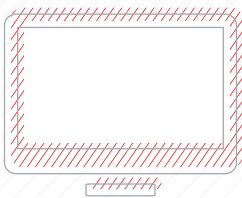
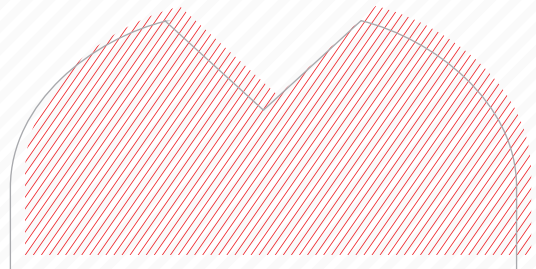
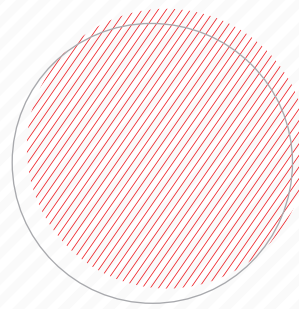
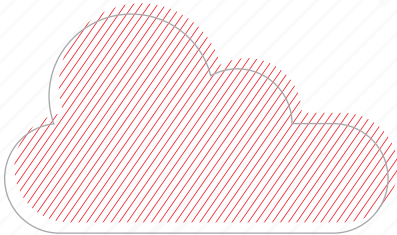
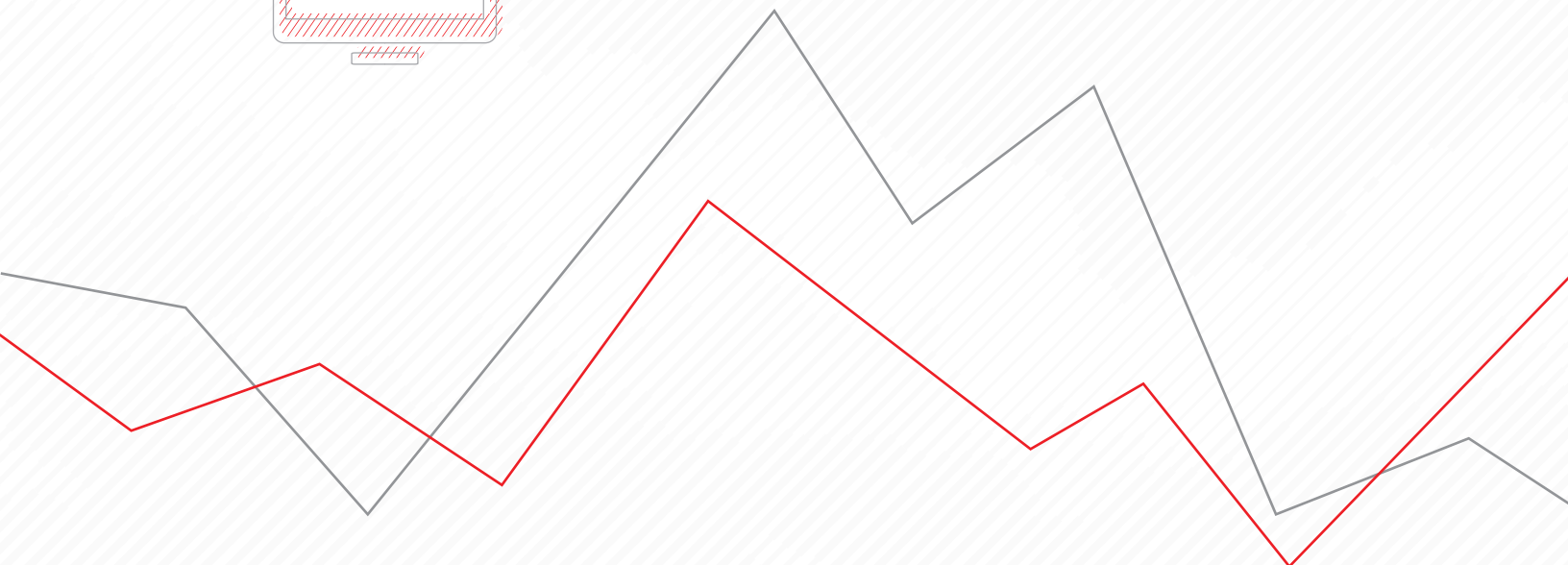


Creating a Performance Report

Exercise Guide



MORNINGSTAR Direct



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Creating a Performance Report

The Morningstar Rating for a fund is a starting point for evaluating a fund's risk-adjusted performance, but it is also important to consider the consistency of a fund's performance over time so you understand whether investors can rely on regular out-performance from the management team.

A performance report, which shows rows of investments and columns of data about those investments, allows you to evaluate which funds have exhibited consistent performance. The Performance Reporting module in Morningstar Direct not only displays return and category rank data from multiple time periods more easily than in other parts of the application, but also allows you to use tools such as grouping, conditional formatting, and a scorecard to calculate results and present data in an easy-to-understand format.

Overview

Folders Consistent Large Growth Funds									
Action Save Calculate Edit Undo Locate Tools Export View Default									
	Ticker	Name	Morningstar Analyst Rating	Return (Annualized)	Peer group %	Return: Peer group % Score	Return (Annualized)	Peer group %	
Report Search Criteria: Morningstar Category = Large Growth And Annual Report Net Expense Ratio < CAT AVG And Closed to New Inv Not= Yes And Sh									
1		▼ US Fund Large Growth							
3	ALLIX	AB Large Cap Growth I	Under Review	22.90	8	1.00	19.36	10	
4	MLCIX	BMO Large-Cap Growth I		21.86	16	1.00	18.99	13	
5	SBLYX	ClearBridge Large Cap Growth I	Bronze	23.72	4	1.00	20.53	4	
6	GTLLX	Glenmede Large Cap Growth		24.64	2	1.00	20.68	4	
7	HGIYX	Hartford Core Equity Y		22.62	9	1.00	19.75	7	
8	HLAGX	Hartford Disciplined Equity HLS IA		22.89	8	1.00	20.00	6	
9	ADGIX	AB Core Opportunities I		20.53	38	0.00	18.10	26	
10	AGFIX	AB Growth I	Under Review	20.04	48	0.00	17.16	46	
11	AKRIX	Akre Focus Instl	Silver	21.57	20	1.00	19.01	13	
12	PGFIX	AllianzGI Focused Growth Institutional		21.49	22	1.00	18.60	19	
13	BRLGX	American Beacon Bridgeway Lg Cp Gr Instl		23.68	4	1.00	21.03	3	
14	RAFQX	American Funds AMCAP R6	Gold	21.48	22	1.00	18.39	22	
15	AMOMX	AQR Large Cap Momentum Style I	Bronze	20.36	41	0.00	18.75	16	
16	ATMOX	AQR TM Large Cap Momentum Style I					18.71	17	
17	BUFEX	Buffalo Large Cap		20.62	36	0.00	17.08	48	
18	CEYIX	Calvert Equity I		19.34	62	0.00	16.23	65	
19	DHAMX	Centre American Select Equity Inv		15.98	95	0.00	13.33	94	
20	CHAIX	Chase Growth Institutional		19.73	54	0.00	17.81	32	
21	CLQZX	Columbia Disciplined Growth Z		21.42	22	1.00	18.70	17	
22	CFGRX	Commerce Growth		19.56	58	0.00	16.29	64	
23	HRCMX	Eagle Capital Appreciation R5		21.69	19	1.00	18.54	20	
24	ESEIX	Eaton Vance Atlanta Capital Sel Eq I					16.82	54	
25		EQ/T. Rowe Price Growth Stock K		21.55	21	1.00	18.84	15	
26	KLCIX	Federated Kaufmann Large Cap Instl	Neutral	24.75	2	1.00	21.21	2	
27	EQPGX	Fidelity Advisor® Equity Growth I	Neutral	20.15	46	0.00	17.85	31	
28	FINSX	Fidelity Advisor® New Insights I	Silver	19.06	67	0.00	16.15	66	
29	FCAKX	Fidelity® Capital Appreciation K	Neutral	22.82	8	1.00	19.43	9	
30	FCNXX	Fidelity® Contrafund® K	Silver	19.69	55	0.00	17.21	45	
31	FEXKX	Fidelity® Export and Multinational K		17.20	89	0.00	14.42	87	
32	FGDXX	Fidelity® Growth Discovery K		20.47	39	0.00	18.12	26	
33	FLGEX	Fidelity® Large Cap Growth Enhanced Idx		20.38	40	0.00	17.71	33	

This sample performance report reflects the use of both conditional formatting and score columns.

Creating a performance report consists of the following steps:

1. Select the investments for the report.
2. Decide how the investments will be grouped together, what the investments on the report should be compared to, and select comparison and calculation benchmarks for the investments on the report.
3. Choose the time periods (trailing 1-year, rolling window, etc.) to display, and data points (Return, Category Rank) to display in each time period.
4. Choose supplementary information you want to include outside of the time periods.
5. Apply conditional formatting to call out important information.
6. Use a scorecard to calculate results over time.

What is involved in creating a performance report?



1 Select the investments for the report.



2 Decide how the investments will be grouped together, what the investments on the report should be compared to, and select comparison and calculation benchmarks for the investments on the report.



3 Choose the time periods (trailing 1-year, rolling windows, etc...) to display and data points (Return, Category Rank) to display in each time period.



4 Choose any supplementary information you want to include outside of the time periods.



5 Optionally, apply conditional formatting to call out important information.



6 Optionally, use a scorecard to calculate results over time.

Your manager wants to understand the consistency of Large Growth open-end funds. Which of the funds have had truly reliable performance during the past five years? Your manager wants you to produce a report identifying consistent Large Growth funds. Each fund must meet the following criteria:

Scenario

- ▶ still open to new investors
- ▶ an above-average Sharpe Ratio for the trailing five-year period when compared to their category peers
- ▶ an expense ratio below the category average
- ▶ a Downside Capture Ratio for the five-year period below 100, and
- ▶ only the cheapest share class of a fund should be considered.

The report should show returns and category ranks for rolling three-year periods, starting from five years ago through the most recent month end.

In the following exercises, a fund will be considered a consistent top performer if it has appeared in the top quarter of its category during all of the 25 time periods being considered. If a fund has a Morningstar Analyst Rating, your manager wants to see that, but funds are not required to have an analyst rating in order to be considered a top performer. Finally, the Sharpe Ratio should also be shown, but only for the most recent three-year period.

