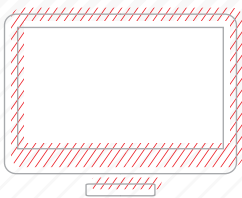
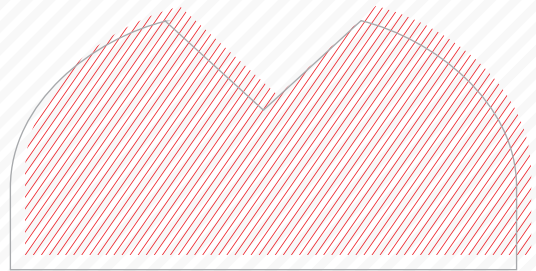
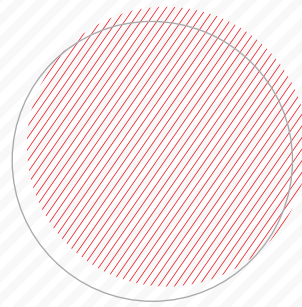
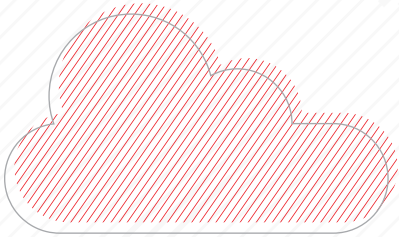
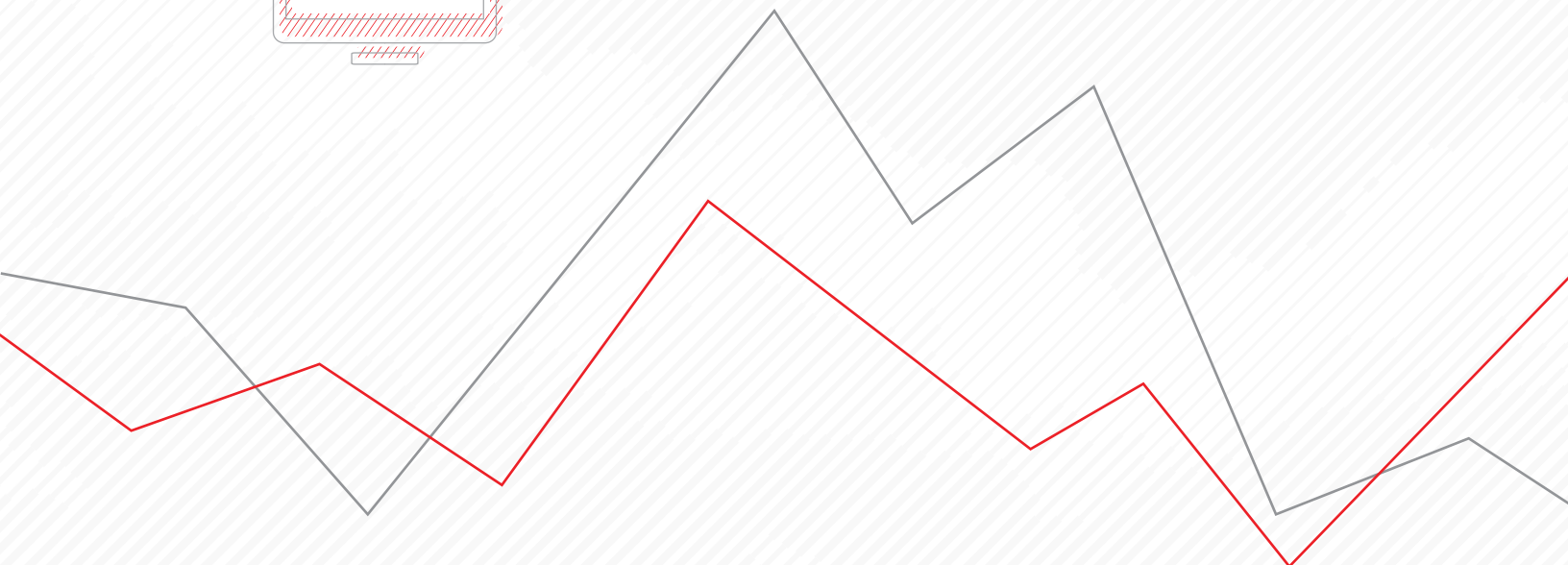


