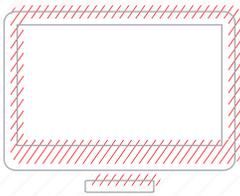
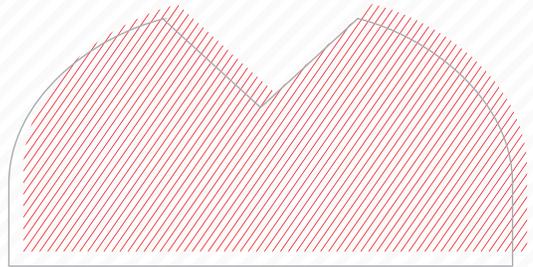
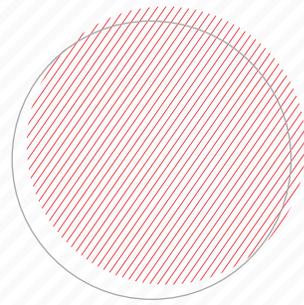
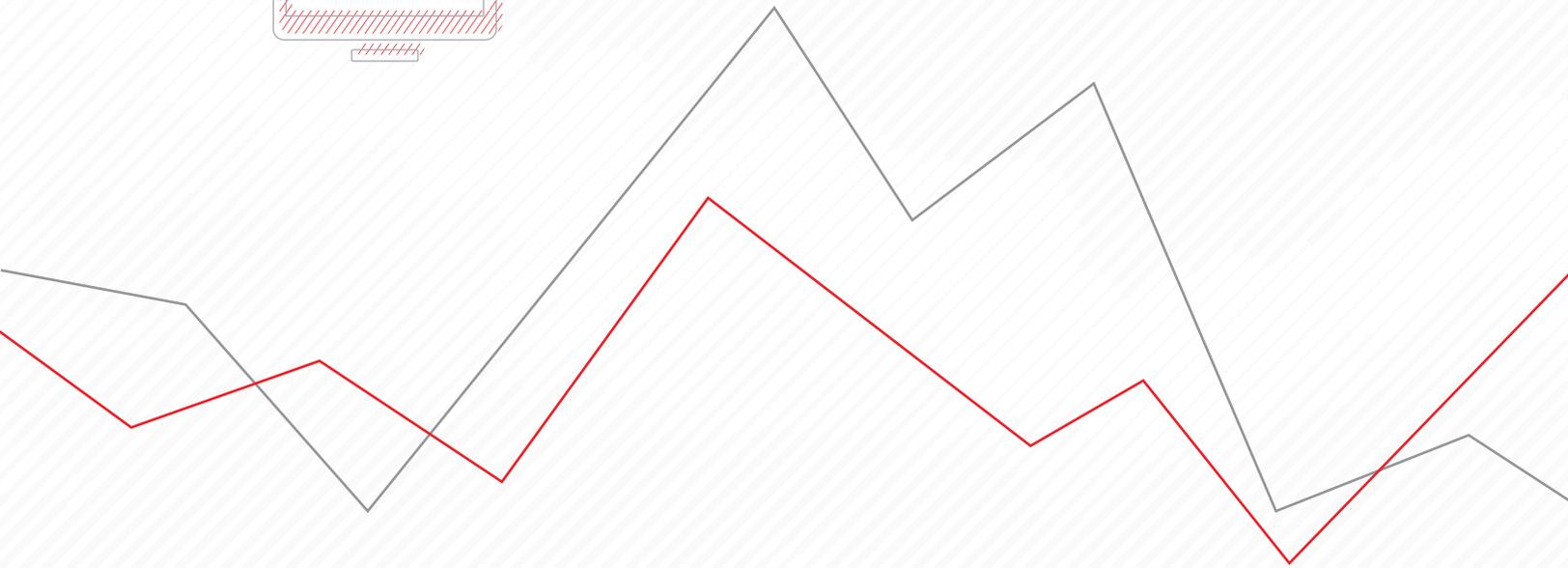


Creating Custom Data Sets in Morningstar Direct

Onboarding Guide



MORNINGSTAR Direct



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Creating Custom Data Sets in Morningstar DirectSM

Morningstar DirectSM has thousands of data points covering asset allocation, returns, risk, operations, and more, organized into standard views. These pre-built views are available in the grid view you see in the Local Databases, Global Databases, and Workspace modules. However, you can assemble a custom data set into your own view using only those data points relevant to your analysis.

Overview

These custom data views (called data sets) can be applied to search results and investment lists. Once saved, they reside in the Data Sets folder under the Workspace module, and can be accessed from the View drop-down field, or from the Edit Data icon within a spreadsheet view.

The screenshot shows the Morningstar Direct interface. On the left, the 'Workspace' sidebar has 'Data Sets' highlighted. In the center, a table lists investments with a 'View' dropdown menu open, showing 'My Data Set' selected. On the right, two callout boxes provide additional information:

- Both pre-built views and those you create are available from this drop-down field.
- Custom data sets can be deleted, renamed, and shared or sent from this folder.

This guide shows you a number of ways to create custom data sets in Morningstar Direct, as well as how to save those data sets, and how you can make one the default view you see when opening a data universe.

- Note: The following exercises use the lists created as part of the work completed in the [Working with Investment Lists in Morningstar Direct](#) guide. If you did not complete this work, you can use other lists as a substitute for those named below.

Not every custom data set you create needs to be saved for later use. At times, you might simply be interested in quickly seeing a new arrangement of data points already offered in a pre-built view. For example, the Snapshot view shows by default for a universe in the Local Databases, Global Databases, and Workspace modules. It has dozens of useful data points.

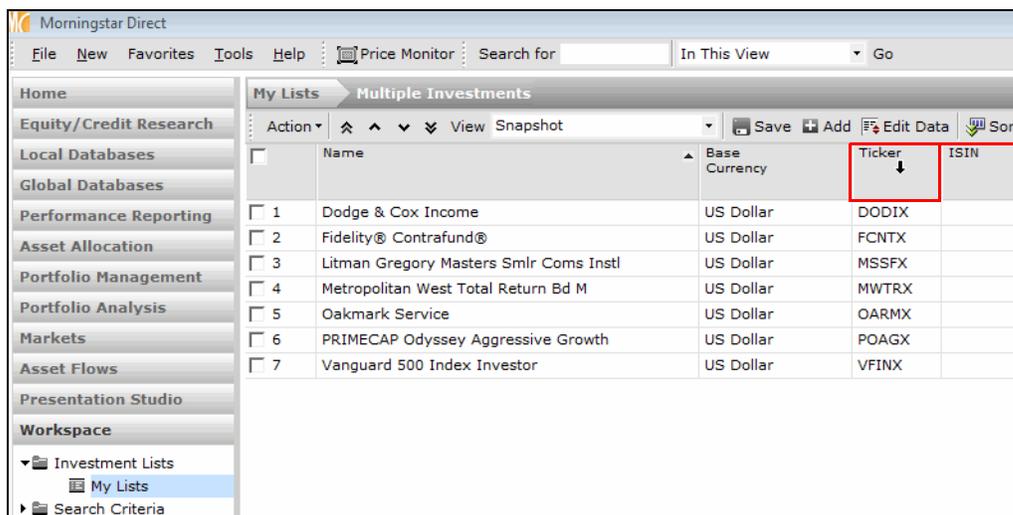
Exercise 1: Create a temporary custom data set

You can create a temporary custom data set by dragging and dropping existing columns into an order of your choosing. Note that this arrangement is not saved, and the view will revert to its original order once you leave the current page.