In this performance report, you will search for the investments to consider, then configure the performance report to retrieve the proper time periods and data points. Conditional formatting will be used to highlight both funds appearing in the top quartile for each time period, and the Morningstar Analyst Rating (where available). Finally, a scorecard will be employed to determine whether funds have consistently appeared in the top quartile of their respective Morningstar Category.

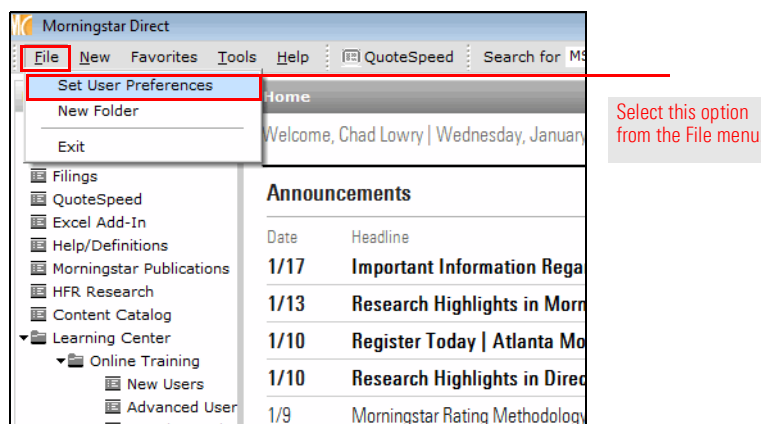
Solution

When creating an advanced search to find only one instance of a fund (rather than seeing all share classes of a fund), you have a number of options, including looking for the following:

- ▶ the oldest share class of a fund
- ▶ a specific share class for a fund, such as the A share, or
- ▶ the least expensive share class for a fund.

Before conducting an advanced search to look for the cheapest share class for a fund, you need to set the proper user preference to allow for this. Do the following:

1. From the menu bar at the top of the Morningstar Direct window, select **File...Set User Preferences**. The Set User Preferences window opens.



2. Select the **User Defined Primary** tab.
3. Select the row for **Annual Report Net Expense Ratio**, then click the **move to top** button. (The move to top button displays two up arrows.) This ensures this criterion takes precedence when conducting a search.
4. Be sure the word **Lowest** appears in the Choose column.

Set User Preferences

General Portfolio Management Import Export Return Settings **User Defined Primary**

User Defined Primary Criteria

After the rules set in the search dialog have been applied, the criteria below will be implemented, in the order chosen, to select only one share class per fund provided the 'User Defined Primary' option is checked.

If more than one share class shares the selected preference for the criteria (e.g. more than one share class shares the highest management fee and/or the oldest inception date) then all those share classes which match the selected preference will be judged using the next criterion (with any share classes that do not match the first preference being discarded). If, for the Currency, Distribution or Institutional criteria, no share classes for the fund match the preference chosen, then none of the share classes should be discarded and so the next criterion is considered.

Order	Criteria in order of preference	Choose
1	Annual Report Net Expense Ratio	Lowest
2	Max Management Fee	Lowest
3	Institutional	Retail Preferred
4	Minimum Investment	Lowest
5	Performance Start Date	Oldest
6	Distribution Status	Accumulation Preferred
7	Currency	US Dollar
8	Hedging Policy	Unhedged
9	Share Class Size (latest)	Lowest

Use this button to move the selected item to the top of the list

Be sure to select this tab.

5. Click **OK**. In the next exercise, you will learn to leverage this setting.

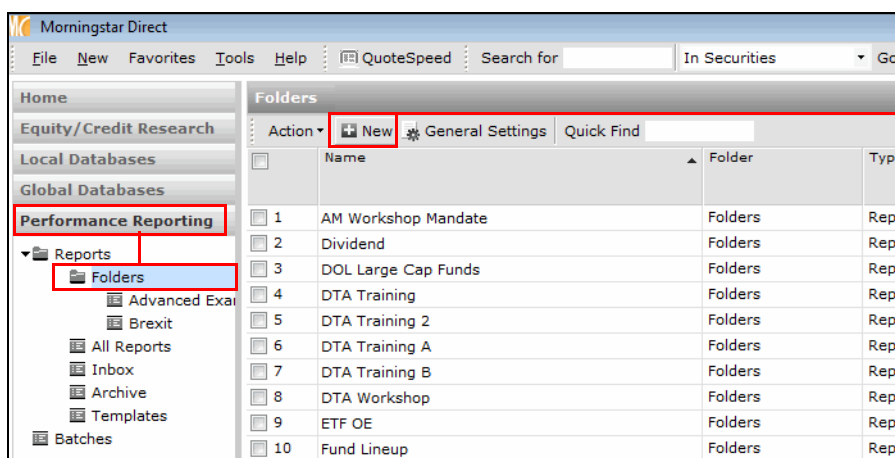
The first step in identifying consistently top performing large cap funds is to search for those open-end funds that meet the following criteria:

- ▶ an expense ratio below the category average
- ▶ still open to new investors
- ▶ an above-average Sharpe Ratio for the trailing five-year period, when compared to their category peers, and
- ▶ a Downside Capture Ratio below 100 for the five-year period.

Create a search by criteria in Performance Reporting

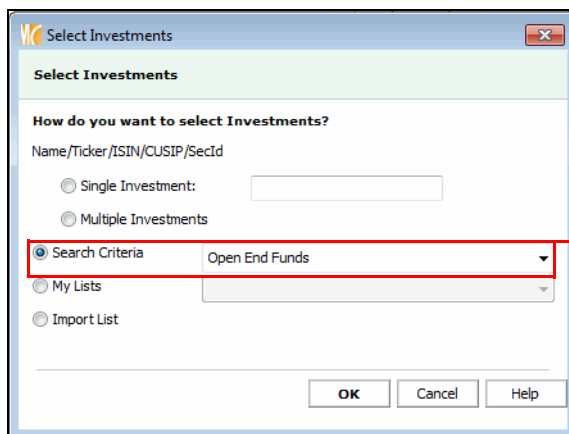
To create a search by criteria in the Performance Reporting module, do the following:

1. In Morningstar Direct, select the **Performance Reporting** tab. The Folders page should be selected by default.
2. From the toolbar above the grid view, click **New**. The Select Investments dialog box opens.



Click this icon to create a new performance report

3. Select the option for **Search Criteria**. Be sure the **Open End Funds** option is selected from the drop-down field.



Be sure this option is selected to find investments based on the parameters you choose

4. Click **OK**. The Search Criteria dialog box opens.

5. Set your criteria as shown in the following table:

Note: At the bottom of the Search Criteria dialog box, be sure to check the checkbox for **User Defined Primary Class Only**.

Rel	(Field Name	Operator	Value)
--		Morningstar Category	=	US Large Growth	
And		Annual Report Net Expense Ratio	<	CAT AVG	
And		Closed to New Inv	Not=	Yes	
And		Sharpe Ratio 5 Yr (Mo-End)	>	CAT AVG	
And		Downside Capture Ratio 5 Yr (Mo-End)	<	100	
And		Inception Date	<=	01/01/2015	

The screenshot shows the 'Morningstar Direct -- Open End Funds' search criteria dialog. The table contains the following criteria:

Rel	(Field Name	Operator	Value)
---		Morningstar Category	=	Large Growth	
And		Annual Report Net Expense Ratio	<	CAT AVG	
And		Closed to New Inv	Not=	Yes	
And		Sharpe Ratio 5 Yr (Mo-End)	>	CAT AVG	
And		Downside Capture Ratio 5 Yr (Mo-End)	<	100	
And		Inception Date	<=	10/1/2012	

At the bottom, the 'View Field Name' section has 'Alphabetically' selected. The 'Include' section has 'Only Surviving Investments' and 'User Defined Primary Class Only' checked. The 'Items Searched' is 252591 and 'Items Found' is 215. A 'Run Search' button is visible.

Be sure your search reflects the inputs shown here.

When looking for criteria in the Field Name column, it helps to select the Alphabetically option, to see all criteria at once.

Be sure to check this box as well

6. Click **OK**. The Group Settings window opens.

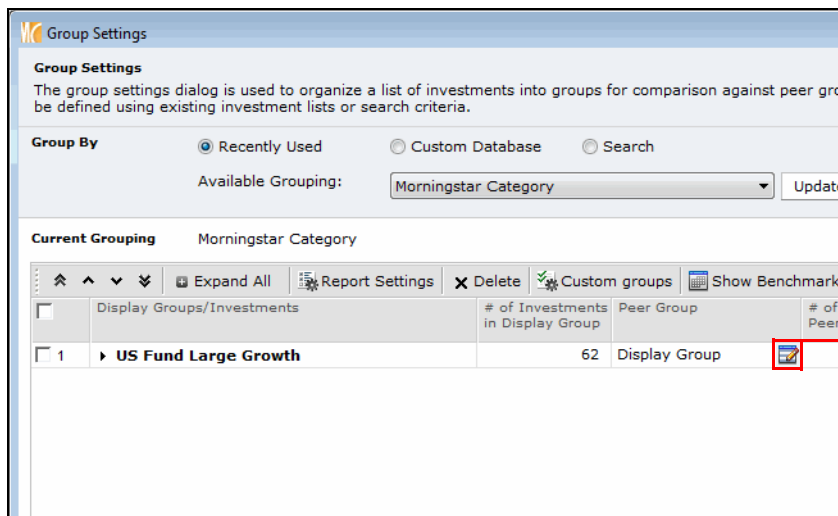
By default, when examining the performance of selected funds in a performance report, Morningstar Direct compares the funds to each other, rather than all of the funds in the appropriate Morningstar Category. In this section, you will learn how to change the peer group for a set of funds.

Exercise 2: Change the settings for the group

In a performance report, it is also important to use a relevant benchmark for both the performance comparison and performance calculations. You can also decide whether to display only one comparison benchmark (rather than the default two benchmarks).

