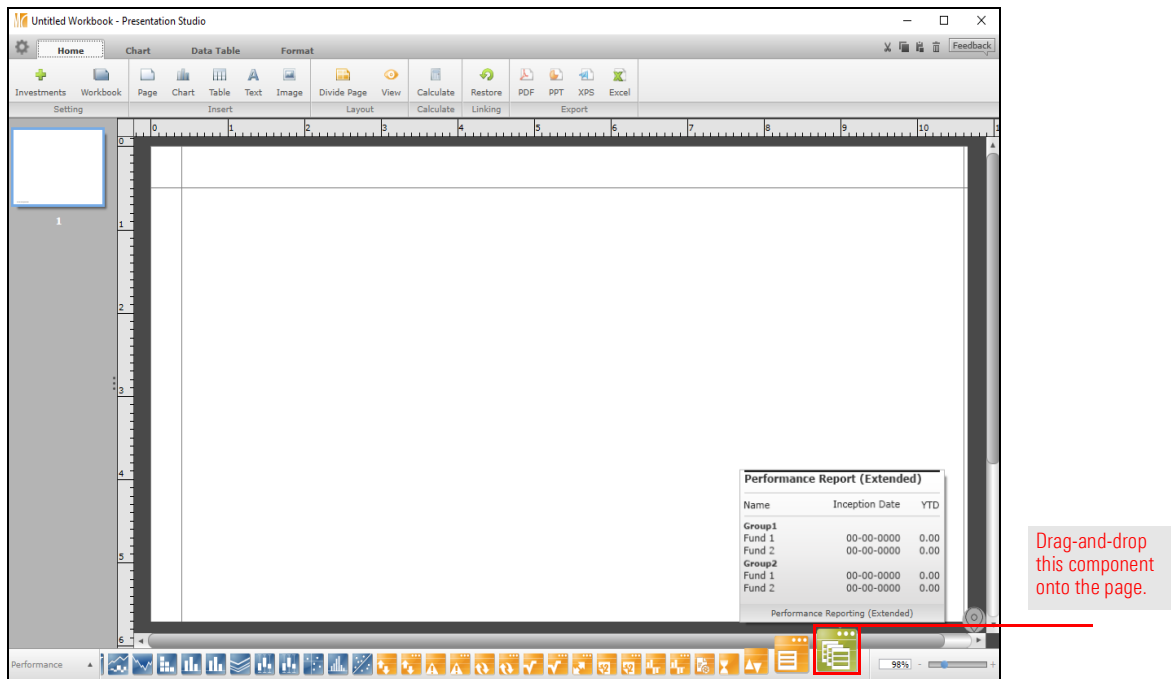
8. Back in the Investments: Settings window, the first five rows are selected by default. Take note of the Category column, and **select** only the **first instance** of each of the six categories used on the report:
 - ▶ US Fund Small Growth
 - ▶ US Fund Small Blend
 - ▶ US Fund Small Value
 - ▶ US Fund Mid-Cap Growth
 - ▶ US Fund Mid-Cap Blend, and
 - ▶ US Fund Mid-Cap Value.

Note: This will serve as a check to ensure the Grouping settings are working as intended.



9. Once one instance of a fund from each category is selected, click **OK** to close the Investments: Settings window. The template window opens.

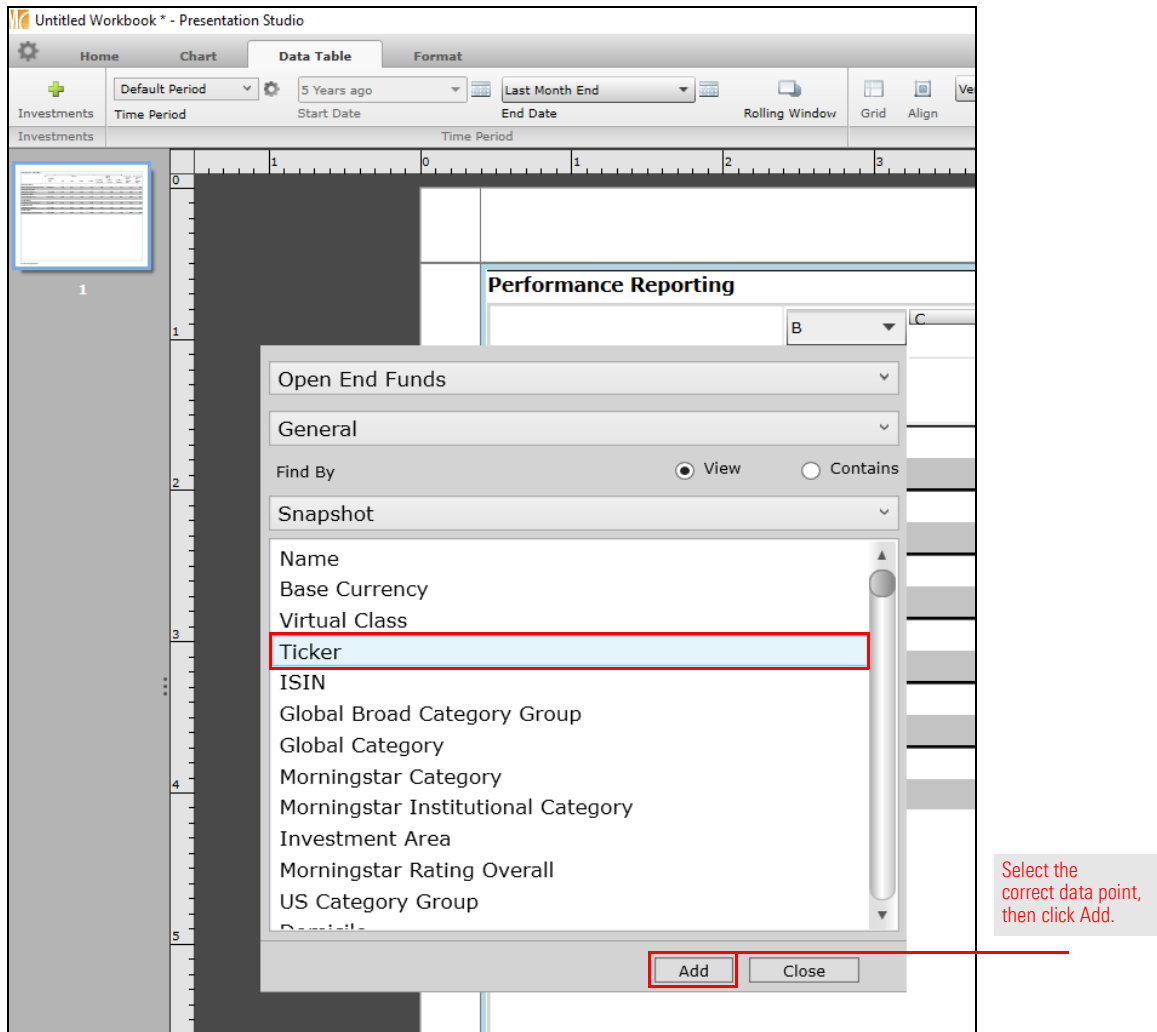
- From the Performance components grouping, **drag-and-drop** the **Performance Reporting (Extended)** component onto the page.