Note: Although the manual reordering is not saved, it is represented in the arrangement you create when exporting to Microsoft[®] Excel[®].

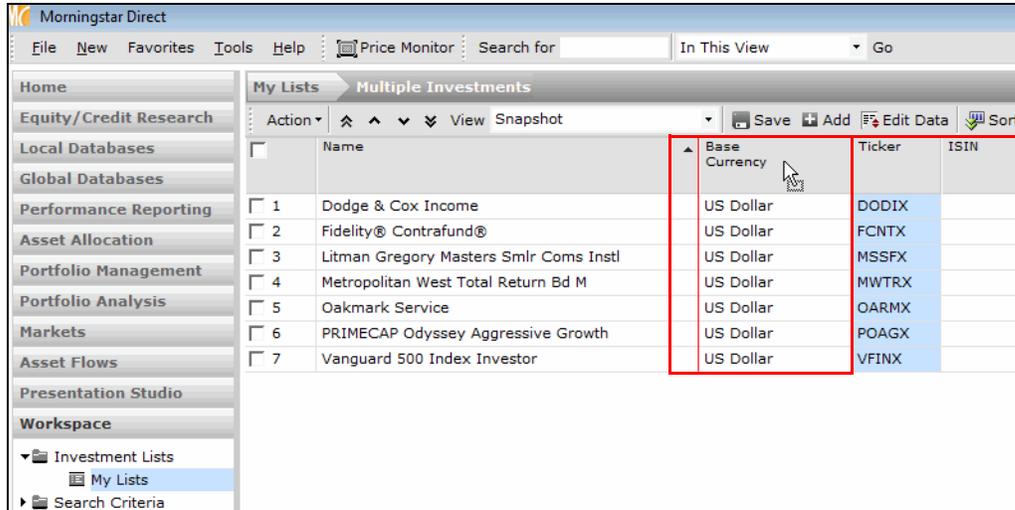
To create a temporary custom data set, do the following:

1. Select the **Workspace** module, and be sure you are looking at the **My Lists** page.
2. **Double-click** the **Multiple Investments** list to open it.
3. Move your mouse over the **Ticker** column header; your mouse should change to a down-facing black arrow. Click once on the **column header** to select it. The selected column is highlighted in blue.



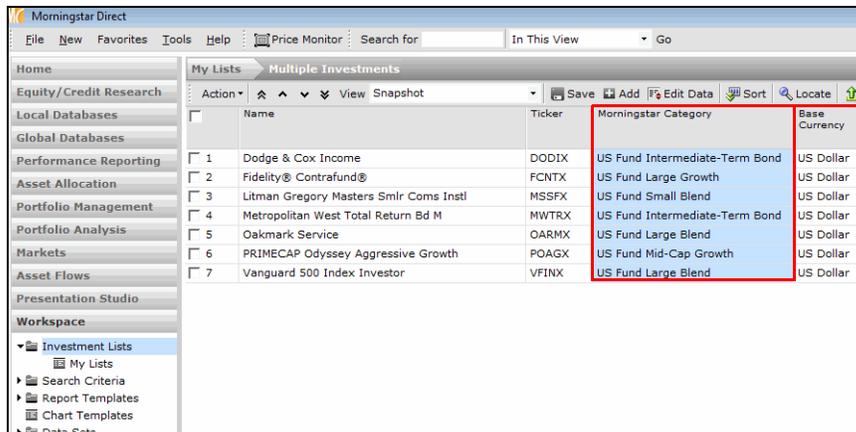
Note the appearance of the cursor when it moves over a column header.

4. Move the cursor back over the Ticker column header. Note that it has returned to its previous state. **Click-and-hold** the left mouse button as the column header is dragged to the left of the Base Currency column.
5. When a thin red line appears to the left of the Base Currency column, **release** the mouse button. The Ticker column now appears to the left of the Base Currency column.



Note the red line to the left of the Base Currency column, and the appearance of the cursor when a column is dropped into a new location.

6. Repeat steps 3-5 to move the **Morningstar Category** column to the left of the Base Currency column as well. Remember that this configuration cannot be saved, and is meant to be used only as a short-term arrangement of columns. As soon as this view or page is left, the Snapshot view will revert to its original configuration.



Note the new position of this column.

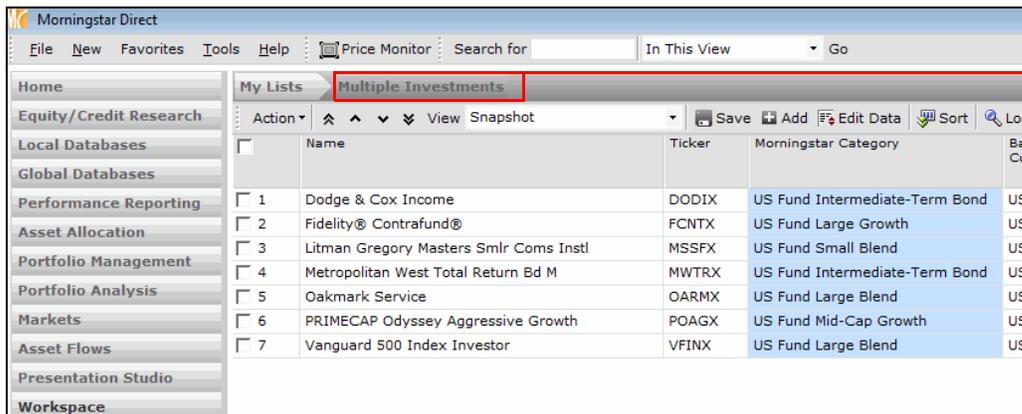
Rather than temporarily creating a custom data set by dragging-and-dropping columns into place, you can instead add columns to a data set simply by right-clicking on a column header; the column(s) you insert will be placed to the left of that column. This results in a custom data set that is saved, so you will want to be sure to give it a name at the time you create it.

Exercise 2: Create a custom data set by right-clicking a column header

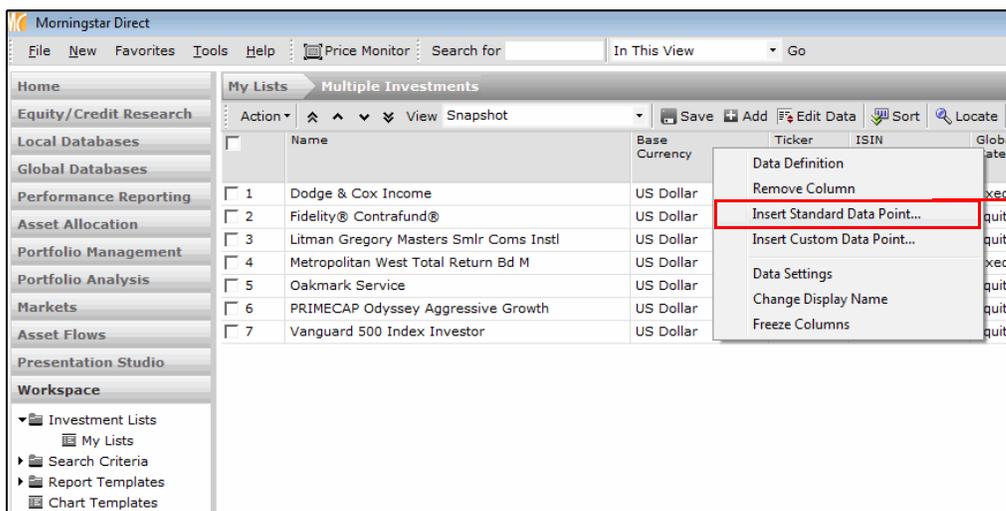
This technique is useful when a certain data point does not exist in the view you are looking at, and you want to quickly add a few columns to a data set without having to build an entire data set from scratch. It is also useful as in the case below, where a data point exists in a column set, but it would be faster to insert it than it would to scroll far to the right, then drag it all the way over to the left.

