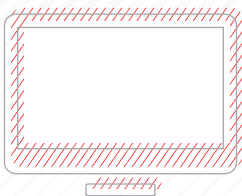
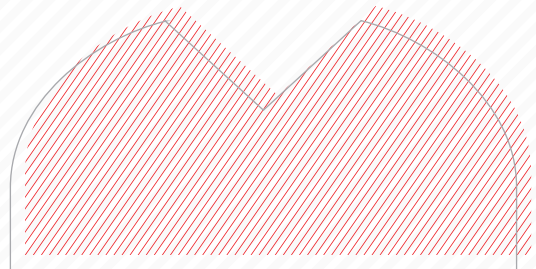
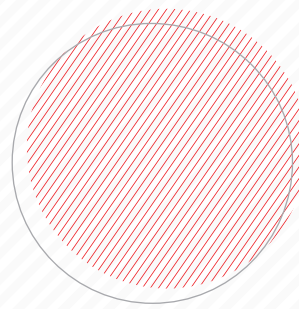
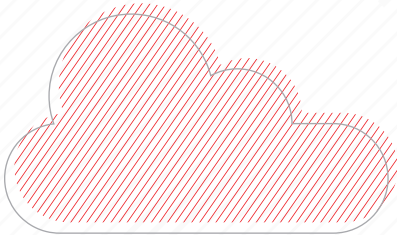
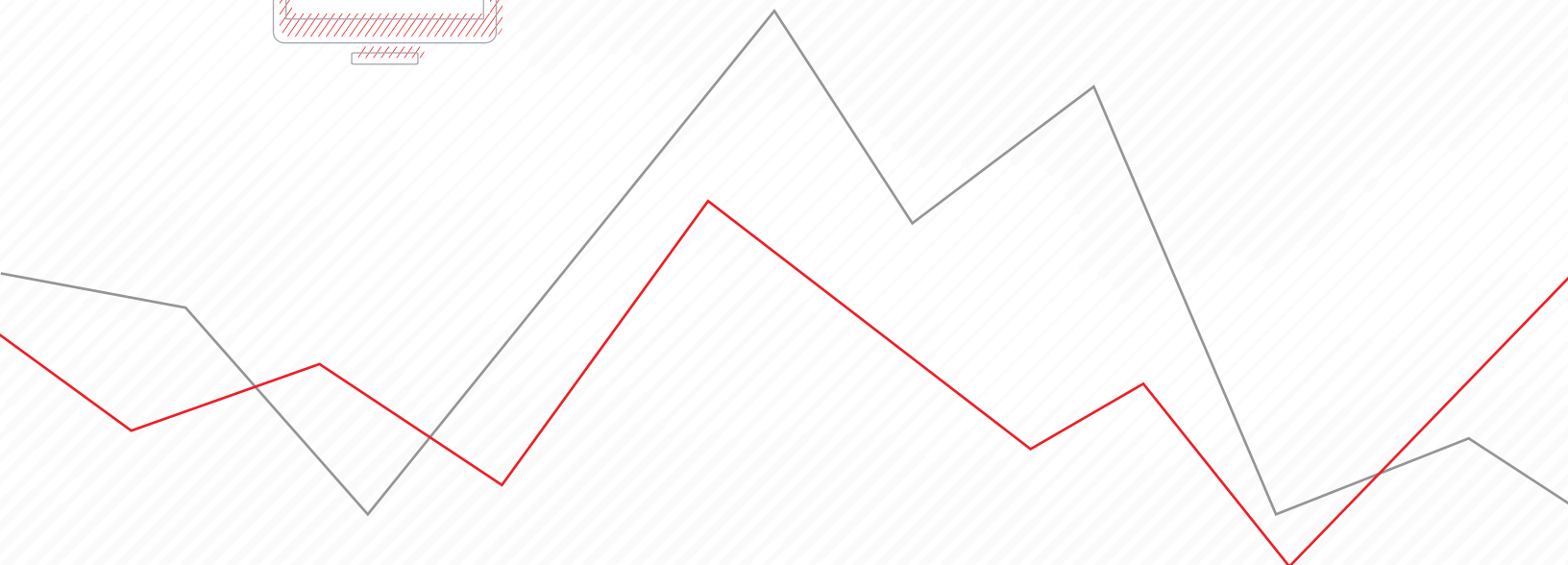


Working with Custom Column Sets

Morningstar DirectSM Cloud Editions



MORNINGSTAR Direct



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Working with Custom Column Sets

By now, you should have completed the [Creating Lists and Workbooks](#) and [Creating Screens](#) manuals. The products of the exercises you completed are referenced in this manual.

The Grid in Morningstar DirectSM for Wealth Management offers several prebuilt column sets with data points grouped logically together. For example, you can find a data set for Performance & Risk, Equity Summary, Returns, Sustainability, and more. These column sets are read-only, and cannot be changed.

Overview

The screenshot shows the Morningstar Direct interface for 'Investment Analysis | *Managed Investments (formerly Grid View)'. The main table displays a list of funds under the heading 'Gold-Rated Large C...'. The table has columns for Name, Ticker, and SecId. A 'Column Set' dropdown menu is open, showing a list of prebuilt column sets. A red box highlights the 'Column Set' dropdown and the list of options. A red callout box points to the list with the text: 'More than a dozen prebuilt column sets are available by default.'

Name	Ticker	SecId
1 American Funds AMCAP A	AMCPX	FOUSA00...
2 American Funds American Mutual A	AMR...	FOUSA00...
3 American Funds Fundamental Invs A	ANCFX	FOUSA00...
4 American Funds New Economy A	ANEFX	FOUSA00...
5 American Funds Washington Mutual A	AWSHX	FOUSA00...
6 AMG Yackman I	YACKX	FOUSA00...
7 DFA US Large Company I	DFUSX	FOUSA00...
8 Diamond Hill Large Cap A	DHLAX	FOUSA02...
9 Dodge & Cox Stock	DODGX	FOUSA00...
10 Fidelity® 500 Index	FXAIX	F00000LZSI
11 FMI Large Cap	FMIHX	FOUSA02...
12 iShares Core S&P 500 ETF	IVV	FEUSA0000E

Column Set

Open

Name

- Company Product Involvement
- Equities Summary
- ESG Company Data
- Fund Carbon Metrics
- Fund Product Involvement
- Manager Research
- Performance & Risk

More than a dozen prebuilt column sets are available by default.

Not all data points are available in the prebuilt column sets, and you might prefer to build your own column sets, containing the data point(s) you want to display. This guide helps you do the following:

- ▶ [Create, Save, and Share a Custom Column Set \(page 5\)](#)
- ▶ [Customize Data Points in a Custom Column Set \(page 20\)](#)
- ▶ [Nest Data Points Together \(page 45\)](#)

In the exercises, you will work with lists and screens; however, the same workflows can be performed with model portfolios.

Create, Save, and Share a Custom Column Set

When you create a custom column set, you have two options:

- ▶ Start from scratch and add columns one at a time in exactly the order you want, or
- ▶ Open an existing column set and add or remove columns as needed.

This section contains exercises covering both approaches. You will also learn how to share a custom column set.

In this section, you will learn how to do the following:

- ▶ Create a custom column set for stocks ([page 5](#))
- ▶ Use the Grid to delete a data point from a custom column set ([page 11](#))
- ▶ Save a custom column set ([page 11](#))
- ▶ Share a custom column set ([page 12](#))
- ▶ Access a custom column set someone has shared with you ([page 13](#)), and
- ▶ Create a custom column set for funds ([page 14](#)).

Overview

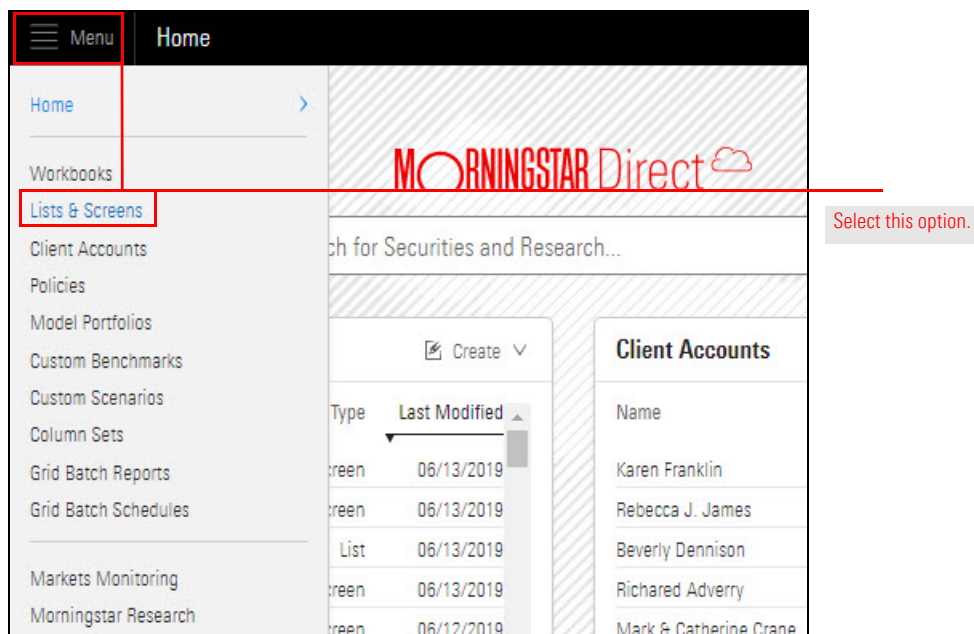
When you created your first screen (for 5-star stocks), you changed from the default Summary column set in the Grid View worksheet to the Equities Summary column set. The Equities Summary column set contains the Morningstar Rating column, but none of the other Morningstar proprietary data points for equities. This exercise teaches you how to do the following:

- ▶ remove the columns you do not want to see in a column set
- ▶ find a data point you want to add to a column set, and
- ▶ rearrange the data points in a column set.

Exercise 1: Create a custom column set for stocks

Do the following:

1. **Hover your cursor** over the **Menu** icon and select **Lists & Screens**.



- Click the **5-Star Stocks** screen. The “Select a workbook to view the list” window opens.

Note: If you do not have this screen saved, select another equity-based screen you have.

- Click **Managed Investments**.

Select a workbook to view the list:

Locate Workbook

	Type	Owner	Modified	Created
Equity Fund Read Only	Investments	Morningstar	01/27/2017	01/26/2017
Fixed Income Fund Read Only	Investments	Morningstar	01/27/2017	01/26/2017
Managed Investments (formerly Grid View) Read Only	Investments	Morningstar	01/27/2017	01/26/2017
Markets - Equity Research Read Only	Investments	Morningstar	01/27/2017	01/26/2017
Markets - Overview Read Only	Investments	Morningstar	01/27/2017	01/26/2017
Multi-Asset Fund Read Only	Investments	Morningstar	01/27/2017	01/26/2017

Select this option.

- Click the **Column Set** menu, then select **Open**. The Open menu opens.

Menu Investment Analysis | *Managed Investm... Search for Securities and Research

5-Star Stocks

✓ 0 54 Show Analytical View

Column Set

Name	Tic...	Exchange
1 Amicus Therapeutics Inc	FOLD	NASDAQ
2 Baidu Inc ADR	BIDU	NASDAQ
3 Blucora Inc	BCOR	NASDAQ
4 Cumberland Pharmaceuticals Inc	CPIX	NASDAQ

Column Sets

Create New

Open

Edit

Save As Column Set

Use this option to select an existing column set.

5. Select the **Equities Summary** column set. The Open menu closes and the Grid displays the Equities Summary data points (columns).

The screenshot shows the Morningstar Investment Analysis interface. The top bar displays 'Investment Analysis | *Managed Investm...' and a search bar. Below the top bar, the '5-Star Stocks' section is visible. A table lists 16 stocks with columns for Name, Ticker, and Exchange. To the right of the table, a 'Column Set' dropdown menu is open, showing a list of column sets. The 'Equities Summary' option is highlighted. A red box is drawn around the 'Open' button at the top of the dropdown menu. A red line points from the 'Equities Summary' option to a text box on the right that says 'Select this option to change the columns being shown.'

6. Click the **Column Set** menu again, then select **Edit**. The Column Set Management window opens.

The screenshot shows the Morningstar Investment Analysis interface. The top bar displays 'Investment Analysis | *Managed Investments (formerly Grid View)'. Below the top bar, the '5-Star Stocks' section is visible. A table lists 4 stocks with columns for Name, Ticker, and Exchange. To the right of the table, a 'Column Set' dropdown menu is open, showing a list of column sets. The 'Edit' option is highlighted. A red box is drawn around the 'Column Set' dropdown menu. A red line points from the 'Edit' option to a text box on the right that says 'Use this option to edit an existing column set.'

7. At the bottom of the window, click the **X** icons to remove the following data points:

- ▶ **Business Country**, and
- ▶ **Base Currency**.

Column Set Management | Column Set ▾

Cancel Done

Select Data Point

Search for data points

Analyst Name

Average Price Ratio

Average Spread Observation Count

Branding Name Id

Business Country

Business Objectives and Strategy

Your Current Data Point Columns

Name	Ticker	Exchange	Business Country	Market Cap (day-end)	Base Currency	Market Price - Close (day-end)
	EDIT X	EDIT X	EDIT X	EDIT X	EDIT X	EDIT X

Click each X to remove these data points.

8. In the **Search for data points** field, type **Fair**, then click **Fair Value Uncertainty**. The data point is added to the far right side of the column set.