- Click **Calculate**.

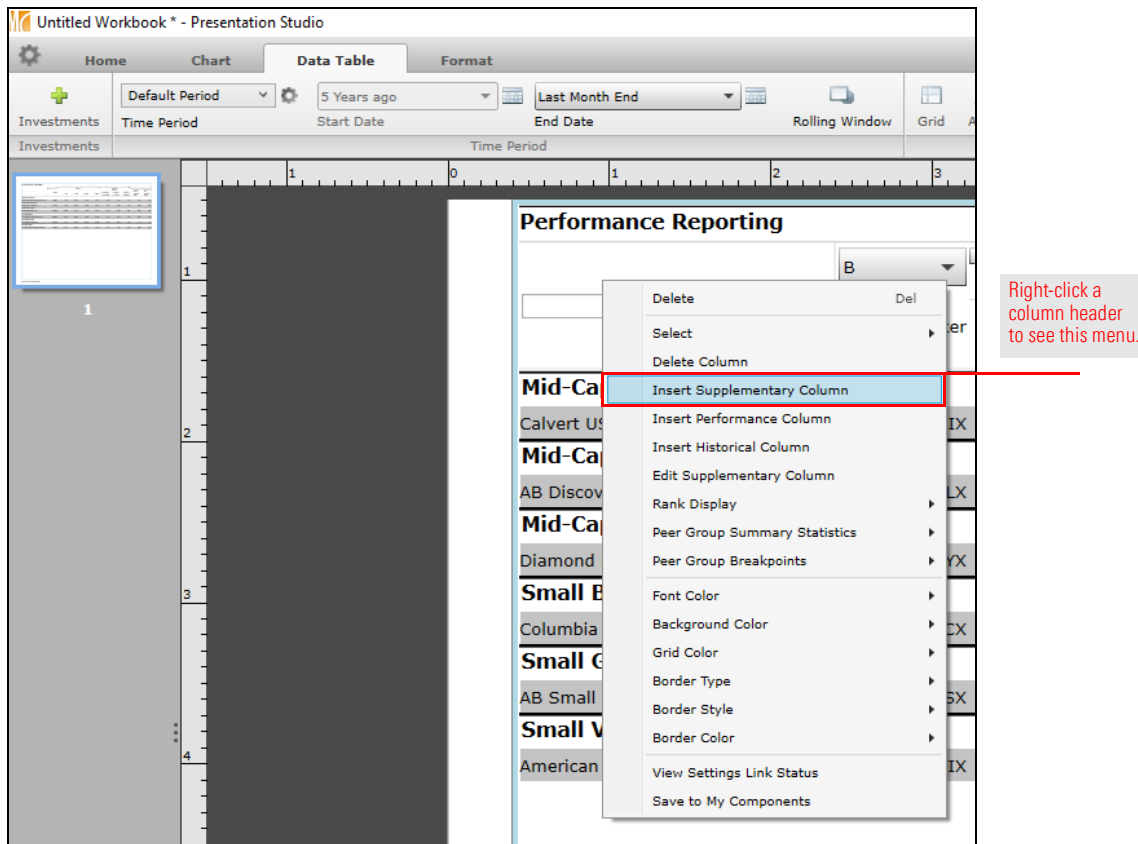
Note: As changes are made to the table, the Calculate button will frequently need to be clicked to proceed. Do this each time it appears.

12. The first column to the right of the fund's name is Inception Date. This column did not appear on the performance report, so it will be replaced with the fund's ticker. From the **column B** drop-down menu, select **Ticker**.
13. Click **Add**.



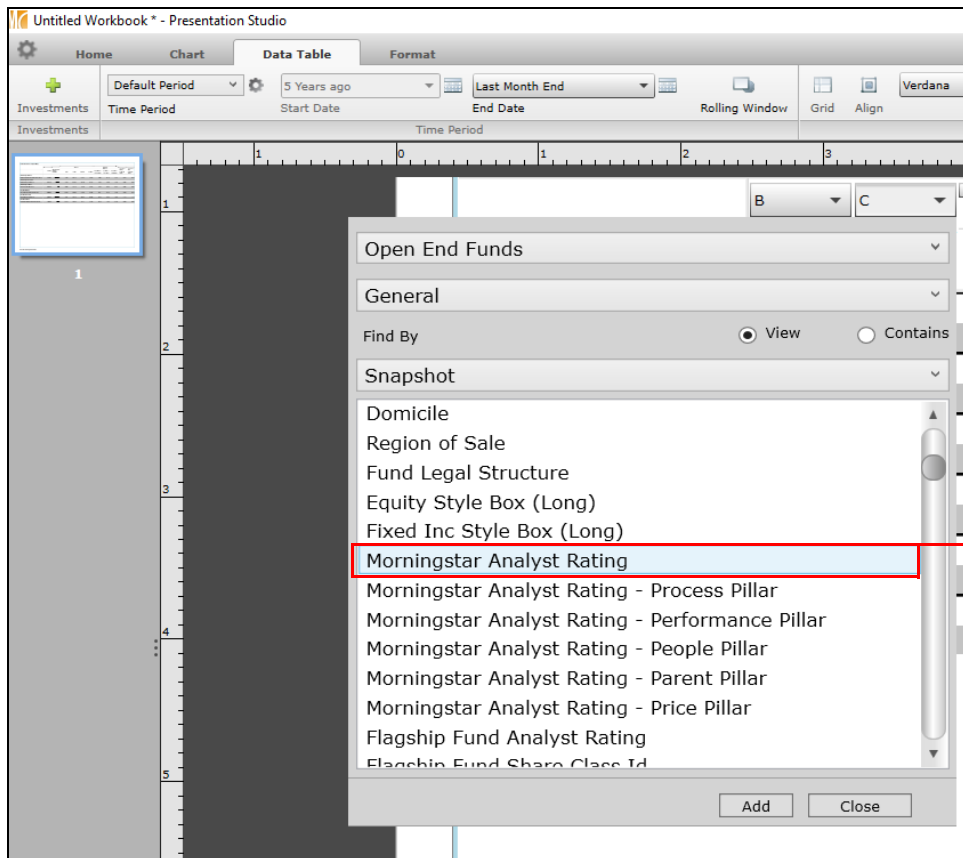
14. Click **Calculate**.

- Recall from the performance report that the Morningstar Analyst Rating was included as a Supplementary data point. To include that data point in this table, **right-click column B**, then select **Insert Supplementary Column**.



- Click **Calculate**. The Morningstar Rating Overall data point was added as a default supplementary column. This will be replaced with the Morningstar Analyst Rating.