To create a custom data set by using the right-click function, do the following:

1. The Multiple Investments list should still be open. From the breadcrumb trail above the grid view, click once on **Multiple Investments** to reset the view.
 - Note: If a confirmation message opens asking whether you want to save your changes, click **No**.

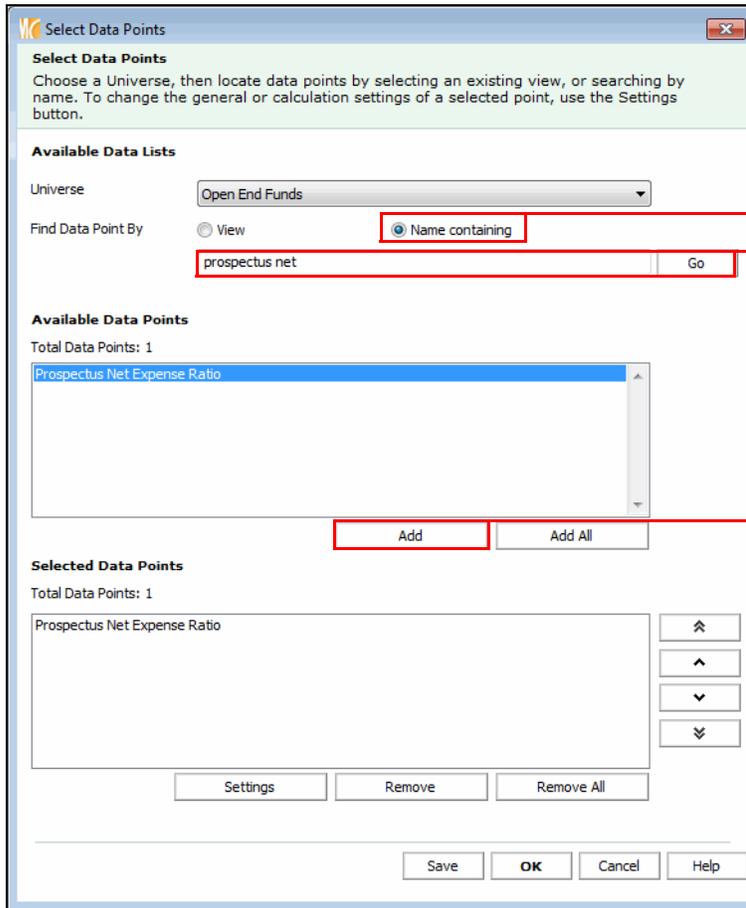


2. **Right-click** on the column heading for **Base Currency** and select **Insert Standard Data Point...** The Select Data Points dialog box opens.



3. In the Select Data Points dialog box, in the Find Data Point By area, click the **Name containing** option button. The drop-down field is removed, and a search field appears.
4. In the **search** field, type **Prospectus Net**, then click **Go**. In the Available Data Points area, the Prospectus Net Expense Ratio data point appears.
5. Click once on **Prospectus Net Expense Ratio** to select it, then click **Add**.

Note: In lieu of using the Add button, you can instead simply **double-click** the **name** of a data point you want to add.



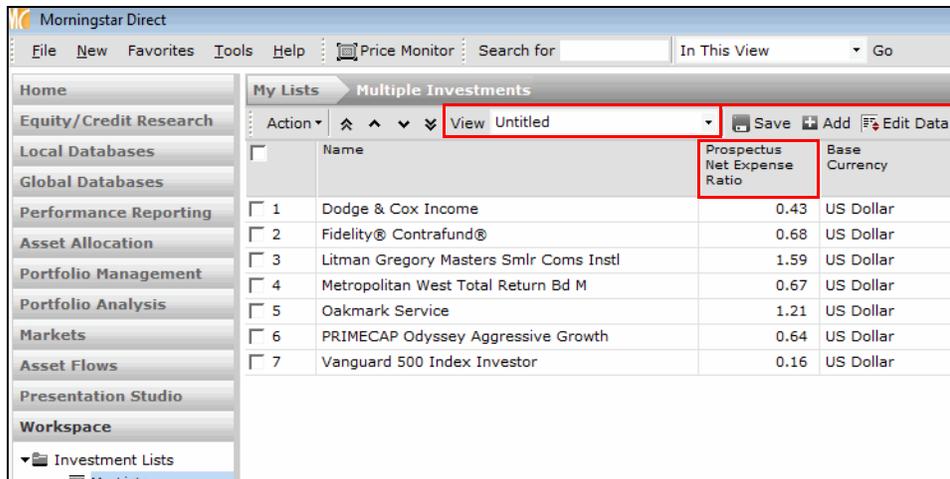
Select this option to find a data point when you know its name, but not necessarily which views it is in.

You can enter only a portion of a data point's name when the Name containing option is selected.

Either highlight the data point(s) you want to move and click this button, or double-click the data point(s) to select them.

- When working in the Select Data Points dialog box and the data point(s) to be included have been added, the following decision needs to be made: either click OK to immediately see the new column set, or first click Save to preserve the new custom data set.

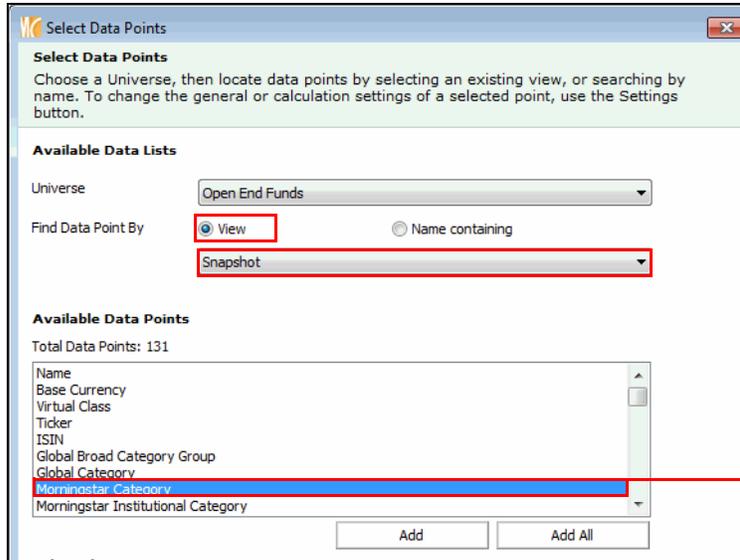
In this instance, do not save the data set, because it would contain only two columns: Name and Prospectus Net Expense Ratio. Click **OK**. The data point has been inserted, but note the name of the view in the View drop-down field above the grid view: it reads "Untitled" because the data set was not saved when the data point was inserted. If the Save icon were clicked now, it would preserve this column set, but the column set will only ever be associated with this specific list.