Column Set Management | Column Set ▾

Cancel Done

Select Data Point

Search for data points

Fair Value

Fair Value Uncertainty

Price To Fair Value

Your Current Data Point Columns

Market Price - Close (day-end)	Fair Value Best (day-end)	P/E Ratio day-end (day-end)	Morningstar Rating for Stocks Best (day-end)	Economic Moat Best (day-end)	Fair Value Uncertainty Best (mo-end)
EDIT X	EDIT X	EDIT X	EDIT X	EDIT X	EDIT X

Note the term to search for, and the data point to select.

9. The actual name of the data point is Fair Value Uncertainty Best (mo-end) data point, indicating that the column will reflect either the qualitative or quantitative value for this data point, depending on which is available for each stock. One change needs to be made, though, to ensure the correct setting is in place to display the text of the value. In the Fair Value Uncertainty Best data point box, click **Edit**. A dialog box opens.

Column Set Management | Column Set ▼

Cancel Done

Select Data Point

Q Fair ▼

Fair Value

Fair Value Uncertainty

Price To Fair Value

Your Current Data Point Columns

Market Price - lose (day-end)	Fair Value Best (day-end)	P/E Ratio day-end (day-end)	Morningstar Rating for Stocks Best (day-end)	Economic Moat Best (day-end)	Fair Value Uncertainty Best (mo-end)
EDIT	EDIT	EDIT	EDIT	EDIT	EDIT

Click here to update the data point's settings

10. From the **Display As** drop-down field, select **Text Value**.
11. Click **OK** to close the dialog box.

Column Set Management | Column Set ▼

Cancel Done

Fair Value Uncertainty

Reset OK

Time End Date

Most Recent ▼ Month End ▼

Display As Source Type

None ▼ Best ▼

None ✓

Value

Date

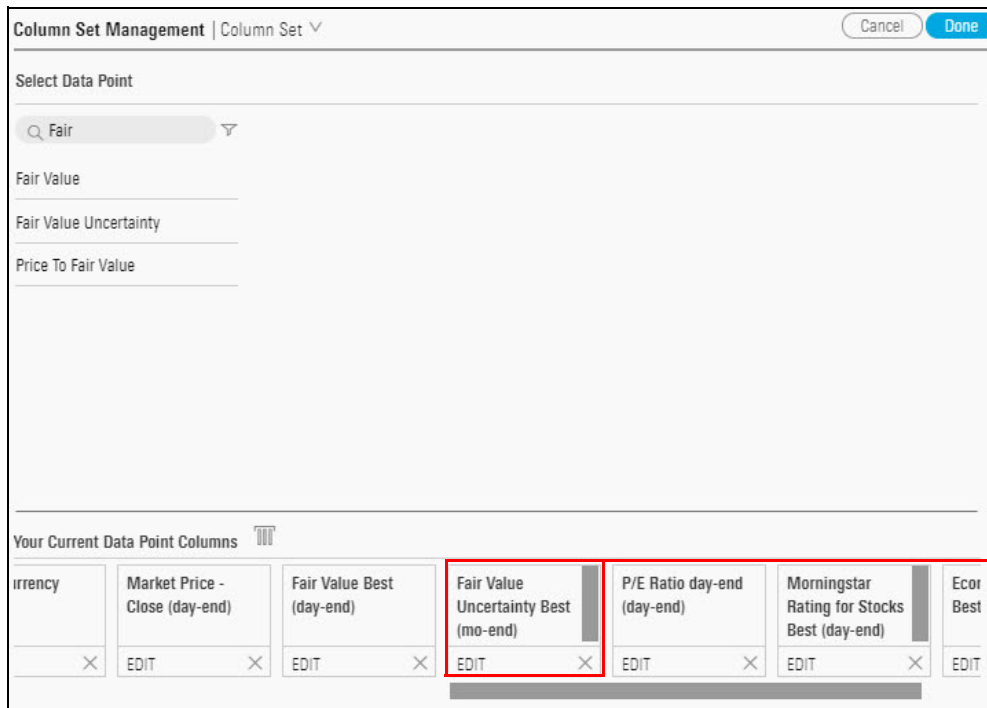
Qualitative/Quantitative Flag

Text Value

Status

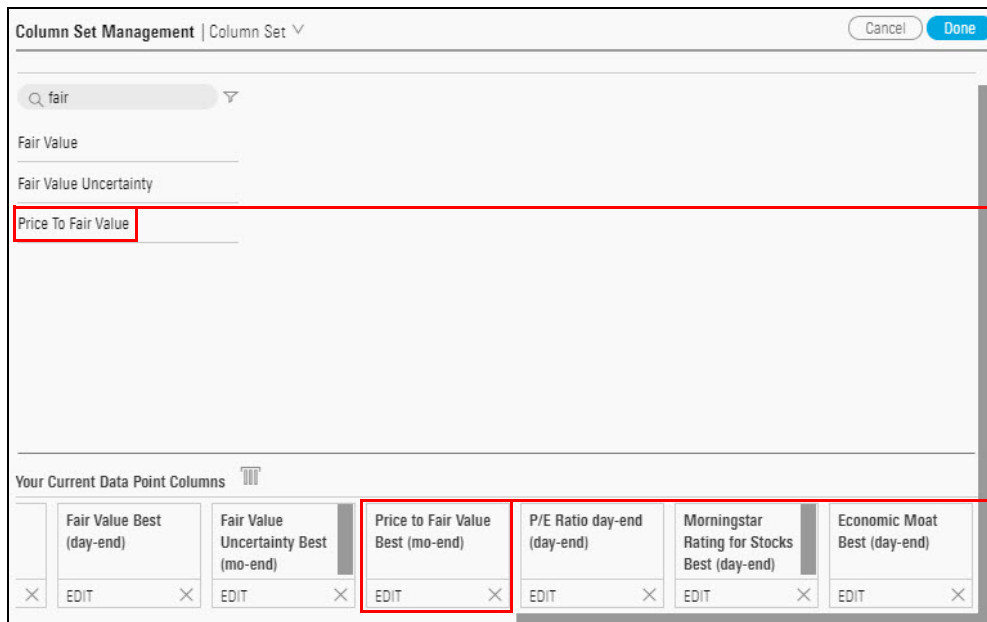
Note the selection from this field.

12. The Fair Value Uncertainty data point is still at the far-right side of the column set. Note that the data point Fair Value is a few positions to the left. **Drag-and-drop** the **Fair Value Uncertainty** data point until it is to the right of the Fair Value data point.



After moving Fair Value Uncertainty to this position, click Done.

13. In the **Search for data points** area, click **Price To Fair Value**. The data point is added to the far right side of the column set. **Drag-and-drop** the **Price To Fair Value** data point until it is to the right of the Fair Value Uncertainty data point.



Note the data point to select.

After moving Price to Fair Value to this position, click Done.

14. Click **Done**.

In [Exercise 1 on page 5](#), you used the Column Set Management window to delete a data point from a custom column set. In this exercise, you will use the Grid to do the same thing.

Exercise 2: Use the Grid to delete a data point from a custom column set

Do the following:

1. In the Grid, locate the **Price to Fair Value Best** column. You might need to scroll right.
2. **Right-click** the **column heading**. The Column Options menu opens.
3. Select **Delete Column**.

The screenshot shows the Morningstar Grid interface for '5-Star Stocks'. The grid displays columns for Name, Market Price - Close (day-end), Fair Value Best (day-end), Fair Value Uncertainty Best (mo-end), and Price to Fair Value Best (mo-end). The 'Price to Fair Value Best (mo-end)' column heading is right-clicked, opening a 'Column Options' menu. The 'Delete Column' option is highlighted in the menu. Red boxes and arrows indicate the right-click action and the selection of the 'Delete Column' option.

Right-click here...

then select this option.

Like a list or a screen, a custom column set is not automatically saved when it is created. A custom column set can be saved from the Column Set Management window, but this exercise shows you how to do this from the Grid.

Exercise 3: Save a custom column set

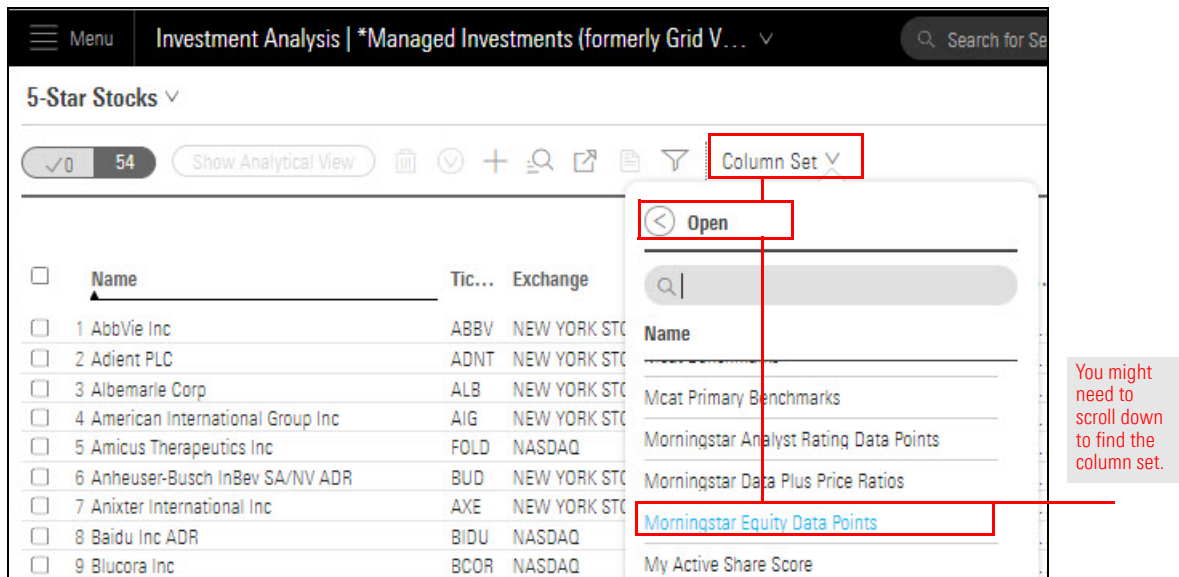
Saving a custom column set from the Grid allows you to see what a column set looks like before you commit to saving it. If you do not like something about the way it looks—perhaps you need to add one more column, remove a column, or rearrange the columns—you can always use the Column Set menu to edit the column set, and then save it. Do the following:

1. Click **Column Set**, then from the menu, select **Save As Column Set**. The Save Column Set As dialog box opens.

The screenshot shows the Morningstar Grid interface for '5-Star Stocks'. The grid displays columns for Name, Tic..., and Exchange. The 'Column Set' menu is open, showing options: Create New, Open, Edit, and Save As Column Set. The 'Save As Column Set' option is highlighted. Red boxes and arrows indicate the selection of the 'Column Set' menu and the 'Save As Column Set' option.

Use this option to save a custom column set.

- In the **name** field, type **Morningstar Equity Data Points**, then click **Save**. From the Column Sets page (found via the Menu icon), this column set can be deleted, renamed, or shared with colleagues.



Now that you have created a saved custom column set, you can share it with other users in your group or firm.

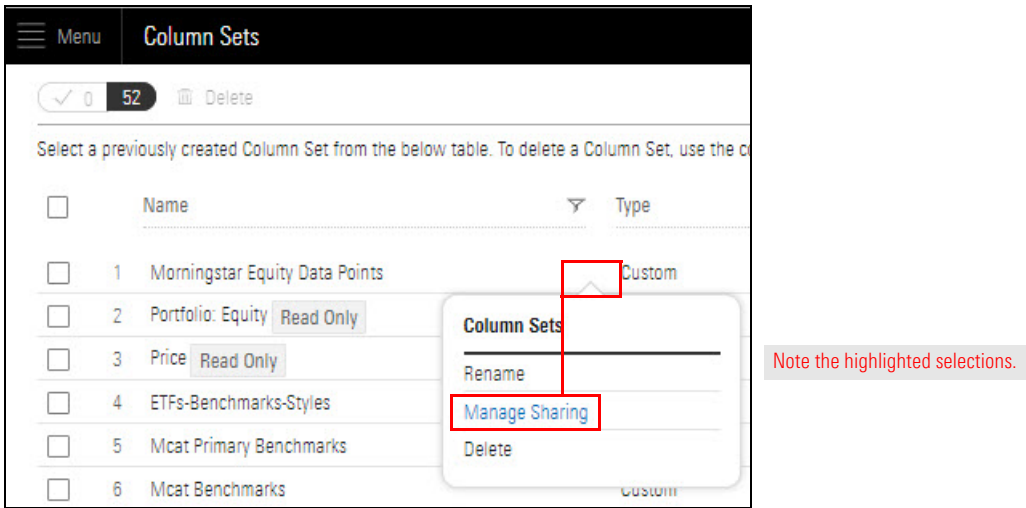
Exercise 4: Share a custom column set

Note: You can share only column sets that you create.

Do the following:

- In the upper-left corner of Morningstar Direct, **hover the cursor** over **Menu**, then select **Column Sets**.
- When a dialog box prompts you to save the workbook, click **Don't save**. The Column Sets page opens.
- Hover the cursor** over the **empty area** to the right of a custom column set name (in this case, Morningstar Equity Data Points). The Actions icon appears.

4. Click the **Actions** icon and from the **Column Sets** menu, select **Manage Sharing**. The Share dialog box opens.



5. At the top of the Share dialog box, in the **Search** field, type one of the following:
- ▶ **colleague name**
 - ▶ **colleague email**, or
 - ▶ **group name**.
6. Click **Share**.

When someone has shared a custom column set with you, you can access the column set as described in the following table:

Note: You cannot modify a column set you did not create.

How can I access a column set someone has shared with me?

