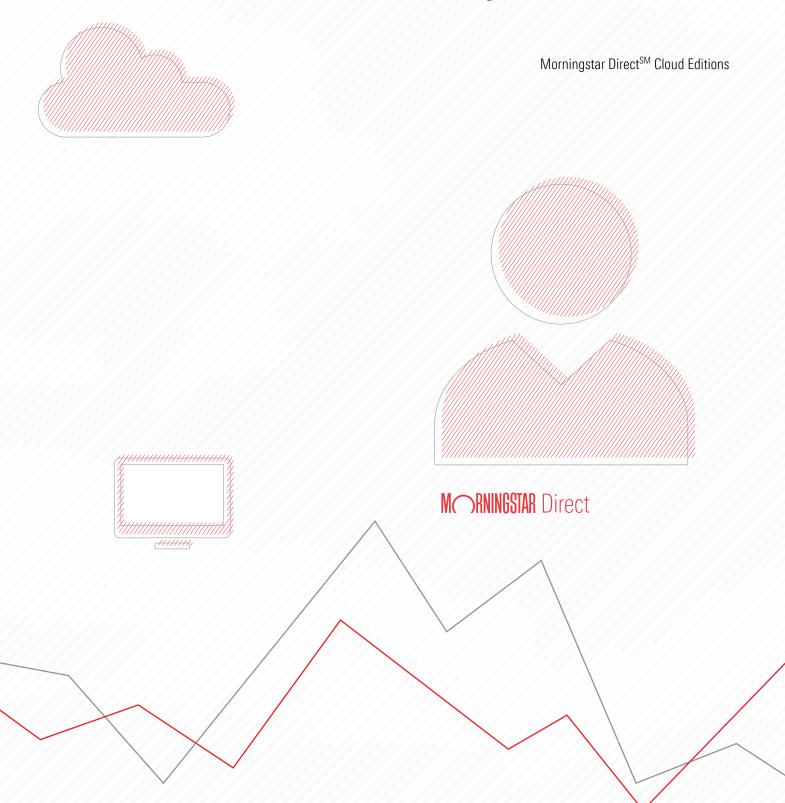
Using Presentation Studio



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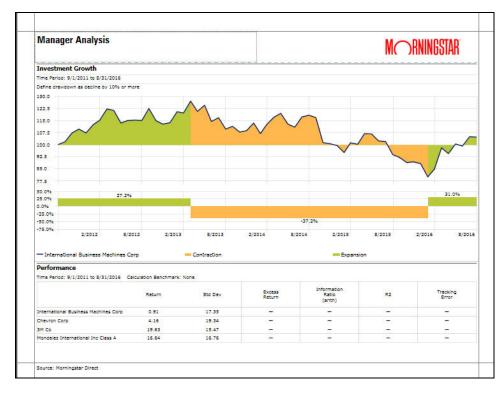
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Using Presentation Studio

In Morningstar DirectSM Cloud Editions, Presentation Studio is the standalone tool for creating custom presentations. With flexible charting and reporting capabilities, and access to Morningstar databases, Presentation Studio helps you communicate the data behind investments. You have control over both the content and format of your presentations, enabling you to use charts, tables, images, and text to tell your story.

Overview



Presentation Studio uses charts, tables, images, and text to communicate information about investments.

This guide describes the following topics:

- ► Introducing Presentation Studio (page 8)
- ► Working with Factsheets and Workbooks (page 22)
- ► Working with a Template (page 25)
- ► Working with Chart and Table Components (page 42)
- ► Using Workbook Settings and Component Settings (page 64)
- ► Creating a New Page (page 81)



Using Presentation Studio Overview

- ► Customizing a Component (page 89)
- ► Working with Headers, Footers, Images, and Watermarks (page 98)
- ► Creating a Template (page 116)
- ► Publishing a Presentation Studio Template (page 124)
- ► Creating a Batch Report (page 131)
- ► Using Components with Nonstandard Features (page 140)



Introducing Presentation Studio

Presentation Studio uses Morningstar data (as well as custom data, model portfolios, and custom benchmarks) to allow you to create reports with a predefined layout and look, or one of your own design. You can present information in a variety of charts, tables, and images, along with analysis and commentary from Morningstar Research. **Overview**

This section helps you understand the following:

- ► Presentation Studio terminology (page 8)
- ► what you can create in Presentation Studio (page 10)
- ► how to download and install Presentation Studio (page 13)
- ▶ what you can do on the Presentation Studio Home page (page 15)
- ► what you can do in the Application Settings (page 17)
- ► how to change the colors used in charts throughout Presentation Studio (page 17), and
- ▶ how Application Settings, Workbook Settings, and Component Settings relate to each other (page 20).

Some of the terms used in Presentation Studio and this guide might be new to you. They are defined in this table.

What Presentation
Studio terminology
do I need to know?

Term	Definition
Factsheet	A factsheet is a document containing information (rating, performance, holdings, and so on) about an investment. It cannot present information for multiple investments at once. It typically presents key data as tables, charts, and text. To view a sample, see What is a factsheet? on page 22.
Workbook	A workbook is a detailed document (usually multiple pages) containing comprehensive information (rating, performance, holdings, and so on) on up to 50 investments. It is frequently used to compare investments or model portfolios. To view a sample, see What is a workbook? on page 24.
Report	A report is a document reflecting information for a specific investment (or investments, in the case of a workbook). In this guide, a report is a factsheet or a workbook.
Template	A template is a Presentation Studio document created to serve as the basis for a specific type of report. A template typically contains text, charts, tables, and images selected to present information in service of the template's purpose. When a template is used as the basis for a report, its content updates to reflect the investment(s) selected for inclusion in the report. For more information, see Working with a Template on page 25.



Term	Definition
Morningstar template	A Morningstar template is created by Morningstar experts to serve as the basis for a specific type of report. Morningstar templates are included in Presentation Studio. For more information, see Working with a Template on page 25.
Component	A component is an element used to present a specific type of information about an investment or investments. Tables, charts, text, and images are components. Each of these is described in this guide.
Component category	Tables and charts are categorized by function. For instance, Markets, Time Series, and Holdings Analysis are different component categories. Markets charts include Markets Growth and Markets Trailing Returns Bar Chart, among others. Markets tables include Markets Summary and Markets Historical Performance, among others. For more information, see Working with Chart and Table Components on page 42.



In Presentation Studio, you can create a variety of reports: workbook, factsheet, and retirement plan review, to name only a few.

What can I create in Presentation Studio?

The exciting part of Presentation Studio is that you can use Morningstar data and research in a graphic page layout.

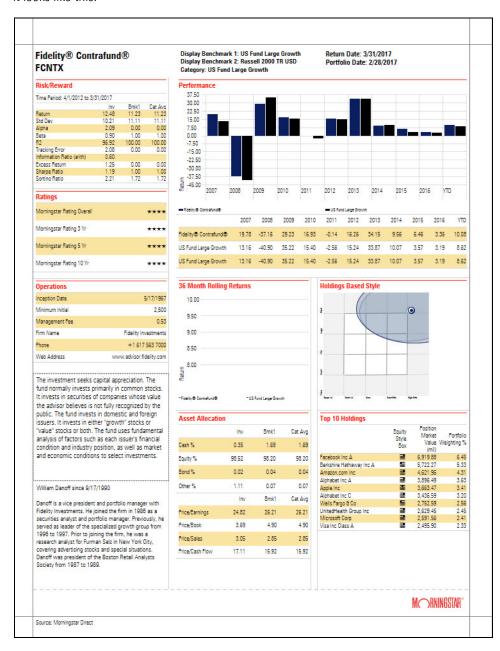
Note: If you have not worked with page layout before, don't worry. The processes presented in this guide do not require a background in design.

For instance, you can have a page divided into sections and laid out like this:





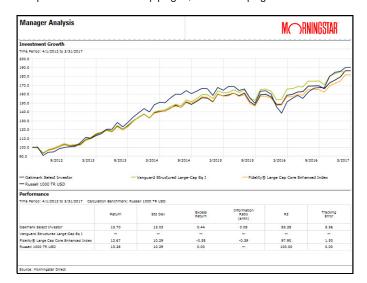
With a few clicks, you can populate it with data and Morningstar research content, so it looks like this:

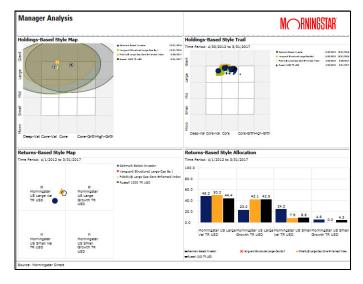


Each cell now contains a chart, table, or text representing Morningstar data and analysis.

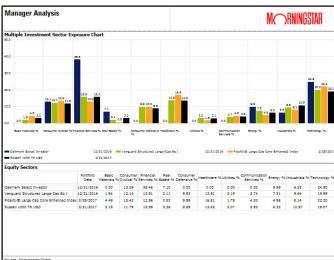


A report can contain many pages, and each page can have a different layout.





The three pages shown here are all from a single Presentation Studio workbook



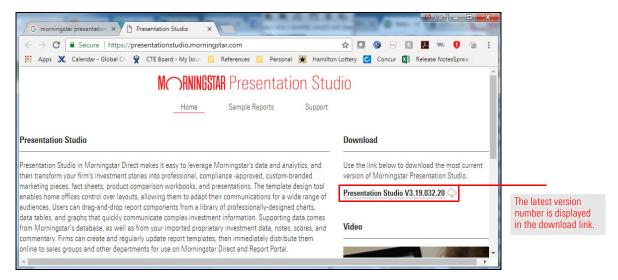


Presentation Studio is a standalone tool, separate from other Morningstar cloud products. In this exercise, you will learn how to download and install Presentation Studio.

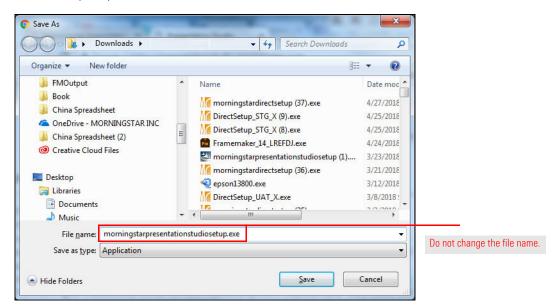
Exercise 1: Download and install Presentation Studio

To download and install Presentation Studio, do the following:

- 1. Click here. The Morningstar Presentation Studio home page opens.
- 2. On the right side of the page, in the Download area, click the **download link**.



3. You are prompted to save the morningstarpresentationstudiosetup.exe file. **Navigate** to a location on your system and click **Save**.





- 4. The action required in this step depends on your browser settings. Do one of the following:
 - ► If the file name is displayed in the download area at the bottom of the browser, click the **file name** and from the drop-down field, select **Open**. The Install Wizard window opens.
 - ► If the file name is not displayed in the download area of the browser, **navigate** to the location where you saved the morningstarpresentationstudiosetup.exe file. **Double-click** the **file** to launch the Install Wizard.
- 5. Follow the on-screen **instructions** in the Install Wizard.
- 6. When the installation is complete, launch **Presentation Studio**. The login screen opens.
- 7. **Log in** with your usual credentials for Morningstar OfficeSM Cloud or a Morningstar Direct cloud edition. The Presentation Studio Home page opens.
 - Note: The Installation Wizard creates a shortcut to Presentation Studio on your desktop. You can launch Presentation Studio at any time by clicking the shortcut icon.



From here, you can create new reports and templates, as well as access existing ones



The Home page is the starting point for your work in Presentation Studio. From here, you can open an existing report or template, or create a new report or template.

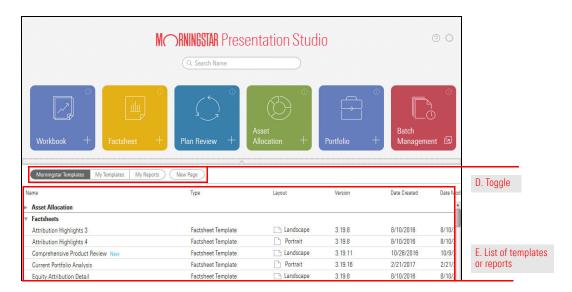
Note: See What Presentation Studio terminology do I need to know? on page 8 to review the definitions of workbook, factsheet, template, and other terms. What can I do on the Presentation Studio Home page?



- A. Click the **Application Settings** icon to open the Application Settings. For information about the Application Settings, see What can I do in the Application Settings? on page 17.
- B. Click a **tile** to create a new report of that type.

- C. Click the **Minimize bar** to reduce the size of the top portion of the Home page.
- Note: The Minimize bar is especially useful when viewing Presentation Studio on a small screen





- D. On the toggle, click a **selection** to display a list of Morningstar Templates, your templates (My Templates), or your reports (My Reports).
- E. The list reflects the selection on the toggle. From the list, you can do the following:
- ► **Double-click** an **entry** to open that template or report;
- ► **Sort** on any column by clicking the column header (Name, Type, and so on);
- ► Scroll down to see more list entries; and
- Scroll right to display additional columns (Version, Owner, Permission, Date Created, and Date Modified).



The Application Settings are comprised of options you can use to customize Presentation Studio. The following are a few examples of features controlled in the Application Settings window:

What can I do in the Application Settings?

- ► language used in your reports
- ► fonts used in various text elements
- ► start and end dates used in your reports
- ► custom groupings, and
- ► default Display benchmarks.

The Application Settings affect reports and templates created in your installation of Presentation Studio. In general, the settings apply only to new reports and templates; existing reports and templates are not affected.

As an example of changing an application setting, update the colors used for charts to reflect those of your firm.

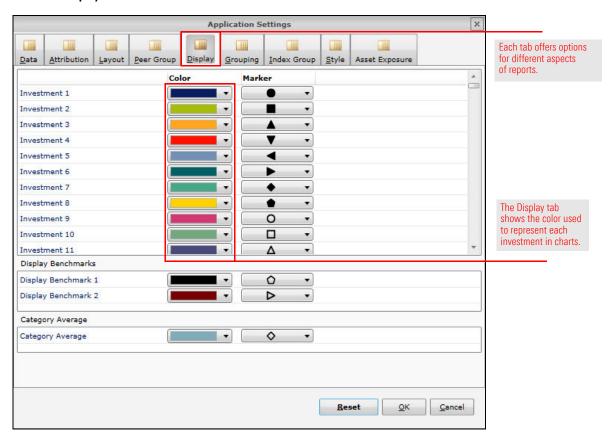
Exercise 2: Change the colors used in charts

To change the default colors to be used in charts, do the following:

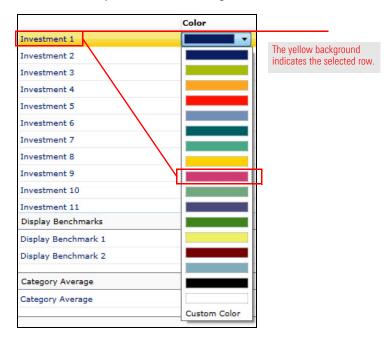
1. On the Presentation Studio Home page, in the upper-right corner, click the **Application Settings** icon. The Application Settings window opens.



2. Select the **Display** tab.

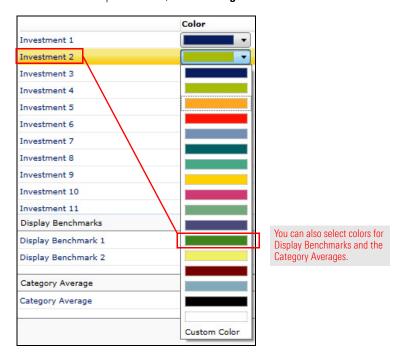


- 3. Click the **Investment 1 row** to select it.
- 4. From the **Color** drop-down field, select **Magenta**.





- 5. Click the **Investment 2 row** to select it.
- 6. From the **Color** drop-down field, select **Dark green**.



7. Click **OK**. The Application Settings window closes.

These colors are used in the reports you create from this point on.



In addition to Application Settings (which affect every new template and report you create), Presentation Studio includes two sets of more granular settings — Workbook Settings and Component Settings. It is important to understand how Application Settings, Workbook Settings, and Component Settings relate to each other, as summarized in the following table:

How do Application, Workbook, and Component Settings relate to each other?

When you customize a setting here	This is the effect
Application Settings	The new setting is applied to every template and report you create from this point on. Existing templates and reports are not affected, with the exception of time periods (discussed later in this guide).
Workbook Settings	The new setting overrides the similar setting in Application Settings. The workbook setting is applied throughout the report (except in individual components with different customization in the setting, which is described later in this section). The new setting also affects any components you later add to the report. Finally, if you use the report as the basis for another report or a template, the Workbook Settings are in effect in the new report or template.
Component Settings	The new setting overrides any similar setting in Workbook Settings, but for only the selected component. If a report with a custom setting in a component is used as the basis for another report or a template, the new setting is in effect in the component in a new report or template. In other words, the components in the new report or template displays one-year rolling windows, except for the one component, which displays a two-year rolling window.

Suppose you are working on a report based on a template with a rolling window setting of three years. The template perfectly suits the report with one exception: you need to display a rolling window of one year throughout the report. Using Workbook Settings, you can change the rolling window setting for the report, without affecting other reports or templates.

Now, let's further suppose that in this report (which now displays one-year rolling window data), you want a specific component to display a two-year rolling window. Using Component Settings, you can change the rolling window setting for the specific component, without affecting other components in the report.

What happens to a component with a custom setting if the Workbook Settings for the report or Application Settings change in a way that conflicts with the component's settings? The custom component setting is not affected by the change in Workbook or Application Settings.



Think of it like this: the smaller the setting's impact, the more powerful it is, as follows:

- ► Application Settings have a large impact, affecting all reports and templates you create from that point on
- Workbook Settings affect only one report. They have a smaller impact than Application Settings, therefore Workbook Settings take precedence over Application Settings, but only in a single report; and
- ► Component Settings affect only one component. They have the smallest impact of all; therefore Component Settings take precedence over Workbook Settings, but only in a single component.

Exercises using Workbook Settings and Component Settings are covered later in this guide.



Working with Factsheets and Workbooks

This guide contains information about the most common Presentation Studio reports — workbooks and factsheets. Whether you are working with a factsheet or a workbook, the same charts, tables, and research content are available.

Overview

Note: In this guide, when information is applicable to both a workbook and factsheet, the word "report" is used to mean "workbook or factsheet."

In this section, you will learn the following:

- ▶ what a factsheet is (page 22), and
- ► what a workbook is (page 24).

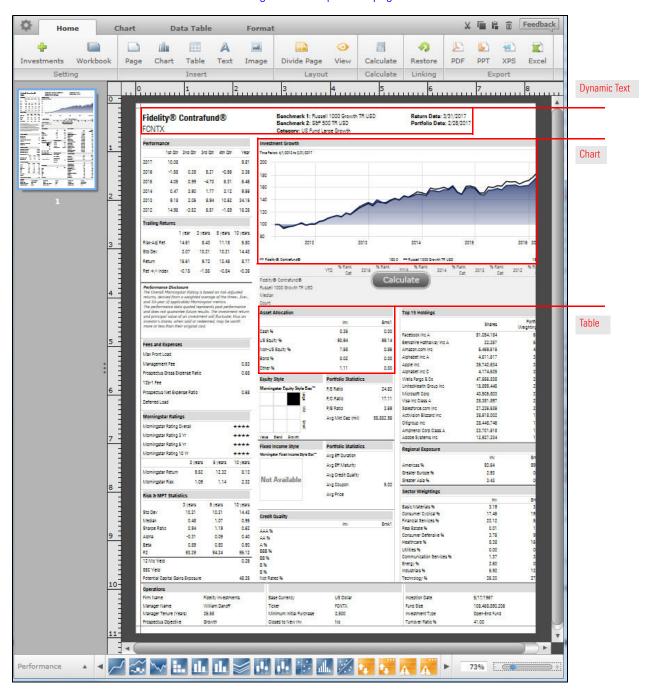
A factsheet is a document containing information (rating, performance, holdings, and so on) about an investment. It cannot depict information for multiple investments. It presents key data as tables, charts, and text.

What is a factsheet?

The sample shown on the next page is based on the Morningstar template for an Investment Detail Report and has a portrait layout (8.5" wide by 11" tall).



The called-out features are described in Working with a Template on page 25.





A workbook is a detailed document (usually multiple pages) containing comprehensive information (rating, performance, holdings, and so on) for up to 50 investments. It is frequently used to compare investments or model portfolios.

What is a workbook?

The sample page shown here is based on the Morningstar template for an Equity Manager Analysis workbook and has a landscape layout (11" wide by 8.5" tall).





Working with a Template Overview

Working with a Template

In Presentation Studio, the simplest way to create a new report is to base it on a template or an existing report.

The section helps you understand the following:

- why you should use a template or an existing report to create a new report (page 25)
- ► how to select a template for a new report (page 26)
- ▶ how to use Search to select an investment for a new report (page 29)
- ▶ how to create a list of investments (page 36) and
- ▶ how to use a saved list to select investments to a new report (page 37).

You can customize the layout and content of your report, but keep in mind that the person who created the template (also referred to as the template builder) might have set limitations on what you can do.

In this section, you will work with the Morningstar Investment Performance factsheet template. The process can also be used when working with a workbook template; a portfolio template, however, is different. Working with a portfolio template is discussed in Creating a Template on page 116.