The View field reads "Untitled" because the new view wasn't saved when it was created.

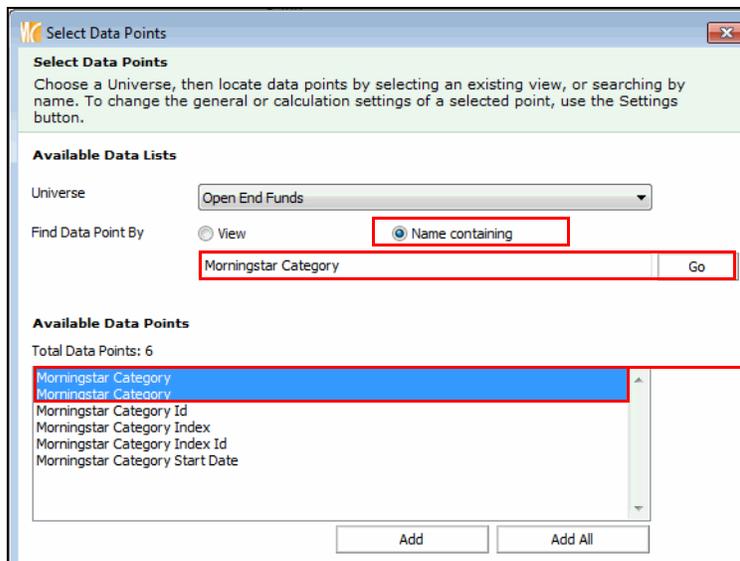
In this exercise, a custom data set is created with only a selection of specific data points, rather than simply adding one or two by inserting them into an existing data set. First, though, a quick lesson on the types of data points available in Morningstar Direct. From the Select Data Points dialog box, when the Snapshot view is chosen, a single instance of Morningstar Category is seen.

How can I create a custom calculation for a data point?



Note the instance of this data point when the Snapshot view is selected.

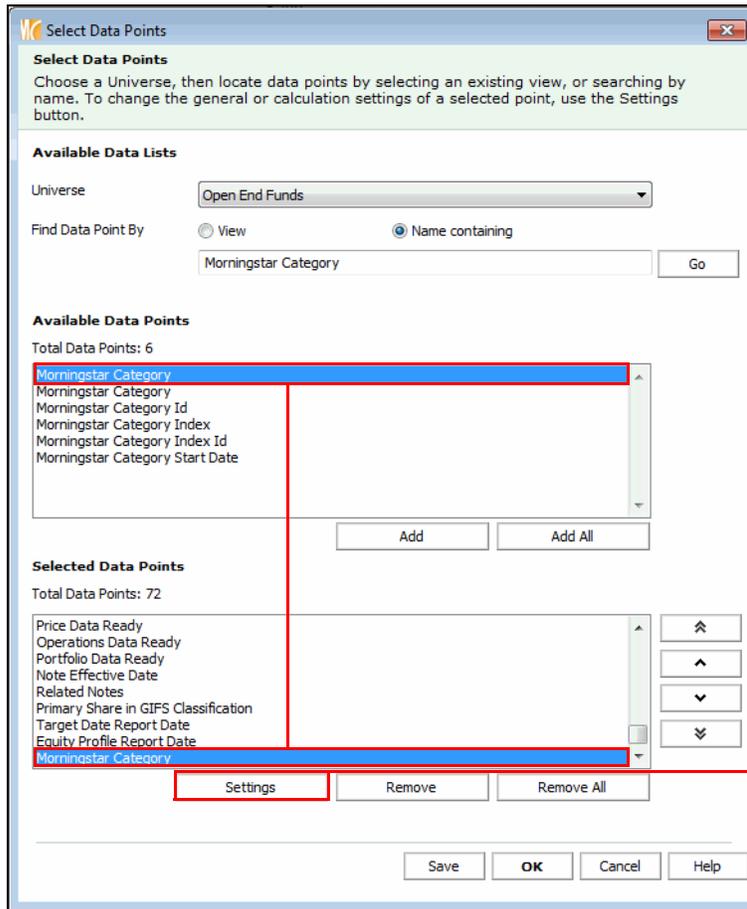
When the "Name containing" option is selected, though, and "Morningstar Category" is entered as the search term, note that two instances of that data point are seen.



Note the two instances of this data point when searching for it by name.

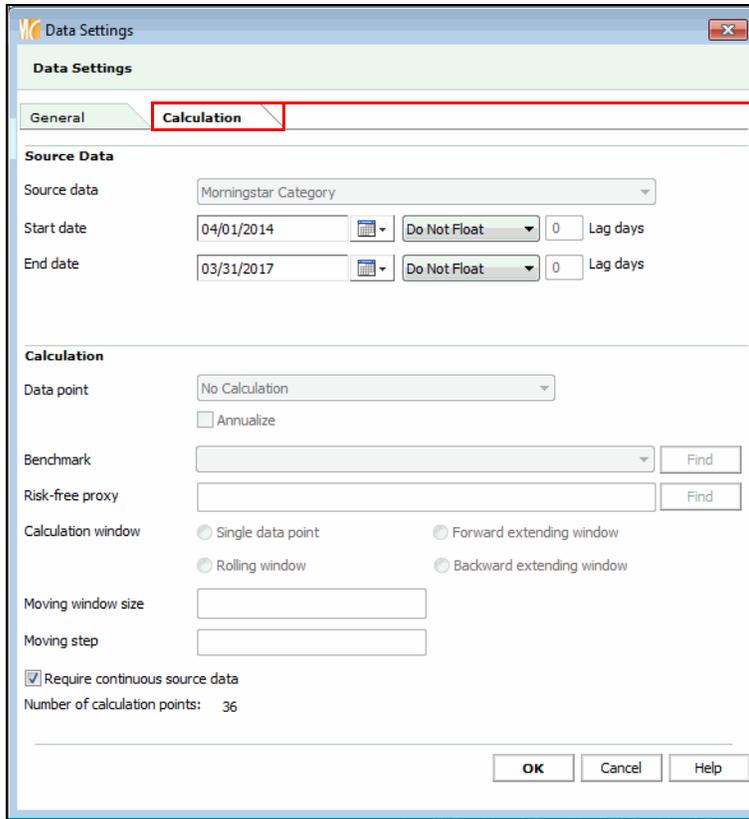
Whenever two instances of the same data point are seen when searching in the Select Data Points dialog box, the first instance is always the custom calculated version of the data point. A custom calculated data point allows users to see past values for a data point, rather than simply the current value for the data point. In this example, a user could see not only what Morningstar Category a fund is assigned to now, but also what Morningstar Categories it might have belonged to in the past.

If this ordering rule (where the first item is the historical version, and the second is the present value) is not remembered, how else can a user know which instance of a data point is the custom calculated one, and which is the current version? The way to do this is to check the settings for a data point. Start by adding a data point to the Selected Data Points area, then either **double-click** the **data point** in the Selected Data Points area, or click it once to select it and then click the **Settings** button to open the Data Settings window.