Location	Description
Column Sets page	The “Shared” tag is displayed to the right of the column set name.
Workbook: Column Sets menu	The “read-only” icon is displayed to the right of the column set name.

In this exercise, you will open a saved list, but start from a blank column set to create a custom column set comprised of the following data points:

Exercise 5: Create a custom column set for funds

- ▶ Morningstar Rating
- ▶ Total Return (1Y - mo-end)
- ▶ Total Return (3Y - mo-end)
- ▶ Total Return (5Y - mo-end)
- ▶ Alpha (1Y - mo-end)
- ▶ Alpha (3Y - mo-end)
- ▶ Alpha (5Y - mo-end)
- ▶ Beta (1Y - mo-end)
- ▶ Beta (3Y - mo-end)
- ▶ Beta (5Y - mo-end)
- ▶ Morningstar Risk
- ▶ Prospectus Net Expense Ratio, and
- ▶ Annual Net Expense Ratio.

You will also learn how to filter for data points specific to a particular data universe.

Do the following:

1. Open the **Managed Investments** workbook.
2. When a window opens prompting you to select a list or screen, select **Gold-Rated Large Cap Funds** list. The workbook opens.
3. From the **Column Set** menu, select **Morningstar Equity Data Points**. Note that most of the columns are blank, because the Morningstar Equity Data Points column you edited and saved is intended for stocks, but the list you opened has mostly open-end funds.

<input type="checkbox"/>	Name	Ticker	Exchange	Business Country	Market Cap (day-end)
<input type="checkbox"/>	1 American Funds AMCAP A	AMCPX	NASDAQ	—	—
<input type="checkbox"/>	2 American Funds American Mutual A	AMR...	NASDAQ	—	—
<input type="checkbox"/>	3 American Funds Fundamental Invs A	ANCFX	NASDAQ	—	—
<input type="checkbox"/>	4 American Funds New Economy A	ANEFX	NASDAQ	—	—
<input type="checkbox"/>	5 American Funds Washington Mutual A	AWSHX	NASDAQ	—	—
<input type="checkbox"/>	6 AMG Yackman I	YACKX	NASDAQ	—	—

Most of this list consists of open-end funds.

4. On the toolbar above the Grid, click **Column Set**, then select **Create New**. The Column Set Management dialog box opens.

The screenshot shows the 'Investment Analysis' interface with a table of funds. The 'Column Set' dropdown menu is open, and the 'Create New' option is highlighted. A red box is drawn around the 'Column Set' button and the 'Create New' option. A red arrow points from a text box to the 'Create New' option.

Gold-Rated Large C... ▾

✓ 0 35 Show Analytical View

Column Set ▾

Column Sets

Create New

Open

Edit

Save As Column Set

Use this option to create a new column set

Name	Ticker	Exchange
1 American Funds AMCAP A	AMCPX	NASDAQ
2 American Funds American Mutual A	AMR...	NASDAQ
3 American Funds Fundamental Invs A	ANCFX	NASDAQ
4 American Funds New Economy A	ANEFX	NASDAQ
5 American Funds Washington Mutual A	AWSHX	NASDAQ
6 AMG Yackman I	YACKX	NASDAQ

5. In the Search field, type **rating**. The results show several data points whose names fit the search criteria.
6. Scroll down the search results and click **Morningstar Rating**, then click **Overall**. The Morningstar Rating Overall data point is added to the Your Current Data Point Columns area at the bottom of the dialog box.

The screenshot shows the 'Column Set Management' dialog box. The 'Select Data Point' section has a search field with 'rating' entered. The results list several data points, with 'Morningstar Rating' selected. The 'Overall' option is highlighted under the 'Morningstar Rating' data point. A red box is drawn around the 'Morningstar Rating' data point and the 'Overall' option. A red arrow points from a text box to the 'Overall' option.

Column Set Management | Column Set ▾

Cancel Done

Select Data Point

rating

Period

Firm % Assets By Rating > Add All (4)

Morningstar Analyst Rating > 3 Years

Morningstar Quantitative Rating > 5 Years

Morningstar Rating > 10 Years

Morningstar Rating > Overall

Morningstar Return Rating >

Morningstar Risk Rating >

Your Current Data Point Columns

Name

For some fields, you need to make additional choices to select the exact item you want

7. In the **Search for data points** field, remove "rating," and type **return**.
8. Click **Total Returns (Mo-End) Collection - (YTD/1Y/3Y/5Y)**. Four data points are added to the Your Current Data Point Columns area.

The screenshot shows the 'Column Set Management' dialog with the 'Column Set' dropdown. The 'Select Data Point' section has a search bar containing 'return'. Below the search bar, a list of data points is shown, with 'Total Returns (Mo-End) Collection - (YTD/1Y/3Y/5Y)' highlighted. The 'Your Current Data Point Columns' section shows a table with one column: 'Morningstar Rating Overall (mo-end)'.

Name	Morningstar Rating Overall (mo-end)
EDIT X	

Rather than making you select each of these data points individually, several collections of return-based data points are made available by default.

9. Remove **Total Return (YTD - mo-end)**.

The screenshot shows the 'Column Set Management' dialog with the 'Select Data Point' section. The 'Your Current Data Point Columns' section shows a table with five columns: 'Morningstar Rating Overall (mo-end)', 'Total Return (YTD - mo-end)', 'Total Return (1Y - mo-end)', 'Total Return (3Y - mo-end)', and 'Total Return (5Y - mo-end)'. The 'Total Return (YTD - mo-end)' column is highlighted with a red box, and a red 'X' icon is visible next to it, indicating it is being removed.

	Morningstar Rating Overall (mo-end)	Total Return (YTD - mo-end)	Total Return (1Y - mo-end)	Total Return (3Y - mo-end)	Total Return (5Y - mo-end)
	EDIT X	EDIT X	EDIT X	EDIT X	EDIT X

Remove just this data point

10. In the **Search** field, remove "return" and type **alpha**.
11. Click **Alpha (Mo-End) Collection - (1Y/3Y/5Y)**. Three data points are added.

The screenshot shows the 'Column Set Management' interface. At the top, it says 'Column Set Management | Column Set'. Below this is a 'Select Data Point' section. A search bar contains the text 'alpha'. Below the search bar, there are three options: 'Alpha (Qtr-End) Collection - (1Y/3Y/5Y)', 'Alpha (Mo-End) Collection - (1Y/3Y/5Y)', and 'Alpha'. The 'Alpha (Mo-End) Collection - (1Y/3Y/5Y)' option is highlighted with a red box. To the right of the search bar, there is a section titled 'Data Definition for Alpha (Mo-End) Collection - (1Y/3Y/5Y)'. It states 'This is a collection of the following data points' and lists three items: 'Alpha Total (excess return) (1Y - mo-end) Cat Curr', 'Alpha Total (excess return) (3Y - mo-end) Cat Curr', and 'Alpha Total (excess return) (5Y - mo-end) Cat Curr'.

As with return-based data, multiple collections of Alpha-based data points are offered, to speed the creation of a custom column set.

12. In the **Search** field, remove "alpha" and type **beta**.
13. Click **Beta (Mo-End) Collection - (1Y/3Y/5Y)**. Three data points are added.

The screenshot shows the 'Column Set Management' interface. At the top, it says 'Column Set Management | Column Set'. Below this is a 'Select Data Point' section. A search bar contains the text 'beta'. Below the search bar, there are three options: 'Beta (Qtr-End) Collection - (1Y/3Y/5Y)', 'Beta (Mo-End) Collection - (1Y/3Y/5Y)', and 'Beta'. The 'Beta (Mo-End) Collection - (1Y/3Y/5Y)' option is highlighted with a red box. To the right of the search bar, there is a section titled 'Data Definition for Beta (Mo-End) Collection - (1Y/3Y/5Y)'. It is currently empty.

Be sure to select this option

14. In the **Search** field, remove "beta" and type **expense**.
15. Click **Annual Report Net Expense Ratio**.

Column Set Management | Column Set ▾

Select Data Point

Q expense ▾

Annual Report Net Expense Ratio

Annual Report Gross Expense Ratio

Prospectus Adjusted Operating Expense Ratio

Prospectus Deferred Tax Expense

Prospectus Expense Waiver

Data Definition for Annual Report Net Expense Ratio

The percentage of fund assets used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio. The expense ratio for fund of funds only includes the wrap or sponsor fees, and does not include the underlying fund fees.

Be sure to select this option.

16. Scroll down and click **Prospectus Net Expense Ratio**.

Column Set Management | Column Set ▾

Select Data Point

Q expense ▾

Prospectus Net Expense Ratio

Prospectus Expense Waiver

Prospectus Expense Waiver Expiration Date

Prospectus Expense Waiver Type

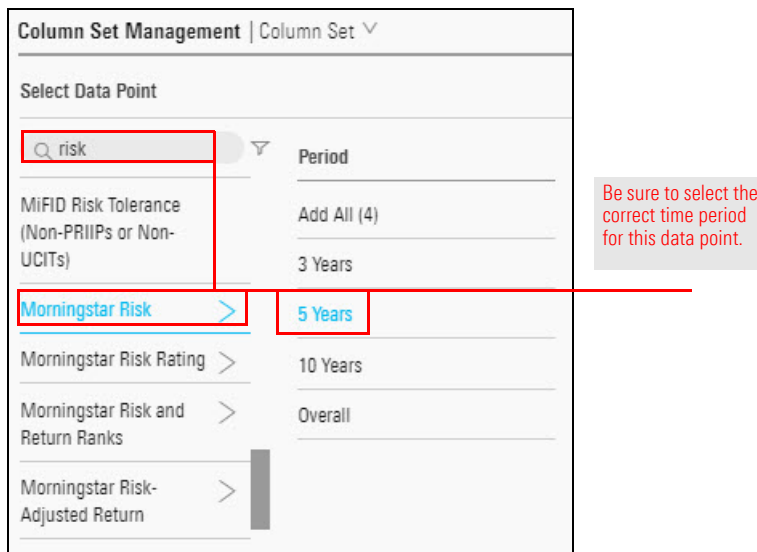
Prospectus Gross Expense Ratio

Data Definition for Prospectus Net Expense Ratio

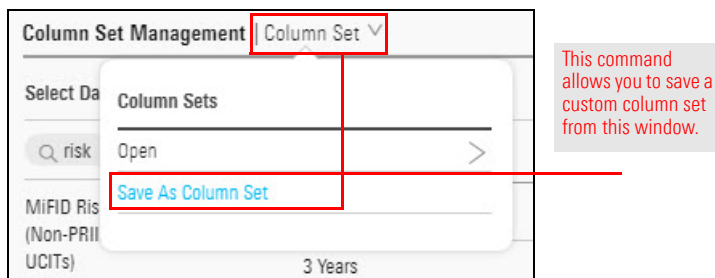
The percentage of fund assets, net of reimbursements, used to pay for operating expenses and management fees, including administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's net asset value. Sales charges are not included in the expense ratio.

Be sure to select this option.

17. In the **Search** field, remove "expense" and type **risk**.
18. From the list of options that appears, click once to select the **Morningstar Risk** data point, then click **5 Years**.



19. To save a custom column set from this window, click **Column Set** at the top of the window, and select **Save As Column Set**.



20. Name the column set **My Custom Fund Data Points**.
21. Click **Save**.
22. In the upper-right corner of the Column Set Management dialog box, click **Done**. The dialog box closes and the Grid View worksheet is displayed.

Customize Data Points in a Custom Column Set

One hurdle you might need to clear when building a custom column set is tuning each data point to exactly the information you want to see. This section's exercises teach you how to customize data points in a custom column set.

Overview

In this section, you will learn how to do the following:

- ▶ Customize data points for stocks ([page 20](#))
- ▶ Customize data points for funds ([page 25](#))
- ▶ Custom a data point to show historical values ([page 29](#))
- ▶ View the Active Share Score for a fund ([page 32](#))
- ▶ Understand why every fund doesn't receive an Active Share Score ([page 32](#))
- ▶ Understand how a benchmark is used to calculate the Active Share Score ([page 32](#))
- ▶ View the Active Share Score for a fund ([page 33](#))
- ▶ Add a benchmark to the column set ([page 37](#)), and
- ▶ Use the Primary Prospectus of a fund's equity holdings for the Active Share calculation ([page 41](#)).

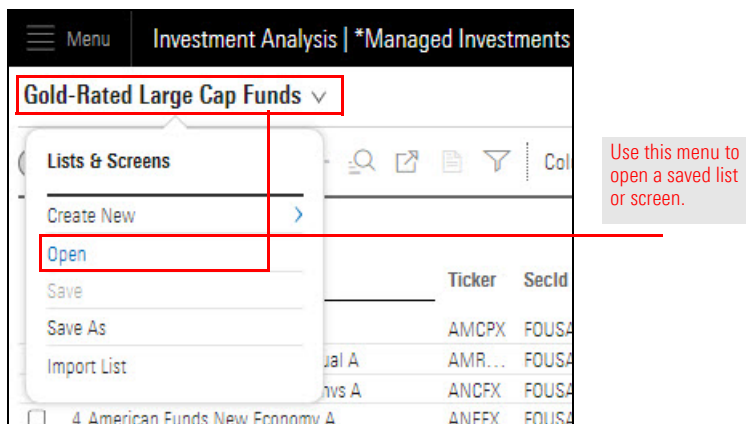
In this exercise, you will learn how to add the Price-to-Book and Price-To-Sales ratios to a custom column set for stocks. (The Price-to-Earnings ratio already exists as part of the column set.) This task requires you to do the following:

Exercise 6: Customize data points for stocks

1. Open and edit a saved custom column set.
2. Filter for data points from a particular universe when building a custom column set.
3. Change the settings for a data point.