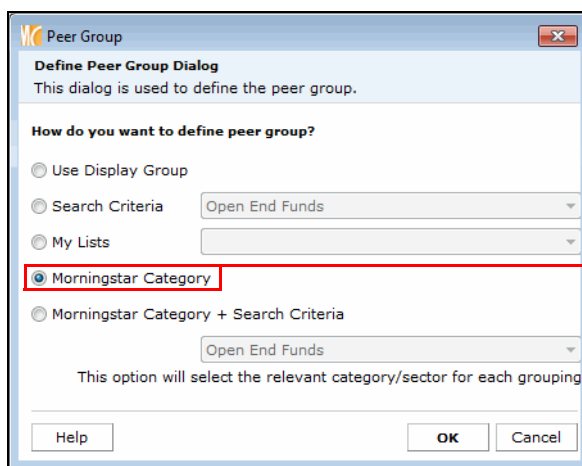
To change these settings for a performance report, do the following:

1. In the Peer Group column for row 1, click the **Peer Group** icon. The Peer Group dialog box opens.



Click this icon to change the peer group for the report

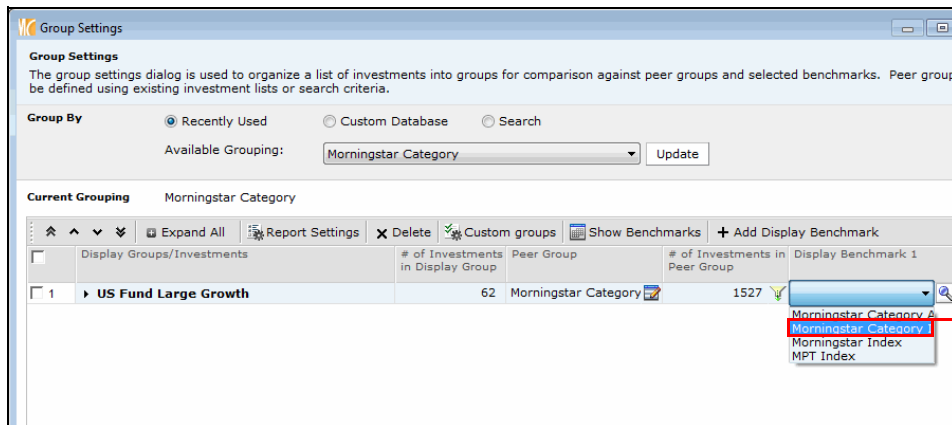
2. Select the **Morningstar Category** option.



This option allows you to compare the funds from your search to all other funds in their category

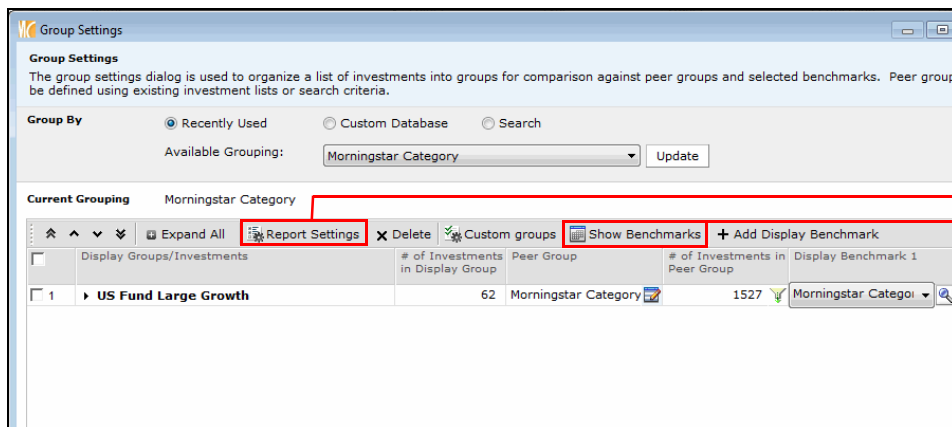
3. Click **OK** to close the dialog box.

4. In row 1, from the **Display Benchmark 1** drop-down field, select **Morningstar Category Index**.



Select this option to assign an index to the category in the performance report.

5. To see what the benchmarks are for each category, from the toolbar, click **Show Benchmarks**.
6. From the toolbar, click **Report Settings**. The Report Settings dialog box opens. From here, the second display benchmark can be hidden.



Use this icon to display just one comparison benchmark on the performance report.

This icon allows you to see the name of each index that will appear on the report.

7. Uncheck the **Show display benchmark 2** checkbox.

Report Settings

Select display and output settings for the performance report.

Display Output

Report Display Settings

- ☐ Show calculation benchmark
- ☐ Show calculation benchmark 2
- ☒ Show floating date labels
- ☒ Show synchronized search criteria name
- ☒ Show synchronized investment list name
- ☒ Show Annualized/Cumulative tag

Group Display Settings

Display benchmarks position ☐ Before funds ☒ After funds

- ☒ Show display benchmark 1
- ☐ Show display benchmark 2
- ☐ Show additional display benchmarks
- ☐ Show rank values for display benchmarks
- ☒ Show number of investments ranked
- ☒ Show peer group definition criteria

Summary Statistics Display Settings

- ☒ Show peer group summary statistics
- ☐ Show display group summary statistics
- ☐ Show list summary statistics

Summary Statistics

<input type="checkbox"/> Average	<input type="checkbox"/> Sum
<input type="checkbox"/> Count	<input type="checkbox"/> Maximum
<input type="checkbox"/> Minimum	<input checked="" type="checkbox"/> Median
<input type="checkbox"/> Standard Deviation	<input type="checkbox"/> Average ex 5% outliers
<input type="checkbox"/> Weighted Average	

Breakpoint Display Settings

<input type="checkbox"/> Quartile breakpoints	<input type="checkbox"/> 5th and 95th breakpoints
<input type="checkbox"/> Quintile breakpoints	<input type="checkbox"/> Decile breakpoints
<input type="checkbox"/> 1 to 100 Percentile breakpoints	

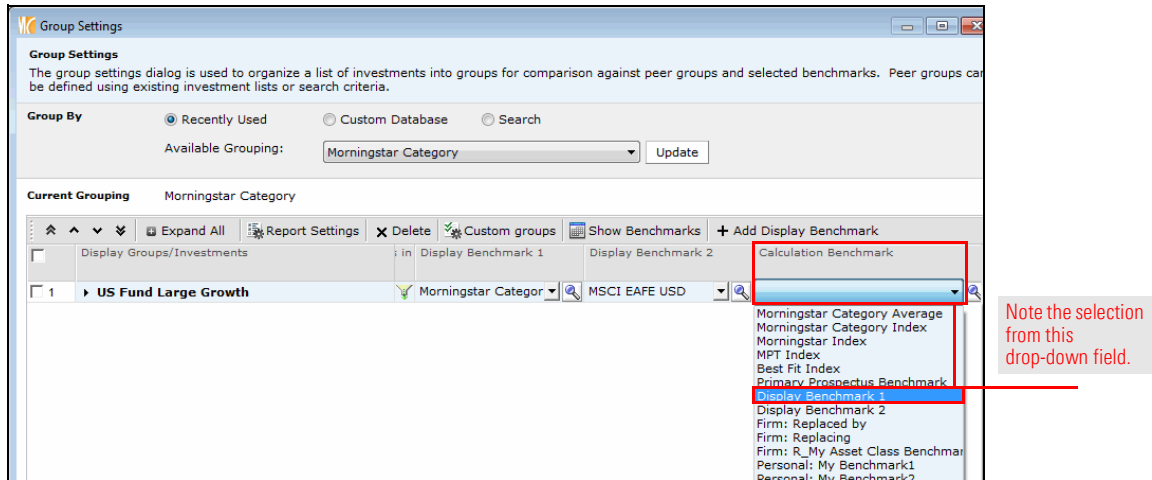
☒ Descending ☐ Ascending

Help OK Cancel

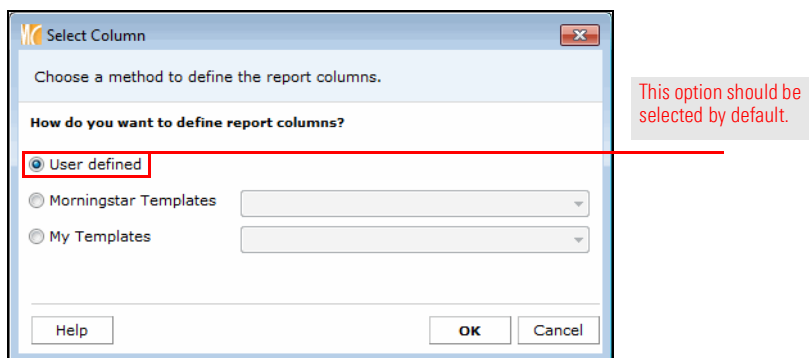
Uncheck this box to ensure only one benchmark appears on the performance report

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

9. Next, you need to ensure the proper benchmark is used for calculating the data on the performance report. From the **Calculation Benchmark** drop-down field, select **Display Benchmark 1**. This allows you to use the same benchmark for both display and calculation. It also ensures a peer-appropriate index is being used for calculation purposes.



10. Click **OK**. The Select Column dialog box opens.
11. Make sure the option for **User Defined** is selected, then click **OK**. The Performance Column Setup window opens.



To see if this set of funds has had consistent performance over a set of rolling three-year periods starting from five years ago, do the following:

Exercise 3: Set the values for the Time Periods tab

1. In the Performance Column Setup, select the **Rolling window** option.
2. From the Start Date field, select **Enter Date**, and select the first day of the current month from five years ago.
3. From the End Date field, select **Last Month End**.
4. From the **Window size** drop-down field, select **3 years**.
5. From the **Moving step** drop-down field, select **1 month**. The Number of columns field should read **25**.
6. Click **Add Columns**. The time periods for the report are added to the Selected Time Periods area.

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

Performance Column Setup

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

Time Periods | Data Points | Ranks

Time Period

Start Date: Enter Date | 12/01/2012

End Date: Enter Date | 11/30/2017

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

Window size: 3 years

Moving step: 1 month

Number of columns: 25 **Add Columns**

Selected Time Periods

- 11/1/2012 - 10/31/2015 (Rolling 3 years window, 1 month step)
- 12/1/2012 - 11/30/2015 (Rolling 3 years window, 1 month step)
- 1/1/2013 - 12/31/2015 (Rolling 3 years window, 1 month step)
- 2/1/2013 - 1/31/2016 (Rolling 3 years window, 1 month step)
- 3/1/2013 - 2/29/2016 (Rolling 3 years window, 1 month step)
- 4/1/2013 - 3/31/2016 (Rolling 3 years window, 1 month step)
- 5/1/2013 - 4/30/2016 (Rolling 3 years window, 1 month step)
- 6/1/2013 - 5/31/2016 (Rolling 3 years window, 1 month step)

Manage Columns Settings Remove Remove All

☐ Order time period latest first

Help OK Cancel

Note the values for the Start Date and End Date fields.