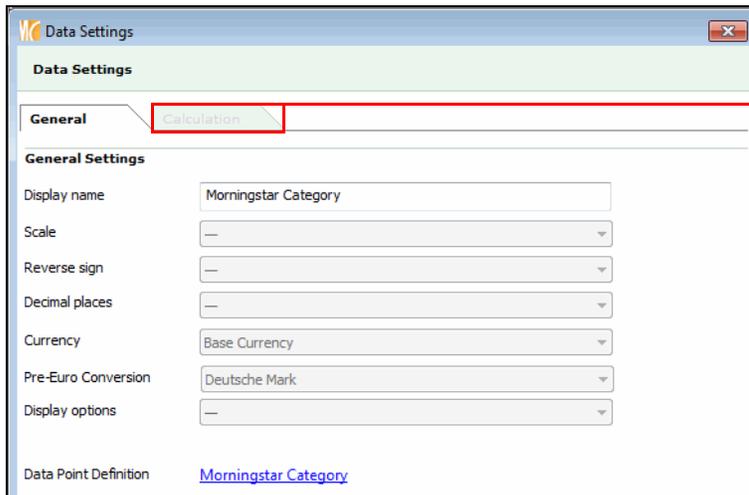


The first instance of "Morningstar Category" has been added; the Settings button is used to access the settings for this data point.

The Data Settings window has two tabs: General, and Calculation. If the Calculation tab can be selected, then the dates and perhaps other information for a data point can be adjusted; only custom calculated data points allow this. For standard data points, the Calculation tab is grayed out and cannot be selected.

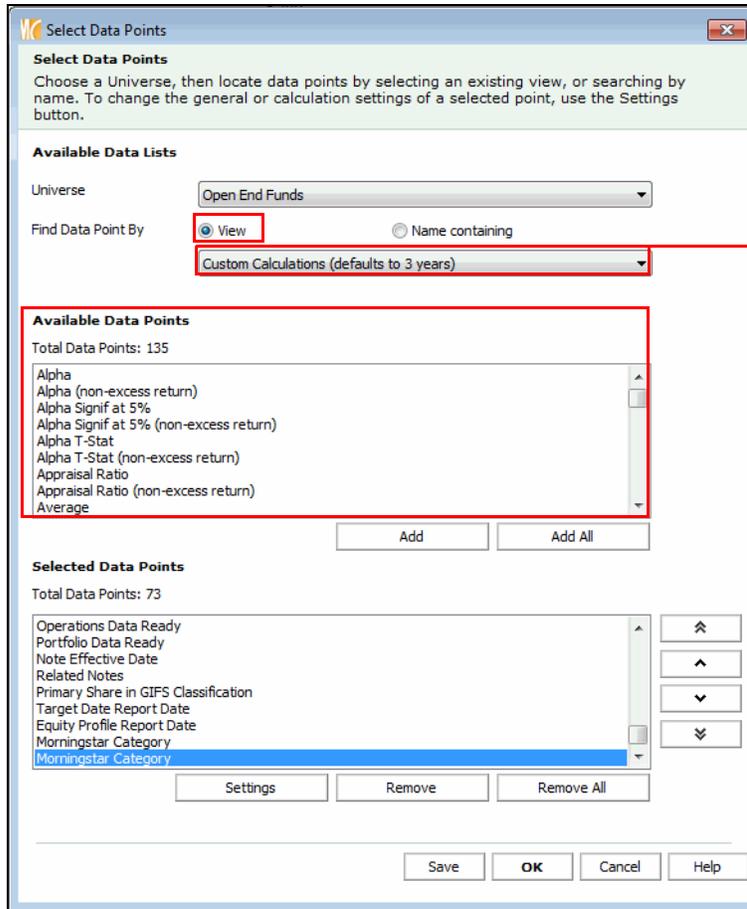


For custom calculated data points, this tab can be selected and the fields adjusted.



For standard data points, the Calculation tab cannot even be selected.

Morningstar Direct offers more than 125 data points with custom calculations. All of these can be seen by selecting the **View** option on the Select Data Points dialog box, then choosing **Custom Calculations (defaults to 3 years)**. Definitions for each of these data points are found in [this manual](#).

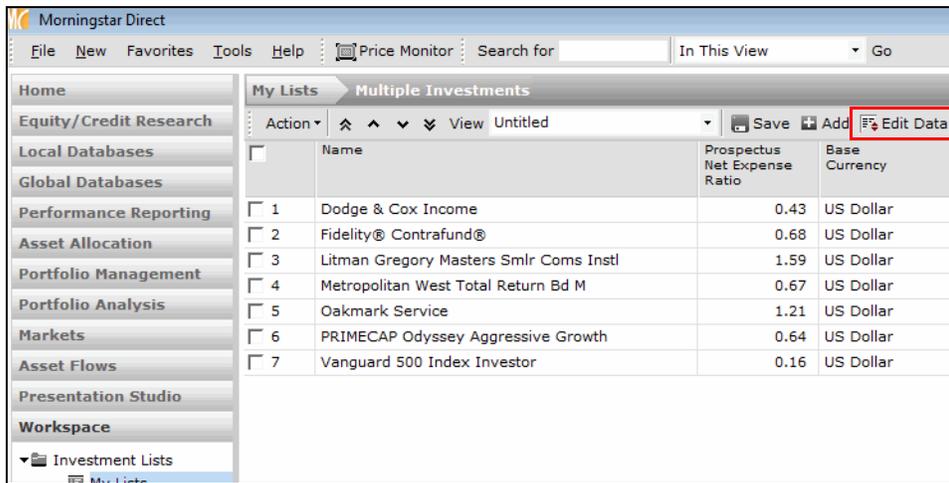


All custom calculated data points can be seen from this view.

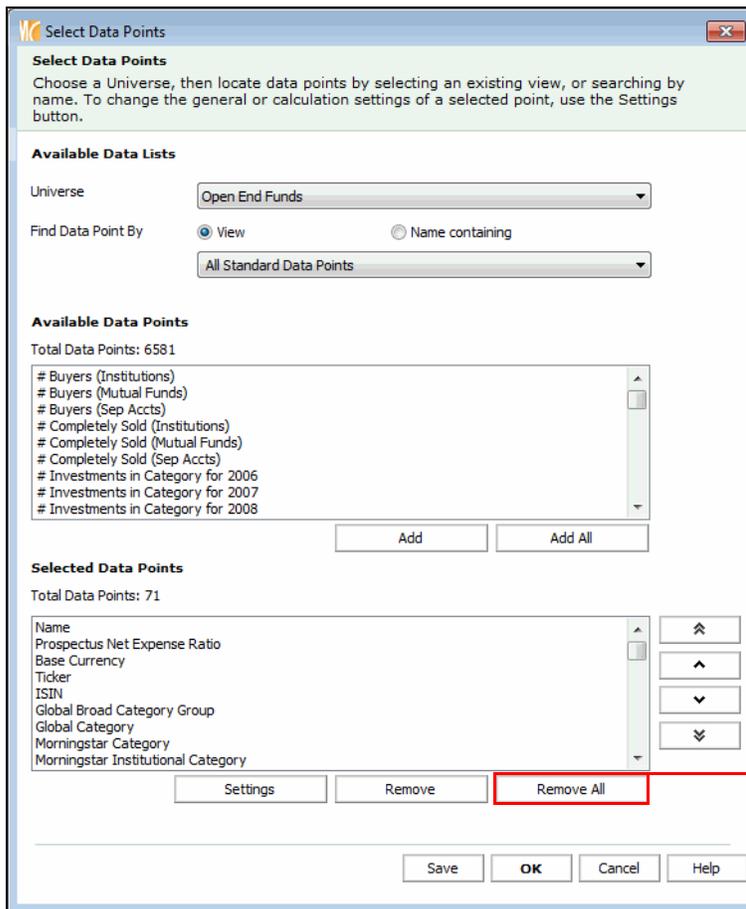
In this exercise, data points from a number of existing views will be combined to create a unique custom data set. To create this custom data set, do the following:

Exercise 3: Create a custom data set

1. From the toolbar, click the **Edit Data** icon. The Select Data Points dialog box opens.



2. To start, remove all of the existing data points. This is often a faster approach than removing individual fields. At the bottom of the dialog box, click the **Remove All** button. Note that the Name field remains; this data point cannot be removed.



3. From the Find Data Points By area, the View option button should be selected. The drop-down field currently shows All Standard Data Points. Instead of trying to find the few data points desired by scrolling up and down through the list of thousands of data points, use the **View** drop-down field to select the **Snapshot** view.
4. From the Snapshot view, **double-click** each of the following to add that data point to the custom data set:
 - ▶ Ticker
 - ▶ Morningstar Category
 - ▶ Morningstar Rating Overall
 - ▶ Morningstar Analyst Rating, and
 - ▶ Manager Tenure (Longest).
5. From the **View** drop-down field, select the **Sustainability: ESG Risk (Fund)** view.
6. From the Sustainability view, **double-click** each of the following to add that data point to the custom data set:
 - ▶ Morningstar Sustainability RatingTM
 - ▶ Portfolio Sustainability Score
 - ▶ Portfolio ESG Score
 - ▶ Portfolio ESG Risk Exposure Score, and
 - ▶ Portfolio ESG Managed Risk Score.
7. Click the **Save** button. The Save As dialog box opens.

Select Data Points

Choose a Universe, then locate data points by selecting an existing view, or searching by name. To change the general or calculation settings of a selected point, use the Settings button.

Available Data Lists

Universe: Open End Funds

Find Data Point By: View Name containing

Sustainability: ESG Risk (Fund)

Available Data Points

Total Data Points: 54

Name
Sustainability Rating Date
Percent of AUM Covered - ESG
Morningstar Sustainability RatingTM
Historical Sustainability Score
Historical Sustainability Percent Rank in Global Category
Historical Sustainability Score Global Category Average
Portfolio ESG Risk Exposure Score
Portfolio ESG Managed Risk Score

Add Add All

Selected Data Points

Total Data Points: 10

Ticker
Morningstar Category
Morningstar Rating Overall
Morningstar Analyst Rating
Manager Tenure (Longest)
Morningstar Sustainability RatingTM
Portfolio Sustainability Score
Portfolio ESG Risk Exposure Score
Portfolio ESG Managed Risk Score

Settings Remove Remove All

Save OK Cancel Help

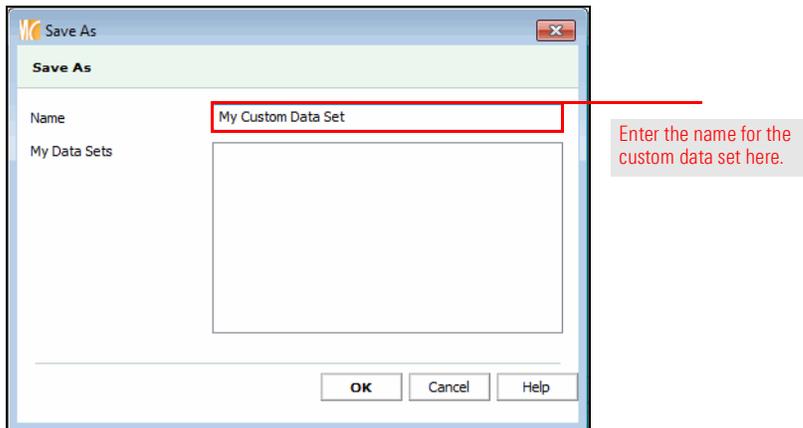
Use this drop-down field to find the data points needed.

Double-click a field's name to add it to the Selected Data Points.

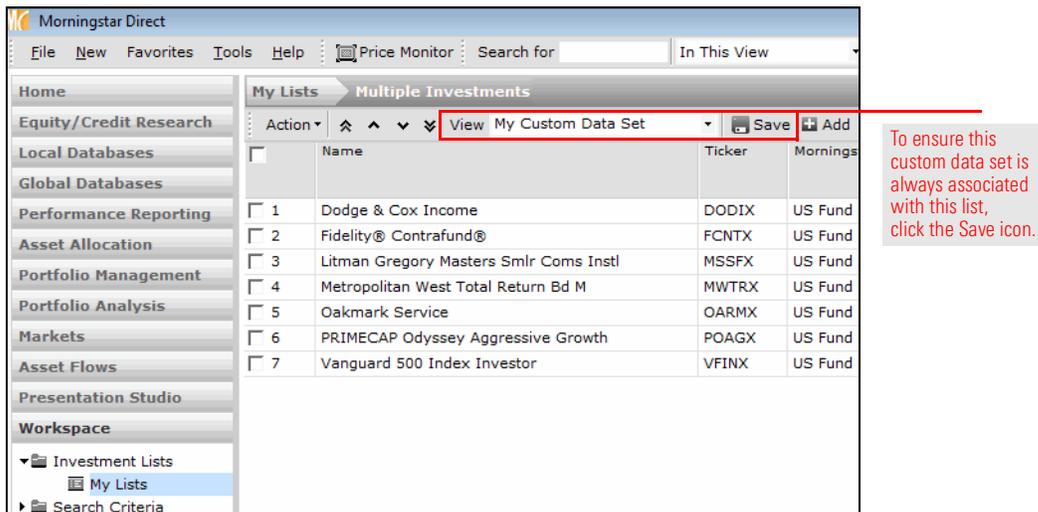
Be sure these data points are selected.

When all of the data points have been added, click this button.

- In the **Name** field, type **My Custom Data Set**.



- Click **OK** to close the Save As dialog box.
- Click **OK** to close the Select Data Points dialog box.
- The custom data set is displayed in the grid view, and the View drop-down field reflects the name entered when the data set was saved. To ensure this custom data set is automatically associated with this list click **Save** on the toolbar. Unless this is done, each time this list is opened, this custom data set must be chosen from the **View** drop-down field above the grid view.



Occasionally, you may need to edit a custom data set you have created. For example, you might have all of the columns you want, but not in the correct order. Or perhaps you want to add more columns or remove some of the columns you have. Rather than continually dragging-and-dropping the columns into the correct order, or creating new custom data sets, you can make these changes in the Select Data Points dialog box.