Do the following:

1. The Managed Investments workbook with the Gold-Rated Large Cap Funds list should still be open. Use the **List & Screens** menu to open the **5-Star Stocks** screen. Note that the columns for these investments display dashes; this is because the data points in the custom column set you just saved are for managed investments, and not equities.



- Click **Column Set**. From the menu, select **Open > My Custom Fund Data Points**.

Note: Your custom column sets are at the bottom of the menu. You might need to scroll down.

The screenshot shows the 'Investment Analysis | *Managed Investments' page. A dropdown menu for 'Column Set' is open, showing options: 'Create New', 'Open', 'Edit', and 'Save As Column Set'. The 'Open' option is selected, leading to a list of column sets. 'My Custom Fund Data Points' is highlighted in red. A red box also highlights the 'Column Set' dropdown in the main interface.

Note the highlighted selections.

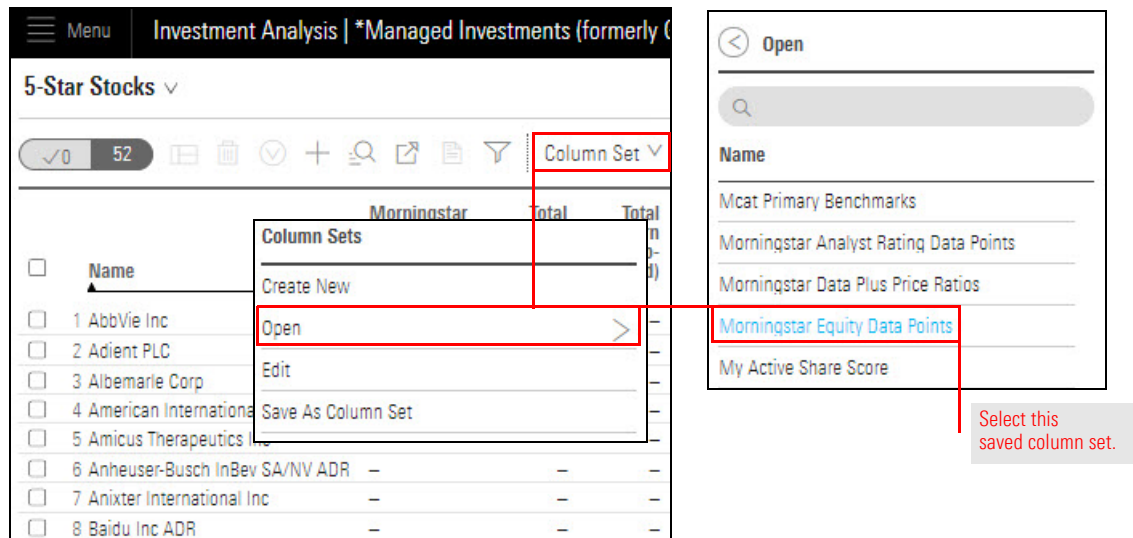
Note that the columns for these investments display dashes; this is because the data points in the My Custom Fund Data Points column set are for managed investments, and not equities.

The screenshot shows the 'Investment Analysis | *Managed Investments (formerly C)' page. The 'Column Set' dropdown is set to 'My Custom Fund Data Points'. The table displays data for 8 stocks, with dashes in the 'Morningstar Rating Overall (mo-end)', 'Total Return (YTD - mo-end)', and 'Total Return (1Y - mo-end)' columns. A red box highlights the data rows, and a red box highlights the 'My Custom Fund Data Points' selection in the dropdown menu.

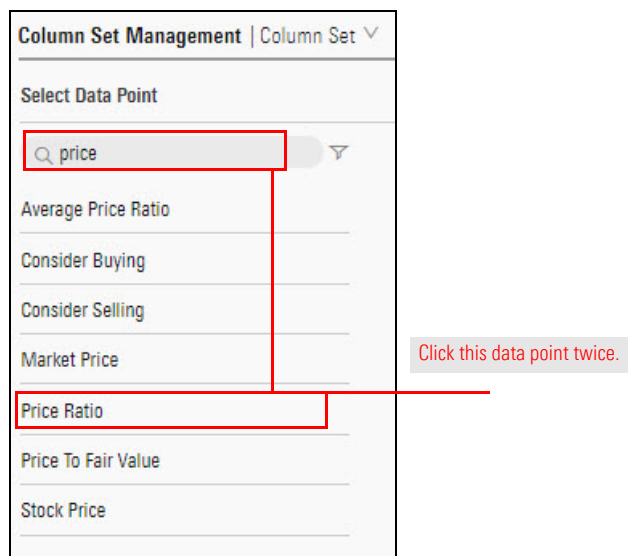
Note the highlighted selections.

Name	Morningstar Rating Overall (mo-end)	Total Return (YTD - mo-end)	Total Return (1Y - mo-end)
1 AbbVie Inc	-	-	-
2 Adient PLC	-	-	-
3 Albemarle Corp	-	-	-
4 American International Group Inc	-	-	-
5 Amicus Therapeutics Inc	-	-	-
6 Anheuser-Busch InBev SA/NV ADR	-	-	-
7 Anixter International Inc	-	-	-
8 Baidu Inc ADR	-	-	-

- From the **Column Set** menu, **open** the **Morningstar Equity Data Points** column set you saved earlier.



- From the **Column Set** menu, select **Edit**. The Column Set Management window opens.
- In the **Search for data points** field, type **price**.
- Click **Price Ratio** twice. Two instances of the P/E Ratio day end (day-end) data point are added to the Your Current Data Point Columns area at the bottom of the window.



7. In the first instance of the P/E Ratio day end (day-end) data point, click **Edit**. A dialog box opens.
8. From the **Valuation per Share Type** drop-down field, select **P/B**.

Column Set Management | Column Set

Price Ratio

Time: Most Recent | End Date: Day End

Decimal Places: 2

Valuation per Share Type: P/E (dropdown open showing P/E, P/B, P/S, Normalized P/E, P/FCF, P/CF)

Display As: Value

Price Ratio (day-end) | Morningstar Rating (day-end) | Economic Moat (day-end) | P/E Ratio day-end | P/E Ratio day-end

EDIT | EDIT | EDIT | EDIT | EDIT

Select this option from this field.

Click here to edit the data point.

9. In the upper-right corner of the window, click **OK**.
10. **Drag-and-drop** the **P/B Ratio day-end (day-end)** data point so it is just to the right of the Morningstar Rating for Stocks Best (day-end) data point.

Column Set Management | Column Set

Select Data Point

price

Average Price Ratio

Consider Buying

Consider Selling

Market Price

Price Ratio

Price To Fair Value

Stock Price

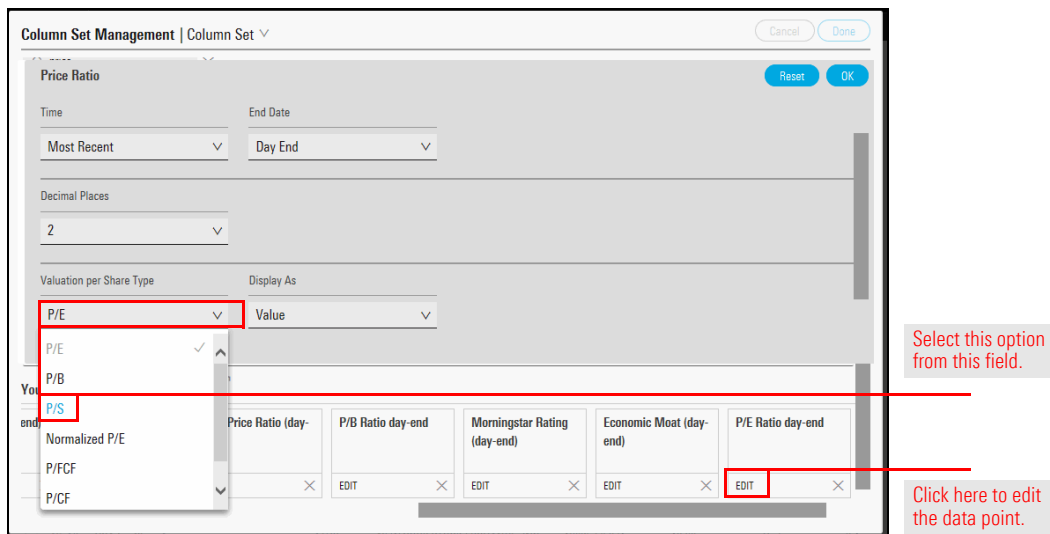
Your Current Data Point Columns

Fair Value Best (day-end) | Fair Value Uncertainty Best (mo-end) | Morningstar Rating for Stocks Best (day-end) | P/B Ratio day-end (day-end) | Economic Moat Best (day-end) | P/E Ratio day-end (day-end)

EDIT | EDIT | EDIT | EDIT | EDIT | EDIT

Drag the data point to this position.

11. In the remaining instance of the P/E Price Ratio (day-end) data point, click **Edit**. A dialog box opens.
12. From the **Valuation per Share Type** drop-down field, select **P/S**.

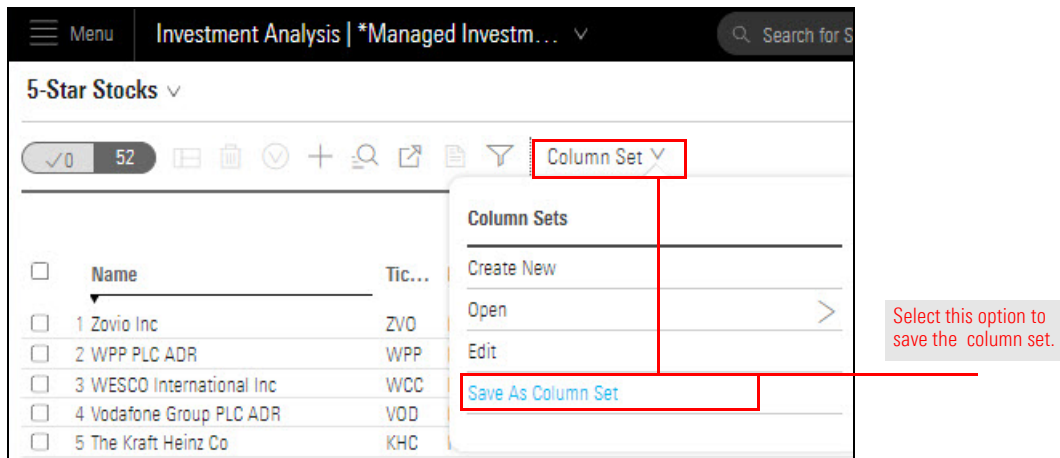


13. In the upper-right corner of the window, click **OK**.
14. **Drag-and-drop** the **P/S Price Ratio (day-end)** data point so it is just to the left of the P/B Price Ratio data point.



15. In the upper-right corner of the Column Set Management window, click **Done**.

16. Click the **Column Set** menu, then select **Save As Column Set**. The Save Column Set As dialog box opens.



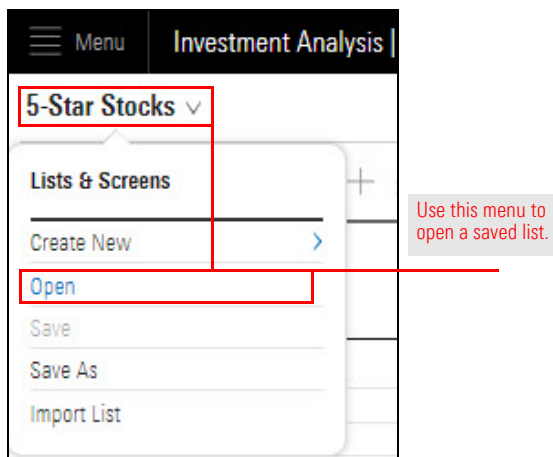
17. In the name field, type **Morningstar Data Plus Price Ratios**, then click **Save**.

You can modify data points for funds in the same way you do for equities. This exercise teaches you how to display the Morningstar Analyst Rating pillars. These data points do not appear in any pre-built column set, so you must create a custom column set to see them. The five pillars (People, Parent, Process, Price, and Performance) are used by Morningstar analysts to help determine the Morningstar Analyst Rating for a fund. Seeing the pillar values can help you understand where a fund is particularly strong or weak.

Exercise 7: Customize data points for funds

Do the following:

1. **Open** the **Gold-Rated Large Cap Funds** list.



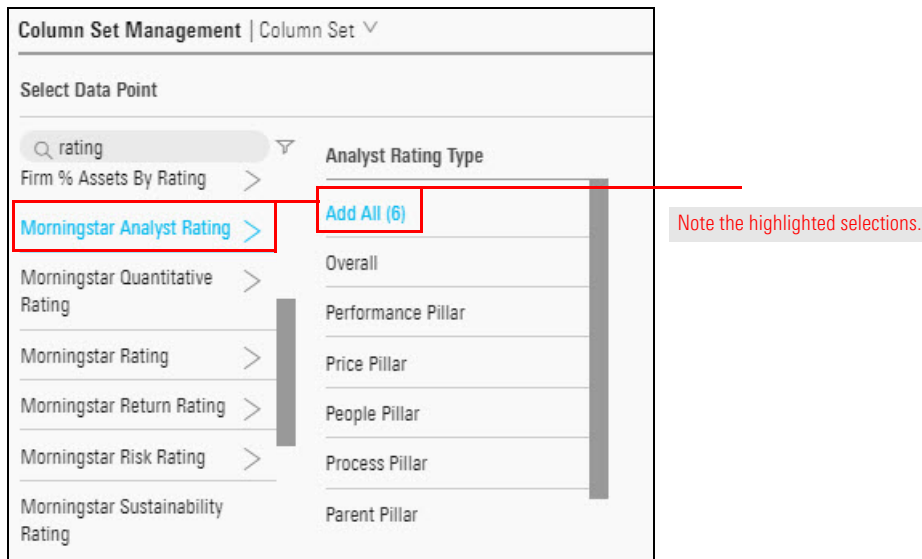
2. Open the **Manager Research** column set.