17. From the **C column** drop-down menu, select **Morningstar Analyst Rating**.
18. Click **Add**.



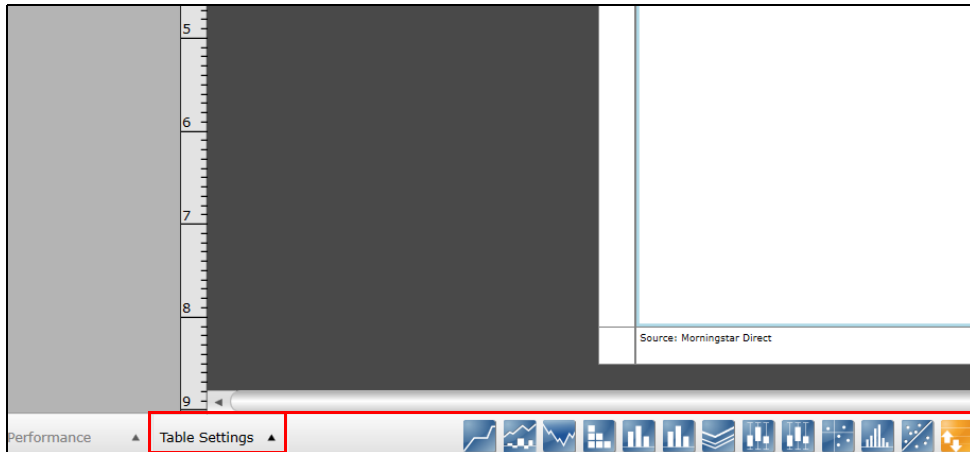
Be sure to select the correct data point for this column.

19. Click **Calculate**.

Now that the Supplementary columns have been added, the time period has to be updated match those selected in the performance report. This is done via the Table Settings menu in the bottom-left corner, rather than clicking on the columns in the table itself. Do the following:

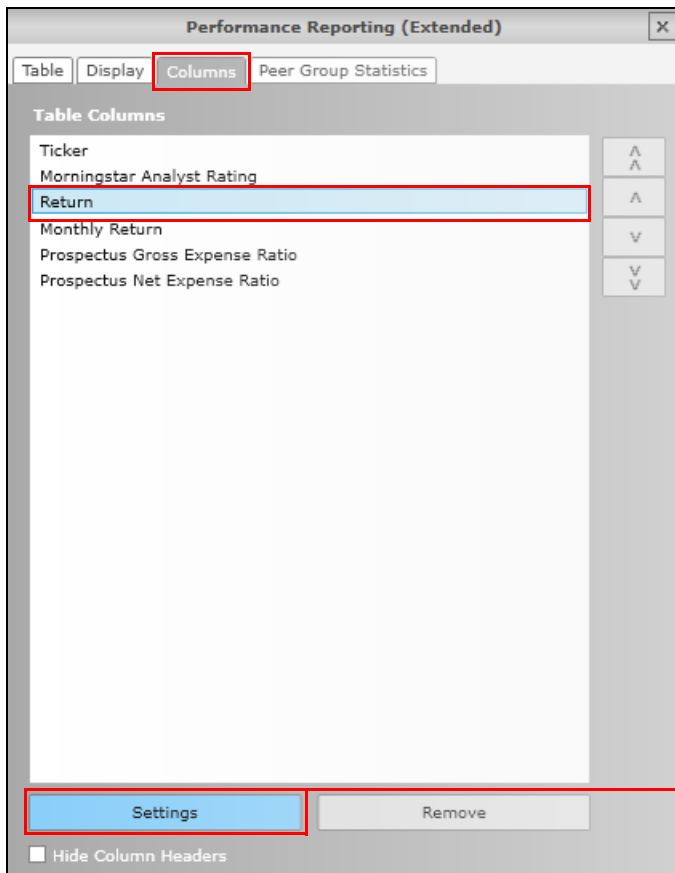
Exercise 14: Update the Time Period Setup

1. Be sure the cell is selected, then click **Table Settings**. The Performance Reporting (Extended) window opens.



Click this menu to change the time periods shown in the table.

2. Select the **Columns** tab.
3. Click **Return**, then click **Settings**. The Time Period Setup dialog box opens.



Click this button to revise which time periods are shown in the table.

4. Click **Remove All**.
5. Select the option for **Rolling window**.
6. From the **Window size** drop-down field, select **3 years**.
7. From the **Moving step** drop-down field, select **6 months**.
8. Click **Add Column(s)**.

Time Period Setup ✕

The time period tab is used to add, edit, or remove time periods.

Time Period

Start Date: 5 Years ago 1/1/2016 15

End Date: Last Year End 12/31/2020 15

Time Periods:

Single period

Rolling window

Trailing periods

Regular periods from start

Forward extending periods

Regular periods from end

Window Size: 3 Years

Moving Step: 6 Months

Number Of Columns: 5 **Add Column(s)**

Selected Time Periods

Selected Periods	Display Name (editable)	Label Rule	Color
1/1/2016 - 12/31/2018	1/1/2016 - 12/31/2018	Start Date to En	
7/1/2016 - 6/30/2019	7/1/2016 - 6/30/2019	Start Date to En	
1/1/2017 - 12/31/2019	1/1/2017 - 12/31/2019	Start Date to En	
7/1/2017 - 6/30/2020	7/1/2017 - 6/30/2020	Start Date to En	
1/1/2018 - 12/31/2020	1/1/2018 - 12/31/2020	Start Date to En	

Select All Reverse Order Remove Remove All

OK Cancel

Be sure to select this option for Time Periods.

Be sure to select the correct values for Window size and Moving step.