Be sure to select this option for Time Periods.

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

Remember that your manager requested to see not only the return for each time period, but also the Sharpe Ratio for only the most recent time period. To set the values for the two remaining tabs in the Performance Column Setup window, do the following:

Exercise 4: Set the values for Data Points and Ranks

1. Select the **Data Points** tab, and ensure **Return** is displayed in the Selected Data Points list.

The screenshot shows the 'Performance Column Setup' window with the 'Data Points' tab selected. The 'Time Period' is set to '5/1/2011 - 4/30/2016'. The 'Data Points' list includes: Alpha, Alpha (non-excess return), Alpha Signif at 5%, Alpha Signif at 5% (non-excess return), Alpha T-Stat, Alpha T-Stat (non-excess return), Appraisal Ratio, and Appraisal Ratio (non-excess return). The 'Selected Data Points' list contains 'Return'. The 'Apply add/remove to all time periods' checkbox is checked. Red lines and callouts highlight the 'Data Points' tab and the 'Return' data point.

Performance Column Setup

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

Time Period: 5/1/2011 - 4/30/2016

Data Points

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

Add

Selected Data Points

- Return

Manage Columns Settings Remove

☒ Apply add/remove to all time periods

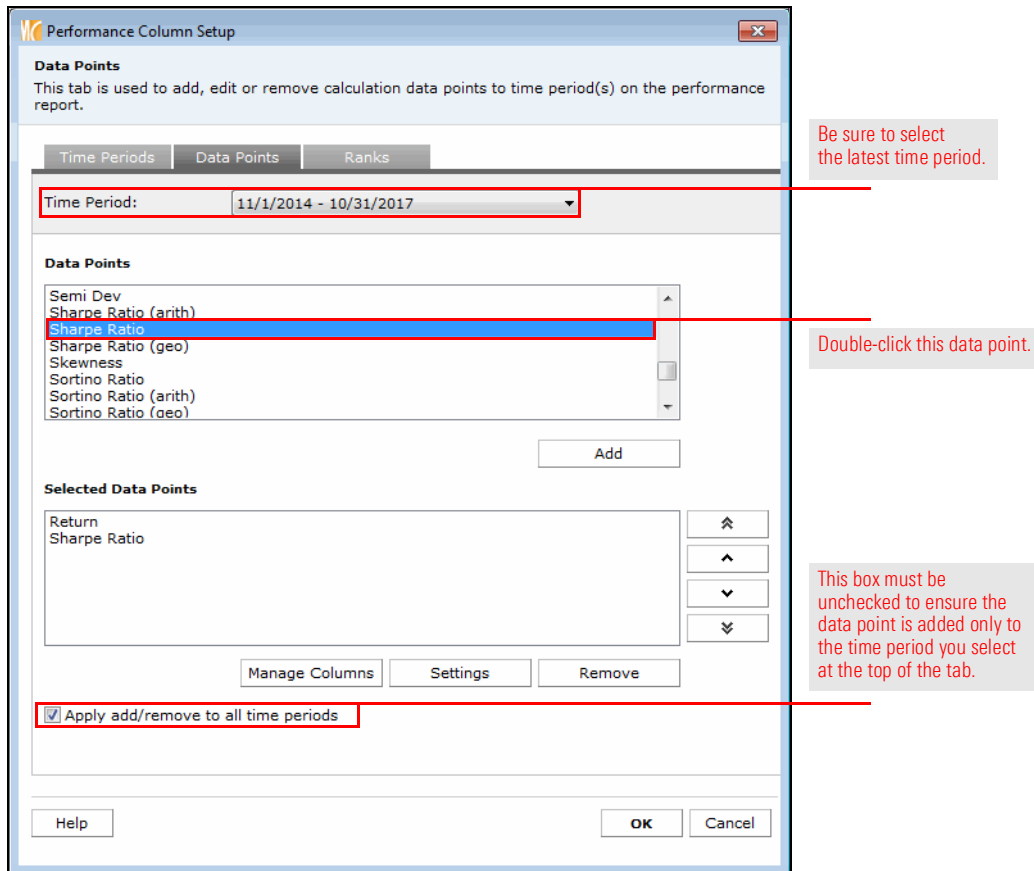
Help OK Cancel

Be sure to select the correct tab.

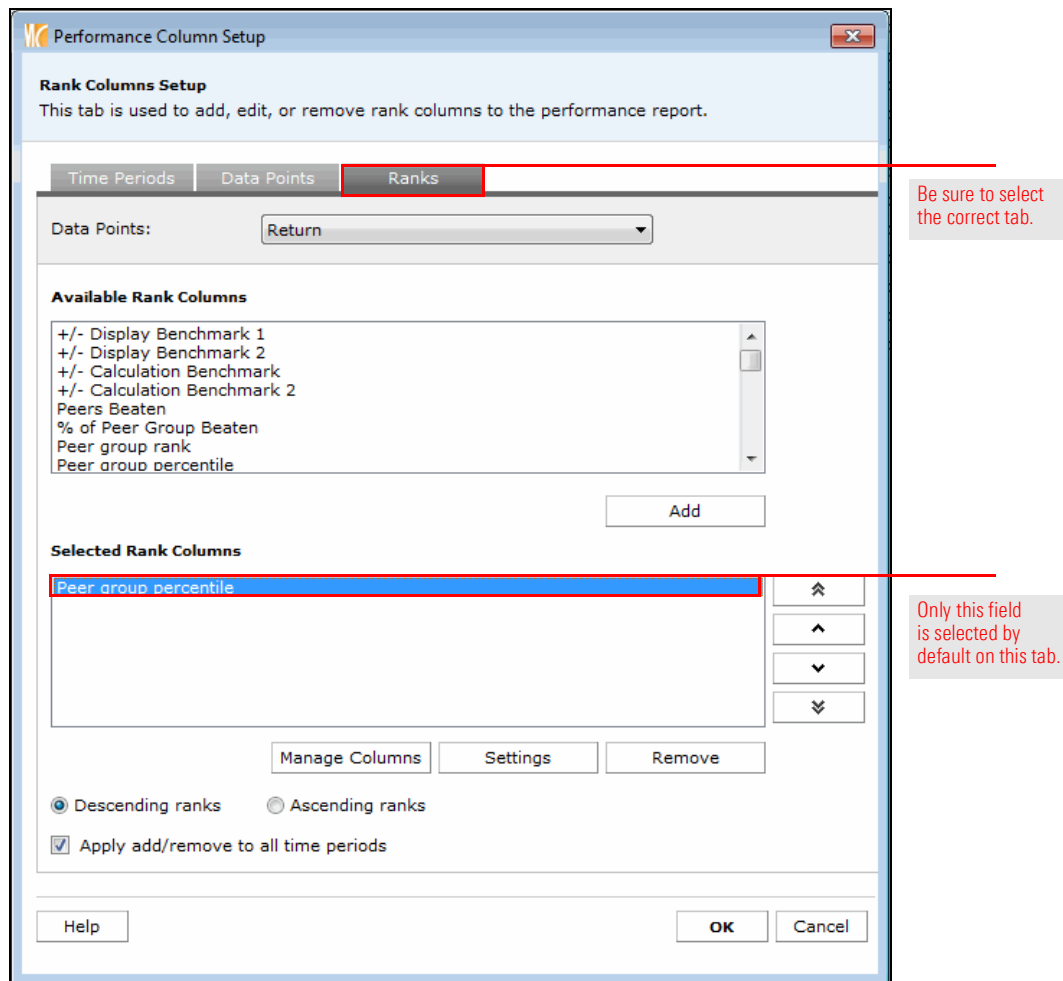
The Return data point is included automatically in a performance report.

2. To see the Sharpe Ratio value for the funds, but only for the most recent time period, at the bottom of the window, uncheck the box marked **Apply add/remove to all time periods**.

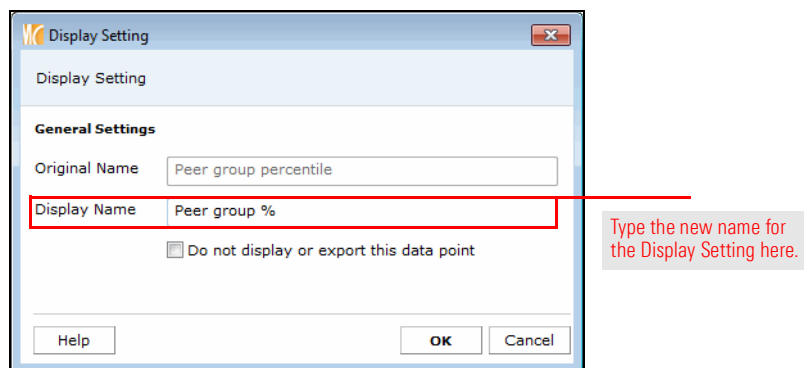
- From the **Time Period** drop-down field at the top of the window, **scroll** down to select **the most recent time period**.
- In the Data Points list, **scroll** down until you see the Sharpe Ratio data point, then **double-click Sharpe Ratio** to add it to the Selected Data Points area.



5. Select the **Ranks** tab, and ensure only **Peer group percentile** is selected in the Selected Rank Columns list.
6. In the Selected Rank Columns list, **double-click Peer group percentile**. The Display Setting dialog box opens.