The screenshot shows the 'Investment Analysis' interface with a 'Gold-Rated Large Cap Funds' column set. A red box highlights the 'Column Set' dropdown menu, which is open, showing options: 'Create New', 'Open', 'Edit', and 'Save As Column Set'. A red arrow points from the 'Open' option to a secondary 'Open' dialog box. In this dialog, a list of column sets is shown, with 'Manager Research' highlighted by a red box. A red callout box with the text 'Be sure to open this column set.' points to the 'Manager Research' entry.

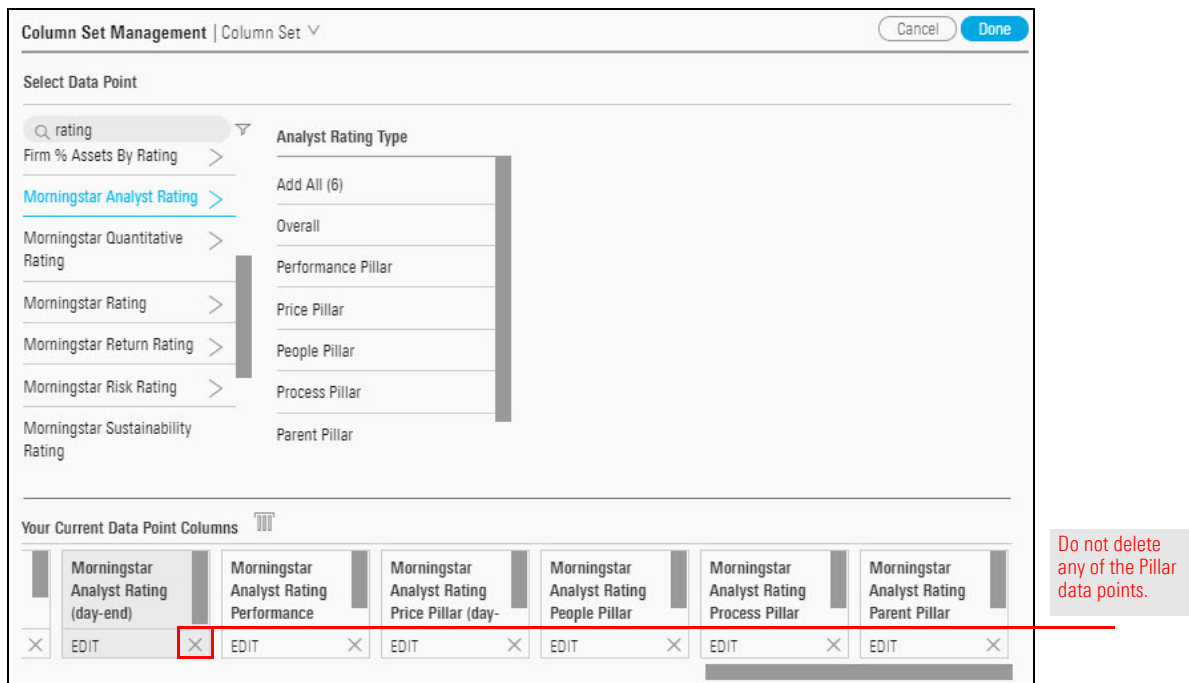
3. Use the Column Set menu to **Edit** the column set.
4. In the **Search for data points** field, type **rating**.
5. Click **Morningstar Analyst Rating**.

The screenshot shows the 'Column Set Management' interface. A search bar at the top contains the text 'rating'. Below the search bar, a list of data points is displayed. The 'Morningstar Analyst Rating' data point is highlighted by a red box. A red arrow points from this data point to a red callout box with the text 'You might need to scroll down to see this data point.'

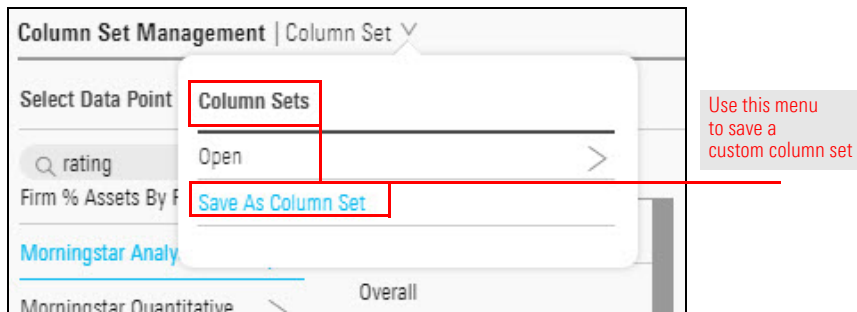
6. Click **Morningstar Analyst Rating > Add All (6)**. Six new data points are added the Your Current Data Point Columns area. Note that five of them are pillars.



7. In the Morningstar Analyst Rating (day end), click the **X** to delete it.



8. Click the **Column Set** menu, then select **Save As Column Set**. The Save Column Set As dialog box opens.



9. In the name field, type **Morningstar Analyst Rating Data Points**, then click **Save**.
10. Click **Done**.
11. **Scroll right** and click the **Morningstar Analyst Rating Price Pillar (day-end)** column header to sort by that data point.

Investment Analysis | *Managed Investm...

Gold-Rated Large Cap Funds

35

Column Set

Show Peer Analytics

Name	Morningstar Analyst Rating Performance Pillar (day-end)	Morningstar Analyst Rating Price Pillar (day-end)	Morningstar Analyst Rating People Pillar (day-end)	Morningstar Analyst Rating Process Pillar (day-end)	Morningstar Analyst Rating Parent Pillar (day-end)
1 American Funds AMCAP A	.01 Positive	Positive	Positive	Positive	Positive
2 American Funds American Mutual A	.00 Positive	Positive	Positive	Positive	Positive
3 American Funds Fundamental Invs A	.97 Positive	Positive	Positive	Positive	Positive
4 American Funds New Economy A	.17 Positive	Positive	Positive	Positive	Positive
5 American Funds Washington Mutual A	.08 Positive	Positive	Positive	Positive	Positive
6 AMG Yacktman I	.36 Positive	Neutral	Positive	Positive	Neutral
7 DFA US Large Company I	.03 Positive	Positive	Positive	Positive	Positive
8 Diamond Hill Large Cap A	.92 Positive	Positive	Positive	Positive	Positive
9 Dodge & Cox Stock	.94 Positive	Positive	Positive	Positive	Positive

Although the funds are all Gold-rated, that does not mean every pillar has a Positive rating

In this exercise, you will customize a data point (the Equity Style Box) so you can compare its historical values. Gold-Rated Large Cap Funds should still be open.

Do the following:

1. Make sure the **Morningstar Analyst Rating Data Points** is displayed.
2. Use the Column Set menu to **Edit** the column set.
3. In the **Search for data points** field, type **style**.
4. Select **Style Box > Equity**.

Exercise 8: Customize a data point to show historical values

The screenshot shows the 'Column Set Management' interface. At the top, there's a header 'Column Set Management | Column Set' with a dropdown arrow. Below this is a section titled 'Select Data Point'. On the left, there's a search bar with the text 'style' entered, which is highlighted with a red box. Below the search bar, there's a list of data points: 'Alternative Style Box', 'Equity Style Box Breakdown', 'Equity Style Percentage', 'Style Box', 'Style Consistency', 'Style Dispersion', and 'Style Factor'. The 'Style Box' item is highlighted with a red box. To the right of this list is a section titled 'Style Box Type' with two options: 'Equity' and 'Fixed Income'. The 'Equity' option is highlighted with a red box. A red line connects the 'Style Box' item in the list to the 'Equity' option in the 'Style Box Type' section.

Note the highlighted selections.

5. In the **Your Current Data Point Columns** area, **scroll right** to the Style Box Eq (Long) (mo-end) data point, then click **EDIT**. A new window opens.

Column Set Management | Column Set ▼ Cancel Done

Select Data Point

style ▼

Alternative Style Box

Equity Style Box Breakdown >

Equity Style Percentage

Style Box >

Style Consistency

Style Dispersion

Style Factor >

Style Box Type

Add All (2)

Equity

Fixed Income

Your Current Data Point Columns

Morningstar Analyst Rating Performance	Morningstar Analyst Rating Price Pillar (day-)	Morningstar Analyst Rating People Pillar	Style Box Eq (Long) (mo-end)
EDIT	EDIT	EDIT	EDIT

Click here to edit this data point.

6. From the **Start Date** menu, select **3 Years ago**.
7. From the **Window Size Granularity** menu, select **Years**.

Style Box Reset OK

Start Date: 3 Years ago

Time: Date Specific ▼

End Date: Last Month End

Sales Position: Long ▼

Style Box Type: Equity ▼

Window Size: 1 ▼

Window Size Granularity: Years ▼

Step Size: 1 ▼

Step Size Granularity: Years ▼

Aggregation Function: Latest Date in Period ▼

Note the highlighted selections.

8. Click **OK**.

9. In the Column Set Management window, **drag-and-drop** the **Style Box Eq (Long) (mo-end)** data point so it is just to the right of the SecId data point.

The screenshot shows the 'Column Set Management' window with a 'Select Data Point' section on the left and a 'Your Current Data Point Columns' section on the right. The 'Style Box Eq (Long) (3Y - mo-end)' data point is highlighted with a red box and a red arrow pointing to its position in the column set, indicating it has been dragged to the right of the 'SecId' column.

Name	Ticker	SecId	Style Box Eq (Long) (3Y - mo-end)	Total Ret % Rank Cat 3Y mo-end (mo-end)
	EDIT	EDIT	EDIT	EDIT

Drag this data point to this position.

10. Click **Done**.
11. In the Grid, **look for funds** whose Equity Style Box has changed in the past three years.

The screenshot shows the 'Investment Analysis' grid for 'Gold-Rated Large Cap Funds'. The grid displays a list of funds with columns for Name, Ticker, SecId, and Style Box Eq (Long) (3Y - mo-end). The 'Style Box Eq (Long) (3Y - mo-end)' column is expanded to show three time periods: 07/01/2016 - 06/30/2017, 07/01/2017 - 06/30/2018, and 07/01/2018 - 06/30/2019. A red box highlights the first and third time periods for the first fund, indicating a difference in the Equity Style Box values.

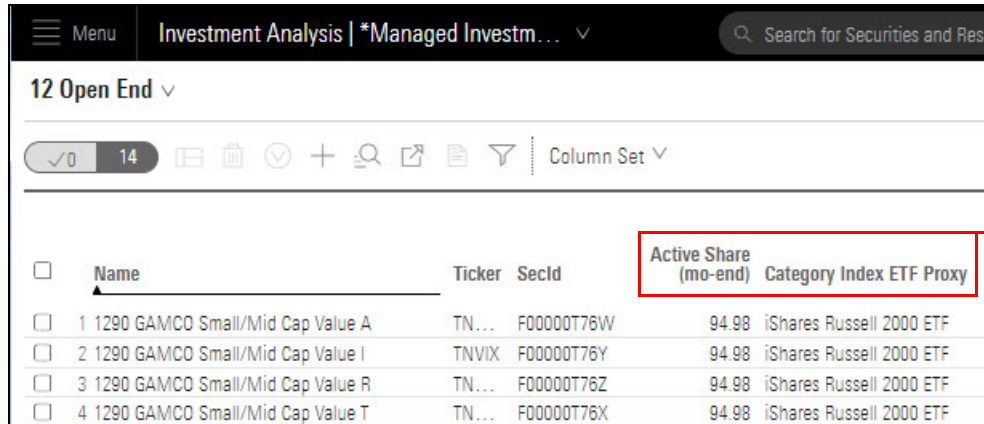
Name	Ticker	SecId	Style Box Eq (Long) (3Y - mo-end)		
			07/01/2016 - 06/30/2017	07/01/2017 - 06/30/2018	07/01/2018 - 06/30/2019
1 American Funds AMCAP A	AMCPX	FOUSA00...			
2 American Funds American Mutual A	AMR...	FOUSA00...			
3 American Funds Fundamental Invs A	ANCFX	FOUSA00...			
4 American Funds New Economy A	ANEFX	FOUSA00...			
5 American Funds Washington Mutual A	AWSHX	FOUSA00...			

Note the difference between the first and the third time periods.

A fund's Active Share Score indicates the overlap between its holdings and that of a benchmark. The Active Share value ranges from 0 to 100, and the higher the score, the more divergent a manager is from the benchmark.

A pre-calculated Active Share Score data point is available for funds in Morningstar Direct Cloud, but this data point is not part of any pre-built view; it must be manually displayed in the Grid View to be seen. In addition to the Active Share Score, you can also see the benchmark used for this calculation as a data point in the Grid View.

What is the Active Share Score for a fund?