9. From the Time Periods area, select the option for **Single period**.
10. Click **Add Column(s)**.

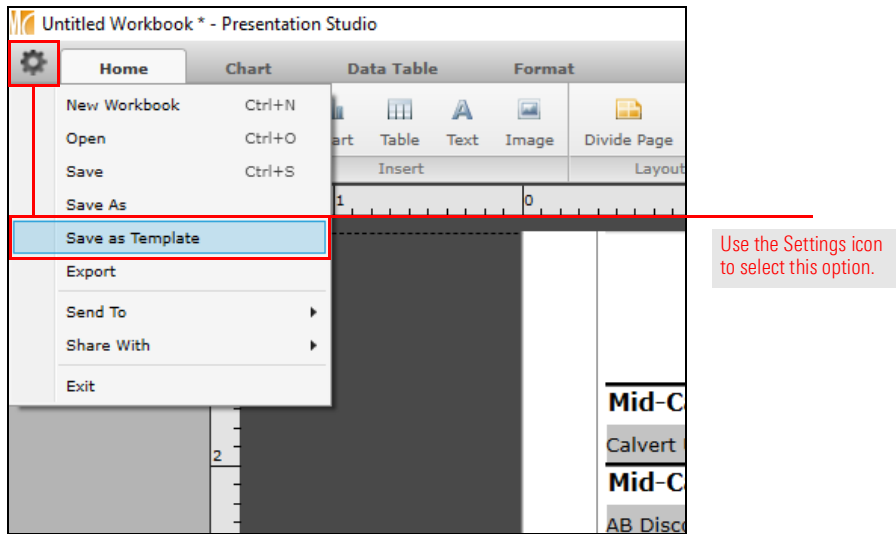
The screenshot shows the 'Time Period Setup' dialog box. The 'Time Period' section includes 'Start Date' (5 Years ago, 3/1/2016) and 'End Date' (Last Month End, 2/28/2021). Under 'Time Periods', the 'Single period' radio button is selected and highlighted with a red box. Other options include 'Rolling window', 'Trailing periods', 'Regular periods from start', 'Forward extending periods', and 'Regular periods from end'. The 'Window Size' is set to '1 Year'. The 'Number Of Columns' is set to '1', and the 'Add Column(s)' button is highlighted with a red box. Below this is a table of 'Selected Time Periods' with columns for 'Selected Periods', 'Display Name (editable)', 'Label Rule', and 'Color'. The table contains four rows of data. At the bottom are buttons for 'Select All', 'Reverse Order', 'Remove', 'Remove All', 'OK', and 'Cancel'. A red line points from the 'Single period' option to a callout box that says 'Select this option for the last time period.'

11. Click **OK**.
12. Click **Calculate**.

When working in Presentation Studio, it is key to save early and often, as no Undo button exists. Therefore, reverting to a previously saved version is sometimes the best option to correct mistakes. To save this template, do the following:

Exercise 15: Save the Presentation Studio template

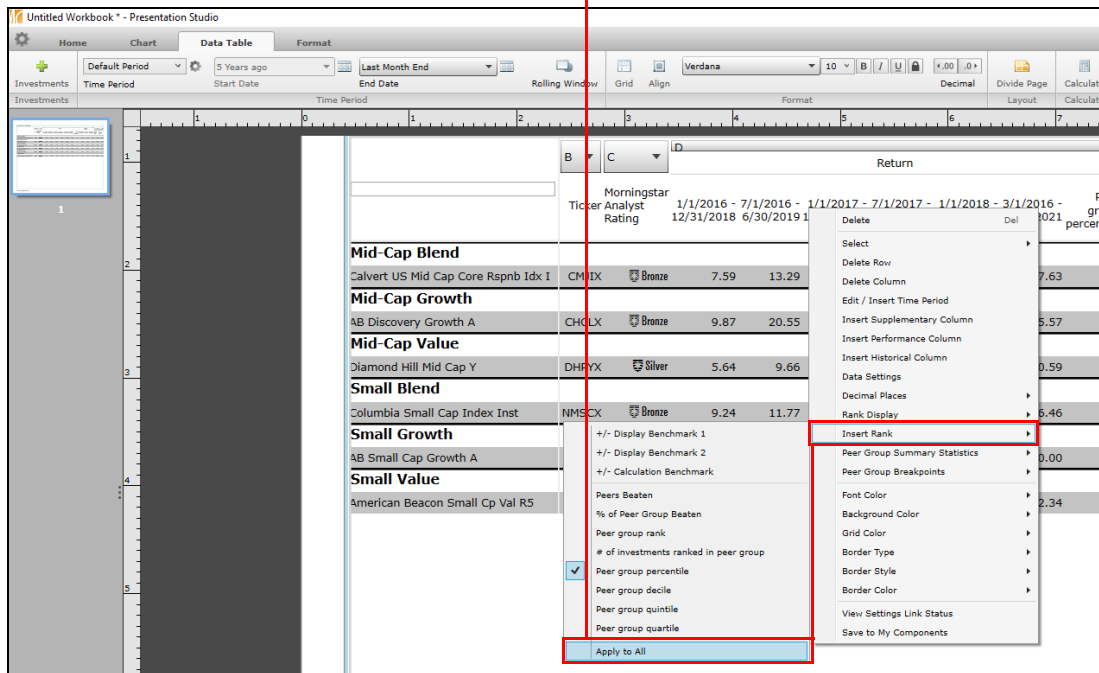
1. In the upper-left corner, click the **Settings** icon, then select **Save As Template**.



2. Name the template **Small-Mid Cap Performance Report**, then click **Save**.
3. When the confirmation message opens, click **OK**.

3. Right-click on the **last time period** column again, then select **Insert Rank > Apply to All**.

Select this option to insert the Peer group percentile column next to all other time period return values.



4. Click **Calculate**.

Note: The values on the report have become a bit difficult to read. Rest assured, this issue will be addressed once all columns are added to the table.

5. Use the **Settings** icon to select **Save as Template**. Be sure to overwrite the previously saved template.

Some data points still need to be removed from the table, and the Alpha and Batting Average performance data points are still missing from the table. To make these changes, do the following:

Exercise 17: Add additional performance data points

1. From the **column P** drop-down menu, select **Alpha**.

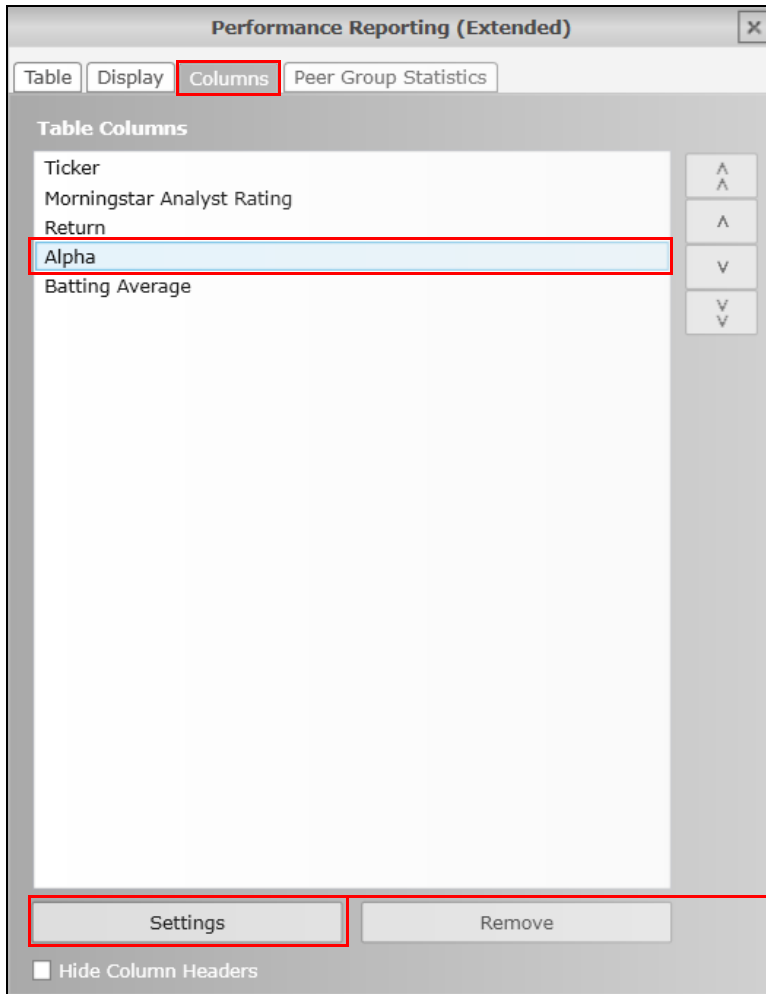
From this list, select Alpha.