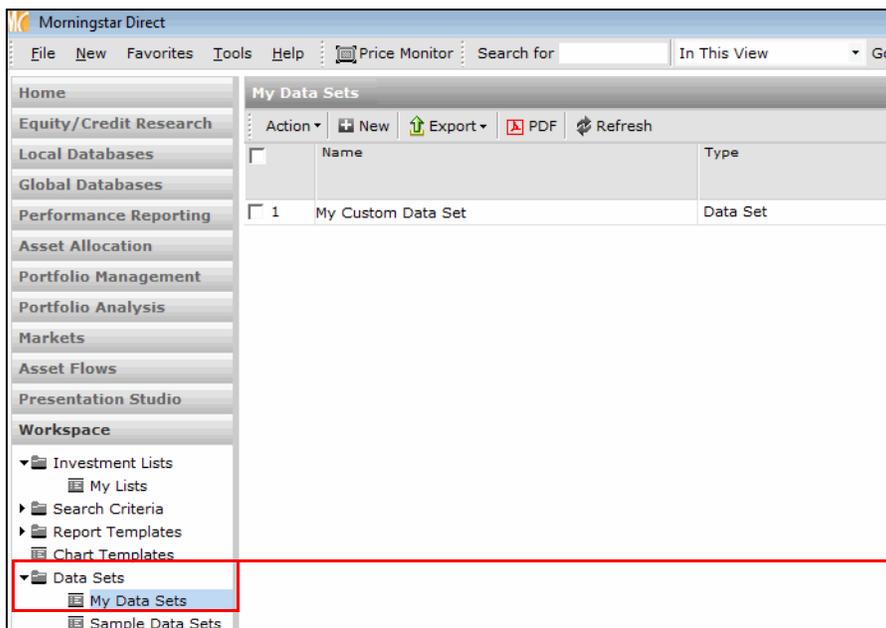
Exercise 4: Edit a custom data set

In the following exercise, you will practice editing a custom data set by taking the following actions:

- ▶ remove a column
- ▶ change a column’s position, and
- ▶ add a column.

To edit a custom data set, do the following:

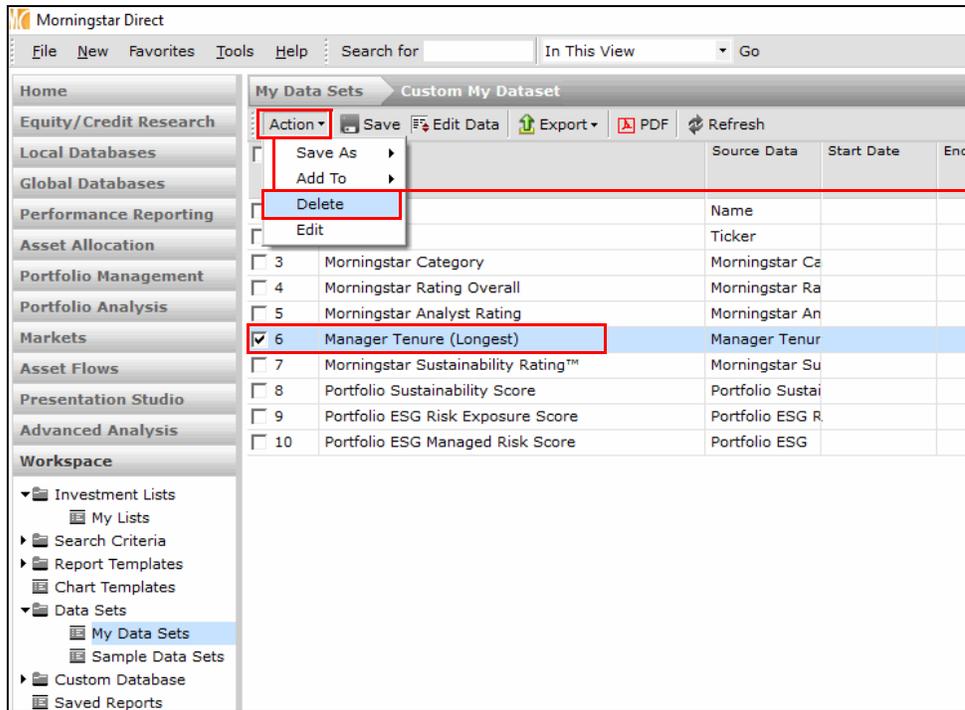
1. The Multiple Investments list should still be open. Although the custom data set could be edited from here by clicking the Edit Data icon on the toolbar, it can also be done another way. In the left-hand navigation pane, expand the **Data Sets** folder and select **My Data Sets**.



This page shows all saved custom data sets.

2. **Double-click** the **My Custom Data Set** item to open it.

3. Select the check box next to **Manager Tenure (Longest)**.
4. From the toolbar above the grid view, select **Action . . . Delete**.
5. When the confirmation message opens, click **OK**.



6. To change a column's position, from the toolbar, click the **Edit Data** icon. The Select Data Points dialog box opens.

- From the Selected Data Points area, click once on **Morningstar Rating Overall**, then click the **Move Up** (single up arrow) icon to move it ahead of Morningstar Category. (This will place it to the left of Morningstar Category in the grid view).

Select Data Points
✕

Select Data Points

Choose a Universe, then locate data points by selecting an existing view, or searching by name. To change the general or calculation settings of a selected point, use the Settings button.

Available Data Lists

Universe: Open End Funds

Find Data Point By: View Name containing

Sustainability: ESG Risk (Fund)

Available Data Points

Total Data Points: 54

Name

Sustainability Rating Date

Percent of AUM Covered - ESG

Morningstar Sustainability Rating™

Historical Sustainability Score

Historical Sustainability Percent Rank in Global Category

Historical Sustainability Score Global Category Average

Portfolio ESG Risk Exposure Score

Portfolio ESG Managed Risk Score

Add
Add All

Selected Data Points

Total Data Points: 10

Ticker

Morningstar Category

Morningstar Rating Overall

Morningstar Analyst Rating

Manager Tenure (Longest)