	Name	Ticker	SecId	Active Share (mo-end)	Category Index ETF Proxy
<input type="checkbox"/>	1 1290 GAMCO Small/Mid Cap Value A	TN...	F00000T76W	94.98	iShares Russell 2000 ETF
<input type="checkbox"/>	2 1290 GAMCO Small/Mid Cap Value I	TNVIX	F00000T76Y	94.98	iShares Russell 2000 ETF
<input type="checkbox"/>	3 1290 GAMCO Small/Mid Cap Value R	TN...	F00000T76Z	94.98	iShares Russell 2000 ETF
<input type="checkbox"/>	4 1290 GAMCO Small/Mid Cap Value T	TN...	F00000T76X	94.98	iShares Russell 2000 ETF

The Active Share Score, and the benchmark used to calculate it, must be displayed manually

The Active Share Score data point cannot be calculated for every fund. Note the following rules related to which funds will display this data point:

- ▶ It is available only for Open-End funds
- ▶ The funds must belong to the Equity Global Broad Category
- ▶ It cannot be an Index Fund, and
- ▶ At least 85% of the portfolio must be direct equity holdings.

Due to these criteria, most fund-of-funds and multi-asset portfolios will not show an Active Share Score.

Why don't all funds receive an Active Share Score?

Because not all Morningstar Direct Cloud subscribers are entitled to see index holdings, the default Active Share calculation uses an ETF as the benchmark. Namely, the ETF is a Morningstar Analyst-assigned proxy for the category index. (Most Morningstar Categories have an analyst-assigned index. If one does not, then the Active Share Score cannot be calculated for the funds in that category.) An example of a category index mapped to an ETF proxy is the Russell 1000 Value TR USD mapped to iShares Russell 1000 Value.

What benchmark is used to calculate the Active Share Score?

The Active Share Score is calculated only on fund portfolio dates where the benchmark also has a portfolio date on the same day, or within 15 days prior. Further, the benchmark must not contain short positions of more than 1%.

To see the Active Share Score for a fund and the benchmark being used for the calculation, first create a screen to ensure the funds you are viewing actually have an Active Share Score value. Additionally, while a high Active Share Score is admirable for actively managed funds, you will also look for funds that have a positive 3-year Sharpe Ratio (to demonstrate the risk-adjusted return value the manager is adding), and a positive 3-year Information Ratio (to see that the manager has also added excess return over the Morningstar Category Primary index).

Exercise 9: View the Active Share Score for a fund

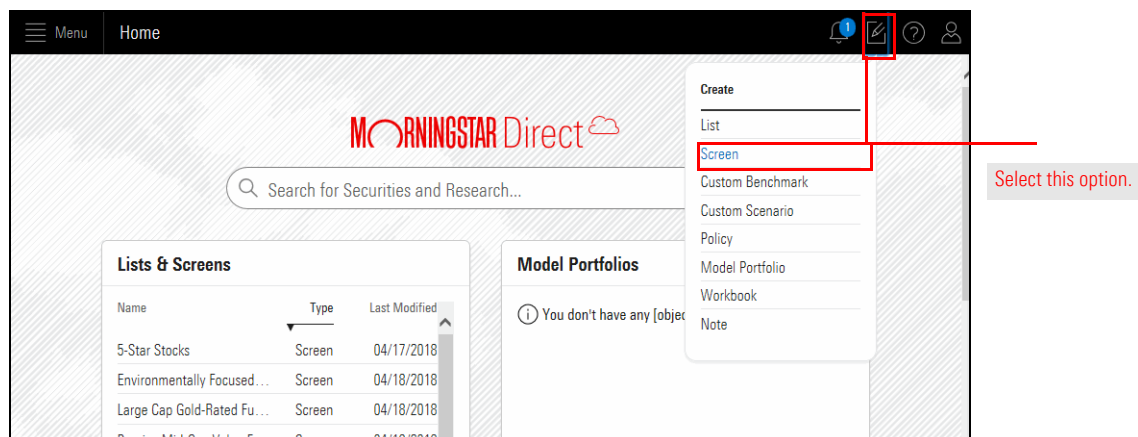
Do the following:

1. From the header, click **Create > Screen**. The Screener window opens.

Note: If you are beginning this exercise immediately after finishing [Exercise 7 on page 25](#), you will be prompted to save the workbook. If you click Don't Save, the sort order you selected for the Price Pillar column in the previous exercise will not be preserved the next time you access the Morningstar Analyst Rating Data Points column set. If, however, you do elect to save the workbook, you must give it a name (because you cannot overwrite the Grid View workbook), and each time you open that workbook, three things will be true:

- 1) The list you had displayed (Gold-Rated Large Cap Funds) will always appear by default in the workbook.
- 2) The Morningstar Analyst Rating Data Points column set will show by default.
- 3) The rows will be sorted by the Morningstar Analyst Rating Price Pillar column in the order you set.

You can, of course, always choose to display a different list or screen in the workbook, as well as change the column set, or add worksheets.



2. For Investment Type, select the option for **Open-End Fund**.
3. Click **OK**.
4. Under the Add Criteria area click **Active Share**.

The screenshot shows the 'Screener' interface with 0 / 26,980 results. The 'Create your Universe' section is set to 'Investment Type: Open-End Fund' and 'Domicile: United States'. The 'Add Criteria' dialog is open, showing a search bar and a list of criteria. 'Active Share' is highlighted in the list. A red box is drawn around 'Active Share' in the list. A red line points from a text box to the 'Active Share' criterion.

Active Share

A measure of the similarity of the equity holdings of a fund and its benchmark. An active share score of 0 indicates that the equity portion of a fund and its benchmark are the same equities in the same proportions. An active share score of 100 indicates that the equity portion of the fund and its benchmark have no common holdings. Active share is a valuable complement to returns based similarity measures like best fit r-squared and tracking error as it

If this data point does not appear here, you can always search for it by name.

5. The Operator should be Greater than or Equal to. In the **Value** field, type **0**, then click **OK**.

The screenshot shows the 'Screener' interface with 0 / 27,387 results. The 'Create your Universe' section is set to 'Investment Type: Open-End Fund' and 'Domicile: United States'. The 'Active Share Score' criterion is selected. The 'Operator' is set to 'Greater than or Equal to' and the 'Value' is set to '0'. A red box is drawn around the 'Greater than or Equal to' operator and the '0' value. A red line points from a text box to the '0' value.

Active Share Score

Operator: ☒ Greater than or Equal to

Value:

This setting ensures any fund without an Active Share Score is excluded from the screen.

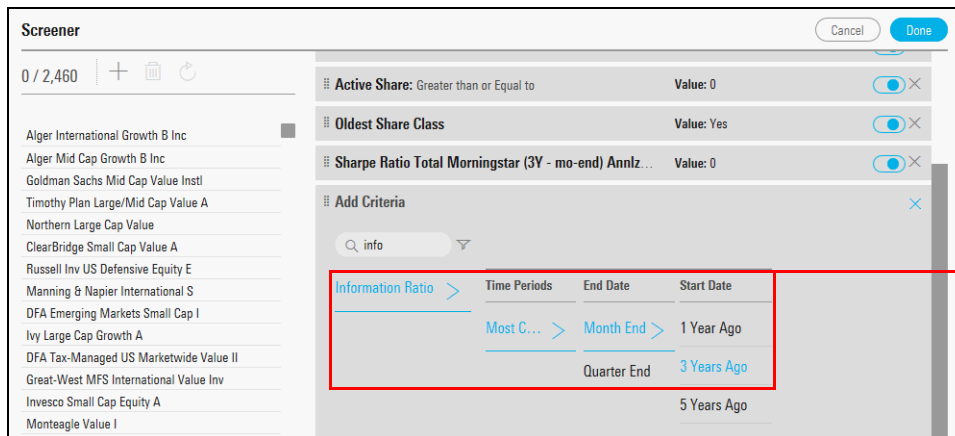
6. In the Add Criteria area, in the **Search for** field, type **old**, then select **Oldest Share Class**.
7. The option for Yes should be selected. Click **OK**.
8. In the Add Criteria area, in the **Search for** field, type **sharp**, then select **Sharpe Ratio > Most Common > Month End > 3 Years Ago**.

The screenshot shows the 'Screener' interface with 0 / 2,754 results. The 'Add Criteria' section is active, showing a search for 'sharp'. The results are: Sharpe Ratio > Time Periods > End Date > Start Date. Under 'Time Periods', 'Most Common' is selected. Under 'End Date', 'Month End' is selected. Under 'Start Date', '3 Years Ago' is selected. A red box highlights these selections. A note on the right says: 'Note the data point and options selected'.

9. Set the Operator to **Greater than**.
10. In the **Value** field, type **0**, then click **OK**.

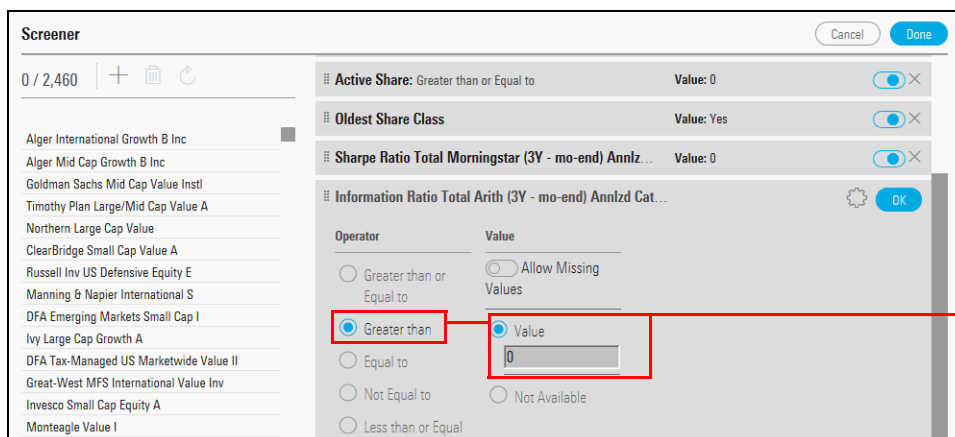
The screenshot shows the 'Screener' interface with 0 / 2,754 results. The 'Add Criteria' section is active, showing the search for 'sharp'. The results are: Sharpe Ratio > Time Periods > End Date > Start Date. Under 'Time Periods', 'Most Common' is selected. Under 'End Date', 'Month End' is selected. Under 'Start Date', '3 Years Ago' is selected. A red box highlights these selections. A note on the right says: 'This setting ensures the screen returns only funds with a positive Sharpe Ratio.'

11. In the Add Criteria area, in the **Search for** field, type **info**, then select **Information Ratio > Most Common > Month End > 3 Years Ago**.



Note the data point and options selected here.

12. Set the Operator to **Greater than**.
13. In the **Value** field, type **0**, then click **OK**.



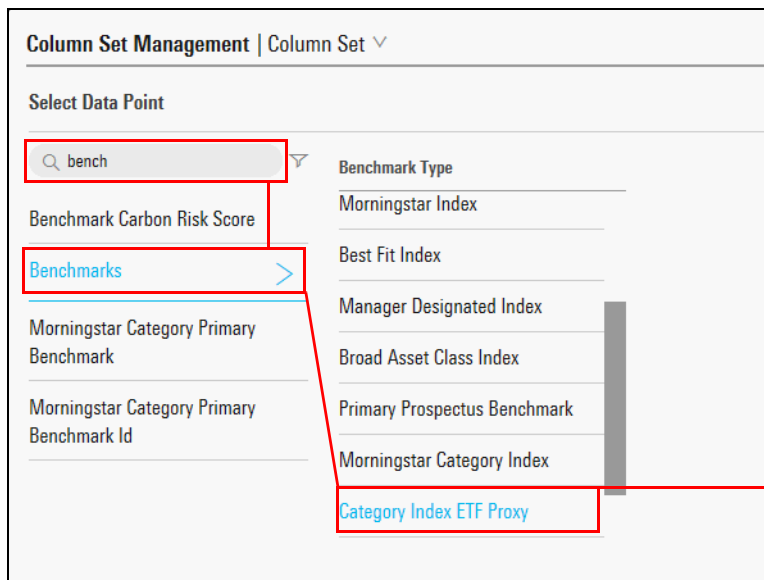
This setting ensures the screen returns only funds with a positive Information Ratio.

14. Click **Done**.
15. Save the screen as **Active Share Funds**.

To add the benchmark used for the active share calculation to the column set, do the following:

1. The default Summary column set is showing. From the **Column Set** menu, select **Edit**. The Column Set Management window opens.
2. In the **Search for data points** field, type **bench**, then click **Benchmarks**. Several options appear under a Benchmark Type heading.
3. Scroll down (if needed) and select **Category Index ETF Proxy**. The Category Index ETF Proxy data point is added to the column set.

Exercise 10: Add the benchmark to the column set



Note the term to search for, and the options to select.

4. **Drag-and-drop** the **Category Index ETF Proxy** data point until it is just to the right of the Active Share Score data point.

The screenshot shows the 'Column Set Management' window. On the left, under 'Benchmarks', is the 'Morningstar Category Primary Benchmark'. On the right, under 'Benchmark Type', is the 'Category Index ETF Proxy'. Below these is a list of 'Your Current Data Point Columns' with headers: Name, Ticker, Active Share, Category Index ETF Proxy, and SecId. The 'Category Index ETF Proxy' column is highlighted with a red box. A red arrow points from a text box on the right to this column.

Column Set Management | Column Set ▾

Search bench ▾

Benchmark Carbon Risk Score

Benchmarks >

Morningstar Category Primary Benchmark

Morningstar Category Primary Benchmark Id

Benchmark Type

Morningstar Index

Best Fit Index

Manager Designated Index

Broad Asset Class Index

Primary Prospectus Benchmark

Morningstar Category Index

Category Index ETF Proxy

Your Current Data Point Columns

Name	Ticker	Active Share	Category Index ETF Proxy	SecId
	EDIT	EDIT	EDIT	EDIT

Drag-and-drop the data point from the right side of the window to this position.