By using a template or existing report as a starting point, you can create a new report in a few simple steps.

Morningstar factsheet templates are designed to summarize data and information about one investment. Morningstar workbook templates are designed to comprehensively illustrate data and information about multiple investments. Morningstar templates have been designed for many different scenarios (such as Stock Analysis and Attribution Highlights), but the steps for using a template are consistent throughout Presentation Studio.

If you want your report to closely resemble a Morningstar template, a custom template, or an existing report, the overall process is as follows:

- 1. Open a template or report with design and content similar to what you want to create.
- 2. Select the investment(s) to be reflected in your report.
- 3. (Optional) Select the benchmarks to be used for comparison in your report
- 4. (Optional) Modify the design (colors, font, page layout, and so on) and content (charts, text, tables, and so on).

Overview

Why should I use a template or an existing report to create a new report?

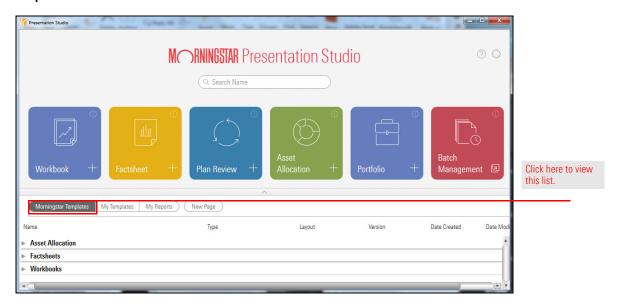


In this exercise, the Morningstar Investment Performance Factsheet template is used to demonstrate the process of working with a factsheet template; however, the steps for using any Morningstar template, a custom template, or an existing report are the same, except where noted.

Exercise 3: Select a template

To create a new factsheet from a template, do the following:

 On the Presentation Studio Home page, on the toggle, be sure the Morningstar Templates tab is selected.



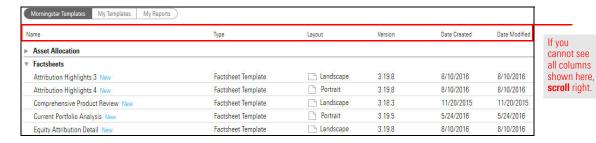
The list of Morningstar template categories opens, displaying the following:

- Asset Allocation
- ► Factsheets, and
- ► Workbooks.
- Note: If you had selected My Templates, the list would display the custom templates available to you. If you had selected My Reports, the list would display your existing reports.

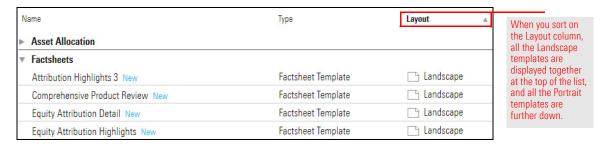


2. Click the **arrow** to the left of Factsheets. The Factsheet category expands to display the Morningstar Factsheet templates.





3. Initially, the templates (or reports) are listed alphabetically. You can sort on any column by clicking the column heading. Click the **Layout** column heading. The list sorts on that column and an arrow appears next to the heading. To reverse the sort order, **click** the arrow next to the heading.



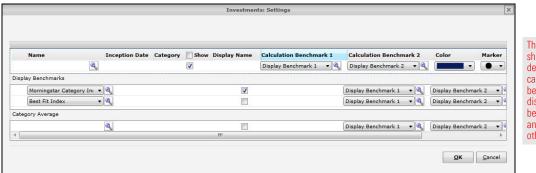


Working with a Template Exercise 3: Select a template

4. In the list, scroll down and double-click Investment Performance Factsheet.



The Investments: Settings dialog box opens.



The dialog box shows the default calculation benchmarks, display benchmarks, and other settings.



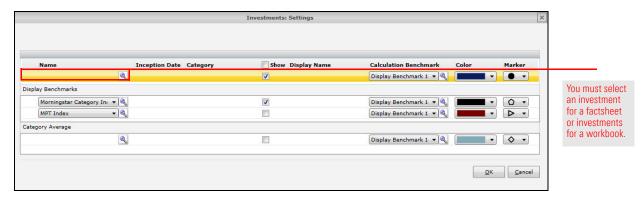
In the Investments: Settings dialog box, changing the default selections for benchmarks, colors, and so on is optional, but you must select at least one investment to be the focus of the report.

Exercise 4: Select an investment

In the Investments: Settings dialog box, the following fields are not filled in:

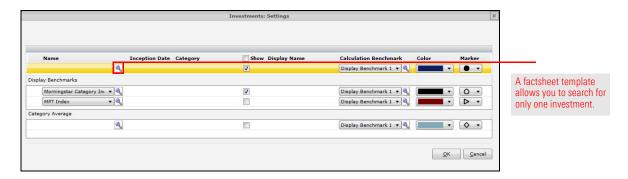
- ► Name
- ► Inception Date
- ► Category, and
- ► Display Name.

When you have selected an investment and it is displayed in the Name field, the Inception Date, Category, and Display Name fields auto-fill.



In this exercise, search for an investment to populate the factsheet. Do the following:

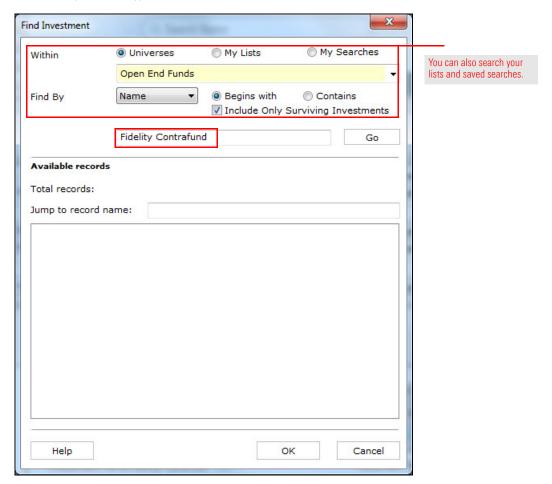
- 1. In the Investments: Settings dialog box, in the Name column, click the **Search** icon. The Find Investment dialog box opens.
 - Note: When creating a new workbook, you can also use search to select multiple investments.





2. In the Within area, click the **Universes** button, and from the drop-down field, select **Open End Funds**.

3. In the Find By text field, type **Fidelity Contrafund**.

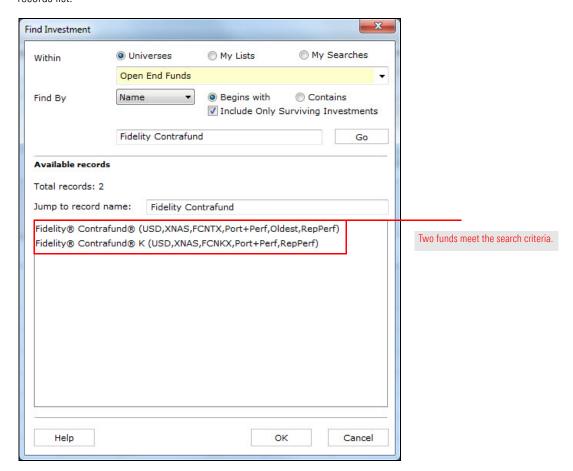


In the Open End Funds universe, you are searching for investments whose names begin with Fidelity Contrafund.

Note: Users who have access to the HFR database can select an HFR fund when setting up a workbook or factsheet. The data populates using monthly returns.

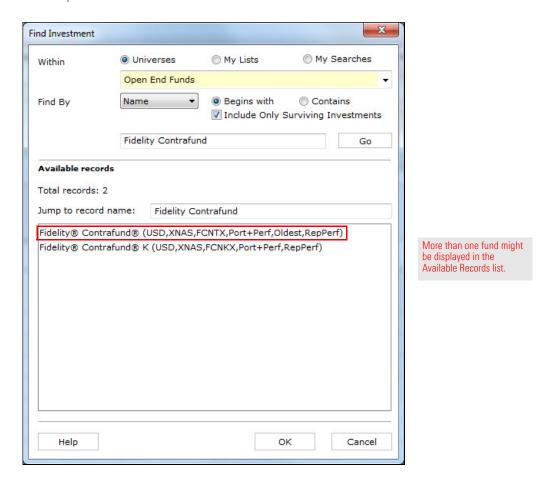


4. Click **Go**. The investments meeting your search criteria are shown in the Available records list.





- In the Available Records list, select Fidelity® Contrafund® (USD,XNAS,FCNTX,Port+Perf,Oldest,RepPerf).
 - Note: Even if only one fund is displayed in Available Records, you must still select it to add it to the report.



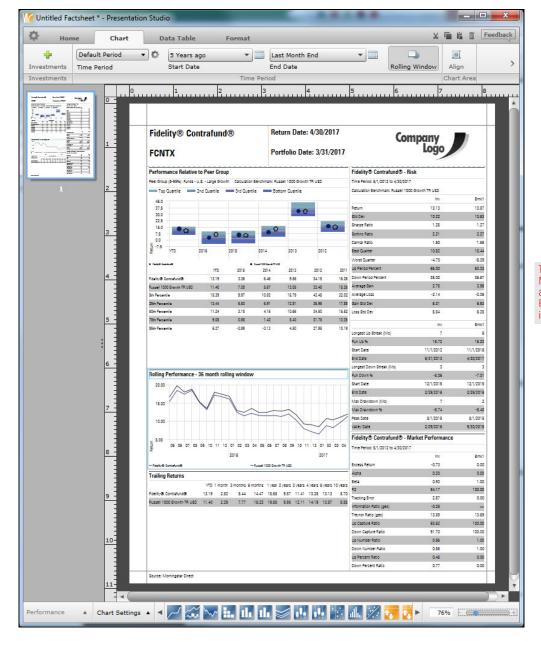
6. Click **OK**. The Investment Settings dialog box is displayed.



The highlighted settings automatically populate based on the selected investment.



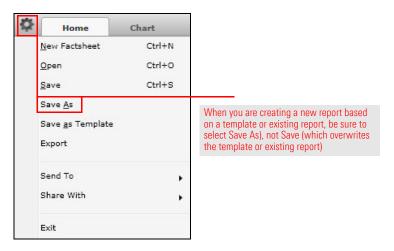
Click **OK** to close the dialog box. The factsheet window opens. The layout of the charts, tables, and text was predetermined in the template, but the content is specific to the investment you selected.



The most current Morningstar data and information on Fidelity Contrafund is displayed.



8. At the top-left corner of the window, click the **Application Settings** icon and from the menu, select **Save As** to give the report a name and save it. A dialog box opens.

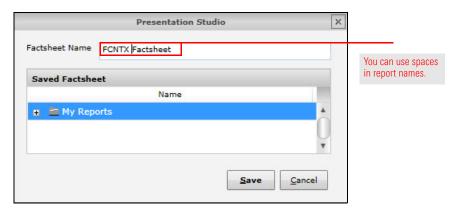


It is important to understand the Save options, which are described in the following table:

When you are working in a	And you select	The result is
Report	Save	The report is updated.
	Save As	A copy of the report is created as a new report (with a name you enter). The original report is unchanged from the last time you saved it.
	Save As Template	A copy of the report is created as a template (with a name you enter). The original report is unchanged from the last time you saved it.
Template	Save	If you built the template, it is updated. If you did not build the template (for example, a Morningstar template), your work is saved as a report. The template is unchanged.
	Save As	A copy of the template is created as a report (with a name you enter). In other words, when you are working with a template (as you are here) and you select Save As, a report is created. The template is unchanged.
	Save As Template	A copy of the template is created as a new template (with a name you enter). The original template is unchanged.

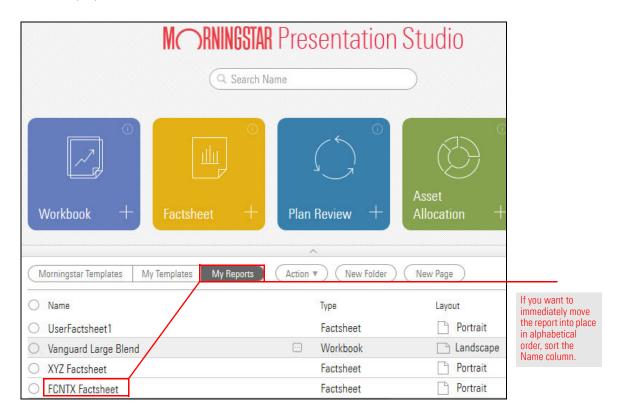


9. In the Factsheet Name field, type FCNTX Factsheet, then click Save.

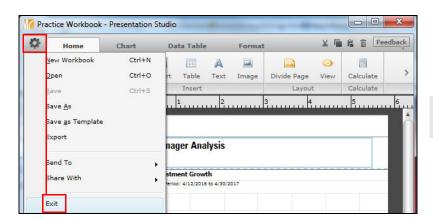


The report is stored in the My Reports folder and listed on the Presentation Studio Home Page when My Reports is selected on the toggle.

Note: On the Presentation Studio Home page, the new report is initially shown at the bottom of the My Reports list.



- 10. Close the factsheet by doing one of the following:
 - ► Click the **Application Settings** icon and select **Exit**, or
 - ► Click the **Close** icon (**X**) in the upper-right corner of the window.
 - Note: You can have only one report open at a time.



If you try to close a report with unsaved changes, you are prompted to save.

In the next exercise, you need a list of investments. You can use one of your existing lists, but you might find it easier to follow the steps in this guide if you replicate the list used here.

Exercise 5: Create a list of investments

To create a list matching the one in the exercise, do the following:

- 1. In your edition of Morningstar Direct Cloud, create a list containing the following investments:
 - Note: The tickers are shown in parentheses so that if you want, you can use them when creating the list.
 - ► ProShares Large Cap Core Plus (CSM)
 - ► ProShares S&P 500 Dividend Aristocrats (NOBL)
 - ► Vanguard S&P 500 ETF (V00)
 - ► PSDR SSGA US Large Cap Low Volatility ETF (LGLV), and
 - ► iShares Morningstar Large-Cap ETF (JKD).
- 2. Name the list Large Blend ETFs.

Morningstar Templates

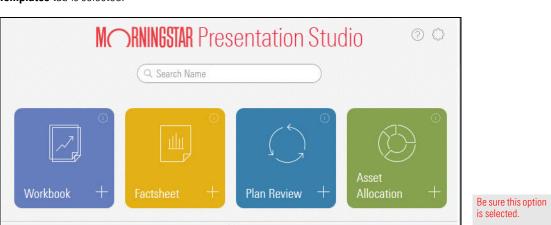
In this exercise, you will create a new workbook by selecting multiple investments from a saved list.

The Morningstar template, Equity Manager Analysis, is used to demonstrate the process of using a workbook template; however, the steps for using any Morningstar template, a custom template, or an existing report are the same, except where noted.

Note: To follow the steps here, you need a saved list with multiple managed investments, such as equity funds or equity ETFs. If you created the list Large Blend ETFs in the previous exercise, please use it here.

To add investments from a saved list to a new workbook, do the following:

 On the Presentation Studio Home page, on the toggle, be sure the Morningstar Templates tab is selected.



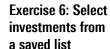
New Page

2. Click the **arrow** to the left of Workbooks. The Workbooks category expands to display the Morningstar workbook templates.

My Reports

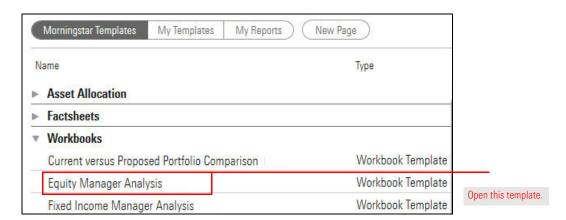
My Templates



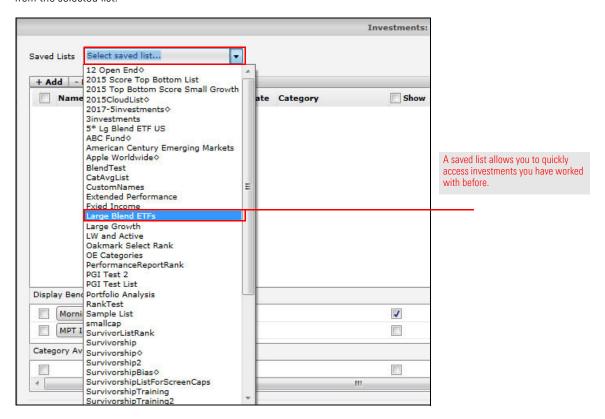




- 3. In the list, **double-click Equity Manager Analysis**. (You might need to scroll down to find this template.) The Investments: Settings dialog box opens.
 - Note: In this exercise, the Equity Manager Analysis template is used to compare two funds.

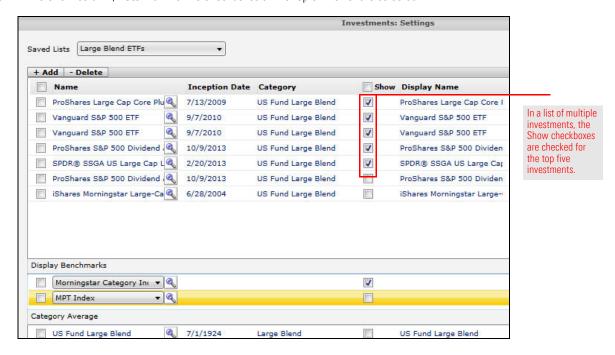


4. In the Investments: Settings dialog box, from the **Saved Lists** drop-down field, select the **name of a saved list**. The Investments: Setting dialog box displays the investments from the selected list.

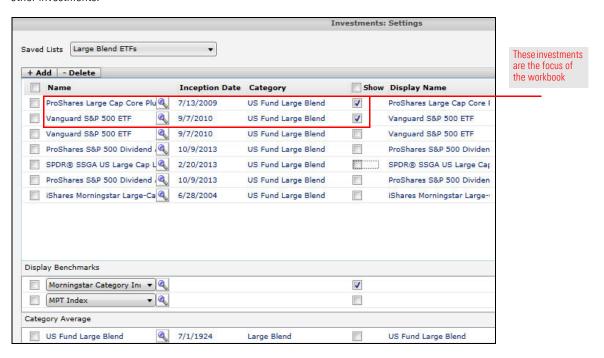




5. In the Show column, **note** that the five checkboxes at the top of the list are selected

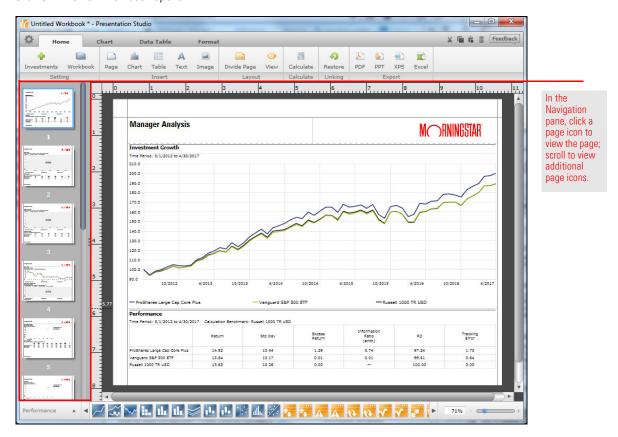


6. If an investment's Show checkbox is not checked, it will not be included in the workbook. To include only the top two investments in the workbook, **clear** the checkboxes for the other investments.





7. Click **OK**. The new workbook opens.

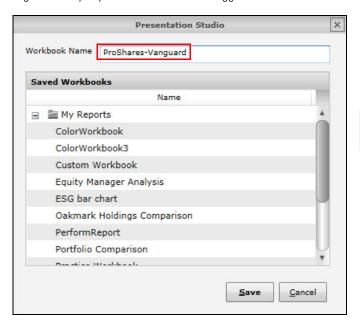


8. At the top-left corner of the Presentation Studio window, click the **Application Settings** icon and select **Save As.** A dialog box opens.



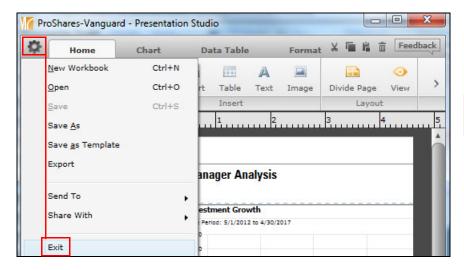
9. In the dialog box, in the **Workbook Name** field, enter **ProShares-Vanguard** then click Save.

The report is stored in the My Reports folder and listed on the Presentation Studio Home Page when My Reports is selected on the toggle.



Once saved, you can access the workbook from the Presentation Studio Home page.

- 10. Close **ProShares-Vanguard** by doing one of the following:
 - Click the Application Settings icon and select Exit, or
 - ► Click the **Close** icon (**X**) in the upper-right corner of the window.



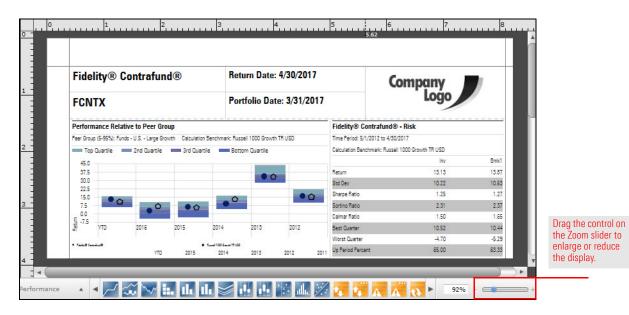
If you try to close a report with unsaved changes, you are prompted to save.