Using Presentation Studio

Morningstar DirectSM



MORNINGSTAR Direct



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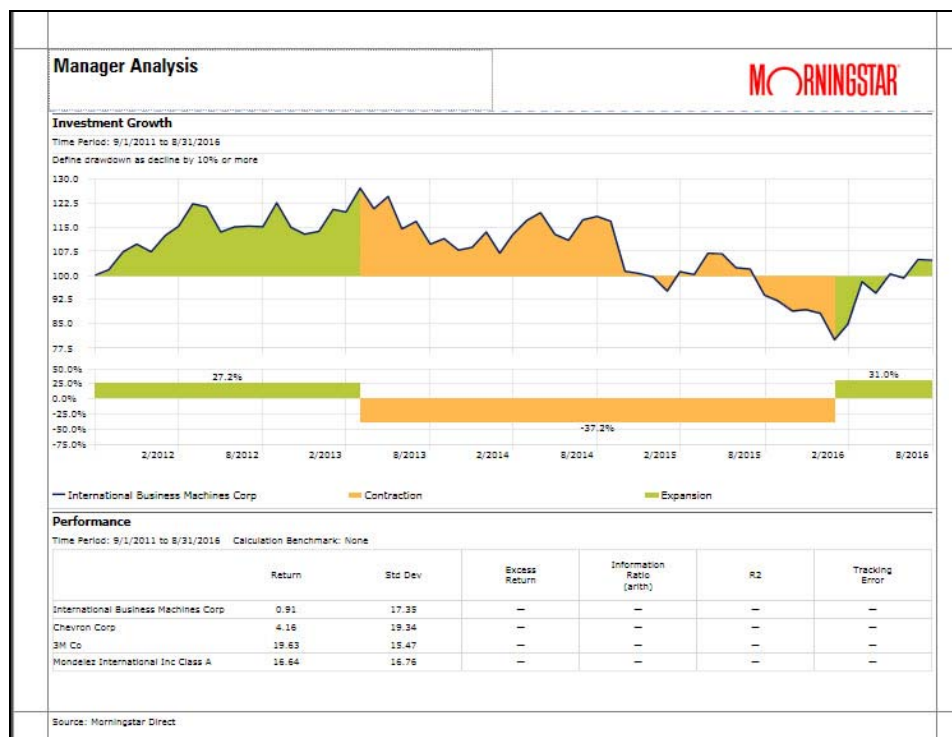
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Using Presentation Studio

In Morningstar DirectSM, Presentation Studio is the 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 \(page 7\)](#)
- ▶ [Working with Factsheets and Workbooks \(page 21\)](#)
- ▶ [Working with a Template \(page 24\)](#)
- ▶ [Working with Chart and Table Components \(page 40\)](#)
- ▶ [Using Workbook Settings and Component Settings \(page 62\)](#)
- ▶ [Creating a New Page \(page 79\)](#)

- ▶ [Customizing a Component \(page 87\)](#)
- ▶ [Working with Headers, Footers, Images, and Watermarks \(page 96\)](#)
- ▶ [Creating a Template \(page 114\)](#)
- ▶ [Publishing a Presentation Studio Template \(page 122\)](#)
- ▶ [Creating a Batch Report \(page 126\)](#)
- ▶ [Using Components with Nonstandard Features \(page 135\)](#)

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.

This section helps you understand the following:

- ▶ Presentation Studio terminology ([page 7](#))
- ▶ what you can create in Presentation Studio ([page 9](#))
- ▶ how to launch Presentation Studio ([page 12](#))
- ▶ what you can do on the Presentation Studio Home page ([page 14](#))
- ▶ what you can do in the Application Settings ([page 16](#))
- ▶ how to change the colors used in charts throughout Presentation Studio ([page 16](#)), and
- ▶ how Application Settings, Workbook Settings, and Component Settings relate to each other ([page 19](#)).