The screenshot shows the 'Performance Reporting' interface. A dropdown menu for column P is open, displaying a list of performance metrics. The 'Alpha' option is highlighted in blue. A red box highlights the 'Alpha' option, and a red arrow points from the text 'From this list, select Alpha.' to the 'Alpha' option. The table below the dropdown shows performance data for various funds, including 'Mid-Cap Blend', 'Mid-Cap Growth', and 'Mid-Cap Value'.

Return	Return	Return	Return	Return	Return	Return	Return	Return	Return
7.59	23	13.29	14	12.34	14	7.03	8		
9.87	20	20.55	12	18.19	28	17.94	18		

2. Click **Calculate**.
3. Only the 5 Years value needs to be included. The other columns in this group can be removed via the Time Periods dialog box via the Table Settings menu. Click **Table Settings**.

4. Select the **Columns** tab.
5. Select **Alpha**, then click **Settings**. The Time Periods dialog box opens.



Select the correct data point, then click Settings.

6. Click **Remove All**.
7. In the Time Periods area, **Single Period** should be selected. Confirm the Start Date and End Date fields reflect the trailing five-year time period.
8. Click **Add Columns** then click **OK**.

The time period tab is used to add, edit, or remove time periods.

Time Period

Start Date: 5 Years ago | 3/1/2016

End Date: Last Month End | 2/28/2021

Time Periods: Single period, Rolling window, Trailing periods, Regular periods from start, Forward extending periods, Regular periods from end

Window Size: 1 Year

Number Of Columns: 1 | **Add Column(s)**

Selected Time Periods

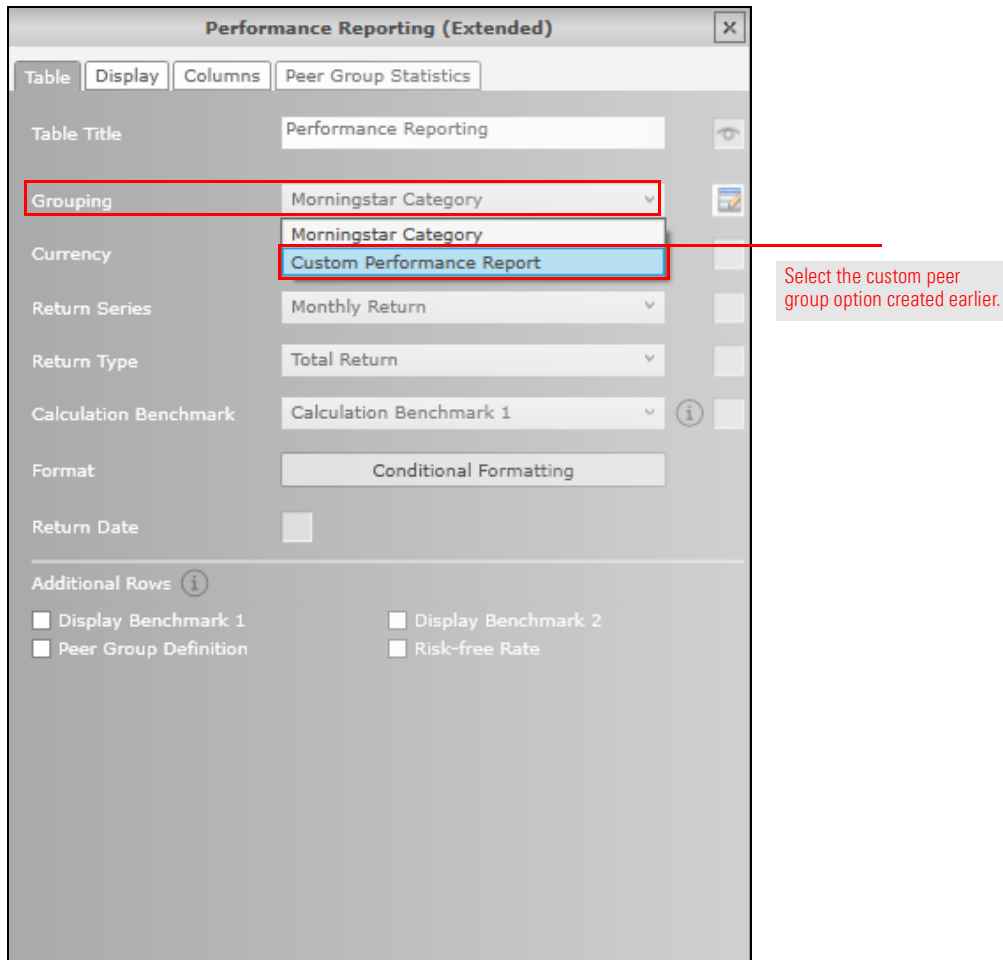
Selected Periods	Display Name (editable)	Label Rule	Color
3/1/2016 - 2/28/2021	3/1/2016 - 2/28/2021	Start Date to En	[Color]

Buttons: Select All, Reverse Order, Remove, Remove All, OK, Cancel

Be sure Single Period is selected before clicking Add Column(s).

9. Click **Calculate**.
10. The 5 Year Batting Average column will be added in a similar manner. **Right-click** the **Alpha** column, then select **Insert Performance Column**.
11. Click **Calculate**.

12. Remember from [Exercise 12: Modify the Group settings on page 37](#), a custom peer group setting was created at the Presentation Studio level. Now is the time to apply that setting to this template. Be sure the cell is selected, then click **Table Settings**.
13. On the Table tab, click the **Grouping** drop-down field and select **Custom Performance Report**.



14. Click away from the Table Settings window to close it, then click **Calculate**. Note the new values for Alpha.
15. From the **Return** drop-down menu, select **Batting Average**.
16. Click **Calculate**.
17. Click **Table Settings**.
18. Select the **Columns** tab.
19. Select **Batting Average**, then click **Settings**.
20. Click **Remove All**.
21. In the Time Periods area, **Single Period** should be selected. Confirm the Start Date and End Date fields reflect the trailing five-year time period.
22. Click **Add Columns** then click **OK**.
23. Click **Calculate**.