Working with Chart and Table Components

Components — charts, tables, and text — comprise the main content of a report. The look of the components (color, font, title, and so on), as well as some of the content (such as category and date range), is determined by settings in the following:

Overview

- ► the Presentation Studio Application Settings
- ► the Investments Settings
- ► the Workbook Settings, and
- ► the Component Settings.
 - Note: On a page with multiple components, you might need to zoom in to see a component more clearly or zoom out to view more of the page.



A Morningstar template contains charts, tables, text, and research content selected by Morningstar analysts to best serve that template's purpose, but you can easily replace, change, or delete any component.

Note: The same components are available in both factsheets and workbooks; however, plan reviews and portfolios are more limited. Plan reviews and portfolios are not covered in this guide.

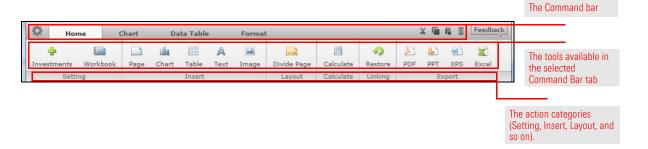
This section helps you do the following:

- ▶ understand what the Command bar is (page 43)
- ▶ use the Command bar to replace a component (page 43)
- ▶ understand what the Component bar is (page 49)
- ▶ use the Component bar to replace a component (page 50)
- ► resize a cell (page 53)
- ► rearrange components (page 56)
- ► delete a component (page 60), and
- ► remove a cell (page 62).



At the top of the Presentation Studio window, you see the Command bar, from which you can access many of the design and content tools. The Command bar has four tabs — Home, Chart, Data Table, and Format. Within each of the tabs, icons are categorized by action. For instance, on the Home tab, the Insert category contains the tool icons Page, Chart, Table, Text, and Image — elements you would insert in a report.

What is the Command bar?



You might decide an existing component does not significantly contribute to your presentation and a different component (not currently in the report) would be more useful.

When replacing components, you should understand the following:

- ► A table can be replaced with a chart and vice versa.
- A component from one category can be replaced with a component from another category, and
- ► A table component requiring a full page (represented by a green icon on the Component bar) cannot replace a component in a cell occupying only part of a page.

Exercise 7: Use the Command bar to replace a component

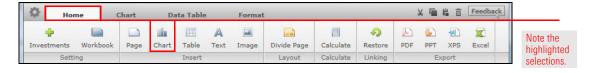


To use the Command bar to replace a component, do the following:

1. On the Presentation Studio Home page, on the toggle, select **My Reports**, then in the list of your reports, **double-click FCNTX Factsheet**.

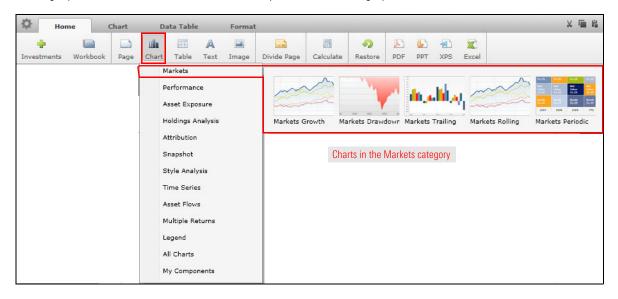


- 2. On the Command bar, be sure the **Home** tab is selected.
- 3. Click the **Chart** icon.

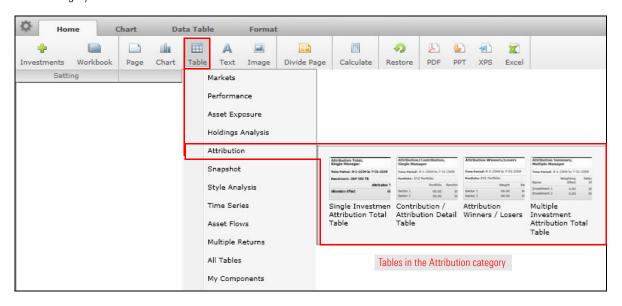




The Chart menu opens, displaying the chart categories (Markets, Performance, and so on). When you select a category from the Chart menu, a window opens to the right, showing representations and names of the chart components in that category.

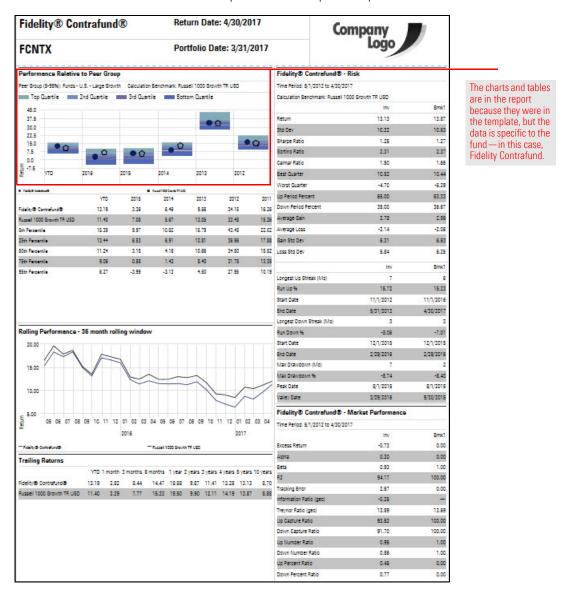


4. Click the **Table** icon. The Table menu opens, displaying the table categories (Markets, Performance, and so on). When you select a category from the Table menu, a window opens to the right showing graphic representations and names of the table components in that category.



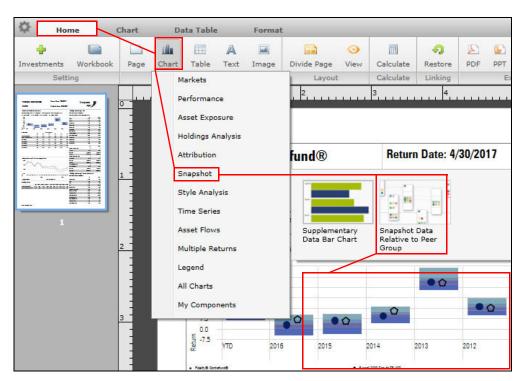


Notice the Performance Relative to Peer Group chart near the top of the report.



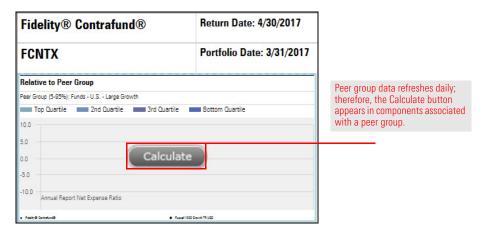


- 5. To replace the Performance Relative to Peer Group chart with a Snapshot Data Relative to Peer Group chart, select the **Home** tab, then select **Chart** > **Snapshot**.
- 6. Drag the **Snapshot Data Relative to Peer Group** icon to anywhere in the cell occupied by the Performance Relative to Peer Group chart.
 - Note: The area containing a component is called a cell.

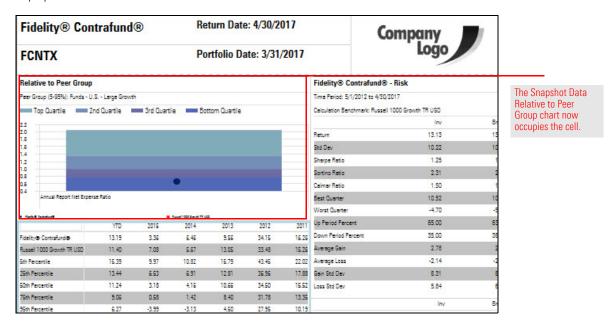


The new component proportionally sizes to fit the cell.

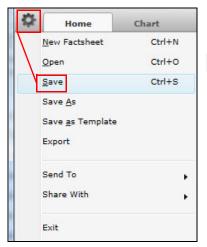
7. In the chart, click Calculate.



When the calculation finishes, the Snapshot Data Relative to Peer Group chart is displayed and reflects the current data.



8. To save your work, click the **Application Settings** icon at the top-left corner of the window and select **Save**.



Note the highlighted selections.

At the bottom of the Presentation Studio window, you see the Component bar, which is another way to access the chart and table components for your report. The Component bar displays the following:

What is the Component bar?

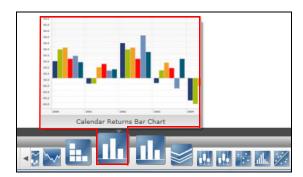
- ► the Component Category button
- ► the Component Settings button, which displays either Chart Settings or Table Settings, and
- ▶ icons representing tables and charts in the selected component category.
 - Note: You cannot insert images or text components from the Component bar.



This table lists the component categories (indicated by different colors) displayed in the component bar.

This color	represents this type of component			
Blue	A chart			
Orange	A table			
Green	A table requiring a full page			
	Note: The tables requiring a full page are Performance Reporting (Extended), Holding Intersection, and Leading Contributors/Detractors.			

In the Component bar, when you hover the cursor over a component icon, the icon enlarges and a pop-up opens, displaying the component name and a representation of the chart or table.



If you drag the cursor across the Component bar, pop-ups open as the cursor passes each icon.



You might decide an existing component does not contribute significantly to your presentation, and a different component (not currently on the page) would be more useful. You can select a chart or table icon from the Component bar.

Exercise 8: Use the Component bar to replace a component

Note: You cannot access text components from the Component bar.

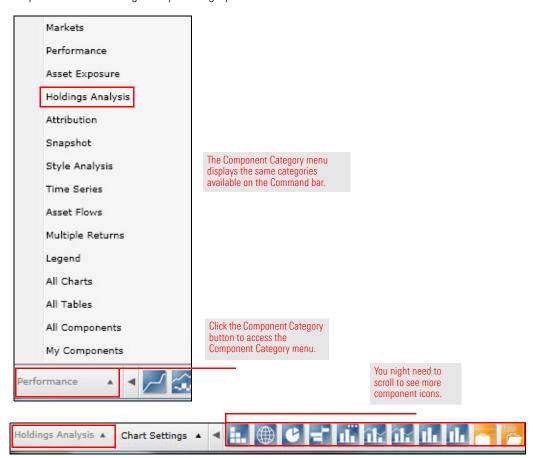
When replacing components, you should understand the following:

- ► A table can be replaced with a chart and vice versa.
- ► A component from one category can be replaced with a component from another category, and
- ► A table component requiring a full page (represented by a green icon on the Component bar) cannot replace a component in a cell occupying only part of

In this exercise, a chart (Rolling Performance - 36 month rolling window) is replaced with a table (Leading Contributors).

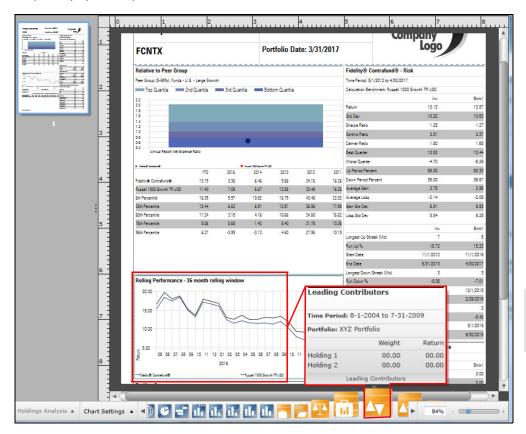
To use the Component bar to replace a component, do the following:

- 1. With the FCNTX Factsheet report open, at the bottom-left corner of the Presentation Studio window, click the **Component Category** button. The Component Category menu opens above the button.
- 2. Select **Holdings Analysis**. The icons on the Component bar now display only the components in the Holdings Analysis category.





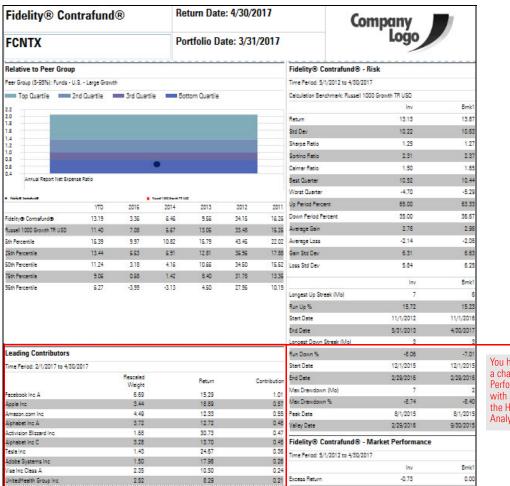
3. Notice the Rolling Performance - 36 month rolling window chart on the left side of the report. Replacing one component with another is a simple drag-and-drop action. To replace the Rolling Performance - 36 month rolling window chart with a Leading Contributors table, from the Component bar, drag the **Leading Contributors table** to the cell occupied by the Rolling Performance - 36 month rolling window chart. The new component proportionally resizes to fit the cell.



Drag the Leading Contributors icon to the cell occupied by the Rolling Performance chart.

4. If necessary, click Calculate.

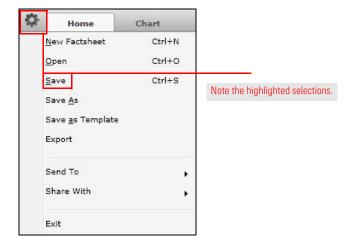




When the calculation finishes, the Leading Contributors table is displayed.

You have replaced a chart from the Performance category with a table from the Holdings Analysis category.

5. To save your work, click the **Application Settings** icon at the top-left corner of the window and select **Save**.



Exercise 9: Resize a cell

Although Morningstar templates are laid out carefully, they cannot account for all possibilities. Take a look at the FCNTX Factsheet and notice the following:

- ► The unlabeled table above the Leading Contributors table does not vertically fill its cell. and
- ► The Leading Contributors table looks crowded.

The page would look better if the Leading Contributors table had more space and the table above it had less. That sounds like a two-step process (enlarge one cell and decrease the other), but it is actually only one. Simply move the border between the two cells. When you enlarge a cell, an adjacent cell is decreased by the same amount (and vice versa).

For instance, if you add space to the top of a cell (in other words, move its top border up), the cell above it shrinks.

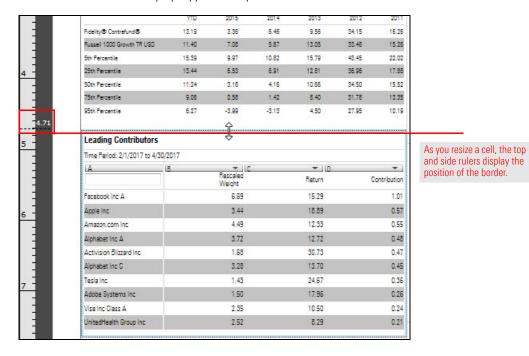
To resize a cell, do the following:

 Select the Leading Contributors table and hover the cursor over its top border. A two-headed arrow appears.

	YTD	2015	2014	2013	2012	2011
Fidelity® Contrafund®	13.19	3.35	6.46	9.55	34.15	16.26
Russell 1000 Growth TR USD	11.40	7.08	5.67	13.05	33.48	15.26
5th Percentile	15.39	9.97	10.82	15.79	43.45	22.02
25th Percentile	13.44	6.53	6.91	12.81	36.96	17.88
50th Percentile	11.24	3.18	4.16	10.66	34.50	15.52
75th Percentile	9.06	0.58	1.42	8.40	31.78	13.35
95th Percentile	6.27	-3.99	-3.13	4.50	27.95	10.19
Leading Contributors		Ţ		***********		***********
		Ĵ				***************************************
Leading Contributors		nescaleo (C	*************	* In		
Leading Contributors Time Period: 2/1/2017 to 4/30/		nescaled in	*******	Return		Contribution
Leading Contributors Time Period: 2/1/2017 to 4/30/		nescaleo (C		* In		Contribution
Leading Contributors Time Period: 2/1/2017 to 4/30/ Facebook Inc A Apple Inc		nescaled in Wainht 6.69		Return 15.29 18.89		Contribution 1.01 0.57
Leading Contributors Time Period: 2/1/2017 to 4/30/ Facebook inc A Apple Inc Amazon.com Inc		nescaled in Wainht 6.69 3.44 4.49		Return 15.29 18.89 12.33		Contribution 1.01 0.57 0.55
Leading Contributors Time Period: 2/1/2017 to 4/30/ [A Facebook Inc A Apple Inc Amazon.com Inc Alphabet Inc A		nescaled (Nainht 6.69 3.44 4.49 3.72		Return 15.29 18.89 12.33 12.72		Contribution 1.01 0.57 0.55
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Leading Contributors Time Period: 2/1/2017 to 4/30/ Pacebook Inc A Apple Inc Amazon.com Inc Alphabet Inc A Activision Bitzard Inc Alphabet Inc C		nescaled (Nainht 6.69 3.44 4.49 3.72		Return 15.29 18.89 12.33 12.72 30.73		Contribution 1.01 0.57 0.55 0.48 0.47 0.45
Leading Contributors Time Period: 2/1/2017 to 4/30/ Pacebook Inc A Apple Inc Amazon.com Inc Alphabet Inc A Activision Bitzard Inc Alphabet Inc C Tesla Inc		nescaled for Mainhet 6,69 3,44 4,49 3,72 1,68 3,28 1,43		Return 15.29 18.89 12.33 12.72 30.73 13.70 24.67		Contribution 1.01 0.57 0.55 0.48 0.47 0.45
Leading Contributors Time Period: 2/1/2017 to 4/30/		nescaled for Wainht 6.69 3.44 4.49 3.72 1.68 3.28		Return 15.29 18.89 12.33 12.72 30.73 13.70		Contribution 1.01 0.57 0.55 0.48 0.47 0.45



- 2. Drag the **arrow** up to enlarge the cell containing the Leading Contributors table.
 - Note: To resize a cell horizontally, select the cell, hover the cursor over one of the side borders, then drag the arrow left or right.
- 3. As you drag the arrow, use the rulers at the top and left of the page as a guide. **Release** the cursor when the ruler displays approximately 4.7".





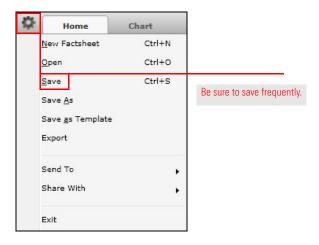
Company Logo Return Date: 4/30/2017 Fidelity® Contrafund® Portfolio Date: 3/31/2017 **FCNTX** Relative to Peer Group Fidelity® Contrafund® - Risk Peer Group (5-95%): Funds - U.S. - Large Growth Time Period: 5/1/2012 to 4/30/2017 Calculation Benchmark: Russell 1000 Growth TR USD Top Quartile 2nd Quartile 3rd Quartile Bottom Quartile 13.13 1.0 0.5 0.0 Std Dev 10.22 Sharpe Ratio 1.25 Sortino Ratio 2.31 YTD 2012 2011 Calmar Ratio 1.50 Fidelity® Contrefund® 13.19 3.35 6.46 9.56 34.15 15.25 Best Quarter 10.52 Russell 1000 Growth TR USD 11.40 7.08 5.67 13.05 33.48 15.26 Worst Quarter -4.70 5th Percentile 15.39 9.97 10.82 15.79 43.45 22.02 Up Period Percent 65.00 63 25th Percentile 36.96 17.88 Down Period Percent 13.44 6.53 6.91 12.81 35.00 38 11.24 34.50 Average Gain 2.78 13.35 Average Loss 75th Percentile 9.06 0.58 1.42 8.40 31.78 -2.14 95th Percentile 6.27 -3.99 -3.13 4.50 27.95 10.19 Gain Std Dev 6.31 Loss Std Dev 5.84 **Leading Contributors** Br Inv Time Period: 2/1/2017 to 4/30/2017 Longest Up Streak (Mo) Return Contribution Run Up % 15.72 Weight Start Date 11/1/2012 11/1/20 1.01 6.69 15.29 Facebook Inc A End Date 5/31/2013 4/30/2 0.57 Apple Inc 3.44 18.89 Longest Down Streak (Mo) 4.49 12.33 0.55 Amazon.com Inc. -8.06 Run Down % Alphabet Inc A 3.72 12.72 Start Date 12/1/2015 12/1/2 Activision Blizzard Inc. 1.68 30.73 0.47 End Date 2/29/2016 2/29/2 Alphabet Inc C 3.28 13.70 0.45 Max Drawdown (Mo) 24.67 Tesla Inc 1.43 0.36 Max Drawdown % Adobe Systems Inc 1.50 17.96 Peak Date 8/1/2015 8/1/2 Visa Inc Class A 2.35 10.50 0.24

The result should now look like this.

The components in the right column have not been affected by the changes to components in the left column.

4. Click the **Application Settings** icon at the top-left corner of the window and select **Save**.

8.29



5. Close FCNTX Factsheet.

UnitedHealth Group Inc

Valley Date

0.21

2/29/2016

Fidelity® Contrafund® - Market Performance

9/30/2

You might want two components to switch places. For instance, if a component of particular relevance to the report is displayed at the bottom of a page, and a less relevant component is displayed at the top of the page, you might want the two components to switch places.