Morningstar Sustainability Rating™

Portfolio Sustainability Score

Portfolio ESG Risk Exposure Score

Portfolio ESG Managed Risk Score

↑

↑

↓

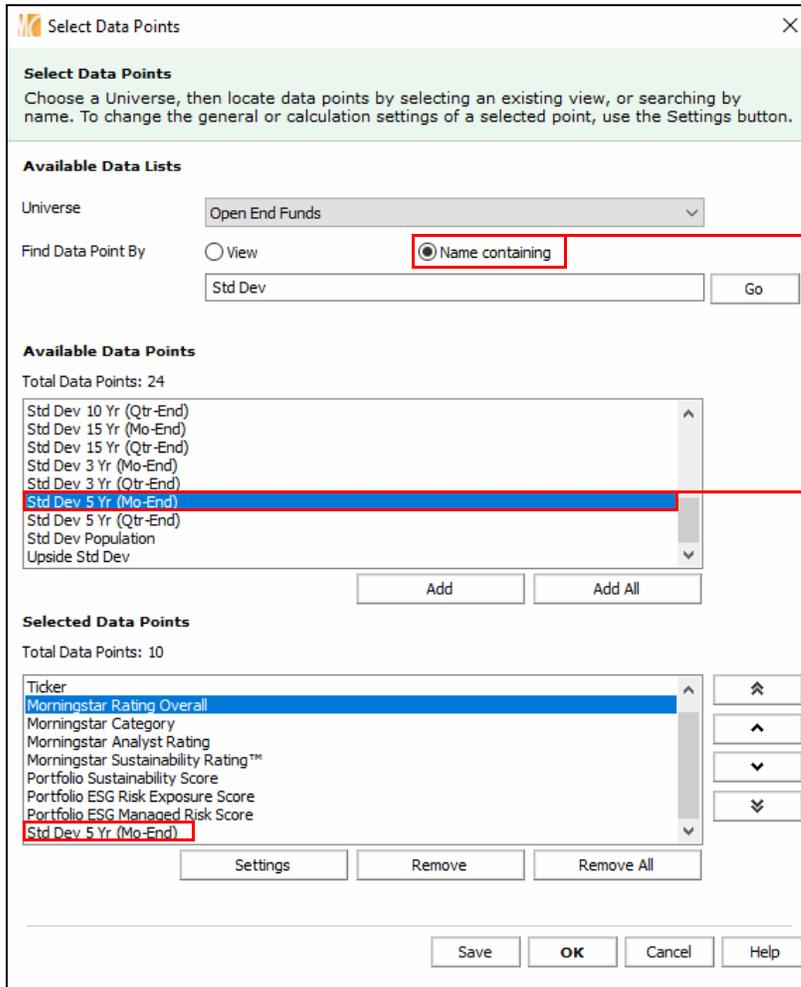
⇩

Settings
Remove
Remove All

Save
OK
Cancel
Help

Use the arrow icons to change the position of columns in a custom data set.

8. To add a column for 5-year standard deviation, select the option button for **Name containing**.
9. In the search field, enter **Std Dev**, then click **Go**.
 - ☞ Note: A number of data point names, such as “Standard Deviation” may be abbreviated in Morningstar Direct.
10. **Double-click** the **Std Dev 5 Yr (Mo-End)** data point to add it to the Selected Data Points area.



Be sure to select this option when looking for a data point by name.

Double-click this data point to add it to the other selected data points.

11. In the Selected Data Points area, click once to select the **Std Dev 5 Yr (Mo-End)** data point, then click the **Move to Top** (double up arrow) icon.
12. Click the **Move Down** (single down arrow) icon twice to position **Std Dev 5 Yr (Mo-End)** below the Ticker data point.

Select Data Points

Choose a Universe, then locate data points by selecting an existing view, or searching by name. To change the general or calculation settings of a selected point, use the Settings button.

Available Data Lists

Universe: Open End Funds

Find Data Point By: View Name containing

Std Dev

Available Data Points

Total Data Points: 24

- Std Dev 10 Yr (Qtr-End)
- Std Dev 15 Yr (Mo-End)
- Std Dev 15 Yr (Qtr-End)
- Std Dev 3 Yr (Mo-End)
- Std Dev 3 Yr (Qtr-End)
- Std Dev 5 Yr (Mo-End)**
- Std Dev 5 Yr (Qtr-End)
- Std Dev Population
- Upside Std Dev

Selected Data Points

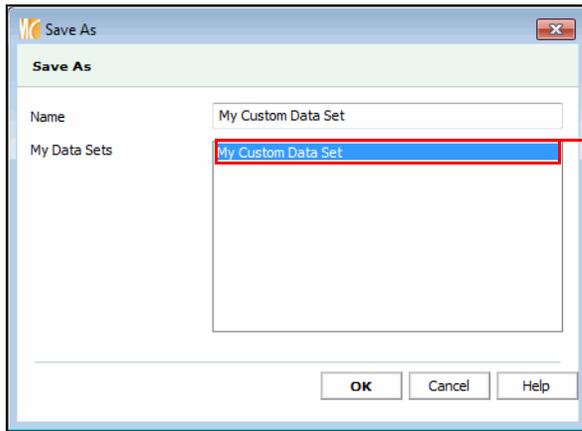
Total Data Points: 10

Name	
Ticker	
Std Dev 5 Yr (Mo-End)	<input checked="" type="checkbox"/>
Morningstar Rating Overall	
Morningstar Category	
Morningstar Analyst Rating	
Morningstar Sustainability Rating™	
Portfolio Sustainability Score	
Portfolio ESG Risk Exposure Score	

Use the highlighted icons to reposition the Std Dev 5 Yr (Mo-End) data point into the position shown.

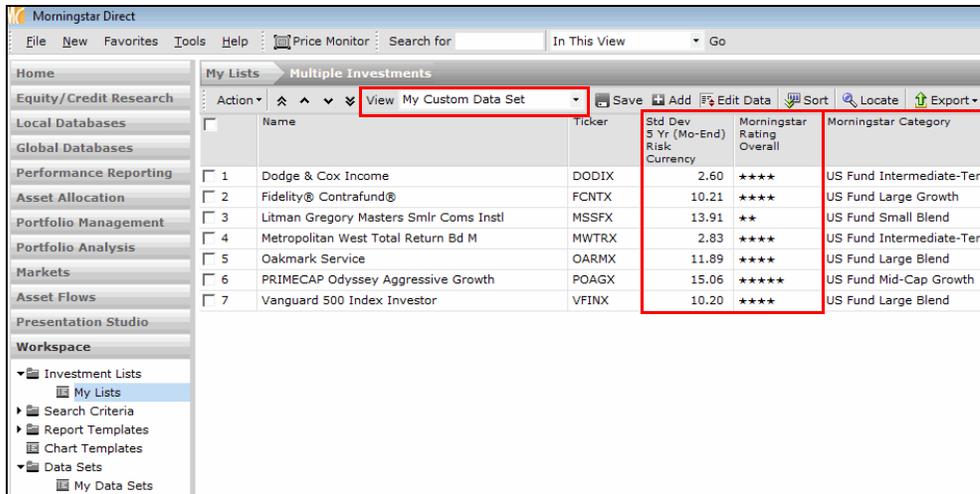
13. Click the **Save** button. The Save As dialog box opens.

14. **Double-click** the **My Custom Data Set** item. Its name automatically appears in the Name field.



Rather than re-typing the name of a custom data set when re-saving, simply double-click its name to populate it in the Name field.

15. Click **OK**.
16. When the confirmation message opens, click **OK**.
17. Click **OK** to close the Select Data Points dialog box.
18. In the left-hand navigation pane, select the **My Lists** page.
 - Note: If prompted to save your changes, click **Yes**.
19. **Double-click** the **Multiple Investments** list to open it. Note the changes to the custom data set.



The same custom data set is still associated with the list, and reflects the changes made.

To review the lessons from this guide, keep in mind the following points:

- ▶ Creating a custom data set can have a number of meanings. It could be a simple rearrangement of data points in an existing data set, it could be adding or removing data points from an existing data set, or it could be manufacturing a data set from scratch by selecting and ordering a specific set of data points.
- ▶ The Edit Data button is used to create a custom data set. Start by opening the correct list or search for which the data set is being built. This way, the data set can be saved specifically to this item.
- ▶ Some data points in Morningstar Direct offer both a current version, and historic values. When two instances of the same data point are seen, the first instance is the historic version.
- ▶ Data sets can be saved, and then later edited from the Data Sets page under the Workspace module. When a data set is created and saved, remember to also click Save in the grid view to ensure that set of data points automatically shows when a particular list or search is opened.

Recapping lessons from creating custom data sets