7. In the Display Name field, type **Peer group %**.

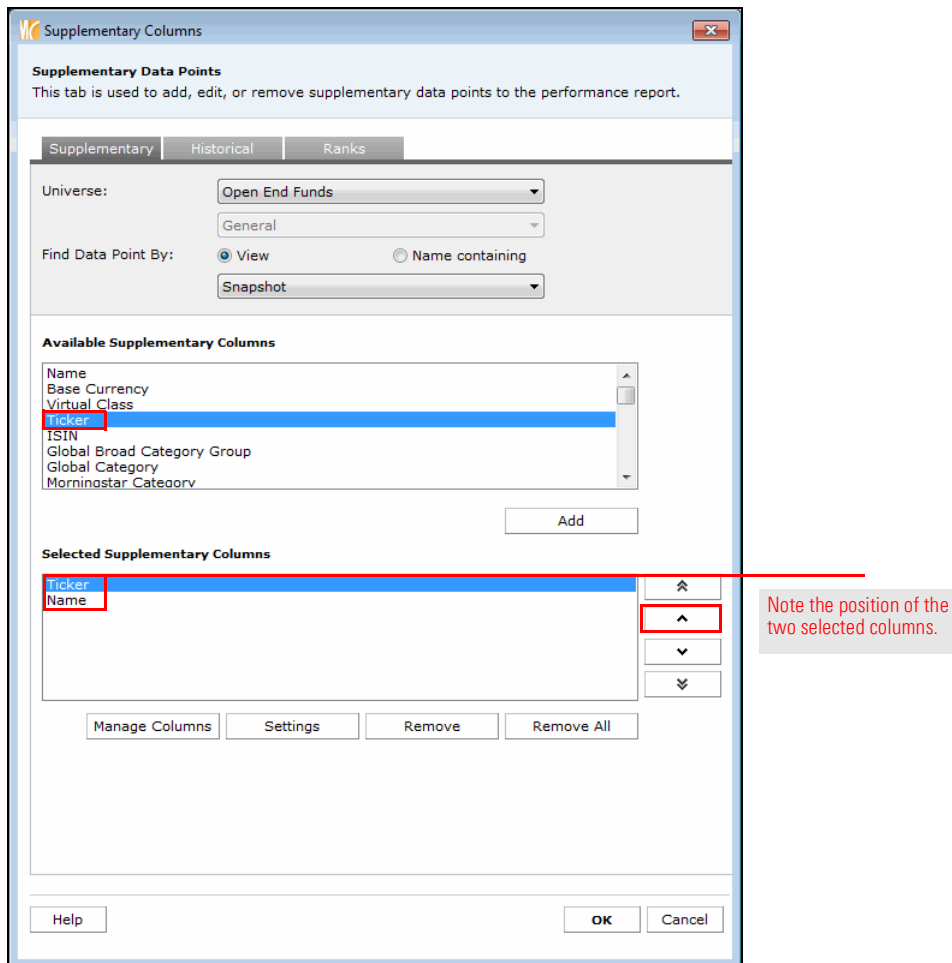


8. Click **OK** to close the Display Setting dialog box, then click **OK** to close the Performance Column Setup window. The Supplementary Columns window opens.

In addition to seeing the name of a fund on the performance report, it will also be useful to include the fund's ticker symbol. Also, your manager asked to see a Morningstar Analyst Rating if one is assigned to the fund. To include a fund's ticker symbol and Analyst Rating on the performance report, do the following:

1. On the Supplementary tab, in the Available Supplementary Columns list, **double-click Ticker** to move it to the Selected Supplementary Columns list.
2. In the Selected Supplementary Columns list, select **Ticker** and click the **up arrow** to move it above Name.

Exercise 5: Select options from the Supplementary Columns window



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

Supplementary Columns

Supplementary Data Points
This tab is used to add, edit, or remove supplementary data points to the performance report.

Supplementary | Historical | Ranks

Universe: Open End Funds
General

Find Data Point By: ☒ View ☐ Name containing
Snapshot

Available Supplementary Columns

- Fixed Inc Style Box (Long)
- Morningstar Analyst Rating
- Morningstar Analyst Rating - Process Pillar
- Morningstar Analyst Rating - Performance Pillar
- Morningstar Analyst Rating - People Pillar
- Morningstar Analyst Rating - Parent Pillar
- Morningstar Analyst Rating - Price Pillar
- Analyst Name

Add

Selected Supplementary Columns

- Ticker
- Name
- Morningstar Analyst Rating

Manage Columns Settings Remove Remove All

Help OK Cancel

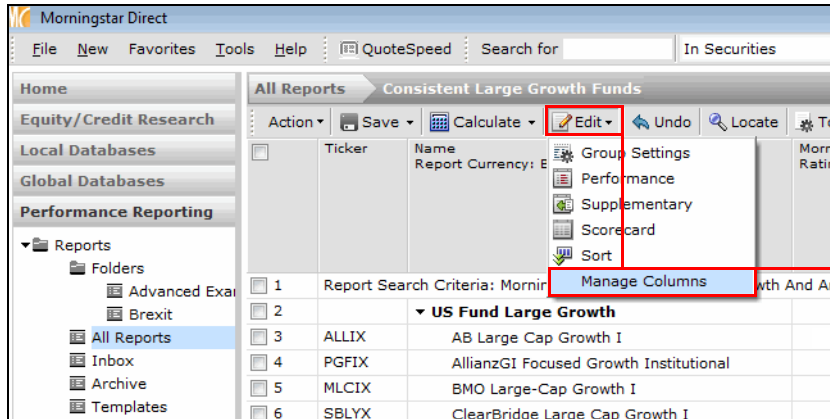
Be sure to double-click the Morningstar Analyst Rating, and not the Morningstar Rating.

4. Click **OK** to close the Supplementary Columns window. The performance report is now ready to be saved and calculated.

Only the most recent time period has the correct label for the Peer group percentile column; the others were not renamed to Peer group %. To correct this for all other time periods at once, do the following:

Exercise 6: Rename a data column

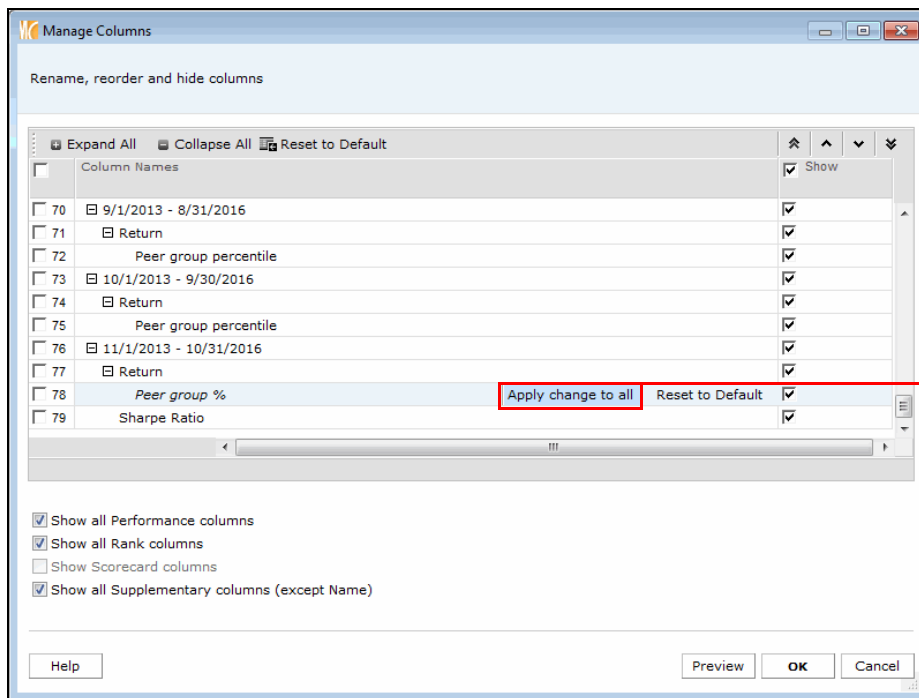
1. From the toolbar above the grid, from the **Edit** drop-down field, select **Manage Columns**. The Manage Columns dialog box opens.



Select this option from the Edit drop-down field.

2. **Scroll down** to the row where Peer group % is shown.
3. **Hover** your mouse over the Peer group % cell.
4. Click **Apply change to all**.

Note: You could also click in a row to manually rename "Peer group percentile" to "Peer group %," but this would take much more effort.



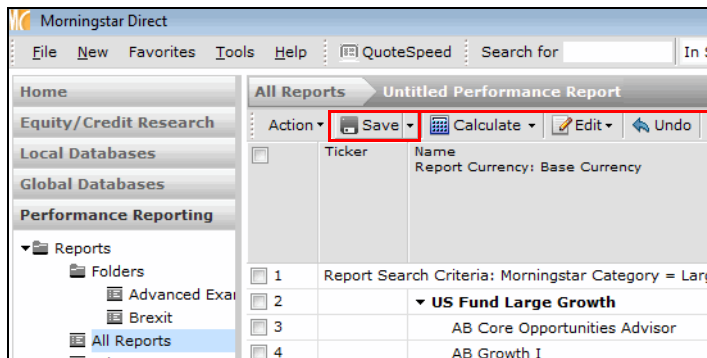
This button is not seen until you hover the cursor over this area.

5. Click **OK** to close the Manage Columns dialog box.

Now that the parameters for the report are set, the last step before calculating it is to save it. To save the performance report, do the following:

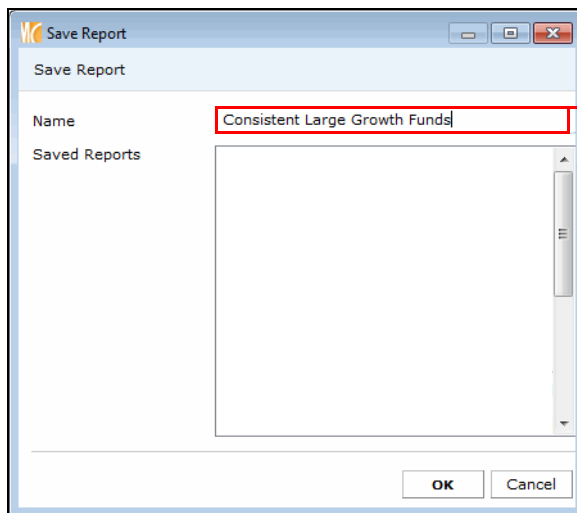
Exercise 7: Save the performance report

1. From the toolbar above the spreadsheet grid, click **Save**. The Save Report dialog box opens.



This icon allows you to save your work when creating a performance report.

2. In the Name field, type **Consistent Large Growth Funds**.



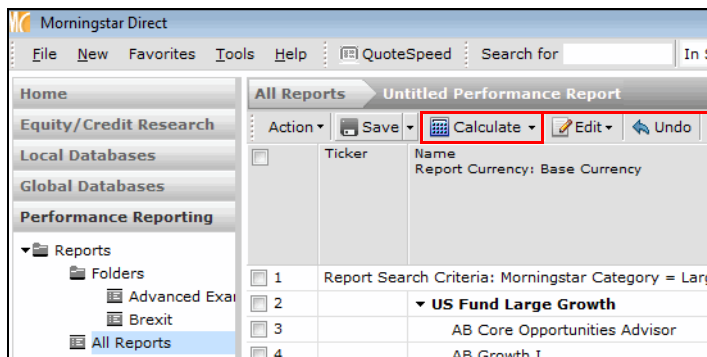
Note the name to enter for this report.