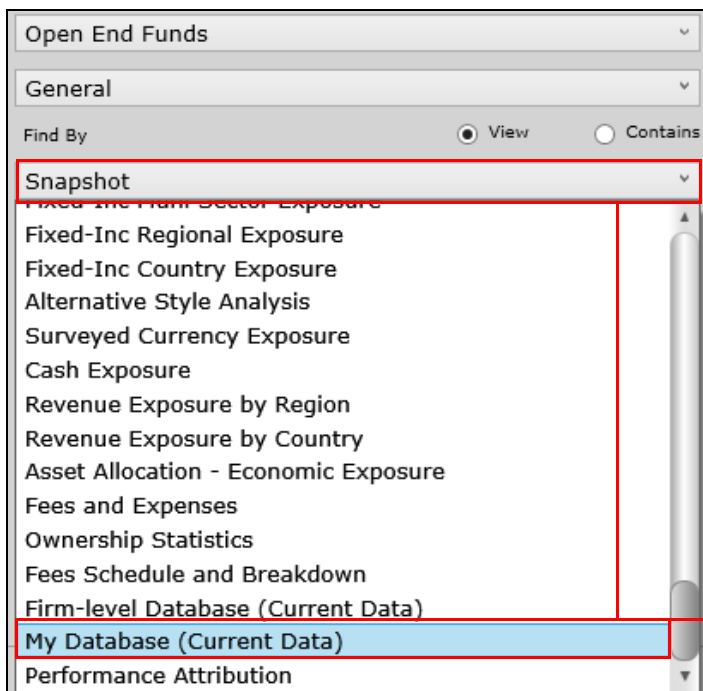
24. **Right-click** both the **Prospectus Net Expense Ratio** and **Prospectus Net Expense Ratio** columns, then select **Delete Column**.
25. In the upper-left corner, use the **Settings** icon to select **Save as Template**. Overwrite the existing template.

The performance and supplementary columns are now part of the template. In this exercise, users will add the Score columns. To add the Score columns, do the following:

Exercise 18: Add the Score columns

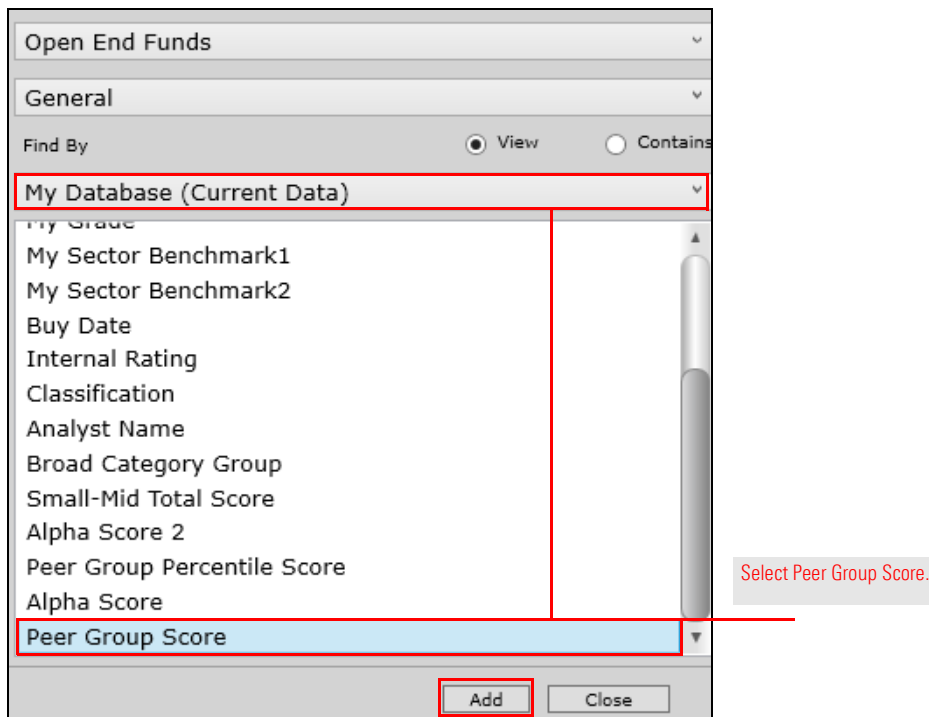
1. **Right-click** the **Batting Average** column, then click **Insert Supplementary Column**.
2. Click **Calculate**.
3. From the **column R** drop-down menu, select the **Find By** drop-down field, then select **My Database (Current Data)**.

Note: The My Database (Current Data) option is located at the bottom of the list.



4. Select **Alpha Score**, then click **Add**.
5. Click **Calculate**.
6. For the next Score column, **right-click** the **Alpha Score** column, then select **Insert Supplementary Column**.
7. Click **Calculate**.
8. From the **column S** drop-down menu, use the **Find By** drop-down field to again select the **My Database (Current Data)** view.

9. Select **Peer Group Score**, then click **Add**.



10. Click **Calculate**.
11. Finally, for the last Score column, **right-click** the **Peer Group Score** column, then select **Insert Supplementary Column**.
12. Click **Calculate**.
13. From the **column T** drop-down menu, use the **Find By** drop-down field to select **My Database (Current Data)**.
14. Select **Small-Mid Total Score** then click **Add**.
15. Click **Calculate**.
16. In the upper-left corner, use the **Settings** icon to select **Save as Template**. Overwrite the existing template.

The necessary performance, supplementary, and score columns are now part of the Performance Report template. In this exercise, conditional formatting will be applied to the Peer group percentile columns. Do the following:

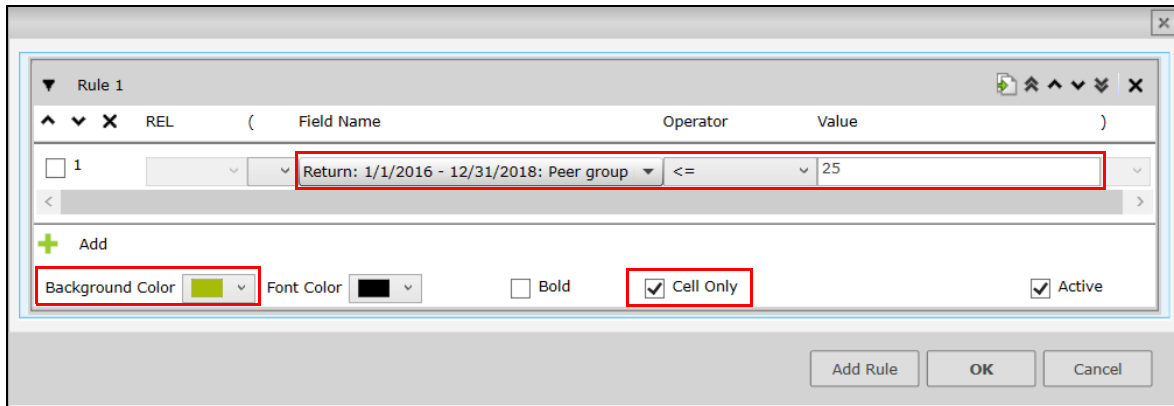
Exercise 19: Apply Conditional Formatting

1. Be sure the cell is selected, then click **Table Settings**.
2. From the **Table** tab, click **Conditional Formatting**. A new window opens.