5. Click **Done**.
6. **Save** the column set as **My Active Share Score**.

The screenshot shows the 'Active Share Funds' window. At the top, there is a 'Column Set' dropdown menu. A red box highlights this menu, and a red arrow points from a text box on the right to the 'Save As Column Set' option in the dropdown.

Menu Investment Analysis | *Managed Investments (fo... ▾ Search

Active Share Funds ▾

✓ 0 694

Column Set ▾

Column Sets

Create New

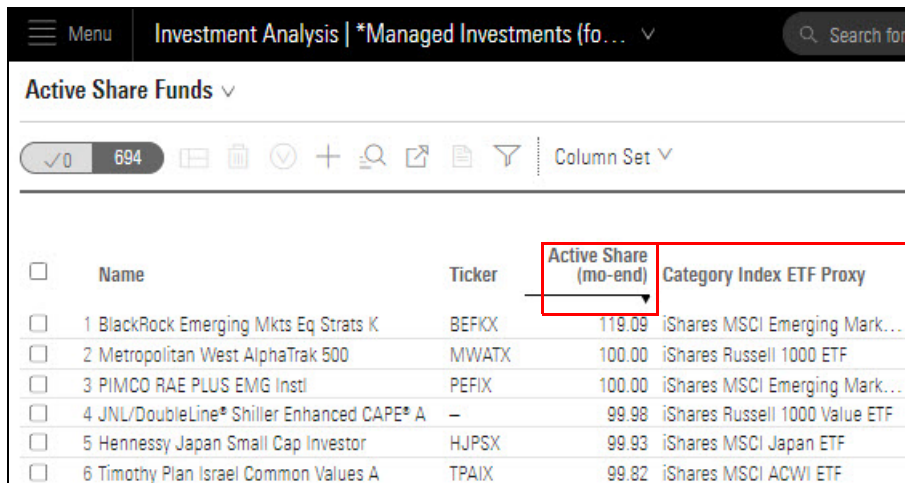
Open >

Edit

Save As Column Set

Use this command to save the column set.

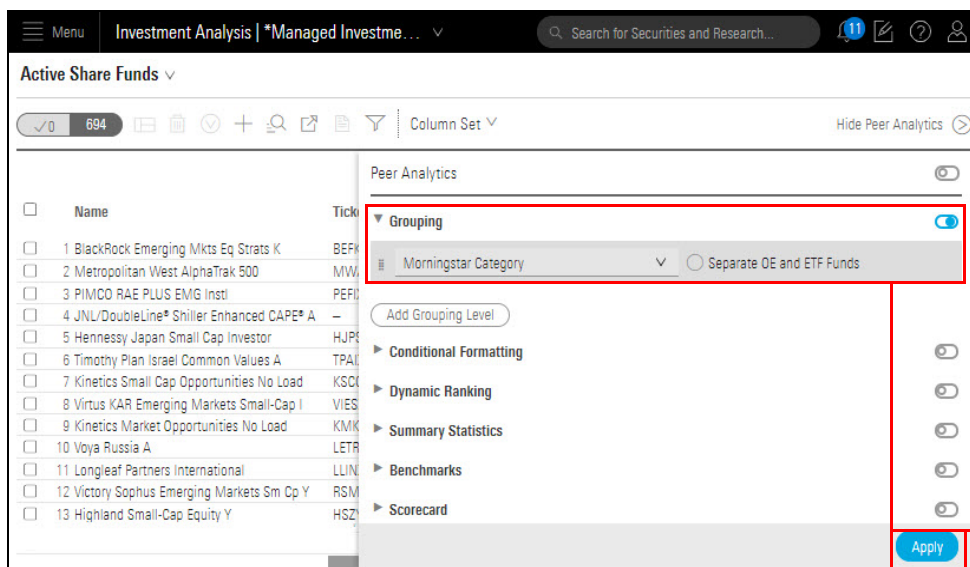
7. Click the **Active Share Score** column header to sort in ascending order.
8. Click the **Active Share Score** column header again to sort in descending order.



<input type="checkbox"/>	Name	Ticker	Active Share (mo-end)	Category Index ETF Proxy
<input type="checkbox"/>	1 BlackRock Emerging Mkts Eq Strats K	BEFIX	119.09	iShares MSCI Emerging Mark...
<input type="checkbox"/>	2 Metropolitan West AlphaTrak 500	MWATX	100.00	iShares Russell 1000 ETF
<input type="checkbox"/>	3 PIMCO RAE PLUS EMG Instl	PEFIX	100.00	iShares MSCI Emerging Mark...
<input type="checkbox"/>	4 JNL/DoubleLine* Shiller Enhanced CAPE* A	—	99.98	iShares Russell 1000 Value ETF
<input type="checkbox"/>	5 Hennessy Japan Small Cap Investor	HJPSX	99.93	iShares MSCI Japan ETF
<input type="checkbox"/>	6 Timothy Plan Israel Common Values A	TPAIX	99.82	iShares MSCI ACWI ETF

Note the sort order for this column.

9. On the right side of the Grid header, click **Show Peer Analytics**. The Peer Analytics panel opens.
10. Click the **Grouping** switch to activate it. In the drop-down field, Morningstar Category should already be selected.
11. Click **Apply**.



Peer Analytics

Grouping ☒

Morningstar Category ☐ Separate OE and ETF Funds

Add Grouping Level

Conditional Formatting ☐

Dynamic Ranking ☐

Summary Statistics ☐

Benchmarks ☐

Scorecard ☐

Apply

After enabling the Grouping capability, click Apply.

12. In the upper-right corner of the Peer Analytics panel, click **Hide Peer Analytics**. You can now see the funds with the highest Active Share Score at the top of each category.

Active Share Funds			
<div> <div>✓ 0 694</div> <div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div> </div>			
▼ Name	Ticker	Active Share (mo-end)	Category Index ETF Proxy
▼ EAA Fund US Large-Cap Growth Equity			
1 Franklin DynaTech Fund A	—	64.20	iShares Russell 1000 Growth ETF
▼ EAA Fund US Mid-Cap Equity			
2 Alger Mid Cap Growth B Inc	—	83.54	iShares Russell Mid-Cap ETF
▼ US Fund Allocation--30% to 50% Equity			
3 Meeder Moderate Allocation Retail	FLDOX	73.41	iShares Russell 1000 Value ETF
▼ US Fund Allocation--50% to 70% Equity			
4 Aberdeen Income Builder Instl	AADDX	80.36	iShares Russell 1000 ETF
▼ US Fund Allocation--85%+ Equity			
5 Hotchkis & Wiley Value Opps Instl	HWAIX	88.15	iShares Russell 1000 Value ETF
6 North Square Multi Strategy A	ORILX	61.06	iShares Russell 1000 Growth ETF
7 Meeder Dynamic Allocation Retail	FLDGX	53.63	—
8 Wells Fargo WealthBuilder Equity C	WEACX	50.00	iShares Russell 1000 Growth ETF
▼ US Fund Diversified Emerging Mkts			
9 BlackRock Emerging Mkts Eq Strats K	BEFKX	119.09	iShares MSCI Emerging Mark...
10 PIMCO RAE PLUS EMG Instl	PEFIX	100.00	iShares MSCI Emerging Mark...
11 Virtus KAR Emerging Markets Small-Cap I	VIESX	99.61	iShares MSCI Emerging Mark...

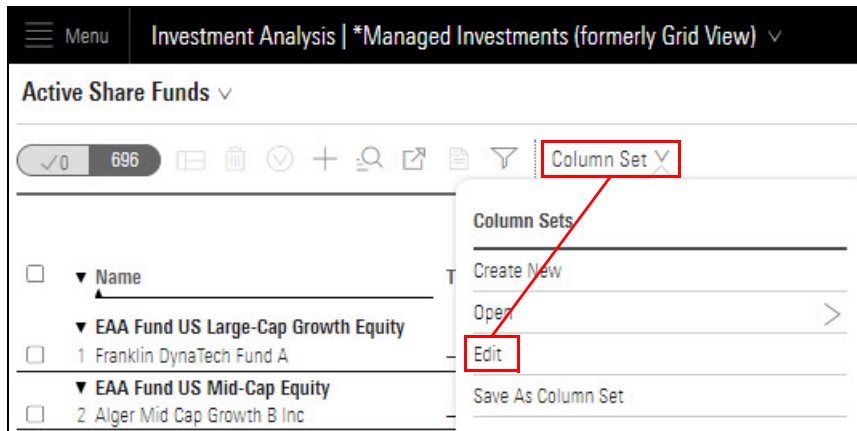
Within each category, the funds are listed according to their Active Share Scores, with the highest at the top.

In the Grid, the primary prospectus benchmark can be used for the Active Share calculation.

The Managed Investments workbooks should still be open with the Active Share Funds screen and My Active Share Score column set displayed.

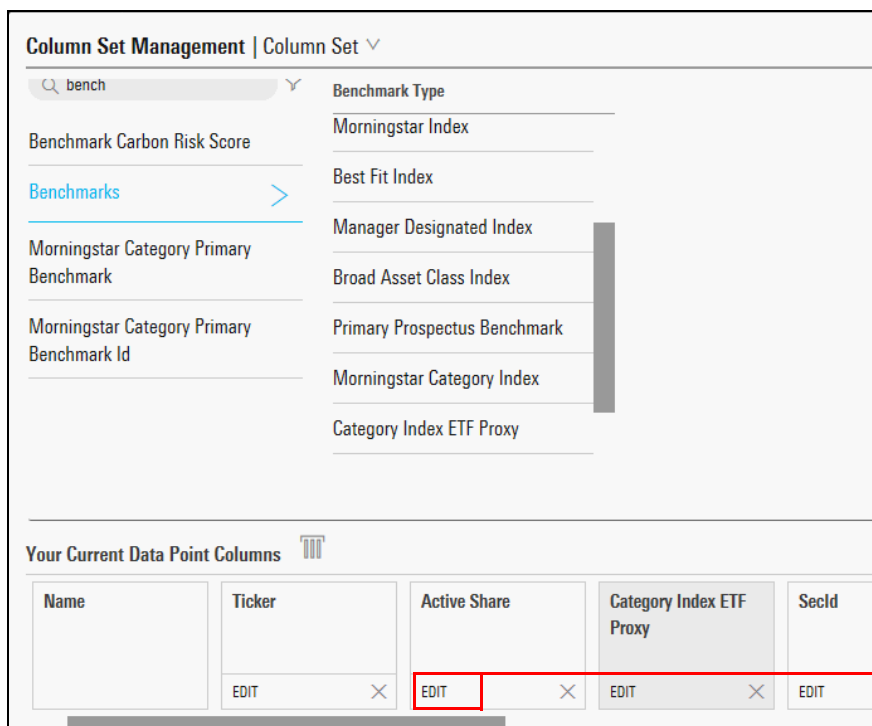
Do the following:

1. From the **Column Set** menu, select **Edit**.



Note the highlighted selections.

2. In the **Your Current Data Point Columns** area, in the **Active Share (mo-end)** tile, click **EDIT**. The Column Set Management window opens.



Click here to edit the data point.

- From the **Benchmark** menu, select **Primary Prospectus Benchmark**.

The screenshot shows the 'Column Set Management' dialog box. The 'Active Share' section is highlighted with a red box. Below it, the 'Benchmark' dropdown menu is open, showing options: 'ETF Benchma...', 'ETF Benchmark ✓', 'Proxy', and 'Primary Prospectus Benchmark'. The 'Primary Prospectus Benchmark' option is highlighted with a red box. The 'Display As' dropdown is set to 'Active Share ...' and the 'Frequency' dropdown is set to 'None'. The 'Decimal Places' dropdown is set to '2'. The 'Time' dropdown is set to 'Most Recent' and the 'End Date' dropdown is set to 'Month End'. The 'Reset' button is in the top right corner. The 'Columns' section at the bottom shows a table with columns: Name, Ticker, SecId, and Active Share (mo-end). Each column has an 'EDIT' button and a close icon (X).

Note the highlighted selections.

- Click **OK**.

5. In the **Your Current Data Point Columns** area, delete **Category Index ETF Proxy**.

Column Set Management | Column Set ▾

Select Data Point

of Holdings

% Asset in Top Holdings

12b-1 Fee

ABI Primary Series

ABS Collateral Type Detail

AIF(AIFMD)

AIMC Board Category

AIMC Category

Your Current Data Point Columns

Name	Ticker	Active Share (mo-end)	Category Index ETF Proxy
	EDIT	EDIT	EDIT

Click here to delete this data point.

6. In the Column Set Management window, search for **Benchmarks**. Then, from the Benchmark Type menu, select **Benchmarks > Primary Prospectus Benchmark**.
7. In the **Your Current Data Point Columns** area, drag **Primary Prospectus Benchmark** to the left so it will be displayed next to the Active Share column.

The screenshot shows the 'Column Set Management' window. At the top, there's a search bar labeled 'Benchmark:' with a red box around it and a red arrow pointing to the 'Benchmarks' category in the 'Benchmark Type' list. Below the list, 'Primary Prospectus Benchmark' is highlighted with a red box. At the bottom, the 'Your Current Data Point Columns' table shows 'Active Share (mo-end)' and 'Primary Prospectus Benchmark' as columns, both with red boxes around them.

Search here.

Scroll down to select Primary Prospectus Benchmark.

It can be helpful to have related data points displayed together.

8. Click **Done**.

The screenshot shows the 'Investment Analysis' window. The 'Active Share Funds' section is active. The table below shows the updated column set with 'Active Share (mo-end)' and 'Primary Prospectus Benchmark' columns. A red box highlights these two columns, and a red arrow points to them from the note on the right.