Note: In this exercise, swapping the positions of two components on the same page is described, but you can also swap two components on different pages, as long as you can see both at the same time. You would probably have to zoom out.

Benchmark 1: Russell 1000 Growth TR USD Fidelity® Contrafund® Benchmark 2: S&P 500 TR USD **FCNTX** Category: US Fund Large Growth 1st Otr 2nd Otr 3rd Otr 4th Otr Year 2017 14.57 2016 -1.58 0.38 5.21 -0.56 3.36 180 2015 160 2014 3.90 1.77 3.12 9.56 140 2013 9.18 2.05 8.94 10.52 34.15 2012 14.96 -3.52 6.51 -1.59 16.26 120 100 1 year 3 years 5 years 10 years 80 Risk-Adi Ret 17.49 10.08 11.81 5.77 2013 Std Dev 2.09 10.15 10.22 14.42 18.58 11.41 13.13 - Fidelity® Contrafund® Ret +/- Index -0.92 -0.70 -0.73 -0.18 % Rank YTD 2016 Fidelity® Contrafund® 3.36 49 Performance Disclosure The Overall Morningstar Rating is based on risk adjusted returns, derived from a weighted average of the three , five and 10 year (if applicable) Morningstar metrics. The performance data quoted represents past performance and does not guarantee future essuits. The investment retur and principal value of an investment will fluctuate; thus an investar's shares, when sold or redeemed, may be worth more or less than their original cost. Russell 1000 Grawth TR USD 11.40 7.08 21 11.23 3.21 1,479 Asset Allocation Bmk1 Inv Cash % 1.03 0.00 US Equity % 90.20 99.13 Fees and Expenses 7.65 0.87 Non-US Equity % Max Front Load Bond % 0.02 0.00 Management Fee 0.53 1.10 Other % 0.00 Prospectus Gross Expense Ratio 0.68 Portfolio Statistics Equity Style 12b-1 Fee Morningstar Equity Style Box P/E Ratio 25.08 Prospectus Net Expense Ratio 0.68 P/C Ratio 17.47 Deferred Load P/B Ratio 3.69 Morningstar Ratings Avg Mkt Cap (mil) 98,969.14 Morningstar Rating Overall Morningstar Rating 3 Yr Morningstar Rating 5 Yr Portfolio Statistics

Fixed Income Style

Not Available

10 years

8.10

2.32

5 years

12.96

1.15

Avg Eff Duration

Ave Eff Maturity

Avg Credit Quality

Avg Caupan

Exercise 10: Rearrange components

Switching the positions of two components is a simple drag-and-drop action.

Morningstar Rating 10 Yr

Morningstar Return

Morningstar Risk

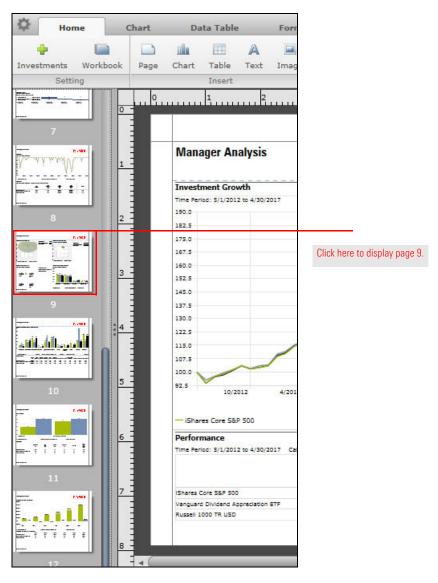
3 years

11.18

1.10

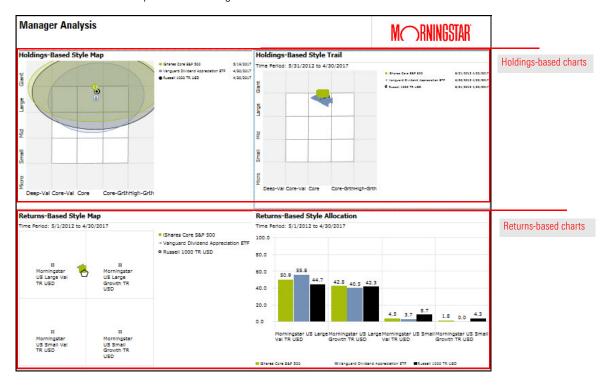
To switch the positions of two components, do the following:

- 1. Open ProShares-Vanguard.
- 2. In the Navigation pane, scroll down and click page 9.

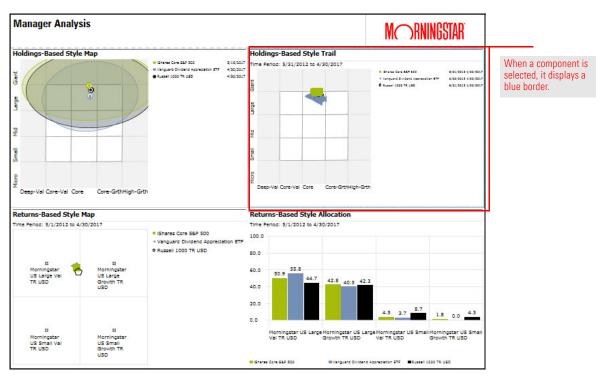




On page 9, you see the Holdings-Based Style Map and Holdings-Based Style Trail near the top of the page, and the Returns-Based Style Map and Returns-Based Style Allocation at the bottom. If the Holdings-Based Style Trail chart and the Returns-Based Style Map switch places, the Holdings-Based components will be displayed on the left and the returns-based components on the right.

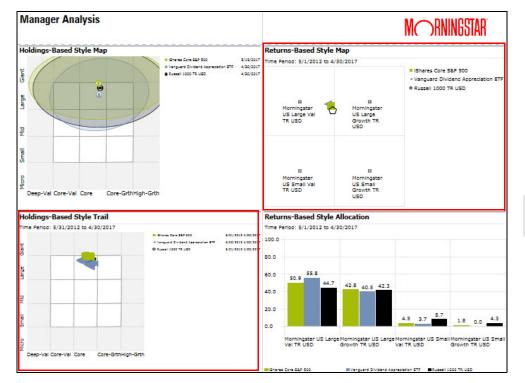


3. Click the **Holdings-Based Style Trail** chart to select it.



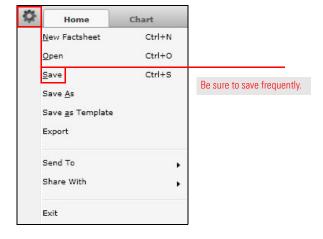


4. Drag the **Holdings-Based Style Trail** chart to the cell occupied by Returns-Based Style Map. The two components switch places.



components have switched places.

5. To save your work, click the **Application Settings** icon at the top-left corner of the window and select **Save**.

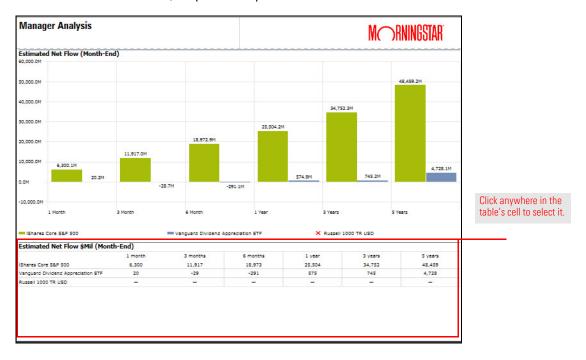


You might decide an existing component is not particularly relevant to your presentation, or you might have another reason for deleting it.

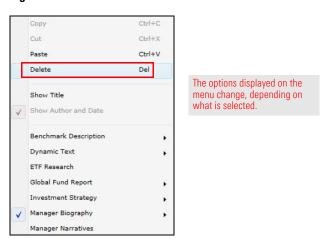
Exercise 11: Delete a component

To delete a component, do the following:

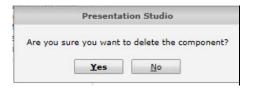
- 1. In ProShares-Vanguard, in the Navigation pane, **scroll down** and click **page 12** (the last page).
- 2. Select the Estimated Net Flow \$Mil (Month-End) table.



3. Right-click and select Delete.

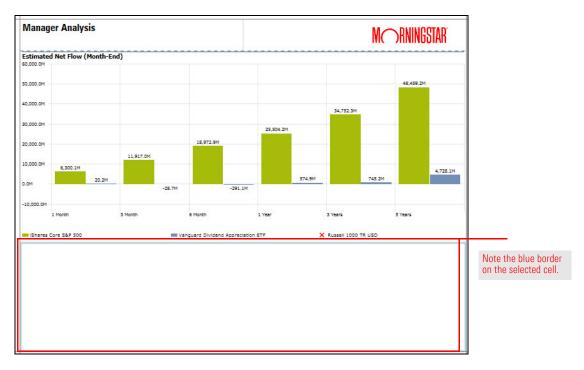


A confirmation alert opens.



You must click **Yes** in the confirmation alert to delete the selected component.

4. In the confirmation alert, click **Yes**. The component is deleted, but the cell it occupied is still selected.



Go to the next exercise, Exercise 12 on page 62, to learn how to remove the empty cell.



Although you deleted the component below the Estimated Net Flow (Month-End) chart, the chart did not resize to fill the available space. Allocating the space to the Estimated Net Flow (Month-End) chart requires you to remove the empty cell and then resize the Estimated Net Flow (Month-End) chart's cell.

Exercise 12: Remove a cell

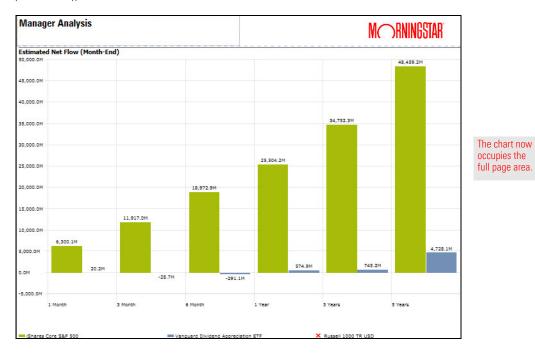
Do the following:

- 1. In ProShares-Vanguard, select the empty cell.
- 2. Right-click and select Delete.

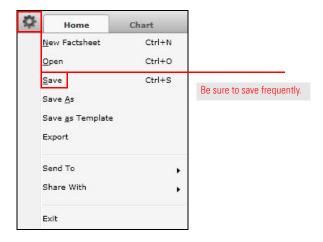




When the empty cell is removed, the component above it (Estimated Net Flow (Month-End)) resizes to use that area.



3. To save your work, click the **Application Settings** icon at the top-left corner of the window and select **Save**.



Using Workbook Settings and Component Settings

In What can I do in the Application Settings? on page 17, you learned how to select features to be used in all the reports you create from that point on. In this section, you will learn how to select features that affect only a specific report or component. You will learn how to modify and create time periods.

Overview

Before starting the exercises, you might want to review How do Application, Workbook, and Component Settings relate to each other? on page 20.

This section helps you do the following:

- ▶ understand what Workbook Settings are (page 64)
- ▶ understand your options when changing a time period (page 65)
- ▶ understand the Start Date and End Date selections (page 66)
- ► modify the Start Date and End Date for a report (page 68)
- ▶ understand what Component Settings are (page 71)
- ► modify the Start Date and End Date for a component (page 71)
- ▶ understand what a linked time period is (page 74)
- ► create multiple time periods (page 75), and
- ► apply a time period (page 77), and
- ► reset a time period (page 79).

Workbook Settings are options specific to a single report. These options can affect various aspects of the report, including the following:

What are Workbook Settings?

- ► fonts
- ► colors
- ▶ data
- ▶ peer group, and
- ▶ time period.

The time period (Start Date and End Date) is one of the features you can change in either Workbook Settings or Component Settings. Before selecting a different time period, you should understand the following:

- ► The time period initially used in your report is determined by the settings in the template (or report) your report is based on.
- ► You can modify the time period for your report or for individual components, and
- ► You have two options on how to change the report's default time period and two options on how to change a component's time period.

Changing the time period for a report or a component is summarized in this table:

What do I need to know before changing a time period?

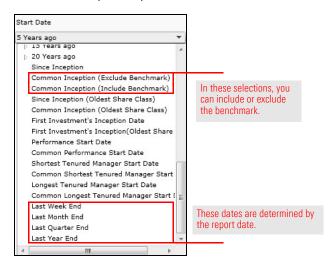
When changing the time period for this	Using Start Date and End Date selections here	The result is	
Report Mote: Selecting a component is optional.	Command bar > Home tab > Workbook icon > Workbook Settings: Data window	The default time period is changed for the report. All components, both existing and yet-to-be created, are affected. See Exercise 13 on page 68. Mote: Individual components with a non-default time period are not affected.	
	Command bar > Chart or Data Table tab > Application Settings icon (next to the Time Period drop-down field) > Default Period		
A selected chart or table	Command bar > Chart or Data Table tab	The time period is changed for only the selected component. Other existing components and new components you create are not affected. See Exercise 14 on page 71.	
		Note: The selected component will not be affected if you change the report's default time period.	



The Start and End Dates can be set in Application Settings, Workbook Settings, and Component Settings.

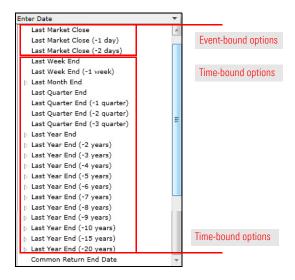
In the Start Date drop-down field, the selections at the top range from one day to 20 years ago. You can also enter a date. However, the drop-down field also offers flexible selections for dates associated with specific content or events, such as the following:

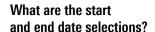
- ▶ investment(s) in the report or component,
- benchmark used in the report or component, or
- ▶ return date
- ► inception date, or
- ▶ when the report is updated.



Note: In any component with start and end dates, when a Common Inception option is selected as the Start Date, the common inception date is displayed in the legend.

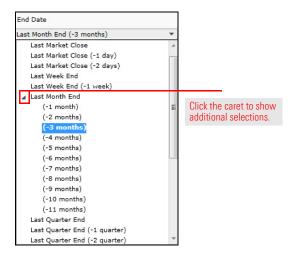
The selections in the End Date drop-down field are event- or time-bound, except for Common Return End Date (at the bottom of the drop-down field), which is determined by the investments in the report.







Note that some of the selections can be expanded. In the selection shown here, the end date is three months ago month end:



Certain components offer additional date options. See the following:

- How can I compare funds' holdings using their most recent common portfolio date? on page 146
- ► How does the portfolio date affect the end date in a stacked bar chart? on page 148, and
- ► How does the portfolio date affect the end date in a stacked bar chart? on page 148.



Before starting this exercise, you might want to review What do I need to know before changing a time period? on page 65.

Exercise 13: Change the time period for a report

To modify the time period for a report, do the following:

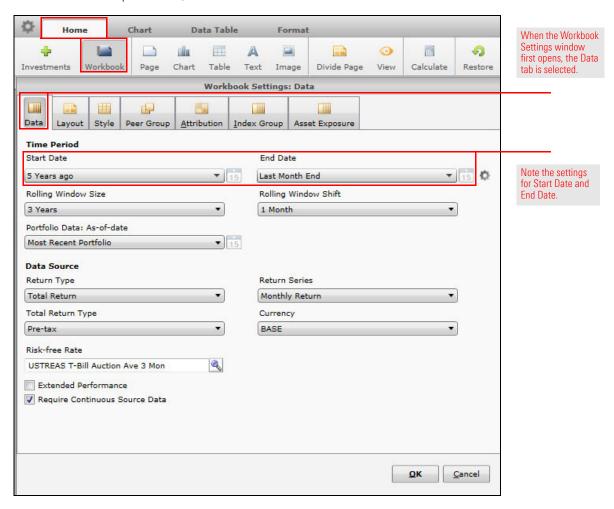
1. In the ProShares-Vanguard navigation pane, click page 1.

On page 1, in the Investment Growth chart and Performance table, notice that the time periods match. This time period was initially defined in the template on which the report is based.

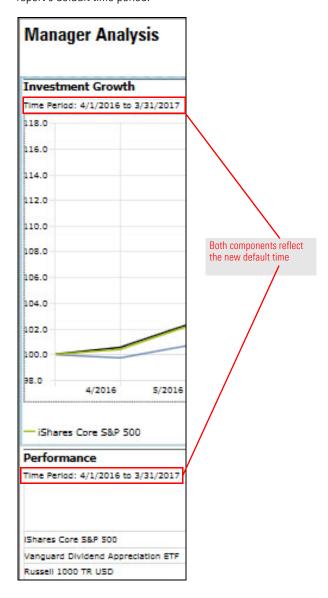




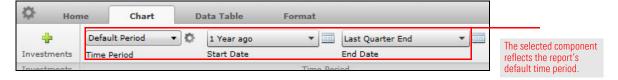
- 2. On the Command bar, select the **Home** tab, then click the **Workbook** icon. The Workbook Settings: Data window opens.
 - Note: If you are working in a factsheet, the icon on the Home tab is still labeled Workbook.
- 3. From the **Start Date** drop-down field, select an **1 Year ago**.
- 4. From the End Date drop-down field, select Last Quarter End.



Click **OK**. The Workbook Settings window closes. You have changed the default for the report. Note that the time period in both the chart and table on page 1 have changed. This is true throughout the workbook because each component's time period is linked to the report's default time period.



- 6. Select **any component** and at the top of the window, select the **Chart** or **Data Table** tab. The information in the Time Period portion of the selected tab tells you the following:
 - ► the start and end dates for the selected component, and
 - ► if the selected component uses the report's default time period.





Component Settings are options specific to a single component These options can affect various aspects of the report, including the following:

What are Component Settings?

- ► fonts
- ► colors
- ► data
- peer group, and
- ► time period.
 - Note: In Component Settings, you can change many of the same things you can in Workbook Settings, but only the selected component is affected.

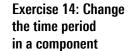
Before going on to the exercise, you might want to review the information in What do I need to know before changing a time period? on page 65

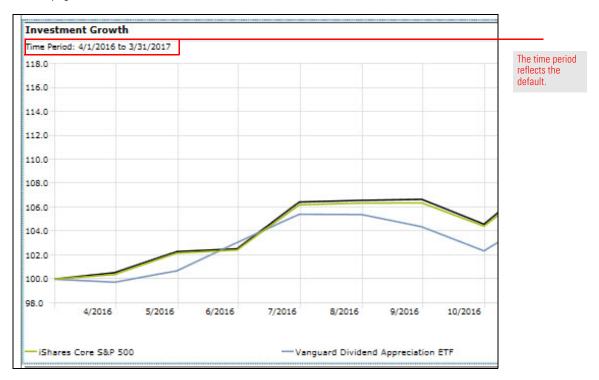
Before starting this exercise, you might want to review What do I need to know before changing a time period? on page 65.

When you modify the settings of an individual component (such as a chart or table), the new settings override the Application and Workbook Settings, but only for that component.

To modify the time period of an individual component, do the following:

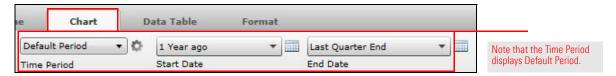
1. With ProShares-Vanguard open, select the **Investment Growth chart** at the top of the first page.



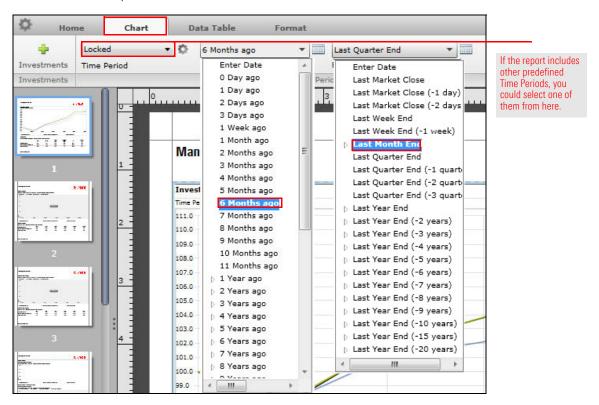




2. On the Command bar, select the **Chart** tab.



- 3. From the **Start Date** drop-down field, select **6 months ago**.
- 4. From the End Date drop-down field, select Last Month End.

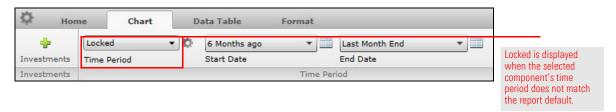




The new dates affect only the selected component. The other components in the report are unchanged.

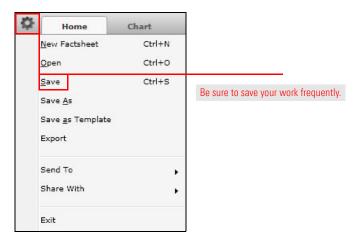


- 5. With the Investment Growth chart still selected, select the **Home** tab, then select the Chart tab. The information in the Time Period portion of the selected tab tells you the following:
 - ► the time period for the selected component, and
 - ► if that time period matches the report's default time period. In this case, the Time Period indicates "Locked," which means the component doesn't use the default time period.





To save your work, click the **Application Settings** icon at the top-left corner of the window and select **Save**.