The screenshot shows the 'Performance Reporting (Extended)' dialog box. The 'Table' tab is selected, and the 'Peer Group Statistics' sub-tab is active. The 'Format' section contains a button labeled 'Conditional Formatting', which is highlighted with a red rectangle. A red line points from this button to a callout box on the right that says 'Click this button to apply conditional formatting to the table.' Other settings in the dialog include 'Table Title' (Performance Reporting), 'Grouping' (Custom Performance Report), 'Currency' (US Dollar), 'Return Series' (Monthly Return), 'Return Type' (Total Return), and 'Calculation Benchmark' (Calculation Benchmark 1). The 'Additional Rows' section at the bottom has four unchecked checkboxes: 'Display Benchmark 1', 'Display Benchmark 2', 'Peer Group Definition', and 'Risk-free Rate'.

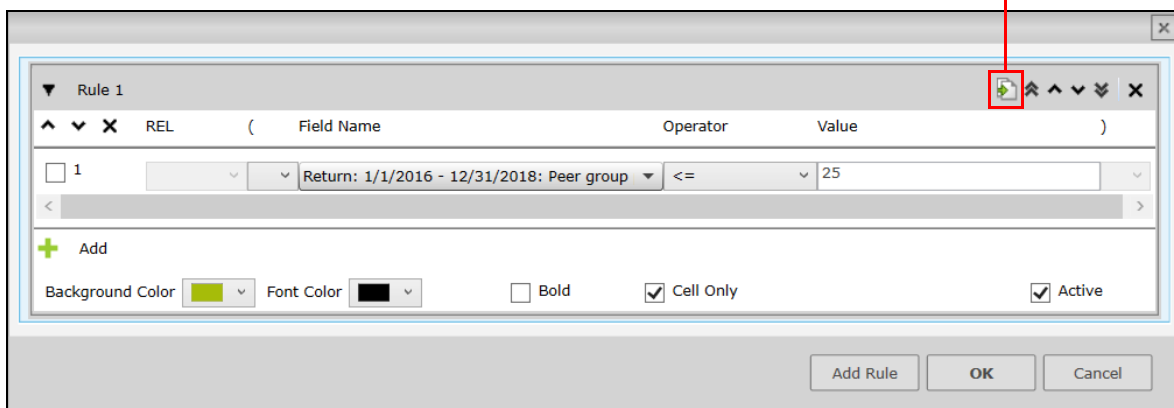
3. Unlike the Performance Reporting module, the conditional formatting rules here need to be applied one column at a time. From the **Field Name** drop-down field, select the **first Peer group percentile**.
4. From the **Operator** drop-down, select **<=**.
5. Set the **Value** to **25**.
6. From the **Background Color** field, select the **first Green** option.
7. **Check** the box for **Cell Only**.

Note the selected values.



8. In the upper-right corner of the pop-up window, click the **Duplicate** icon.
9. From the **Field Name** drop-down, select the **second Peer Group Percentile**.
10. From the **Operator** drop-down, select **<=**.
11. Set the **Value** to **25**.
12. From the **Background Color** field, select the **first Green** option.
13. **Check** the box for **Cell Only**.

This is the Duplicate icon.



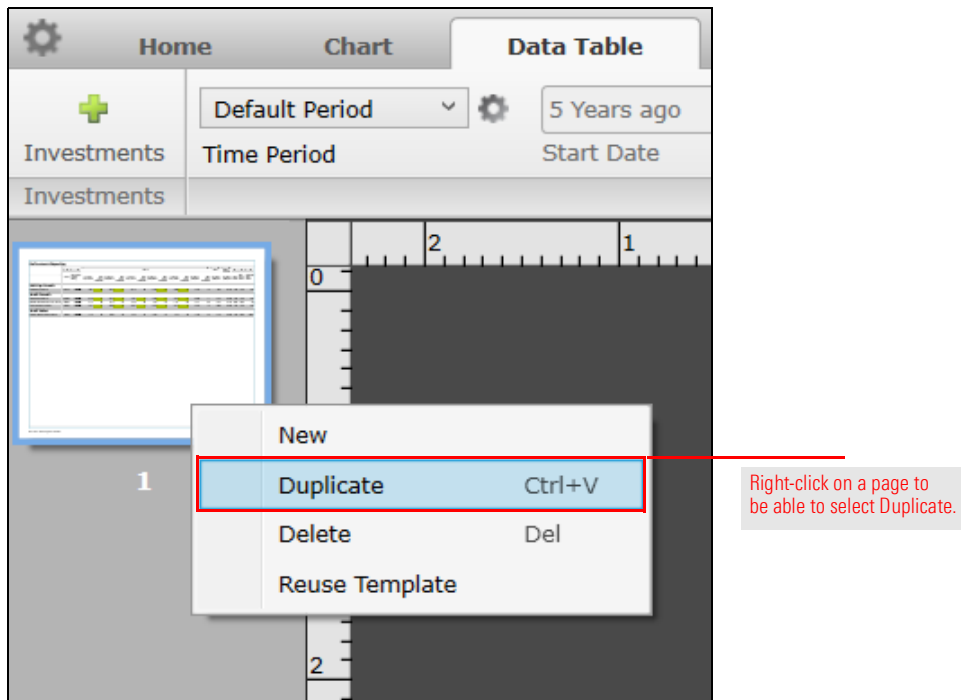
14. Repeat **Steps 8-13** for the remaining Peer group percentiles values.

15. Click **OK**.
16. In the upper-left corner, use the **Settings** icon to select **Save as Template**. Overwrite the existing template.

The text in the Performance Report is small and difficult to read. Spreading the columns across two pages would make for a better experience for anyone who will be reading the report. To format the workbook this way, do the following:

Exercise 20: Format the Workbook for easier reading

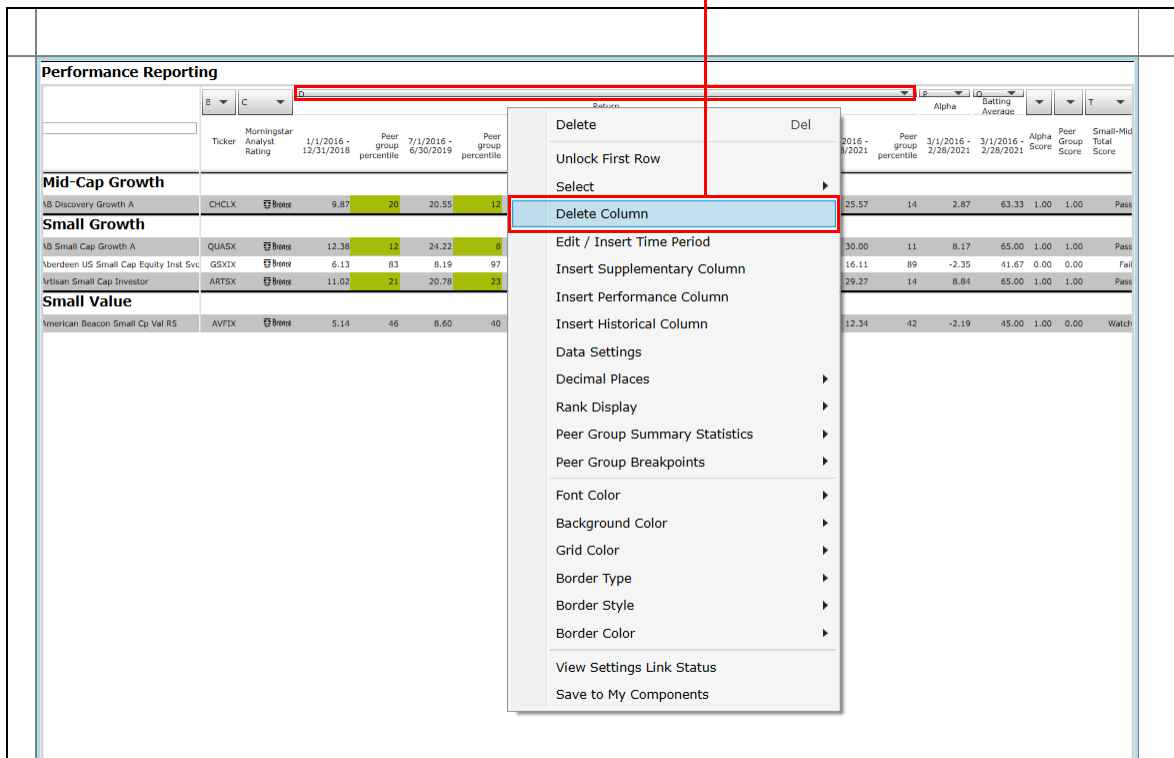
1. In the pane to the left, **right-click** the **first page**, then select **Duplicate**. A second page appears in the filmstrip.



2. Click **Calculate**.
3. Select the cell.

- On the second page, **right-click** the **Return** column header, then click **Delete Column**.

Be sure to right-click on the drop-down menu when selecting this option, in order to delete the entire group at once.

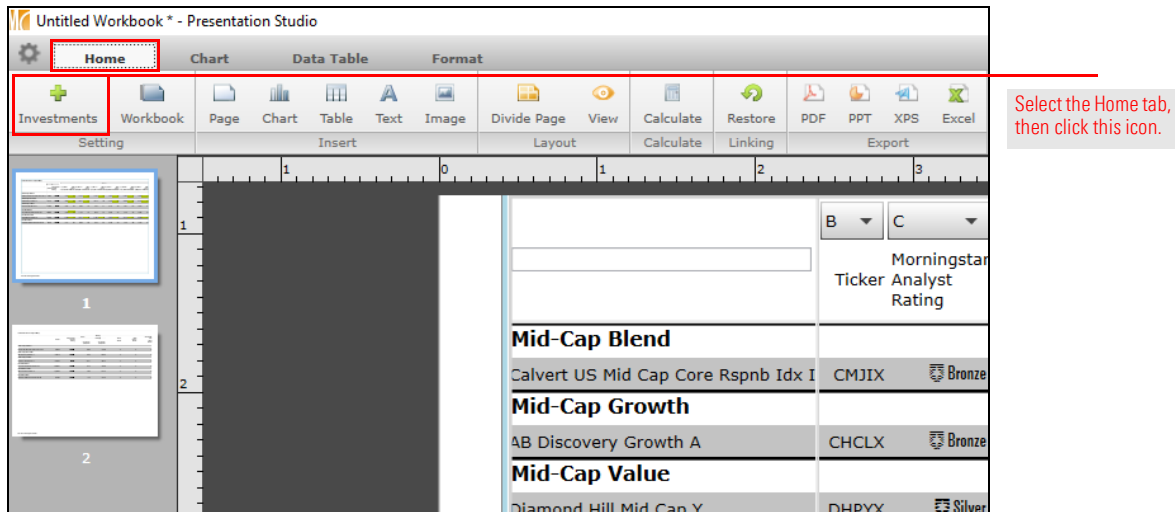


- In the pane to the left, select the **first page**.
- Use the same **right-click** function to individually **delete** the following columns from the table here:
 - ▶ Alpha
 - ▶ Batting Average
 - ▶ Alpha Score
 - ▶ Peer Group Score, and
 - ▶ Small-Mid Total Score.
- In the upper-left corner, use the **Settings** icon to select **Save as Template**. Overwrite the existing template.

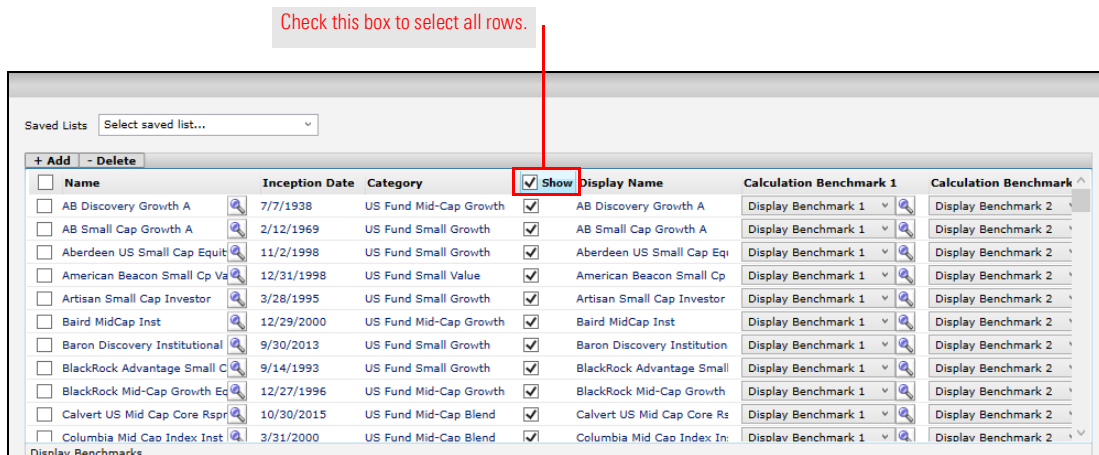
Now that the columns are all added, the conditional formatting is in place, and the pages are designed for easier reading, the last steps are to add in all rows from the search result and produce a PDF of the report. Do the following:

Exercise 21: Add all rows to the report and produce a PDF

1. Select the **Home** tab, then click the **Investments** icon.



2. Click the **Select All** box to the right of the Show column.



3. Click **OK**.
4. Click **Calculate** on both pages.

- From the toolbar, click **PDF > Full Report**. The report opens in a new window as a PDF.

Use the PDF icon to select Full Report.