3. Click **OK**. The Save Report dialog box closes.

To calculate the performance report, do the following:

1. From the toolbar above the grid view, click **Calculate**. During the calculation, the Folders page is displayed.

Exercise 8: Calculate the performance report



This icon allows you to generate a performance report.

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

The screenshot shows the Morningstar Direct application window with the 'Consistent Large Growth Funds' report displayed. The grid is filled with data, including fund names, Morningstar Analyst Ratings, and Return (Annual) values. The grid is outlined with a red border.

	Ticker	Name Report Currency: Base Currency	Morningstar Analyst Rating	Return (Annual)
1		Report Search Criteria: Morningstar Category = Large Growth And Annual Report Net Expe		
2		US Fund Large Growth		
3	ADGYX	AB Core Opportunities Advisor		
4	AGFIX	AB Growth I	Neutral	
5	ALLIX	AB Large Cap Growth I	Neutral	
6	PGFIX	AllianzGI Focused Growth Institutional		
7	BRLGX	American Beacon Bridgeway Lg Cp Gr Instl		
8	RAFGX	American Funds AMCAP R6	Gold	
9	RGAGX	American Funds Growth Fund of Amer R6	Bronze	
10	AMOMX	AQR Large Cap Momentum Style I	Bronze	
11	MLCIX	BMO Large-Cap Growth I		
12	BUFEX	Buffalo Large Cap		
13	CEYIX	Calvert Equity I		
14	DHAMX	Centre American Select Equity Inv		
15	CHAIX	Chase Growth Institutional		
16	SBLYX	ClearBridge Large Cap Growth I		
17	RDLIX	Columbia Disciplined Growth I		
18	CFGRX	Commerce Growth		
19	HRCTX	Eagle Capital Appreciation R5		
20		EQ/T. Rowe Price Growth Stock K		
21	KLCIX	Federated Kaufmann Large Cap Instl	Neutral	
22	EQPGX	Fidelity Advisor® Equity Growth I		
23	FINSX	Fidelity Advisor® New Insights I	Silver	
24	FCAKY	Fidelity® Capital Appreciation K	Neutral	

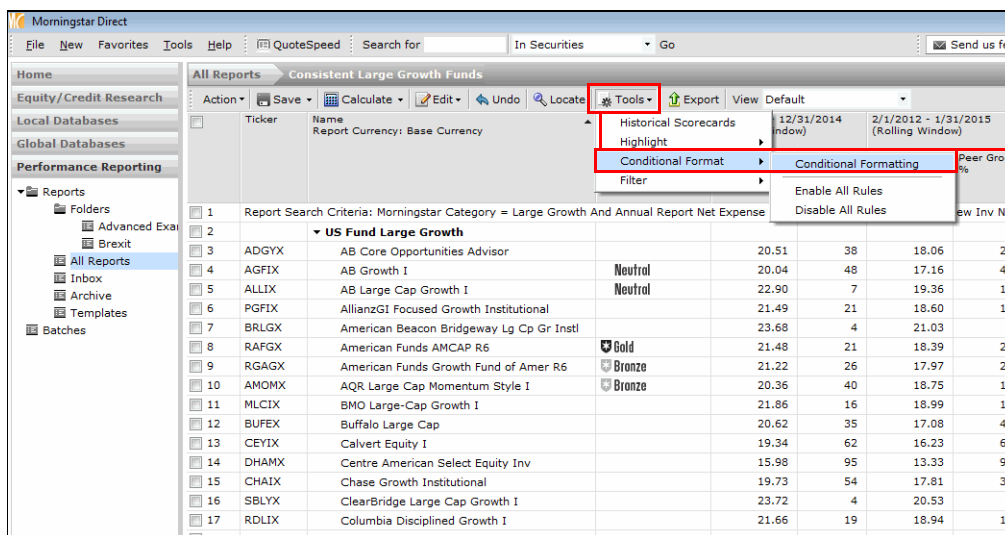
Note the data now available in the report.

The information in the performance report is great, but it is also a bit difficult to read without some additional formatting. The conditional formatting feature in the Performance Reporting module allows you to color each row, cell, or column to aid the interpretation of the data.

Exercise 9: Apply conditional formatting to a performance report

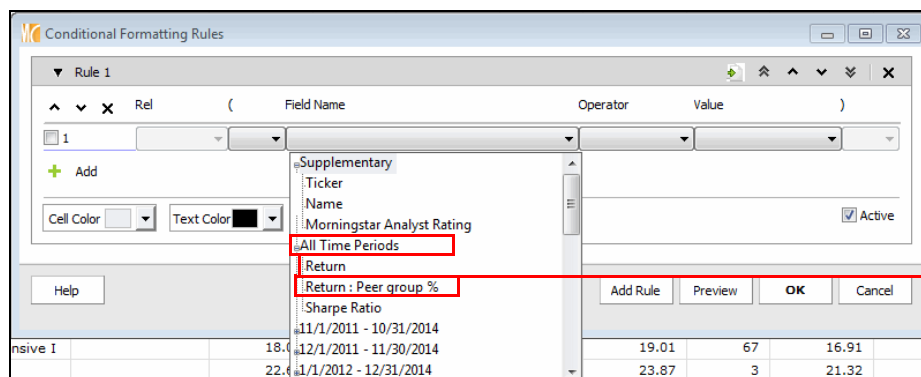
In this exercise, you will apply a color to the Peer group % column to call out the times when each fund was in the top quartile of its category. To apply conditional formatting to a performance report, do the following:

1. From the toolbar above the grid view, from the **Tools** drop-down field, select **Conditional Format... Conditional Formatting**. The Conditional Formatting Rules dialog box opens.



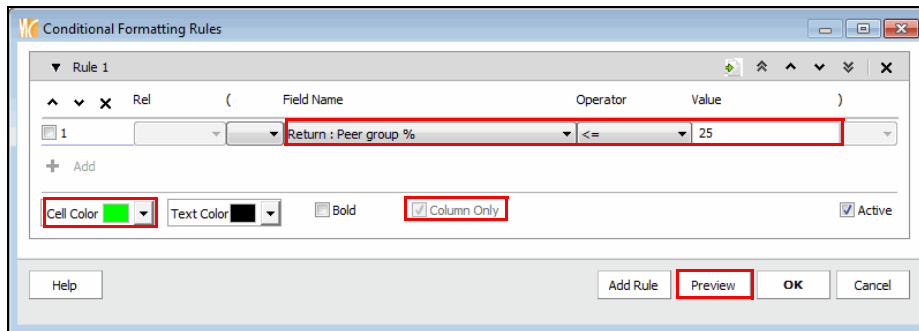
Select this option to highlight information on the report

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



Be sure to select the correct option here

- From the **Operator** drop-down field, select **<=**.
- In the **Value** field, type **25**.
- From the **Cell Color** drop-down field, select **green** in the upper-right corner.
- Be sure the box for **Column Only** is checked.
- Click **Preview** to ensure the rule is working as expected.



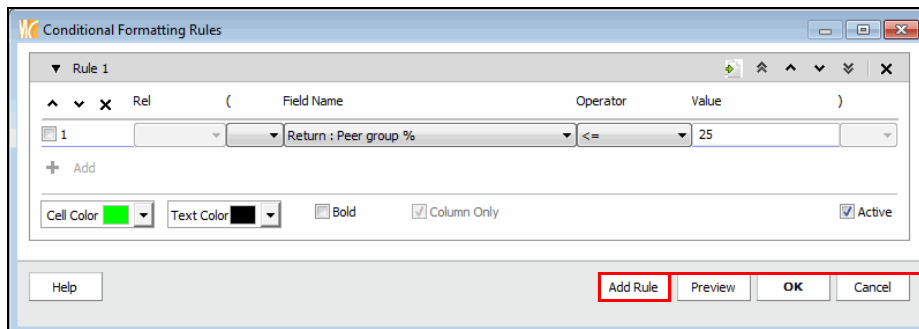
Note all of the highlighted values for this first rule.

- Click **OK**. The Conditional Formatting Rules dialog box closes.

In addition to highlighting funds when they appeared in the top quartile, you can also apply conditional formatting to the Morningstar Analyst Rating column, to help these values stand out. Do the following:

- From the toolbar above the grid view, from the **Tools** drop-down field, select **Conditional Format...Conditional Formatting**. The Conditional Formatting Rules dialog box opens.
- Click **Add Rule**. Rule 2 now appears.

Exercise 10: Apply conditional formatting to the Morningstar Analyst Rating



Click this button to add another formatting rule.

3. From the **Field Name** drop-down field, select **Morningstar Analyst Rating**.
4. The Operator field should show **=**.
5. From the **Value** field, select **Gold**.
6. From the **Cell Color** drop-down field, click **Custom**. The Custom Color dialog box opens.

Note the values for this rule.

Use this button to customize the color for these cells.

Field Name	Operator	Value
Morningstar Analyst Rating	=	Gold

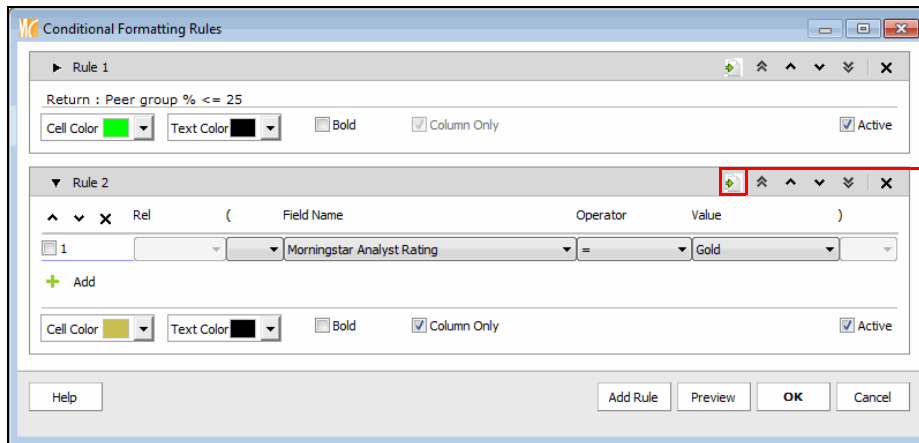
7. Set the following values:

- ▶ Red = **250**
- ▶ Green = **164**
- ▶ Blue = **29**

Be sure your values match those shown here.