Initially, a component's time period is the same as the time period in Workbook Settings. The component's time period is linked to the report's time period. If you change the report's time period in Workbook Settings, that change is reflected in the linked time periods of components.

linked time period?

What is a

When you change a component's time period (as described in Exercise 14: Change the time period in a component on page 71), the link becomes inactive. An inactive link is not affected if you change the time period in Workbook Settings.

You have been working with linked time periods in Exercise 13: Change the time period for a report on page 68 and Exercise 14: Change the time period in a component on page 71.

In this exercise, you will create additional time periods, allowing you to change the time periods for all components and pages in a report without modifying each component individually. Keep the following in mind when working with multiple time periods:

Exercise 15: Create multiple time periods

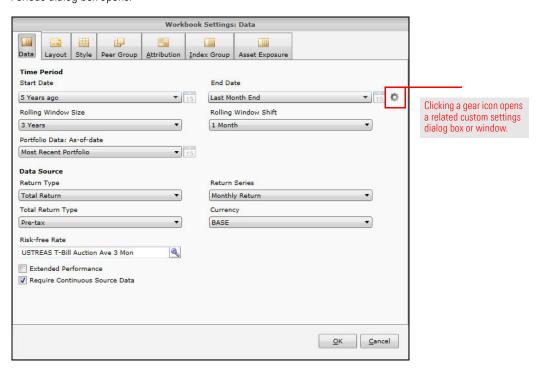
- ► You can create up to eight additional time periods.
- ► The time periods are available if you need them but are not necessarily in use in the report at any given time, and
- ► The time periods are specific to the report (or template) in which they are created.
 - Note: When you create time periods as described in this exercise, those time periods are available in all components in the report.

To create additional time periods, do the following:

 In ProShares-Vanguard, click the **Home** tab, then click **Workbook**. The Workbook Settings Data window opens.

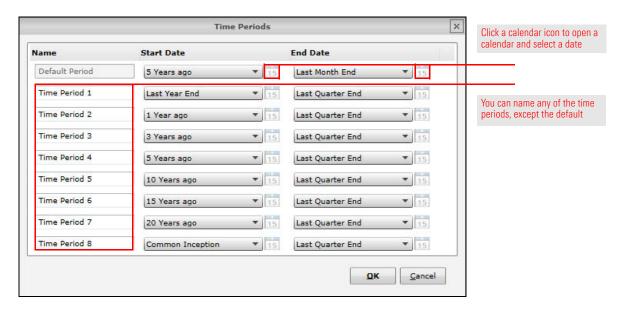


2. Click the **Time Periods** icon to the right of the End Date drop-down field. The Time Periods dialog box opens.





- 3. From the drop-down fields, select a **Start Date** and an **End Date** for at least one time period.
 - Note: If you are building a template, keep in mind that all time periods are enabled, which means anyone who uses the template can select from all nine time periods. If you want users to select from specific time periods (for example, the first six), you may want to name the other time periods "Do Not Use."



- 4. In the Name column, name the **time period(s)** you changed to indicate its range. For instance, the name 1YrAgo-LastQtrEnd describes its range.
- 5. Click **OK**.
- 6. In the Workbook Settings: Data window, click **OK**.

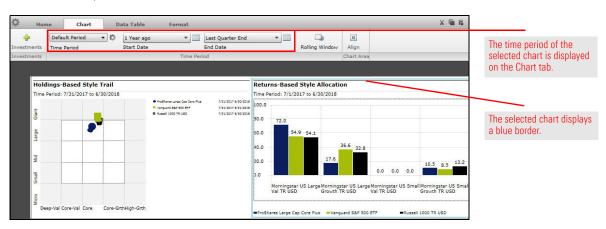


When working with a report in which additional time periods have been defined, you can switch from the default time period to one of the predefined time periods for a specific chart.

Exercise 16: Apply a predefined time period to a chart

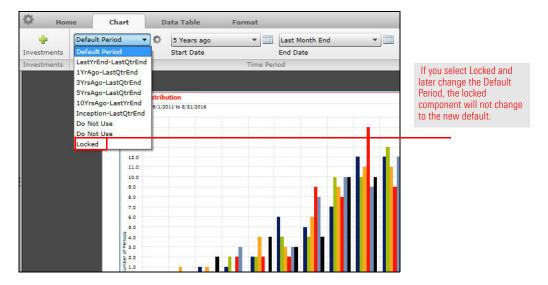
Do the following:

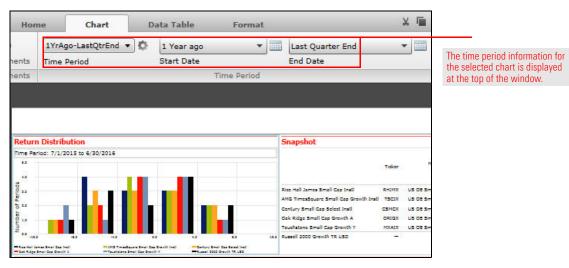
1. In ProShares-Vanguard, on page 9, select the **Returns-Based Style Allocation chart**. On the Command bar, the Chart tab is now selected.





2. On the Chart tab, from the **Time Period** drop-down field, select a modified, renamed time period. The report refreshes to reflect the selected time period in the chart and on the Chart tab (when the chart is selected).





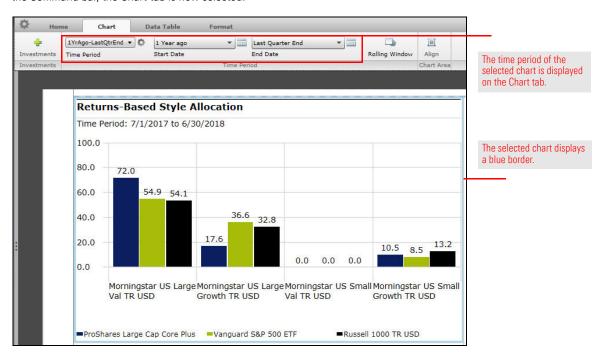


When you created additional time periods in Exercise 15 on page 75, you might have noticed that the default time period was listed in the Time Periods dialog box. It is also listed on the Time Period drop-down field. These settings make it easy to reset a chart's time period to the default at any time.

Exercise 17: Reset a chart's time period to the default

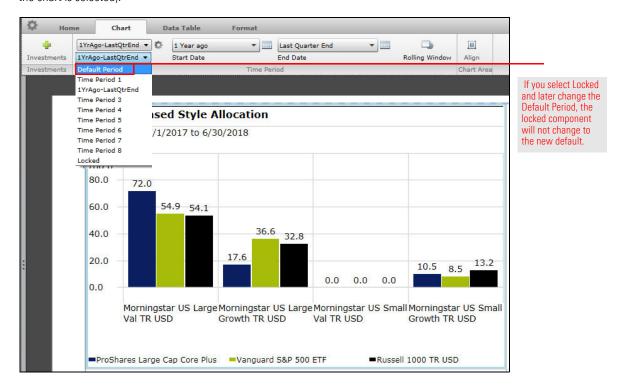
To reset a chart's time period to the default, do the following:

1. In ProShares-Vanguard, on page 9, select the **Returns-Based Style Allocation chart**. On the Command bar, the Chart tab is now selected.





2. On the Chart tab, from the **Time Period** drop-down field, select **Default Period**. The report refreshes to reflect the new time period in the chart and on the Chart tab (when the chart is selected).



Remember—if you have changed the time period in Workbook Settings, that is the new default for the component.

In this section, you have learned how to customize the properties of individual components. As you become more familiar with Presentation Studio, you will see customizations that are common to most components, such as clicking the Eye icon to show or hide certain data.

Additionally, in most components, when you click Chart Settings or Table Settings, you can do the following:

- ► select a different benchmark
- ► select a different currency, and
- ► change, add, and delete data points.

However, some components have uncommon features to help you display additional information. To learn about these components and their settings, please read Using Components with Nonstandard Features on page 140.

How can I learn more about customizing components?



Creating a New Page Overview

Creating a New Page

You can add a new page anywhere in a report.

This section guides you as you do the following:

- ► add a page to a report (page 81)
- ► create a page layout (page 82)
- ▶ use Snap to Grid to precisely resize a cell (page 85), and
- ▶ insert a component into a cell (page 86).

When you add a page to a report, you can choose to duplicate an existing page or create a blank page. The new page appears after the page selected in the Navigation pane.

To add a new blank page to the end of a report, do the following:

1. In the Navigation pane of ProShares-Vanguard, **scroll** to the bottom and click the **last page** to select it.

Manager Analysis

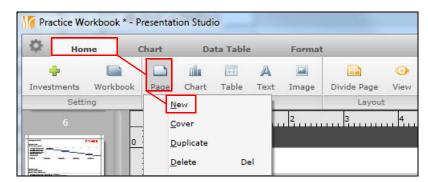
| Setimated Net Flow (Month-End) | Setimated Net

Overview

Exercise 18: Create a new page



- 2. On the Command bar, select the **Home** tab.
- 3. Click the **Page** icon and select **New**. A new page is created after the page selected in the Navigation pane (in this case, the last page).



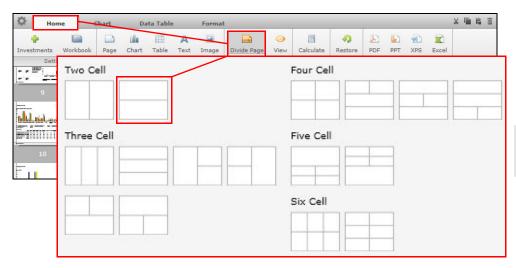
If you select Duplicate, a copy of the selected page is created.

The newly created page consists of one large cell, which is fine if you want to use a large component or a table component requiring a full page. But in most cases, you want the page to contain multiple cells.

Exercise 19: Create the page layout

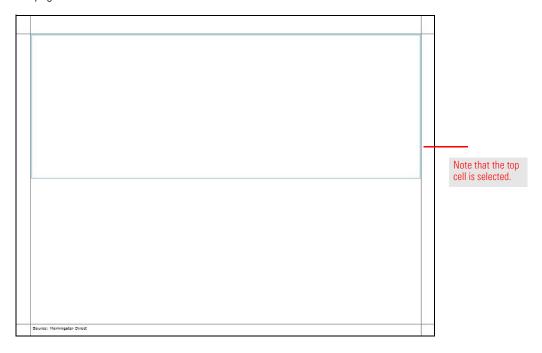
Do the following:

1. On the Home tab, click the **Divide Page** icon and select the right **Two Cell** option.

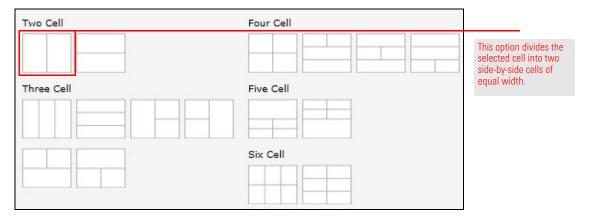


The Two Cell options divide the page into two cells of equal width.

The page is now divided into two cells.



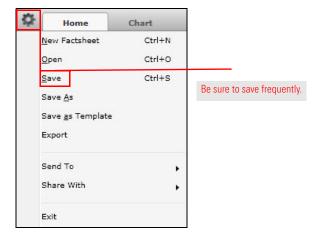
2. With the top cell selected, on the Home tab, click the **Divide Page** icon and select the left **Two Cell** option.



The top cell is now divided into two cells.



- Note: The cells do not have to remain equal in size. You can resize them as you did earlier in Resize a cell on page 53.
- 3. To save your work, click the **Application Settings** icon at the top-left corner of the window and select **Save**.



In the blank page, the two cells at the top are the same width (3.75"). However, the design calls for the left cell to be 2.75".

Exercise 20: Use Snap to Grid to precisely resize a cell

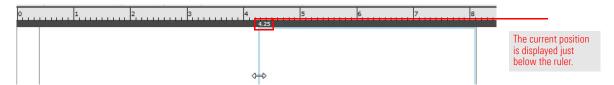
You can resize cells by dragging the margin and cell borders, but even with the ruler and gridlines visible, it can be difficult to set an exact measurement, such as 0.75". Snap to Grid makes it simple to precisely resize and position cells.

To enable Snap to Grid, do the following:

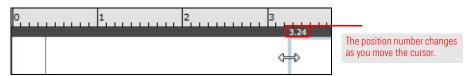
- 1. On the **Home** tab, click **View**, then from the menu, select **Snap to Grid**.
- 2. If Ruler is not already selected, select Ruler.



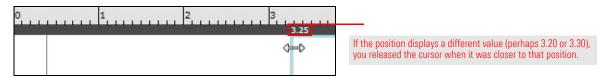
3. On the page, **hover your cursor** over the vertical border between the two top cells. The cursor changes to a double-sided arrow.



- 4. **Drag** the cursor to the **left** while watching the position numbers displayed just below the ruler.
- 5. When the position number is close to 3.25", **release** the cursor.



6. **Hover the cursor** over the border once more and notice that, even though you may have released the cursor somewhere between 3.23" or 3.27", the new position is 3.25".



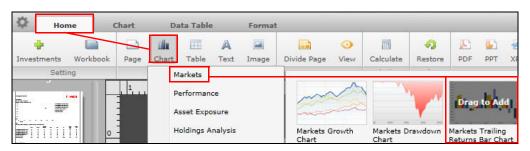


Inserting a component into a cell is the same process as replacing a component—drag-and-drop.

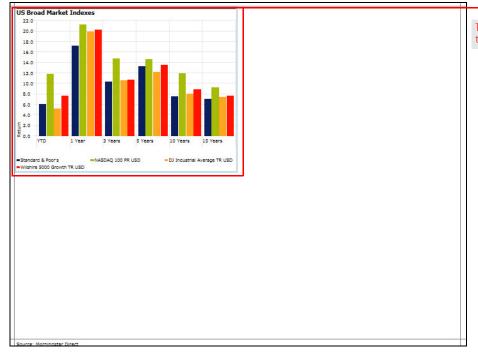
Exercise 21: Insert a component into a cell

Do the following:

- 1. With ProShares-Vanguard open and the last page displayed, make sure the **Home** tab selected.
- 2. Select **Chart** > **Markets** and drag **Market Trailing Returns Bar Chart** into the empty cell in the upper-left corner.

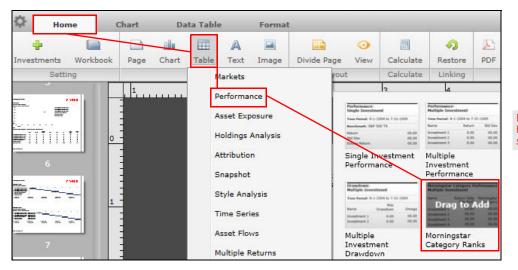






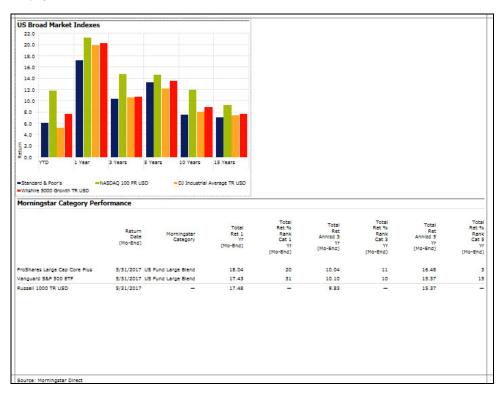
The chart occupies the top-left cell.

 With the Home tab selected, select Table > Performance, then drag Morningstar Category Ranks into the bottom cell.



Note the highlighted selections.

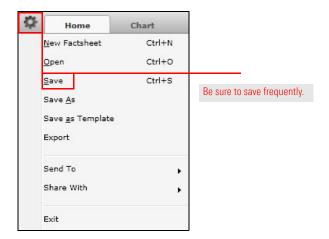
The page should now look like this.



The page has two components.

Note: You will Insert an image into the top-right cell in Exercise 27 on page 102.

4. To save your work, click the **Application Settings** icon at the top-left corner of the window and select **Save**.





Customizing a Component Overview

Customizing a Component

Each component allows a certain amount of customization. When you modify (or customize) a setting of an individual component, that setting overrides Application Settings and Workbook Settings, but for that component only.

You have learned how to modify a component's start and end dates from the Command bar (Change the time period in a component on page 71), but many other aspects of a component's look and content can be customized by using the Component Settings.

Before starting this section, you might want to review How do Application, Workbook, and Component Settings relate to each other? on page 20.

This section describes using Component Settings to do the following:

- customize a bar chart by hiding values and changing the orientation (page 89)
- ► customize a table by changing the portfolio date and removing a row (page 92)
- ► add a data point to a table component (page 94), and
- ► change a data point in a table component (page 96).

A chart is a graphic representation of data. You have seen how you can modify that representation by resizing a chart to make it more readable or make the page more presentable. You have modified the represented time period to focus on specific data. Color, marker shapes, and line widths are some of the other graphic properties you can use to enhance a chart. These and other options are found in the Component Settings.

Do the following:

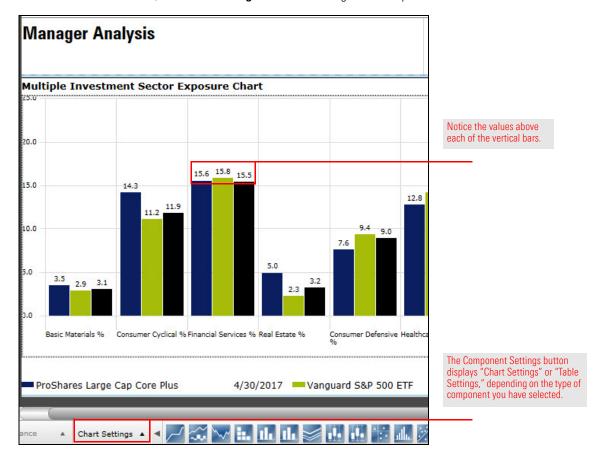
- 1. In ProShares-Vanguard, go to page 10.
- 2. Select the Multiple Investment Sector Exposure chart.

Overview

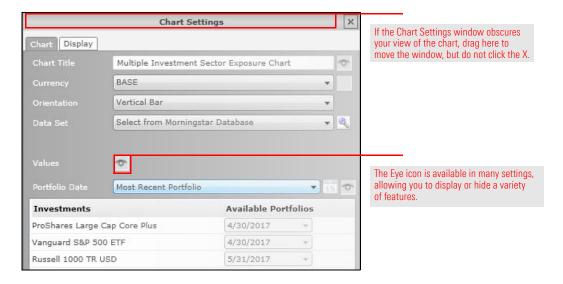
Exercise 22: Customize a bar chart



3. At the bottom of the window, click **Chart Settings**. The Chart Settings window opens.

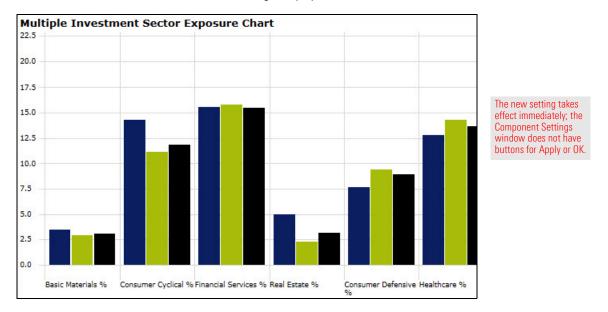


- 4. In the Chart Settings window, next to Values, click the **Eye** icon.
 - Note: The various chart types have different options in the Chart Settings window.

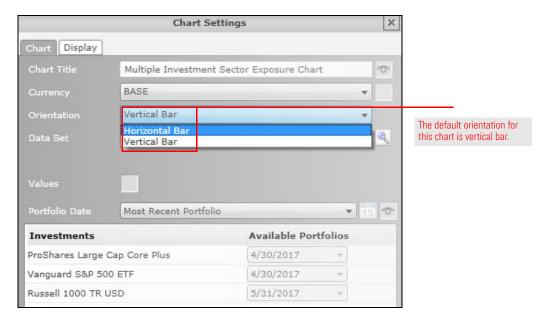




In the chart, the numbers above each bar are no longer displayed.

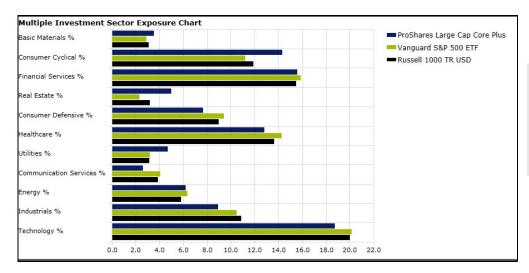


5. In the Chart Settings window, from the **Orientation** drop-down field, select **Horizontal Bar**.



Customizing a Component Exercise 23: Customize a table

The chart now looks like this.



If the space available and/or number of investments make the selected orientation unappealing, simply select the Vertical option.

- 6. To close the Chart Settings window, do one of the following:
 - ► In the upper-right corner of the Chart Settings window, click the X, or
 - Click away from the Chart Settings window.

Customizing a table is similar to customizing a chart, however a table offers different options.