Name	Ticker	Active Share (mo-end)	Primary Prospectus Benchmark
▼ EAA Fund US Large-Cap Growth Equity			
1 Franklin DynaTech Fund A	—	64.20	Russell 1000 Growth TR USD
▼ EAA Fund US Mid-Cap Equity			
2 Alger Mid Cap Growth B Inc	—	71.34	Russell Mid Cap Growth TR USD
▼ US Fund Allocation--30% to 50% Equity			
3 Meeder Moderate Allocation Retail	FLDOX	—	Morningstar Mod Con Tgt Risk TR USD
▼ US Fund Allocation--50% to 70% Equity			
4 Aberdeen Income Builder Instl	AADDX	78.35	S&P 500 TR USD

Note the new columns and values.

Nest Data Points Together

While building column sets in these exercises, you might have noticed that many common, related data points repeat the same information in their column header. This takes up unnecessary space on the screen. Fortunately, you can address this issue by using a feature called “nesting.”

Nesting combines information from common data points under a single, shared header. This allows you to see more data points at once on the screen.

Overview

Name	Sharpe Ratio Morningstar (3Y - mo-end)	Morningstar Analyst Rating (day- end)	Morningstar Analyst Rating Performance Pillar (day-end)	Morningstar Analyst Rating Price Pillar (day- end)	Morningstar Analyst Rating People Pillar (day- end)	Morningstar Analyst Rating Process Pillar (day-end)
1 AB Concentrated Growth Advisor	1.39	Neutral	Neutral	Negative	Positive	Positive
2 AB Discovery Growth A	1.04	Bronze	Positive	Positive	Positive	Neutral
3 AB Growth B	1.32	Neutral	Positive	Negative	Neutral	Neutral
4 AB Large Cap Growth A	1.38	Neutral	Positive	Positive	Neutral	Neutral
5 AB Small Cap Growth A	1.22	Bronze	Positive	Positive	Positive	Neutral

Notice how much less space is taken up in the bottom image by the same data points when nesting is activated and a common header is applied.

Menu

Investment Analysis | *Managed Investm... ▼

Search for Securities and Research...

11

Active Share Funds ▼

✓0

698

+

Column Set ▼

Show Pe...

	Name	Sharpe Ratio Morningstar (3Y - mo-end)	Morningstar Analyst Rating (day-end)					Morningstar Category Primary Benchmark	
			Morningstar Analyst Rating (day- end)	Perfor... Pillar	Price Pillar	People Pillar	Process Pillar	Parent Pillar	
<input type="checkbox"/>	1 AB Concentrated Growth Advisor	1.39	Neutral	Neutral	Nega...	Positive	Positive	Neutral	S&P 500 TR USD
<input checked="" type="checkbox"/>	2 AB Discovery Growth A	1.04	Bronze	Positive	Positive	Positive	Neutral	Neutral	S&P 500 TR USD
<input type="checkbox"/>	3 AB Growth B	1.32	Neutral	Positive	Nega...	Neutral	Neutral	Neutral	S&P 500 TR USD
<input type="checkbox"/>	4 AB Large Cap Growth A	1.38	Neutral	Positive	Positive	Neutral	Neutral	Neutral	S&P 500 TR USD
<input type="checkbox"/>	5 AB Small Cap Growth A	1.22	Bronze	Positive	Positive	Positive	Neutral	Neutral	S&P 500 TR USD

In this section, you will learn how to do the following:

- ▶ Nest columns by data point ([page 46](#)), and
- ▶ Nest columns by time period ([page 48](#)).

To nest columns by data point, do the following:

Exercise 12: Nest columns by data point

1. In a Managed Investments workbook, open the **Gold-Rated Large Cap Funds** list.
2. Open the **Morningstar Analyst Rating Data Points** column set.
3. **Scroll right.** Notice the various columns for Morningstar Analyst Ratings.

Name	Morningstar Analyst Rating (day-end)	Morningstar Analyst Rating Performance Pillar (day-end)	Morningstar Analyst Rating Price Pillar (day-end)	Morningstar Analyst Rating People Pillar (day-end)	Morningstar Analyst Rating Process Pillar (day-end)	Morningstar Analyst Rating Parent Pillar (day-end)
1 AB Concentrated Growth Advisor	Neutral	Neutral	Negative	Positive	Positive	Neutral
2 AB Discovery Growth A	Bronze	Positive	Positive	Positive	Neutral	Neutral
3 AB Growth B	Neutral	Positive	Negative	Neutral	Neutral	Neutral
4 AB Large Cap Growth A	Neutral	Positive	Positive	Neutral	Neutral	Neutral
5 AB Small Cap Growth A	Bronze	Positive	Positive	Positive	Neutral	Neutral

The words "Morningstar Analyst Rating" are repeated in each column heading.

4. **Edit** the column set.
5. At the bottom of the Column Set Management window, click the **Nest** icon, then select **Nest By Data Point**.

Column Set Management | Column Set

Select Data Point

Search for data points

of Holdings

12b-1 Fee

AOP

Accounting Fee

Acquired Fund Expense

Active Share Score

Actively Managed

Your Current Data Point Columns

Name	Actions	old	Morningstar Category
	Nest by Time Period		
	Nest By Data Point		

Use this option to nest data points together under a common header.

6. Click **Done** to close the Column Set Management window.

7. **Scroll to the right** (if needed) to see how the Morningstar Analyst Rating data points have been consolidated under a common header.

Note the new display of these data points.

Active Share Funds		Morningstar Analyst Rating (day-end)						Morningstar Category Primary Benchmark
	Name	Morningstar Analyst Rating (day-end)	Perform... Pillar	Price Pillar	People Pillar	Process Pillar	Parent Pillar	Morningstar Category Primary Benchmark
<input type="checkbox"/>	1 AB Concentrated Growth Advisor	Neutral	Neutral	Nega...	Positive	Positive	Neutra	S&P 500 TR USD
<input type="checkbox"/>	2 AB Discovery Growth A	Bronze	Positive	Positive	Positive	Neutral	Neutra	S&P 500 TR USD
<input type="checkbox"/>	3 AB Growth B	Neutral	Positive	Nega...	Neutral	Neutral	Neutra	S&P 500 TR USD
<input type="checkbox"/>	4 AB Large Cap Growth A	Neutral	Positive	Positive	Neutral	Neutral	Neutra	S&P 500 TR USD
<input type="checkbox"/>	5 AB Small Cap Growth A	Bronze	Positive	Positive	Positive	Neutral	Neutra	S&P 500 TR USD

Note: To preserve the nesting modification, you need to resave the column set. When saving a custom column set after you make a change, you must give the column set a new name; you cannot simply overwrite the existing custom column set. You can give the updated column set the same name you assigned to the original custom column set, but that results in two copies of that column set. In this case, consider using the Column Sets page to delete the earlier version you no longer need.

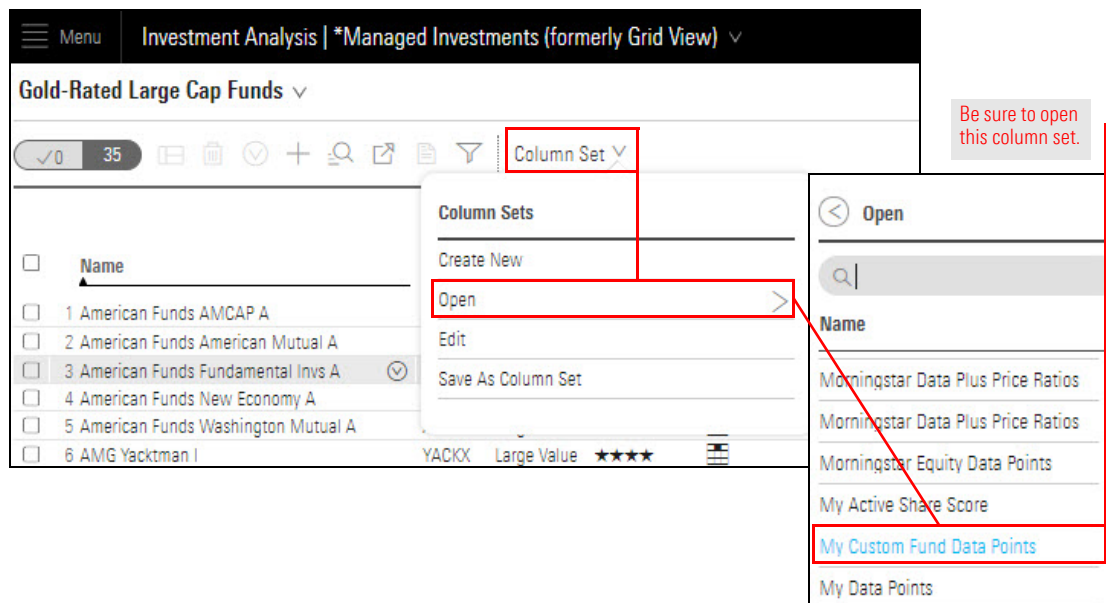
Only column sets you created can be deleted from this page.

Column Sets	
<input type="checkbox"/>	21 Morningstar Data Plus Price Ratios Custom
<input type="checkbox"/>	22 Morningstar Data Plus Price Ratios Custom
<input type="checkbox"/>	23 Morningstar Equity Data Points
<input type="checkbox"/>	24 My Active Share Score
<input type="checkbox"/>	25 My Custom Fund Data Points
<input type="checkbox"/>	26 My Data Points
<input type="checkbox"/>	27 My Fund Product Involvement Custom
<input type="checkbox"/>	28 My Sustainability Data Custom

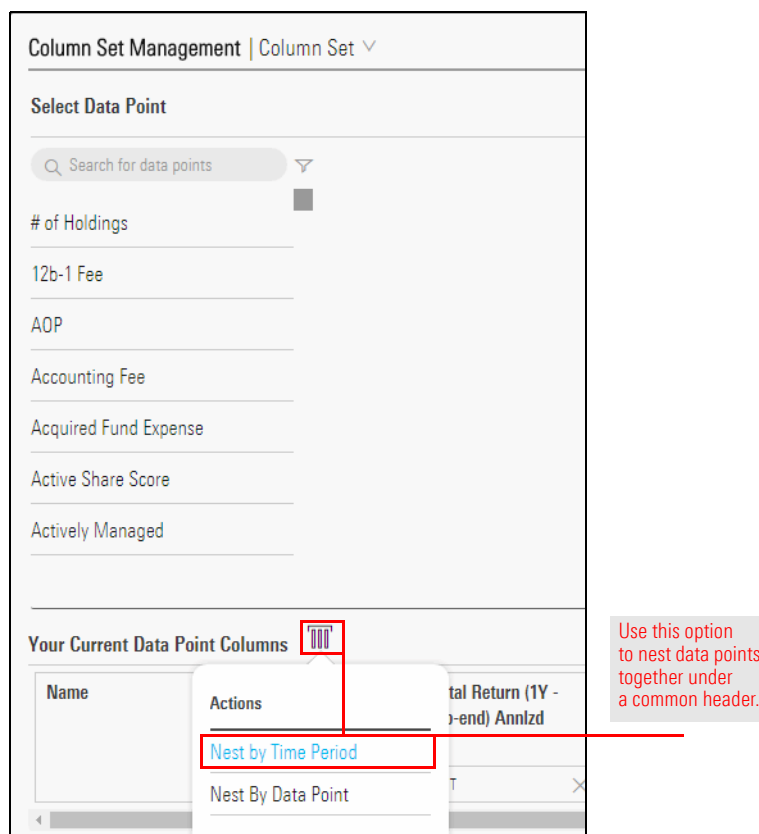
Another option for nesting data points is to group them under a common header for the time period they represent. To see this using the list you have open, do the following:

Exercise 13: Nest columns by time period

1. From the **Column Set** menu, open the **My Custom Fund Data Points** column set.



2. **Edit** the column set.
3. Click the **Nest** icon, then select **By Time Period**.



4. Click **Done**. Note the consolidated headers, and the various data points appearing under each one.

Gold-Rated Large Cap Funds

Column Set

Name	1Y (mo-end)			3Y (mo-end)			5Y (mo-end)		
	Total Return	Alpha Total (excess return) Cat Curr	Beta Total (excess return) Cat Curr	Total Return	Alpha Total (excess return) Cat Curr	Beta Total (excess return) Cat Curr	Total Return	Alpha Total (excess return) Cat Curr	Beta Total (excess return) Cat Curr
1 Oakmark Investor	0.39	-10.78	1.24	13.11	-3.25	1.22	7.76	-4.21	1.19
2 PRIMECAP Odyssey Growth	0.78	-10.39	1.27	17.90	0.70	1.26	11.88	-0.38	1.20
3 American Funds New Economy A	2.69	-6.99	0.98	17.27	3.16	0.97	9.83	-0.42	0.98
4 Dodge & Cox Stock	4.14	-5.96	1.03	14.43	-0.16	1.05	8.26	-2.70	1.06
5 American Funds AMCAP A	5.16	-4.81	1.00	14.10	0.21	0.98	9.51	-0.79	0.97
6 American Funds Fundamental Invs A	5.40	-4.20	0.93	12.83	-0.43	0.93	9.80	-0.54	0.97
7 PRIMECAP Odyssey Stock	6.41	-4.42	1.14	15.05	-0.68	1.14	10.49	-0.89	1.09

Note the new display of these data points.

Note: To preserve the nesting modification, you need to resave the column set. When saving a custom column set after you make a change, you must give the column set a new name; you cannot simply overwrite the existing custom column set. You can give the updated column set the same name you assigned to the original custom column set, but that results in two copies of that column set. In this case, consider using the Column Sets page to delete the earlier version you no longer need.