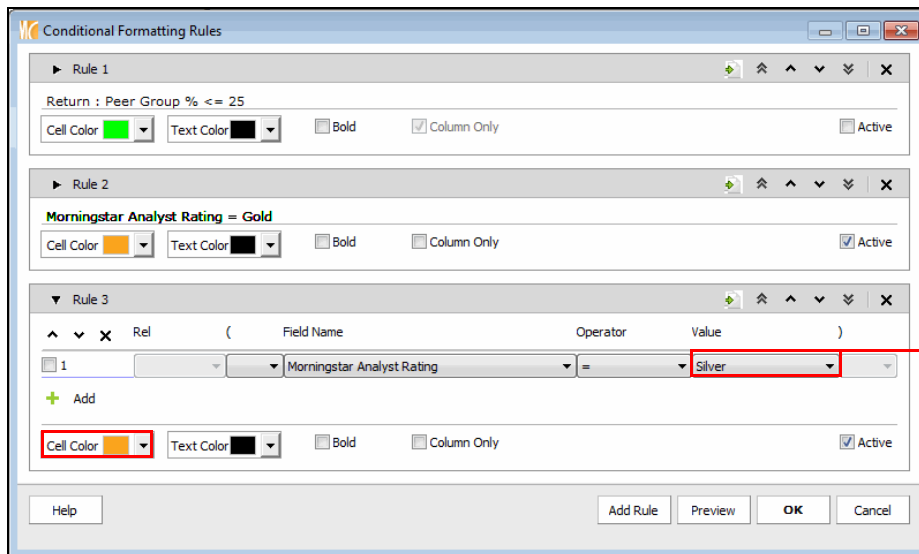
8. Click **OK**.
9. Be sure the **Column Only** box is checked.

10. To help you create multiple conditional formatting rules for the same column, you can use the Clone Rule icon. From the Rule 2 heading bar, click the **Clone Rule** icon. Rule 3 now appears. The Field Name, Operator, and Value fields are populated automatically based on the rule you cloned.



Be sure to click the Clone Rule icon for the correct rule.

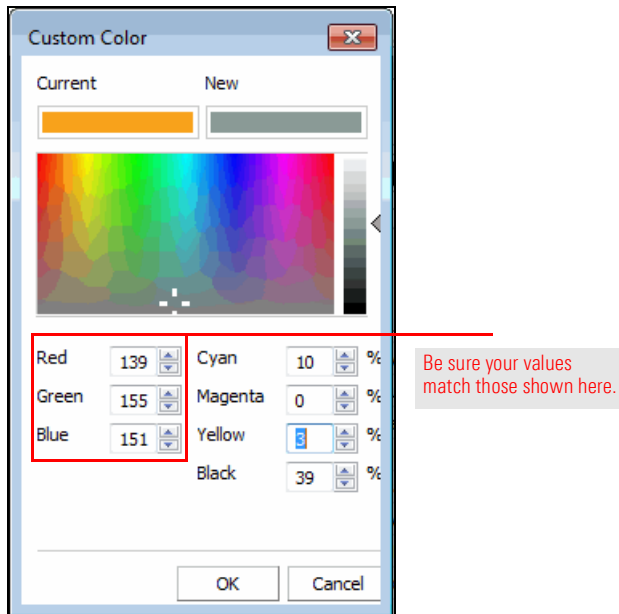
11. In the Rule 3 section, from the **Value** drop-down field, select **Silver**.
12. From the **Cell Color** drop-down field, click **Custom**. The Custom Color dialog box opens.



Be sure to change the value for this field.

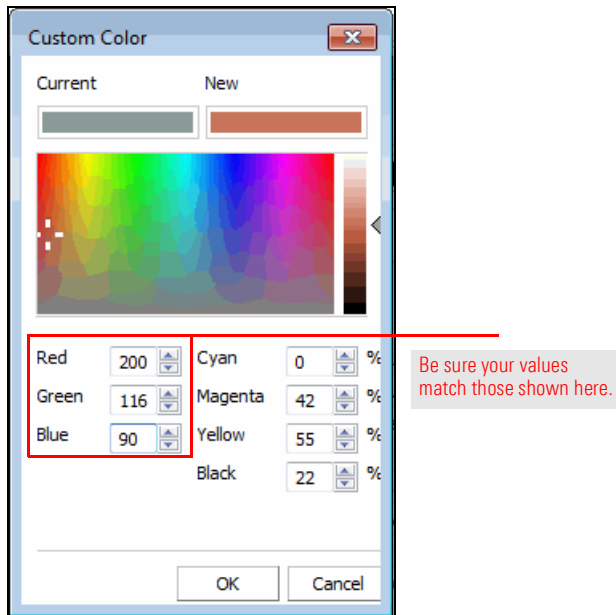
13. Set the following values:

- ▶ Red = **139**
- ▶ Green = **155**
- ▶ Blue = **151**



14. Click **OK** to close the Custom Color dialog box.
15. In the Conditional Formatting Rules dialog box, on the Rule 3 heading bar, click the **Clone Rule** icon. Rule 4 now appears.

16. In the for Rule 4 section, from the **Value** drop-down field, select **Bronze**.
17. From the **Cell Color** drop-down field, select **Custom**. The Custom Color dialog box opens.
18. Set the following values:
 - ▶ Red = **200**
 - ▶ Green = **116**
 - ▶ Blue = **90**



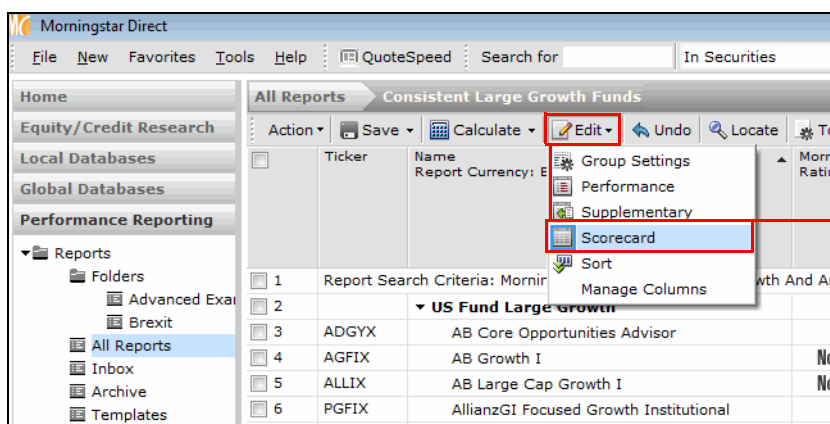
19. Click **OK** to close the Custom Color dialog box.
20. Click **OK** to close the Conditional Formatting Rules dialog box.

Conditional formatting is helpful, but it still is not clear which funds have actually performed consistently well. Remember, your manager stated that to be considered a top performer, a fund had to be in the top quartile at least 75% of the time over these time periods. This calculation can be done with the Scorecard feature. A new column will be added to each time period, as well as to the right side of the report for the Total Score of each fund across these time periods.

In this instance, each time a fund appears in the top quartile of its category for a time period, it will be given a score of one point. If it is not in the top quartile, it will not receive any points. Once you add a scorecard to a performance report, you will need to recalculate the report.

To create a Scorecard for this set of investments, do the following:

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

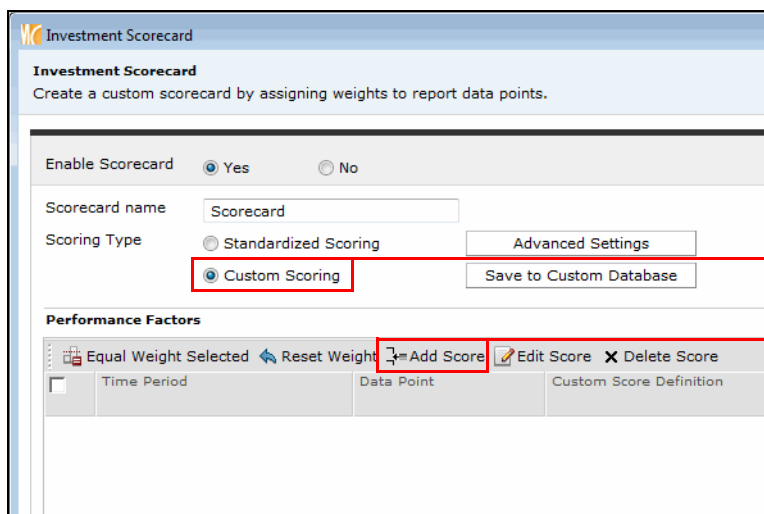


Select this option from the Edit icon's drop-down field.

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

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

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



Be sure to select this option to create your own scoring rules.

Use this icon to create your custom scorecard.

4. The Time Period field should read All Time Periods. From the **Data Point/Rank Selected** drop-down field, select **Return: Peer group %**.
5. In row 1, enter the following values:

Operator	Value1	Score	Display
<=	25	1	1

Custom Score Setting

Time Period: All Time Periods

Data Point/Rank Selected: Return: Peer group %

Custom Score Name: Return: Peer group % Score

Default Score Value: 0 Display: 0

	Operator	Value1	Value2	Score	Display
1	<=	25		1	1

Note the highlighted values for this rule.

6. Click **OK** to close the Custom Score Setting dialog box.
7. Click **OK** to close the Investment Scorecard dialog box.
8. From the toolbar above the spreadsheet grid, click **Calculate**.

Morningstar Direct

File New Favorites Tools Help QuoteSpeed Search for In S

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Advanced Exa

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All Reports

All Reports

Untitled Performance Report

Action Save Calculate Edit Undo

Ticker Name

Report Currency: Base Currency

1 Report Search Criteria: Morningstar Category = Large

2

3

4

US Fund Large Growth

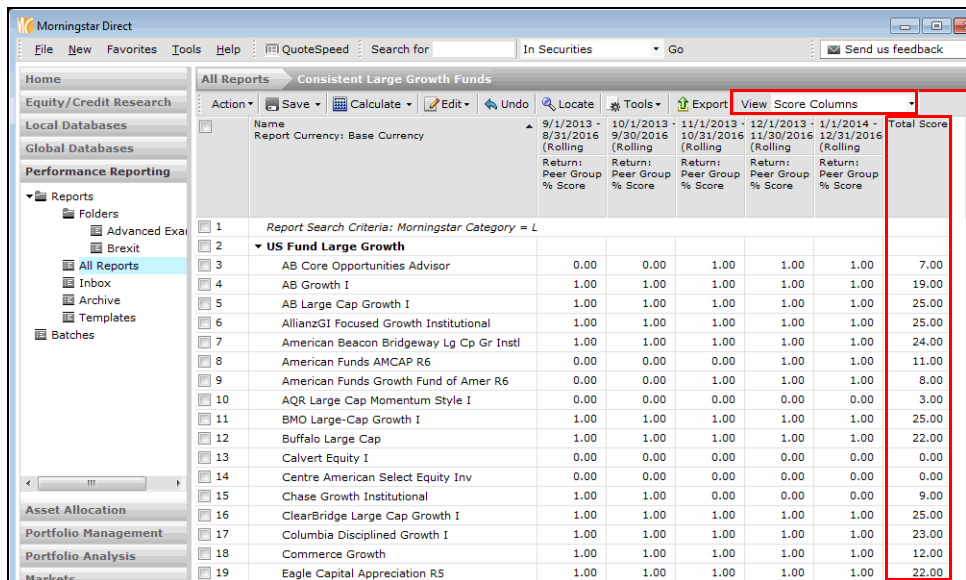
AB Core Opportunities Advisor

AB Growth I

Because the parameters of the report have changed, it needs to be recalculated.