Exercise 23: Customize a table

Do the following:

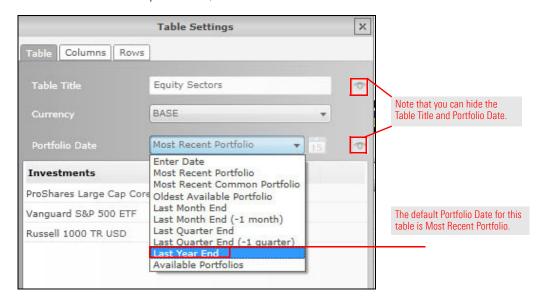
- 1. In ProShares-Vanguard, on **page 10**, select the **Equity Sectors** table.
 - Note: The funds do not report portfolio numbers on the same date, which is why the dates in the Portfolio Date column do not match.
- 2. At the bottom of the window, click the **Table Settings** button. The Table Settings window opens.





Customizing a Component Exercise 23: Customize a table

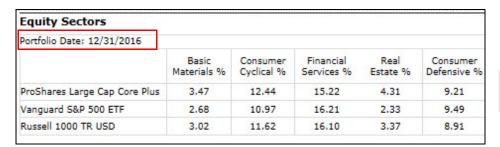
3. From the **Portfolio Date** drop-down field, select **Last Year End**.



Note: You might need to move the Table Settings window to see the Equity Sectors table.

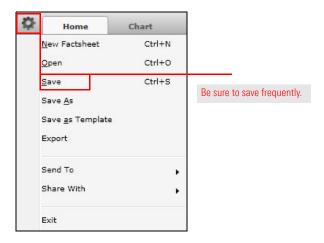
Note the following changes to the table:

- ► The data shown in the columns now reflect the portfolio date you selected.
- ► The Portfolio Date is now displayed above the table, and
- ► The Portfolio Date column has been removed.



The new portfolio date affected several features in the table.

4. To save your work, click the **Application Settings** icon at the top-left corner of the window and select **Save**.





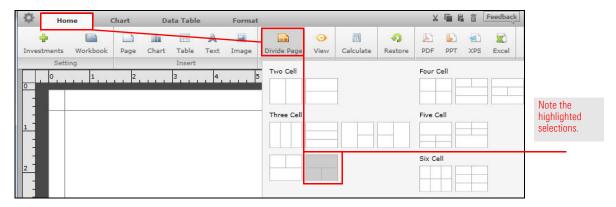
In a table or chart, you can add, remove, or replace data points. In this exercise, you will do the following:

Exercise 24: Add a data point to a table

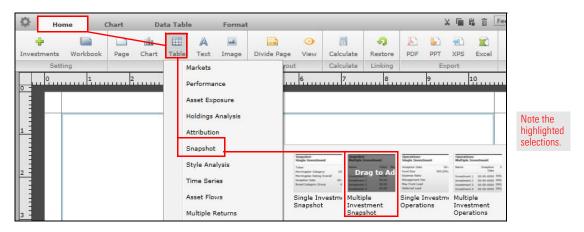
- ► add a page
- ► insert a table component, and
- ► add a data point to the table.
 - Note: You may want to review Exercise 18: Create a new page on page 81, Exercise 19: Create the page layout on page 82, and Exercise 21: Insert a component into a cell on page 86.

Do the following:

- 1. In ProShares-Vanguard, create a **new page** at the end of the report.
- 2. Select a three-cell page layout as shown here.

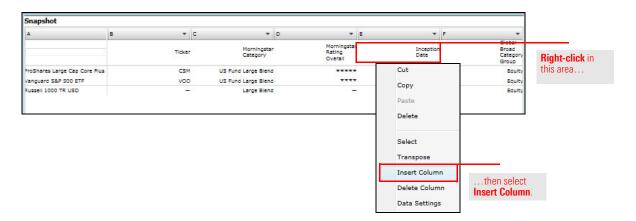


3. In the top cell, insert a **Multiple Investment Snapshot** table.





- 4. In the table, **right-click** the **Inception Date** column header, and from the drop-down field, select **Insert Column**.
 - Note: When you click or right-click a column header, drop-down fields appear above each column



A new column appears to the right of the Inception Date column. It is currently labeled Morningstar Rating Overall.



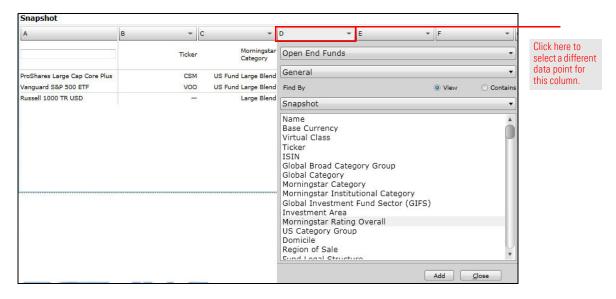
As you saw in the previous exercise, when you create a new column, it defaults to Morningstar Rating Overall. In this exercise, you will select a different data point for that column.

Exercise 25: Change a data point

Note: This procedure can be used for any column. It is not restricted to columns you create.

Do the following:

- 1. If the drop-down field is not visible above the column heading Morningstar Rating Overall, click the **column heading**.
 - Note: When you click or right-click a column header, drop-down fields appear above each column
- 2. Click the **drop-down field** above the column header (Morningstar Rating Overall). The drop-down field opens.



The options in this drop-down field are similar to those you see throughout Morningstar Direct, whenever you search for a data point to use. You can select from the following fields to find the data point you want:

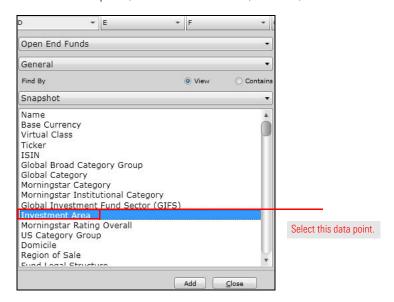
- ► Universe (Open End Funds in the above illustration)
- ► Location (General in the above illustration), and
- ► Find By (View or Contains).

When Find By View is selected (as in the above illustration), the data points found in the selected View (Snapshot in the above illustration) are displayed.

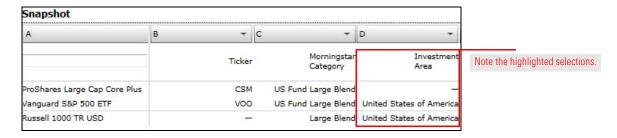
When Find By Contains is selected, the View drop-down field is replaced by a Search field.



3. In the list of data points, select Investment Area, click Add, then click Close.



4. The column header now reads Investment Area and the column displays that information.





Working with Headers, Footers, Images, and Watermarks

Images can be an important part of your presentation. For instance, a company logo reinforces your company's branding. Many graphic formats, such as .jpg, .png, and so on, are compatible with Presentation Studio.

A header is an area for information at the top of a page (company name, logo, and so on) and a footer is displayed at the bottom of a page (page number, source of data, and so on). In Presentation Studio, a report can have the same header and footer on every page, or individual pages can vary.

This section describes how to do the following:

- ▶ understand what content to include in a header or footer (page 98)
- ► add a header (page 100)
- ► insert an image into the header (page 102)
- ► change the position of an image (page 104)
- ▶ understand what dynamic text is (page 105)
- ► use dynamic text in the header (page 105)
- ► change font properties (page 106)
- ▶ use the same header on every page of a report (page 107)
- ► change the size of an image in a body cell (page 109), and
- ► add a watermark (page 113).
 - Note: In this section, working with a header is described. The process for creating and working with a footer is the same.

Header and footer content does not have any hard-and-fast rules (although your firm's legal and design teams might). Some common elements used in header and footers are as follows:

- ► Your company logo
- ► Your company name
- ► Client name
- ► Report type
- ► Report date, and
- ► Page number.

The information in a header and/or footer can apply to the entire report or selected pages. Some common header and footer page layouts are as follows:

- ► The same header and footer are displayed on every page.
- ► All pages have the same header and none have a footer, and
- ► The header and/or footer content on pages 2 to the end differs from that on the first page.

Overview

What content should I include in a header and footer?



In the illustrations here, note the headers and footers, where they match on both pages, and where they differ.



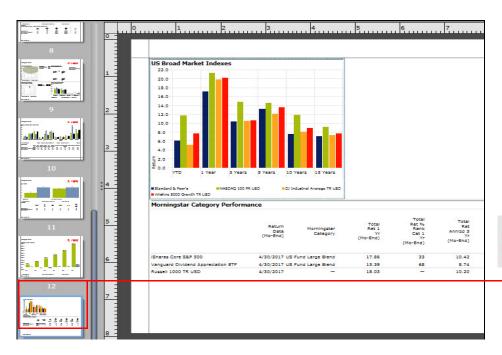


The page you created in ProShares-Vanguard currently has no header, but the other pages do. In this exercise, as you add a header to the page, keep in mind that you can add a header and footer to any page, or replace components in any existing header and footer.

Exercise 26: Add a header to a page

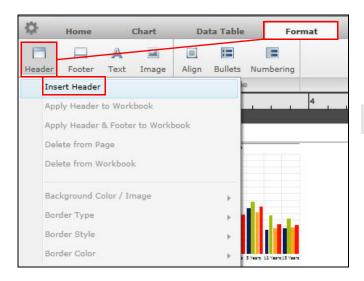
To add a header, do the following.

1. With ProShares-Vanguard open, in the Navigation pane, **scroll** to the bottom and select the **last page**. (This is the page you created in Creating a New Page on page 81).



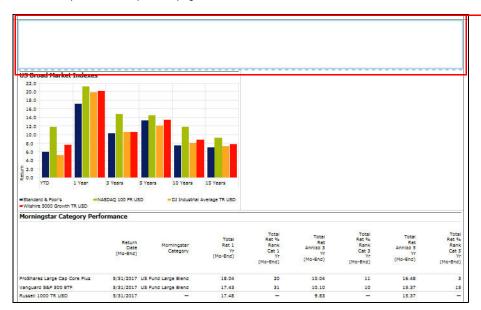
In the Navigation pane, the selected page is outlined in blue.

2. On the Command bar, select the **Format > Header** icon, then select **Insert Header**.



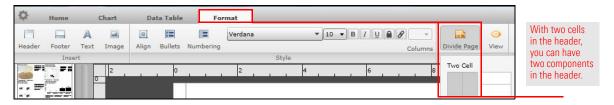
The other selections on the Header menu become available after you have inserted a header.

A new cell opens at the top of the page.

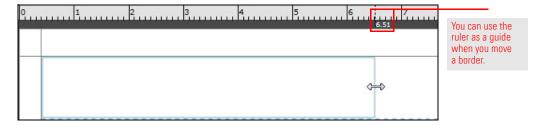


To make room for the header, space was removed from the two rows of cells.

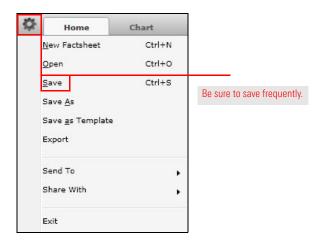
 With the header cell selected, on the Command bar, make sure the Format tab is still selected, then click the Divide Page icon and select the Two Cell option showing side-by-side cells.



4. In the header, allocate more space to the left cell and less space to the right. Select the **left cell** and drag its **right border** to the 6.5" mark on the ruler (approximately).



5. To save your work, click the **Application Settings** icon at the top-left corner of the window and select Save.



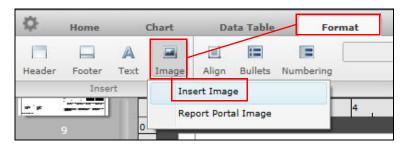
In this exercise, you should use an image available on your network or drive.

Exercise 27: Add an image

Note: Although the logo is being added to the header, the process described here can be used to add an image to any cell.

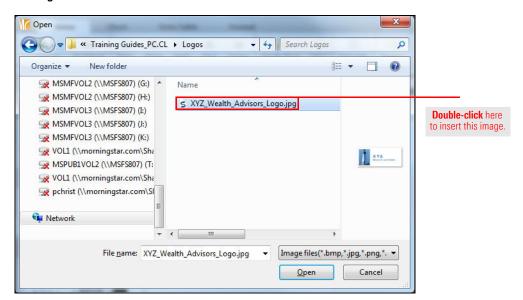
To add a logo, do the following:

- 1. In ProShares-Vanguard, in the header, select the **right cell**.
- 2. On the Command bar, select the **Format** tab, then click **Image** > **Insert Image**. The Open dialog box opens.



Note the highlighted selections.

3. In the Open dialog box, **navigate** to a location on your network or drive and **double-click** an **image file**.



The image is displayed in the header cell.



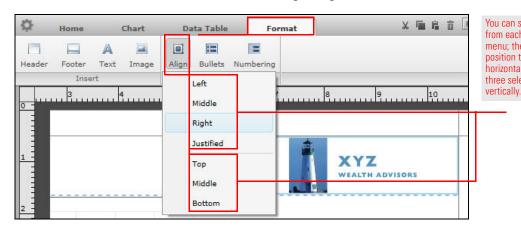
Exercise 28: Change the

position of an image

When you insert an image, it is centered in the cell.

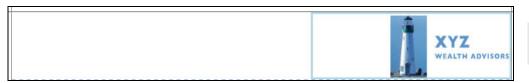
To change the image's position, do the following:

- 1. Select the **cell** containing the image.
- 2. On the Command bar, select the **Format** tab, then click **Align** > **Right**.



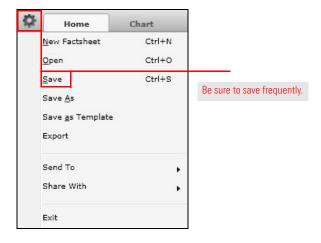
You can select one option from each section of the Align menu; the top four selections position the component horizontally, and the bottom three selections position it

The image aligns with the right side of the header cell.



The size of the image does not change.

To save your work, click the **Application Settings** icon at the top-left corner of the window and select **Save**.



Dynamic text displays information (such as investment name, ticker, and so on) specific to a report or investment. Dynamic text updates automatically whenever the report is opened or refreshed. For instance, if a report displays the dynamic text component Report Date, the new report date is displayed when you open the report.

Note: If you do not want to keep the updated Report Date, close the report without saving.

Exercise 29: Use dynamic

text in a header

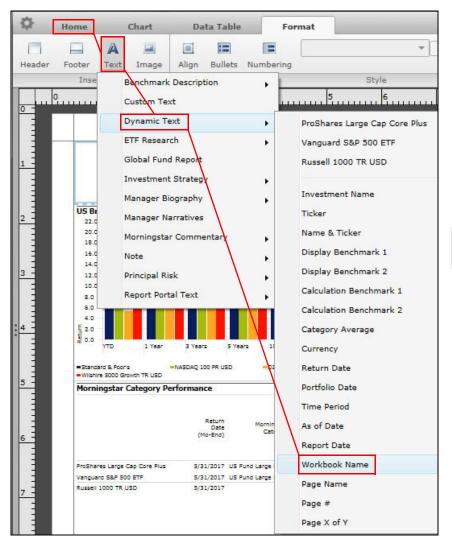
What is dynamic text?

In this exercise, use the dynamic text component "Workbook Name" in a header. The header then reflects the name of the report.

Note: You can type text in a cell but it won't be dynamic.

Do the following:

- 1. In ProShares-Vanguard, in the last page's header, select the left cell.
 - Note: Because a cell cannot accommodate more than one component, the text and image must be in separate cells.
- On the Command bar, select the Format tab, then click Text > Dynamic Text > Workbook Name.







The workbook name is displayed in the header.



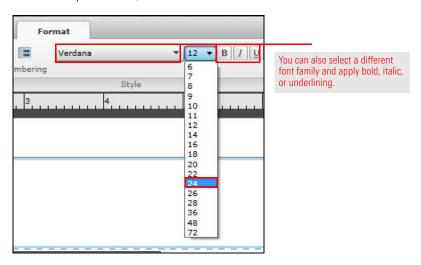
You can change font properties of a text component (whether dynamic or not) from the Command bar. Some of the font properties are as follows:

Exercise 30: Change font properties

- ► Font family (Times Roman, Helvetica, and so on)
- ► Font size, and
- ► Font style (bold, italic, and underlining).

Do the following

1. In ProShares-Vanguard, with the Format tab and the left header cell selected, from the **Font Size** drop-down field, select **24**.

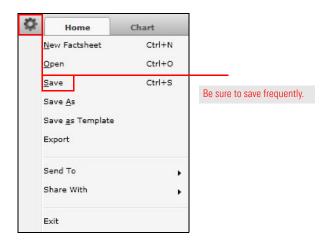


The header should now look something like this.





2. To save your work, click the **Application Settings** icon at the top-left corner of the window and select **Save**.

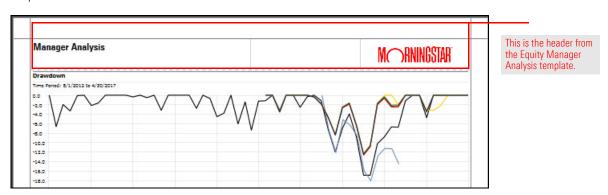


You do not have to recreate the header on every page; you can easily share it across all pages in the report.

Exercise 31: Use the same header throughout the report

Do the following:

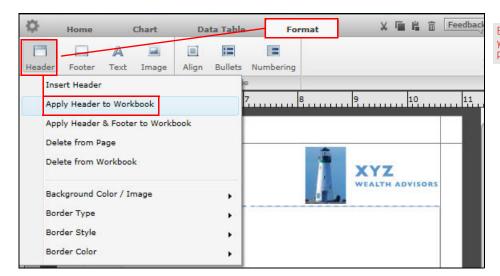
 In ProShares-Vanguard, in the Navigation pane, click a few pages to view them. Note that, except for the page you created, they all display the original header from the template.



2. Go to the last page (the page you created) and select a cell in the header.



On the Command bar, select the Format tab, then click Header > Apply Header to Workbook.



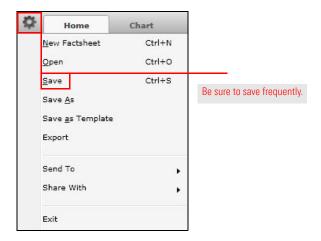
Be sure a cell in the header you want to use on all pages is selected.

4. In the Navigation pane, click a few **pages** to view them. Now they all display the header you built.



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5. To save your work, click the **Application Settings** icon at the top-left corner of the window and select **Save**.



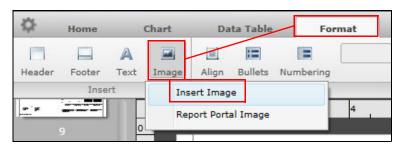
When working with an image, keep the following in mind:

- ► When you insert an image into a header or footer cell, it resizes to fit the cell without distorting the proportions; and
- ► When you insert an image into a regular (body) cell, it does not resize to fit the cell, which means it might be too large or small for the selected cell.

In this exercise, inserting an image into a body cell and changing its size is described.

Do the following:

- 1. In ProShares-Vanguard, on the last page in the top row, select the **right (empty) cell**.
- 2. On the Command bar, select the **Format** tab, then click **Image** > **Insert Image**. The Open dialog box opens.

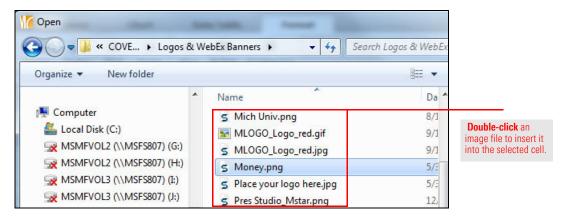


Exercise 32: Change the size of an image

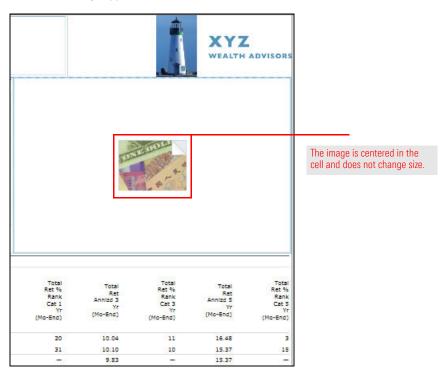
Note the highlighted selections.



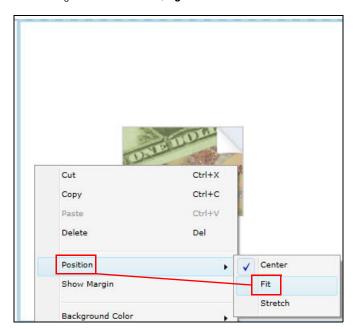
3. **Navigate** to a location on your network or drive, and **double-click** an **image file**. The image is inserted into the selected cell. The cell remains selected.



The selected image appears in the cell.



4. With the right cell still selected, **right-click** and select **Position** > **Fit**.



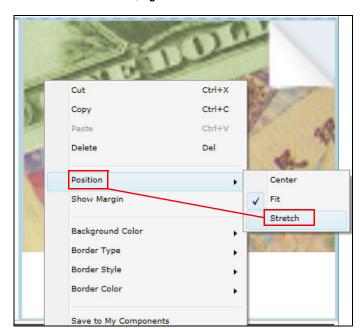
Note the highlighted selections.

The image resizes proportionally to fit in the cell.



When resized proportionally, the image might not fill the cell.

5. With the cell still selected, **right-click** and select **Position** > **Stretch**.



Note the highlighted selections.

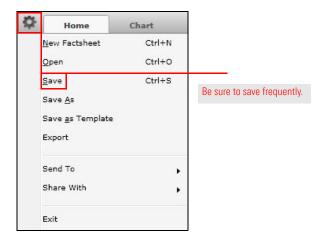
The image resizes to fill the cell, but loses its original proportions.



Note the distortion in the image.



6. To save your work, click the **Application Settings** icon at the top-left corner of the window and select Save.

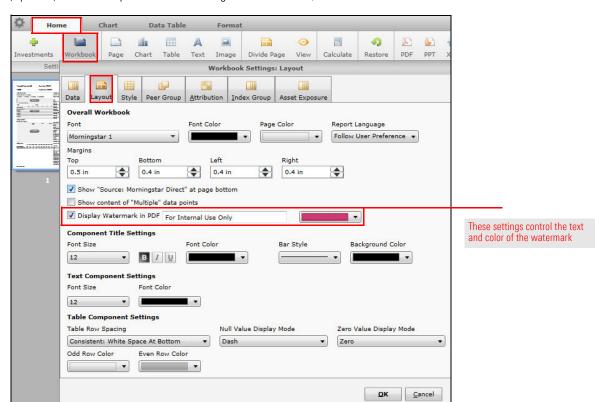


You can add a watermark to a report. The watermark appears in the PDF generated from the report. This feature is useful when a report has restricted distribution, such as "Internal Only."

Exercise 33: Add a watermark to a report

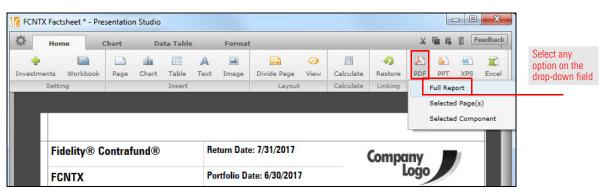
To add a watermark, do the following:

- 1. In a report, select the **Home** tab, then click **Workbook**. The Workbook Settings window opens.
- 2. Select the **Layout** tab.
- 3. Click the Display Watermark in PDF checkbox.
- 4. In the text field to the right of the checkbox, type the watermark text.
 - Note: The maximum number of characters is 50, including spaces.



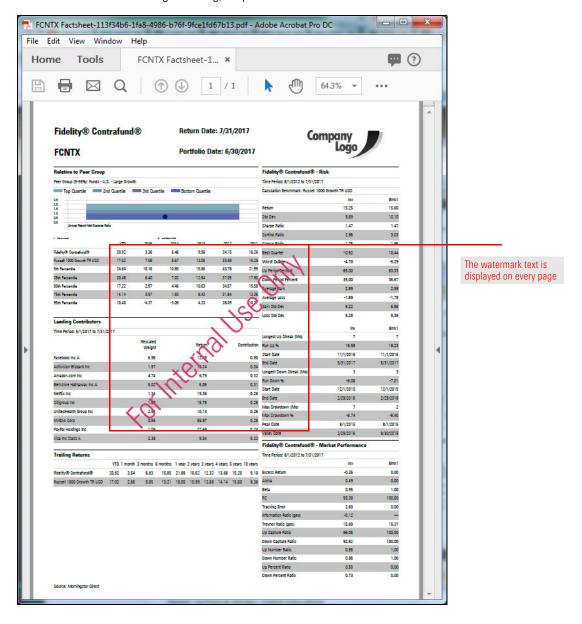
5. (Optional) From the drop-down field to the right of the text field, select a **color**.

- 6. Click **OK**. The watermark text is not displayed in the report.
- 7. At the top of the window, on the Home tab, click **PDF**. The PDF menu opens. Select an **output option**. In this example, **Full Report** is selected.





When the PDF has finished generating, it opens.





Creating a Template Overview

Creating a Template

Up to this point, you have worked with Morningstar templates, but they are not your only options. You can also create your own templates.

Overview

In this section, the basics of creating a template are described as follows:

- ▶ what is involved in creating a template (page 116)
- ▶ how to save a report as a template (page 118), and
- ▶ how to create a portfolio template (page 121).

To create a template, first identify the purpose of the template and then create a report to present the appropriate data. Once you are satisfied with the report, you save it as a template.

What is involved in creating a template?

You can also create a template starting from an empty file or, if you have an existing template or report with similarities to the template you want to build (in content and/or layout), you might want to base the new report on that.

In this guide, most of the tasks necessary for building a template have been covered. If you have followed the steps, you have completed the tasks described in the table here.

Task	Click to review the topic
Created a report based on an existing template	Working with a Template on page 25
Replaced, removed, rearranged, deleted, and resized components	Working with Chart and Table Components on page 42
Set a time period for the report	Using Workbook Settings and Component Settings on page 64
Created a new page with a custom layout and inserted components in cells	Creating a New Page on page 81
Customized individual components using Chart and Table Settings	Working with Chart and Table Components on page 42
Added a header and inserted an image and dynamic text	Working with Headers, Footers, Images, and Watermarks on page 98



Before saving a report (such as ProShares-Vanguard) as a template, you should do the following:

- 1. (Optional) Insert a footer. Consider including dynamic text, such as a page number and your firm name.
 - Note: The steps for creating a footer are the same as those for creating a header. See Add a header to a page on page 100 and in steps 2 and 3, click the Footer icon and select Insert Footer.
- 2. Review the content on all pages to make sure the purpose of the template is supported throughout the report. Some of the questions you should ask yourself include the following:
 - ► Is every component relevant to the purpose of the template?
 - ► Is the order and position of components appropriate to the purpose of the template?
 - ► Are similar components (such as a chart and a table displaying holdings-based data) displayed on the same page?
 - ► Is every page easy to read?
 - ► Are text, table, and chart components easy to interpret?
 - ► Are more pages needed?
 - ► Can you delete any pages?
 - Where can you use dynamic text to make the template as flexible as possible? For instance, if regular (typed) text is used, it is shown in every report based on the template, so make sure you have not keyed in the names of the firm, benchmarks, indexes, and so on
 - Is every component and page appropriately labeled? For instance, if every component on a page displays information about risk, it might not be necessary to show the label (or title) of every component.
 - Does the report meet your firm's branding and design standards? You might want to contact your Marketing or Design department to learn about preferred fonts and colors.
 - Note: Do not assume a Morningstar template can be used without modification. If you need a template for Current Portfolio Analysis, the Morningstar Current Portfolio Analysis template is a good starting point, but do not skip the above review steps. At the least, you should remove or replace the Morningstar logo.

When creating a template, one thing you do not have to modify is the investment(s) you selected. The investment(s) are simply placeholders so you have a visual representation of your work. When you save the report as a template, the investments and related data related become irrelevant.

When you want to use a template as the basis of a new report, you open the template and you are immediately prompted to select investments. (See Select an investment on page 29 and Select investments from a saved list on page 37.) The sample investments in the report are replaced by the investments you selected and the report accesses the data related to the selected investments.



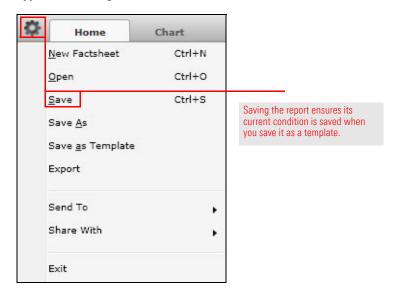
When you are satisfied that your report is as template-ready as possible, save it as a template.

Exercise 34: Save a report as a template

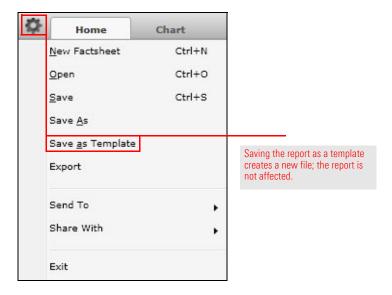
• Note: In this exercise, it is assumed that your ProShares-Vanguard is final, regardless of what condition it is in.

Do the following:

1. With ProShares-Vanguard open, in the upper-left corner of the window, click the **Application Settings** icon and select **Save**.

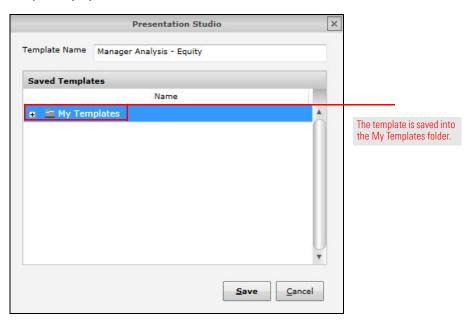


2. Click the **Application Settings** icon again, and select **Save As Template**. A dialog box opens.





3. In the Template Name field, replace "ProShares-Vanguard" with **Manager Analysis - Equity**.

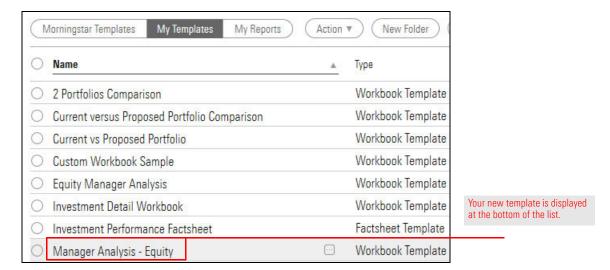


- 4. Click **Save**. An alert opens, reporting that the file has been successfully saved as a template.
- 5. Close the **template**. The Presentation Studio Home page is displayed.
- 6. On the Presentation Studio Home page, on the toggle, select **My Templates**.





Your templates are displayed in the list area.



The two portfolio templates are as follows:

- ► Portfolio Proposal template, and
- ► Portfolios Comparison template.

In these templates, the features you have learned about (components, page layouts, headers and footers, and so on) are available, but they are not prebuilt in the templates. To create a portfolio template, you must build from scratch.

Do the following:

- 1. On the Presentation Studio home page, click the **Portfolios** tile. The Choose Template dialog box opens.
- 2. Click **New Template**. The Select a Template Type dialog box opens,



What do I need to know before creating a portfolio template?



- 3. Select a template type, as follows:
 - ► Use the **Portfolio Proposal template** to present a proposed portfolio to a client. Go to Exercise 35 on page 121.
 - ► Use the **Portfolios Comparison template**, to compare multiple model portfolios. Go to Exercise on page 122.

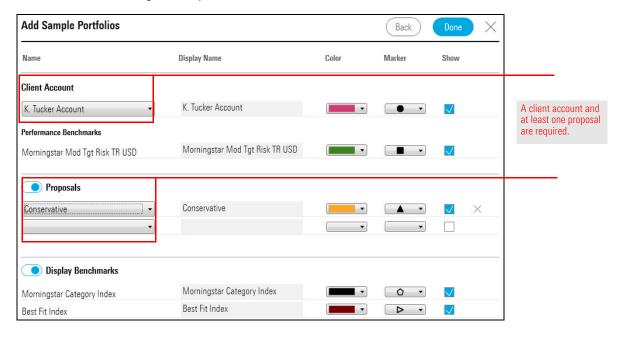


After completing the steps in What do I need to know before creating a portfolio template? on page 120, do the following:

Exercise 35: Create a Portfolio Proposal template

- 1. In the Add Sample Portfolios dialog box, select the following:
 - a client account, and
 - one or more proposals.

The other fields in the dialog box are optional.





2. Click Done.

A blank Presentation Studio file opens.

The charts available in this template are as follows:

- ► Multiple Investment Growth
- ► Legend
- ► Returns Correlation Matrix
- ► Calendar Returns Bar Chart
- ► Rolling Window Chart
- ► Trailing Returns Bar Chart
- ► X/Y Scatter Plot
- ► Pie Chart
- ► Morningstar Style Box, and
- ► Multiple Sector Exposure Chart.

The tables available in this template are as follows:

- ► Multiple Investment Performance
- ► Multiple Investment Snapshot
- ► Multiple Investment Calendar Returns
- ► Multiple Investment Trailing Returns, and
- ► Portfolio Holdings.

Continue creating the template, using the processes in this document and following the guidelines in What is involved in creating a template? on page 116.

After completing the steps in What do I need to know before creating a portfolio template? on page 120, do the following:

1. In the Add Portfolios dialog box, select **two or more portfolios** to compare.

Cancel Done Add Portfolios Name Identifier Туре Aggressive 50058416 Model Portfolio Conservative 50058418 Model Portfolio Jamison Proposal 50043462 Model Portfolio When you select a portfolio, a checkmark is shown to its right. Moderate Aggressive Model 50058415 Model Portfolio Moderate Conservative Model 50058417 Model Portfolio Moderate Model 50058414 Model Portfolio

2. Click **Done**. The Add Sample Portfolios dialog box opens.

Exercise 36: Create a Portfolios Comparison template



3. Selections in this dialog box are optional. Click **Done**.



A blank Presentation Studio file opens.

The charts available in this template are as follows:

- ► Multiple Investment Growth
- ► Legend
- ► Returns Correlation Matrix
- ► Calendar Returns Bar Chart
- ► Rolling Window Chart
- ► Trailing Returns Bar Chart
- ► X/Y Scatter Plot
- ► Pie Chart
- ► Morningstar Style Box, and
- ► Multiple Sector Exposure Chart.

The tables available in this template are as follows:

- ► Multiple Investment Performance
- ► Multiple Investment Snapshot
- ► Multiple Investment Calendar Returns
- ► Multiple Investment Trailing Returns, and
- ► Portfolio Holdings.

Continue creating the template, using the processes in this document and following the guidelines in What is involved in creating a template? on page 116.



Publishing a Presentation Studio Template

You can publish a your Presentation Studio templates and use them when generating reports in the following Morningstar products:

Overview

- ► Morningstar Direct Cloud Editions, and
- ► Report Portal.

The requirements for publishing a Presentation Studio template are as follows:

- 1. You must be the owner of the template.
- 2. You cannot publish a Morningstar template. However, you can publish a template that you built based on a Morningstar template (or a template owned by someone else). See Exercise 38 on page 127.
- 3. You need permission to publish a Presentation Studio template. If you cannot complete the steps in Exercise 37 on page 125, contact your Customer Success Manager.

When you publish a template, you decide who may use the template. Be sure to include yourself (or a group of which you are a member) among those the template is published to.

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

- ▶ publish a Presentation Studio template (page 125)
- ► save a copy of a Presentation Studio template you do not own (page 127), and
- ▶ use a Presentation Studio template to generate a report (page 128).



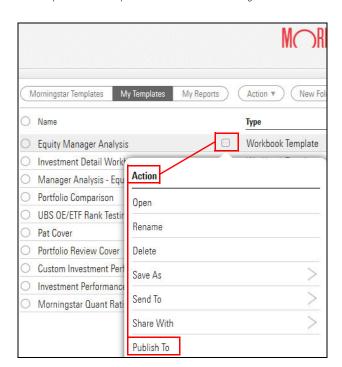
Presentation Studio initially includes templates from Morningstar, which cannot be published to other users. Templates you create can be published to yourself, selected users, or all users at your firm. Do the following:

Exercise 37: Publish a Presentation Studio template

1. On the Morningstar Presentation Studio Home page, click My Templates.

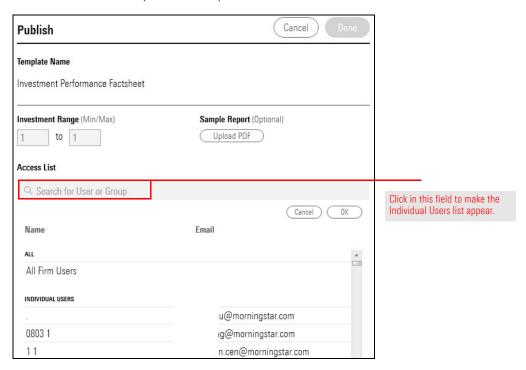


- 2. **Hover the cursor** over the row displaying the name of the template you want to publish. The Action icon is displayed.
- 3. Click the **Action** icon and from the **Action** menu, select **Publish To**.
 - Note: If Publish To is not an option on the Action menu, you do not have permission to publish templates. Contact your Customer Success Manager.

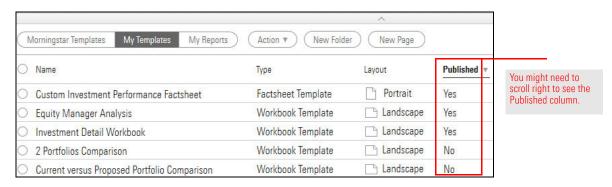


Note the highlighted selections.

- 4. Click in the **Search for User or Group** field. A list of your firm's Presentation Studio users is displayed. Do one or more of the following:
 - ► Enter your **email** and **select** it (recommended).
 - Search for the emails of the users who should have access to this template; be sure to select them.
 - ► Select **users** from the list, and/or
 - ► Click **All Firm Users** to publish the template firm-wide.



- 5. Click **OK**, then click **Done**. An alert opens.
- 6. Click OK.
- 7. In the list of your templates, **note** the template(s) you have published.



In Morningstar Report Portal, you can use your published templates to create reports. To learn about using Report Portal, read the Morningstar Report Portal User Guide.



If you built a template based on a Morningstar template or one built by another user, when you saved it, you became the owner. If you need to publish a Morningstar template or one built by another user, simply save a copy of it. You do not have to make any changes to the original template to own a copy.

Exercise 38: Create a copy of a template owned by Morningstar or another user

Note: Morningstar or the other individual is still the owner of the original.

Do the following:

- 1. Open a **template** you do not own.
- 2. Optional: **Customize** the template.
- 3. At the top-left corner of the window, click the Application Settings icon and from the menu, select **Save As Template**. A dialog box opens.



4. In the **Name** field, type a **name**, then click **Save**.

A copy of the template is created as a new template (with the name you entered). The original template is unchanged. The template you saved is stored in the My Templates folder and listed on the Presentation Studio Home Page when My Templates is selected on the toggle.

5. **Publish** your template, as directed in Exercise 37 on page 125.

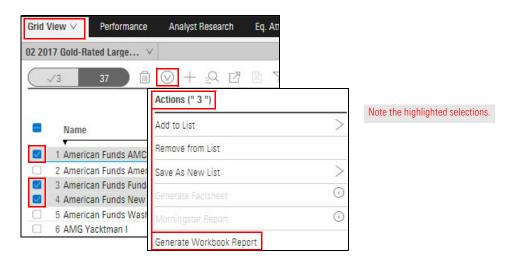


In this exercise, reports for multiple investments are generated, but you can use this process to generate a report for a single investment as well. Note that you are limited to 50 investments.

Exercise 39: Use your template to generate a report

To generate a workbook report for multiple investments, do the following:

- 1. Launch your Morningstar Direct Cloud edition.
- 2. Open a list or screen of investments in the **Grid View**.
- 3. Select **more than one investment** (but not more than 50) by clicking the checkboxes at the left of their rows.
- 4. On the toolbar above the grid, click the **Actions** icon. The Actions menu opens.
- From the **Actions** menu, select **Generate Workbook Report**. The Report Options window opens.
 - Note: If you are generating a workbook report for a single investment, click the Actions menu on the investment's row.

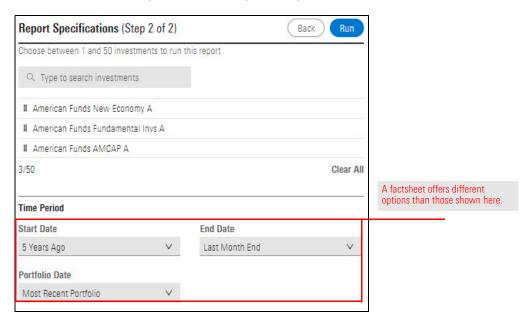


- 6. From the **Template Type** menu, select a **template**.
 - Note: You cannot change the investment range or the Report Name.

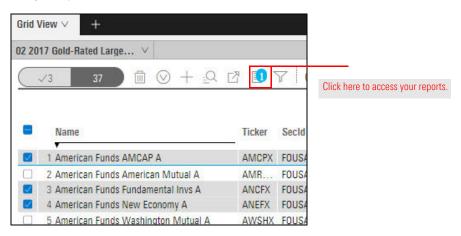


7. Click **Next**. Another Report Options window opens.

- 8. If you have more than 50 investments displayed, remove some of them. **Hover the cursor** over one or more of the **investments**. An X appears to the right.
- 9. Click the **X** to remove that investment from the report.
- 10. From the Time Period menus, select a **Start Date**, **End Date**, and **Portfolio Date**.



- 11. Click **Run**. The window closes and an alert opens, informing you that the reports are being generated.
- 12. On the toolbar above the grid, a number appears on the **Generated Reports** icon when the report is ready. Click the **Generated Reports** icon. The Generated Reports dialog box opens.





13. Click the **name of the report**.



14. Depending on your browser settings, you might be prompted to **open** or **save** the report, or it might open in a separate browser tab or window.

Keep in mind that reports are not saved indefinitely in Morningstar Direct Cloud; the Generated Reports list is cleared when you log out of your session. When you log in, you will not be able to access your reports.

If you elect to open the report or the report opened after generating, it is recommended that you **save** it to your system so you can access it later.

Note: The report is a PDF.



Creating a Batch Report Overview

Creating a Batch Report

Suppose you need a monthly report on certain investments on the 16th day of the month. Every month, you could create each individual report by doing the following:

Overview

- 1. Open a template.
- 2. Select the investment(s) to be reflected in the report.
- 3. Save the report.
- 4. Repeat steps 1–3 for each investment or set of investments.