9. When the confirmation message opens, click **Yes** to view the report.

- To see only the scores, from the toolbar above the grid view use the **View** drop-down field to select **Score Columns**. Note the new Total Score column on the far right side.



Select this option to see only the score columns for the report.

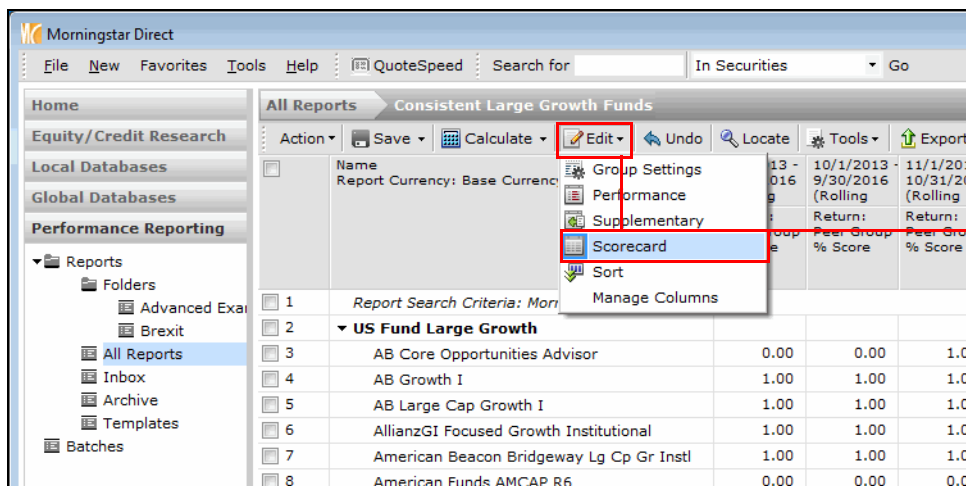
The Total Score column was added to the report.

Name	9/1/2013 - 8/31/2016 (Rolling)	10/1/2013 - 9/30/2016 (Rolling)	11/1/2013 - 10/31/2016 (Rolling)	12/1/2013 - 11/30/2016 (Rolling)	1/1/2014 - 12/31/2016 (Rolling)	Total Score
Report Search Criteria: Morningstar Category = L						
US Fund Large Growth						
AB Core Opportunities Advisor	0.00	0.00	1.00	1.00	1.00	7.00
AB Growth I	1.00	1.00	1.00	1.00	1.00	19.00
AB Large Cap Growth I	1.00	1.00	1.00	1.00	1.00	25.00
AllianzGI Focused Growth Institutional	1.00	1.00	1.00	1.00	1.00	25.00
American Beacon Bridgeway Lg Cp Gr Instl	1.00	1.00	1.00	1.00	1.00	24.00
American Funds AMCAP R6	0.00	0.00	0.00	1.00	1.00	11.00
American Funds Growth Fund of Amer R6	0.00	0.00	1.00	1.00	1.00	8.00
AQR Large Cap Momentum Style I	0.00	0.00	0.00	0.00	0.00	3.00
BMO Large-Cap Growth I	1.00	1.00	1.00	1.00	1.00	25.00
Buffalo Large Cap	1.00	1.00	1.00	1.00	1.00	22.00
Calvert Equity I	0.00	0.00	0.00	0.00	0.00	0.00
Centre American Select Equity Inv	0.00	0.00	0.00	0.00	0.00	0.00
Chase Growth Institutional	1.00	1.00	0.00	0.00	0.00	9.00
ClearBridge Large Cap Growth I	1.00	1.00	1.00	1.00	1.00	25.00
Columbia Disciplined Growth I	1.00	1.00	1.00	1.00	1.00	23.00
Commerce Growth	1.00	1.00	1.00	1.00	1.00	12.00
Eagle Capital Appreciation R5	1.00	1.00	1.00	1.00	1.00	22.00

The information in the score columns is useful, but it would be nice to summarize the scores, and then analyze the funds. How many have been truly consistent over all 25 time periods? Do the following:

Exercise 12: Add a summary column for various scores

- From the toolbar above the spreadsheet grid, from the **Edit** drop-down field, select **Scorecard**. The Investment Scorecard window opens.



As before, use this option to create a scorecard column.

Name	9/1/2013 - 8/31/2016 (Rolling)	10/1/2013 - 9/30/2016 (Rolling)	11/1/2013 - 10/31/2016 (Rolling)	12/1/2013 - 11/30/2016 (Rolling)	1/1/2014 - 12/31/2016 (Rolling)	Total Score
Report Search Criteria: Morningstar Category = L						
US Fund Large Growth						
AB Core Opportunities Advisor	0.00	0.00	1.00	1.00	1.00	7.00
AB Growth I	1.00	1.00	1.00	1.00	1.00	19.00
AB Large Cap Growth I	1.00	1.00	1.00	1.00	1.00	25.00
AllianzGI Focused Growth Institutional	1.00	1.00	1.00	1.00	1.00	25.00
American Beacon Bridgeway Lg Cp Gr Instl	1.00	1.00	1.00	1.00	1.00	24.00
American Funds AMCAP R6	0.00	0.00	0.00	1.00	1.00	11.00

2. From the toolbar in the Performance Factors section, click **Add Score**. The Custom Score Setting dialog box opens.

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

Enable Scorecard: ☒ Yes ☐ No

Scorecard name:

Scoring Type: ☐ Standardized Scoring ☒ Custom Scoring

Buttons:

Performance Factors

Equal Weight Selected ☒ Reset Weight ☒ **Add Score** ☒ Edit Score ☒ Delete Score

	Time Period	Data Point	Custom Score Definition	% Weight
<input type="checkbox"/> 1	1/1/2012 - 12/31/2014	Return: Peer Group % Sc Less Than Or Equal To 25	Display = 1; Greater T	0%
<input type="checkbox"/> 2	2/1/2012 - 1/31/2015	Return: Peer Group % Sc Less Than Or Equal To 25	Display = 1; Greater T	0%
<input type="checkbox"/> 3	3/1/2012 - 2/28/2015	Return: Peer Group % Sc Less Than Or Equal To 25	Display = 1; Greater T	0%
<input type="checkbox"/> 4	4/1/2012 - 3/31/2015	Return: Peer Group % Sc Less Than Or Equal To 25	Display = 1; Greater T	0%

Click this button to create an additional score column.

3. From the **Time Period** drop-down field, select **Score**. The Data Point/Rank Selected drop-down field should show Total Score.

Custom Score Setting

Time Period: **Score**

Data Point/Rank Selected: **Score**

Custom Score Name:

Default Display:

Buttons: ☒ Insert Rule

	Operator	Value
<input type="checkbox"/> 1	=	

Select this option to summarize the scores on the report.

4. In row 1 under Default Display, enter the following values:

Operator	Value1	Display
=	25	Consistent Performer

5. Click **Insert Rule** to create the following rule:

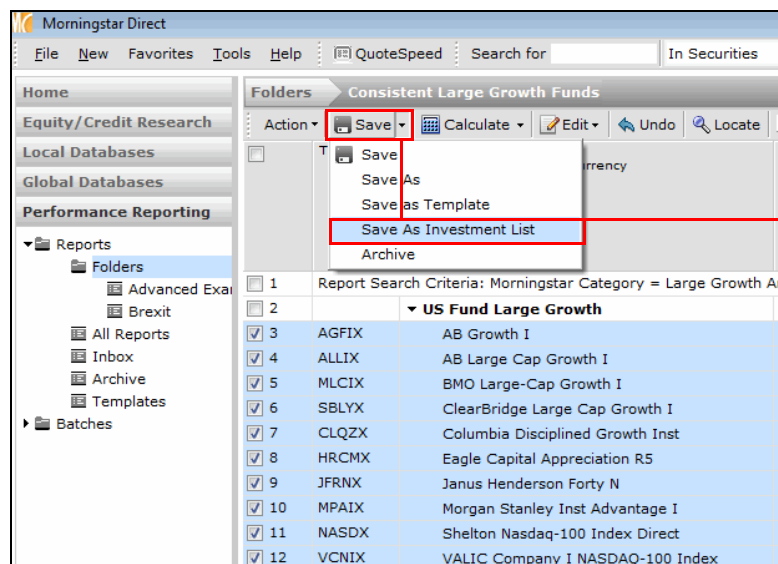
Operator	Value1	Display
<	25	Do Not Consider

6. Click **OK** to close the Custom Score Setting dialog box.
7. Click **OK** to close the Investment Scorecard window.
8. From the toolbar above the grid view, click **Calculate**.
9. When the confirmation message opens, click **Yes** to view the report.
10. **Scroll** to the right and **double-click** the **Total Score** column header to sort the content of this column.

Now that you know which funds should be considered consistent top performers, you can do further analysis on the portfolio of each one. The first step is to save these items to a list. Do the following:

Exercise 13: Save investments to a list

- For each fund in the Large Growth category marked as a Consistent Top Performer in the Total Score column, click the **checkbox** to the left of its row number
- From the toolbar, from the **Save** drop-down field, select **Save as Investment List**. The Save As dialog box opens.



Be sure to select the correct option to save these items to an investment list.

- In the **Name** field, type **Large Growth Consistent Performers**.
- Click **OK**.

You have now successfully generated a Performance Report, and saved the securities to a list for further analysis. To conduct that analysis, you will use the Portfolio Analysis module, which is covered in the next section.