It is more efficient to have it created automatically every month at a specific date and time. The automated process is called a batch report.

Note: Batch reporting is not automatically enabled in user accounts. To gain access to batch reporting, contact your Customer Service Consultant.

In the Morningstar Report Portal, you can use your published templates to create reports. To learn about using Report Portal, read the Morningstar Report Portal User Guide.

In this section, the following procedures are described:

- ▶ understanding the process for generating reports in a batch (page 131)
- ► creating a batch report (page 132)
- ► testing a batch report (page 136), and
- ► download all reports from a batch (page 138).

The overall process of creating a batch report is as follows:

- 1. Select a template.
- 2. Select an investment or set of investments for each individual report.
- 3. Schedule the batch to run.
- 4. Test the batch.

The advantage to this over creating individual reports every month is that you don't have to repeat this process.

In these exercises, the procedure to create a batch report for multiple investments is described, but you can also create a batch to generate a single report on a set of investments.

Note: When preparing to create a batch report, keep in mind that a single-investment template can cover only one investment. In this guide, you used a single-investment template to create a factsheet. A multiple-investment template covers (and frequently compares) multiple investments. You used a multiple-investment template to create a workbook.

What is the process for generating reports in a batch?



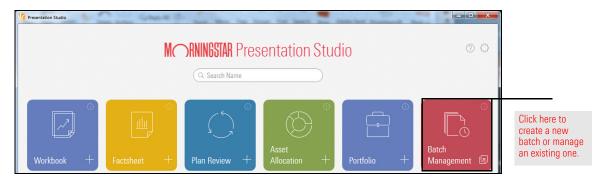
In this exercise, create a batch to generate monthly ETF Analysis reports for several ETFs.

Exercise 40: Create a batch

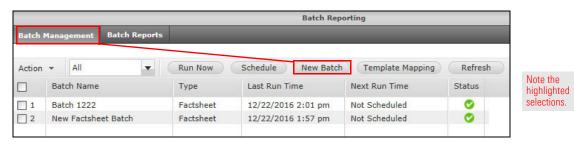
Note: If you don't have an investment list or saved search of ETFs, use another investment type and an appropriate template.

Do the following:

1. On the Presentation Studio Home page, click **Batch Management**. The Batch Reporting window opens.



2. Select the **Batch Management** tab and click **New Batch**. The New Batch Setup dialog box opens.



3. Select **Factsheet** and click **Continue**. The New Batch Setup dialog box opens.

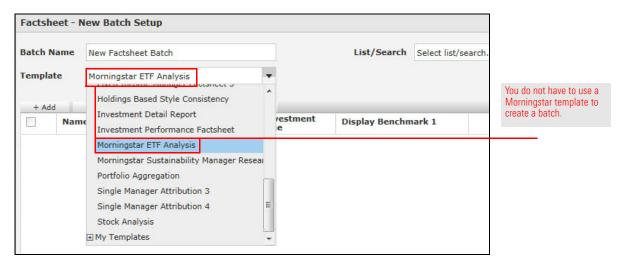




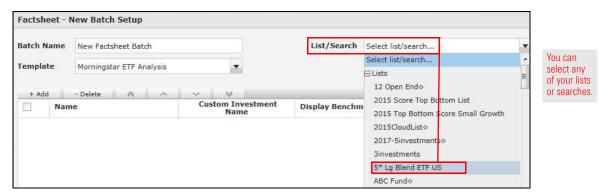
 Select Use a single template and click Continue. The Factsheet - New Batch Setup dialog box opens.



- 5. Do the following:
 - ► In the Batch Name field, enter Monthly ETF Analysis, and
 - From the Template drop-down field, click Morningstar Templates, then scroll down and select Morningstar ETF Analysis.



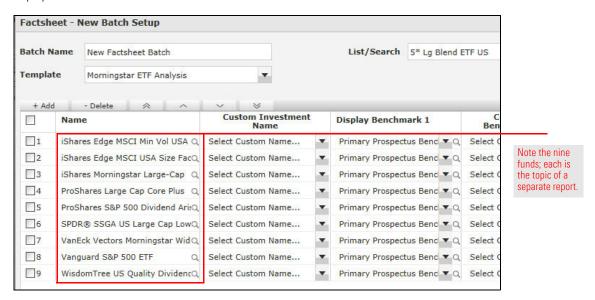
 In the List/Search drop-down field, expand Lists and select a list of ETFs (in this case, 5* Lg Blend ETF US).



When you use an investment list in setting up a batch report, the reports respond dynamically to changes to the list. In other words, when you make changes to the investment list, the changes are reflected in the reports the next time the batch runs.



In the New Batch Setup dialog box, the contents of that list (nine ETF funds) are displayed in the list area.

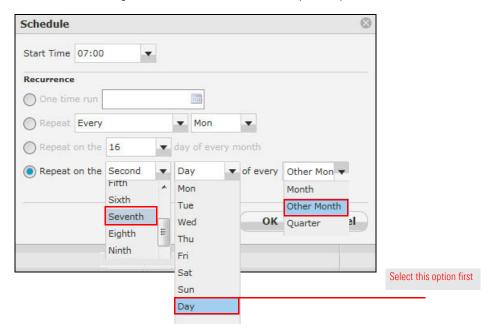


- 7. At the bottom of the dialog box, click **Schedule**. The Schedule dialog box opens.
- 8. From the **Start Time** drop-down field, select **07:00**.
 - Note: The Start Time drop-down field uses a 24-hour clock, so 07:00 is 7:00 a.m. and 14:00 is 2:00 p.m. The clock conforms to your local time.
- 9. Under Recurrence, click the **Repeat on the** ___ **day of every month** button, then from the drop-down field, select **16**.



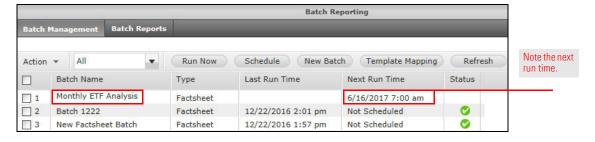


The Schedule dialog box offers flexible scheduling options to meet a variety of needs. The first menu in the Repeat on the area usually displays only the options First, Second, Third, Fourth, and Last. But when you select Day from the second menu, the additional options Fifth, Sixth, Seventh, Eighth, Ninth, and Tenth become available. In the image here, the batch is being scheduled to run on the seventh day of every other month.



- 10. Click **OK**. The Schedule dialog box closes.
- 11. In the Factsheet New Batch Setup dialog box, click Save.

Monthly ETF Analysis is now listed in the Batch Reporting window.

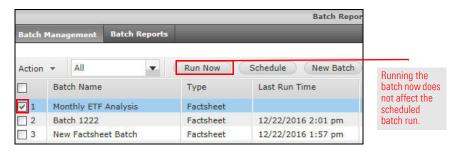


The batch runs on the date and time listed in the Next Run Time column. When the run is completed, an email is sent to the person who created the batch.



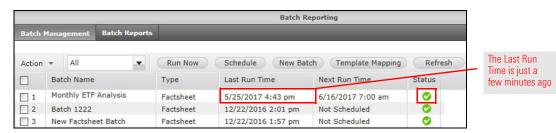
Although the batch is not scheduled for an immediate run, you can test it by doing the following:

- Exercise 41: Test a batch
- In the Batch Reporting window, select the Batch Management tab, then select Monthly ETF Analysis by clicking the checkbox at the beginning of its row.
- 2. Click Run Now.

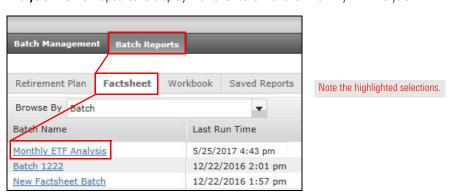


Note: The number and complexity of reports being generated affect the amount of time to complete the run.

When the batch is finished running, a green checkmark appears in the Status column.



3. Select the **Batch Reports** tab, then select the **Factsheet** tab and click **Monthly ETF Analysis**. The view updates to display the list of batch runs for Monthly ETF Analysis.





4. In the window, all runs of the batch Monthly ETF Analysis are listed, including old batches. Click the **Run Date** link for the batch you want to view. Because this is the first time the batch has been run, only one link is shown.

Note: Batch output is saved in the Morningstar system for two years. At the end of that time, Morningstar sends an email advising you of the upcoming expiration so you can save the output locally.

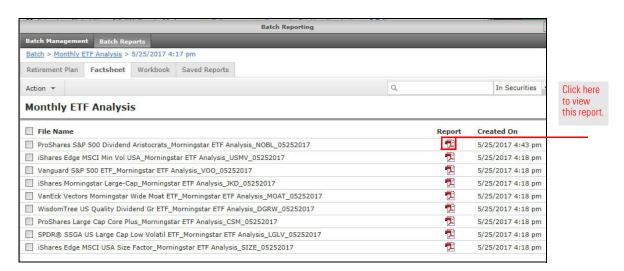
The view updates to display the list of reports generated in the batch run.



- 5. All reports (including outdated reports) generated from the batch run are displayed. The file name of each report includes the following:
 - ▶ Name
 - ▶ Template name
 - ► Ticker, and
 - ► run date in the format mmddyyyy.

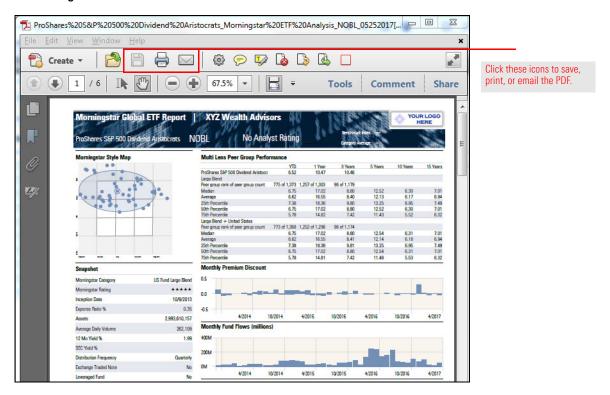
To view a report, click its **PDF** icon. The report PDF opens. Depending on the settings in your internet browser, you might see a Download message.

Note: If you do not have Adobe Acrobat Reader or a similar application installed on your system, an error message opens, containing a link to the Adobe website, where you can download Acrobat Reader.





6. Look through the PDFs.

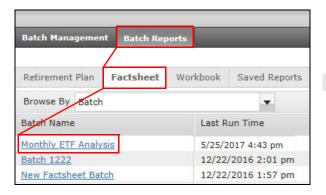


In Exercise 41: Test a batch on page 136, you viewed a PDF of a single report, which you can download. You can also download all the reports in a batch run as a .zip file. In this exercise, you will download all the PDFs in a batch run of Monthly ETF Analysis.

Exercise 42: Download all PDFs from a batch run

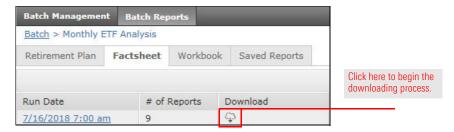
Do the following:

- 1. Select the **Batch Reports** tab.
- 2. Select the **Factsheet** tab and click **Monthly ETF Analysis**. The view updates to display the list of batch runs for Monthly ETF Analysis.



Note the highlighted selections.

3. In the row of the run date you are interested in, click the **Cloud** icon. A tooltip appears, displaying the word "Packing." When the reports are ready, a down arrow is displayed.

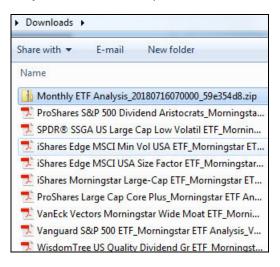


4. Click the **Down Arrow**.



Depending on your browser settings for downloads, one of the following happens:

- ► The .zip file downloads to the folder you have designated for downloads, or
- ► An alert opens, giving you options such as Open, Save, and Save As.
- 5. **Unzip** the file to access the report PDFs.



The report PDFs are shown here in the Downloads folder of Windows Explorer.



Using Components with Nonstandard Features

Most components have properties in common with others of the same type. For instance, in many charts, you can change markers and colors. In many tables, you can add or remove columns (data points). Additionally, charts and tables in the Returns category offer various returns data to choose from (Return Series, Return Type, and so on).

Overview

In this section, the focus is on the following:

- components with uncommon features or capabilities, and
- component features used to address specific usage,

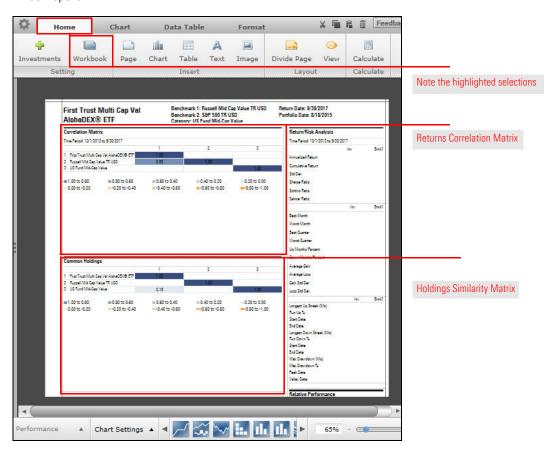
You will learn how to do the following:

- ► expand a Holdings Similarity Matrix or Returns Correlation Matrix (page 141)
- customize a component to display multiple values (page 144)
- ▶ understand the Asset Allocations pie chart (page 146)
- compare holdings according to their most recent common portfolio date (page 146), and
- ► compare holdings in a stacked bar chart (page 148).



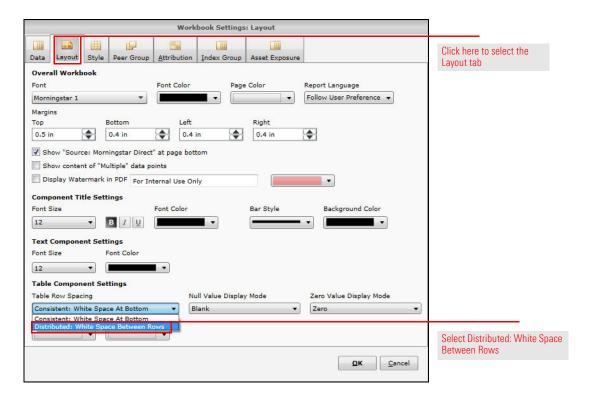
In Holdings Similarity Matrix and Returns Correlation Matrix charts, you can expand the chart to fill its component cell, resulting in a more consistent and visually pleasing presentation. To expand the Holdings Similarity Matrix or Returns Correlation Matrix charts to fill its component cell, do the following:

- How can I expand a Holdings Similarity Matrix or Returns Correlation Matrix?
- 1. In a Presentation Studio report, select or insert a **Returns Correlation Matrix** chart and/or a **Holdings Similarity Matrix** chart.
- 2. On the Command bar, select the **Home** tab and click **Workbook**. The Workbook Settings window opens.





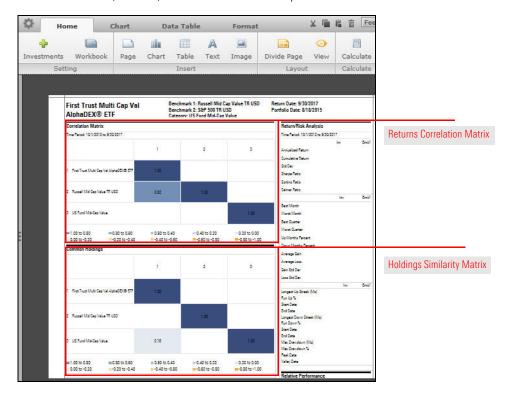
- 3. In the Workbook Settings window, select the **Layout** tab.
- 4. In the Table Component Settings area, from the **Table Row Spacing** drop-down field, select **Distributed: White Space Between Rows**.
 - Note: The other option is Consistent: White Space at Bottom.





5. Click **OK**.

Note that the chart (or charts) now fills its cell's vertical space.



Most data points return only a single value — price, Morningstar Category, and so on. However, some data points can have multiple values. For instance, an investment can be available for sale in more than one country, or it can have multiple managers.

How can I customize a component to display multiple values?

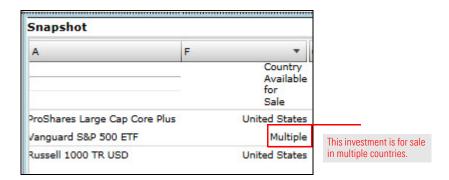
The following data points can return multiple values:

- ► data points related to managers, manager history, and so on
- ► Wrap/TAMP Availability
- ► Country Available for Sale
- ► Country Registered for Sale, and
- ► Distributor.

When one of these data points has multiple values, it displays the word "Multiple." You have the option of displaying the expanded list.

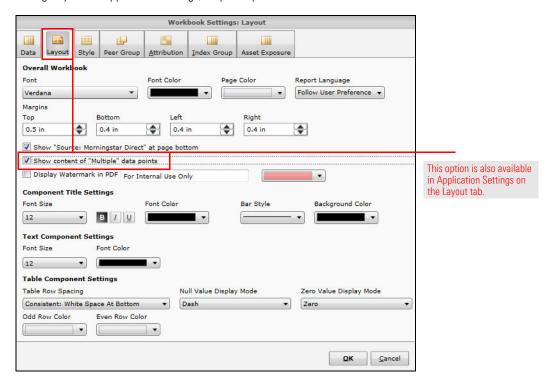
The option to display an expanded list is available in both Application Settings and Workbook Setting. In this example, Workbook Settings in a Snapshot table are used.

- 1. Select a table component displaying the word "Multiple" in a column.
 - Note: Columns B through E are hidden in the image for readability.



- 2. On the Command bar, select the **Home** tab, then click **Workbook**. The Workbook Settings window opens.
- 3. Select the **Layout** tab.
- Click the Show content of "Multiple" data points checkbox, then click OK to close the window.

When using Workbook Settings, only data points in this report are affected by this setting. If you use Application Settings, all your reports are affected.



In the Country Available for Sale column, Vanguard S&P 500 ETF now shows "Mexico, United States."



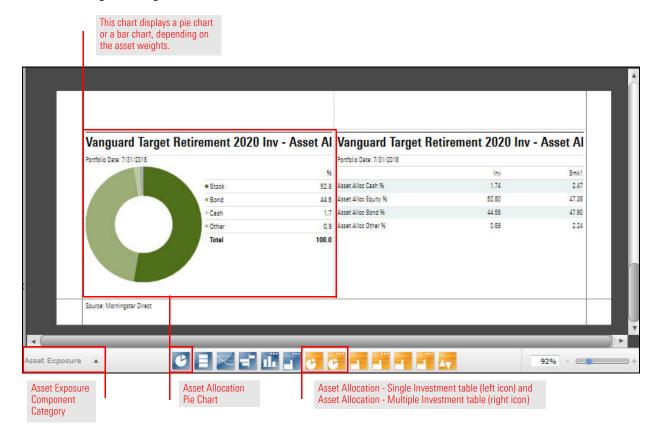


When you select the **Asset Exposure Component Category**, the Component Bar displays the following pie chart icons:

- ► Asset Allocation Pie Chart
- ► Asset Allocation Single Investment (table), and
- ► Asset Allocation Multiple Investment (table).

The table components display as you would expect, but on occasion, the pie chart may display a bar chart. This component automatically converts to a bar chart if any of the assets have negative weights.

Why does the Asset Allocations Pie Chart sometimes display a bar chart?



The Holdings Comparison template compares the holdings of two funds in the following tables:

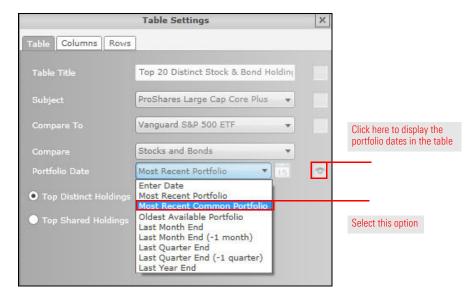
- ► Top 20 Distinct Stock & Bond Holdings (Portfolio 1 and Portfolio 2), and
- ► Top 20 Shares Stock & Bond Holdings (Portfolio 1 and Portfolio 2).

In these tables, the option Most Recent Common Portfolio is available. These components do not display data over a time period. Instead, the focus is on a specific

How can I compare funds' holdings using their most recent common portfolio date? date. The Most Recent Common Portfolio option finds the most recent common portfolio date for the two funds so that the dates are always in sync.

In the Holdings Comparison template, this selection is found in the Table Settings window when one of the following components is selected:

- ► Top 20 Distinct Stock & Bond Holdings (Portfolio 1 and Portfolio 2), and
- ► Top 20 Shares Stock & Bond Holdings (Portfolio 1 and Portfolio 2).





In a stacked bar chart representing a portfolio's holdings, if the end date is later than the most recent portfolio date, the automatically adjusts to the most recent portfolio date. How does the portfolio date affect the end date in a stacked bar chart?

In this sample, note the following:

- ► On the toolbar at the top of the window, the end date setting for the stacked bar chart is Last Month End, which at the time of this writing is 7/31/2017.
- ► At the top of the stacked bar chart, the Time Period is displayed as 10/1/2012 to 4/30/2017.
- ► At the top of the pie chart, the portfolio date is displayed (4/30/2017).