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

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 21 .
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 23 .
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 24 .

Overview

What Presentation Studio terminology do I need to know?

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 24 .
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 40 .

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

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:

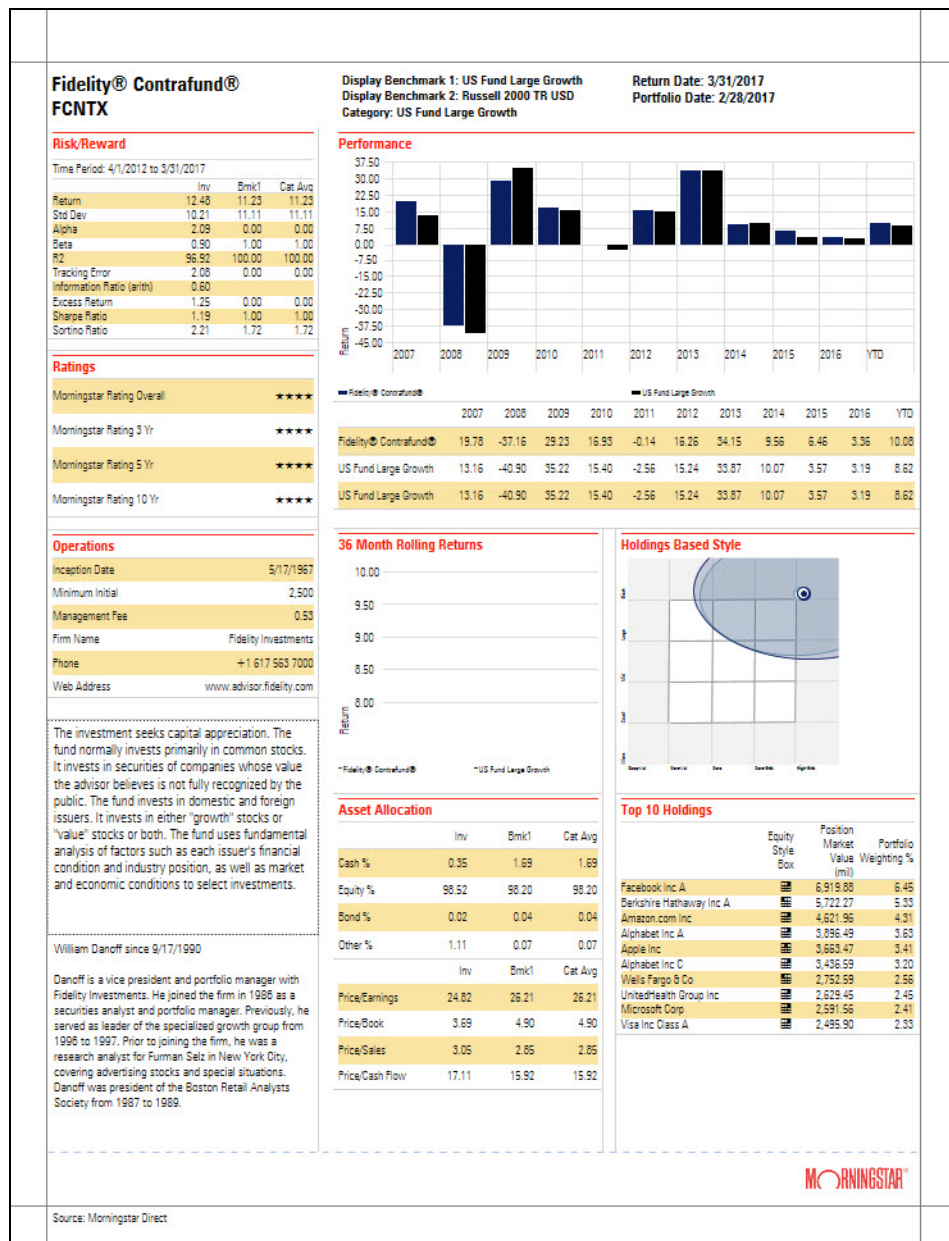
What can I create in Presentation Studio?

MORNINGSTAR[®]

Source: Morningstar Direct

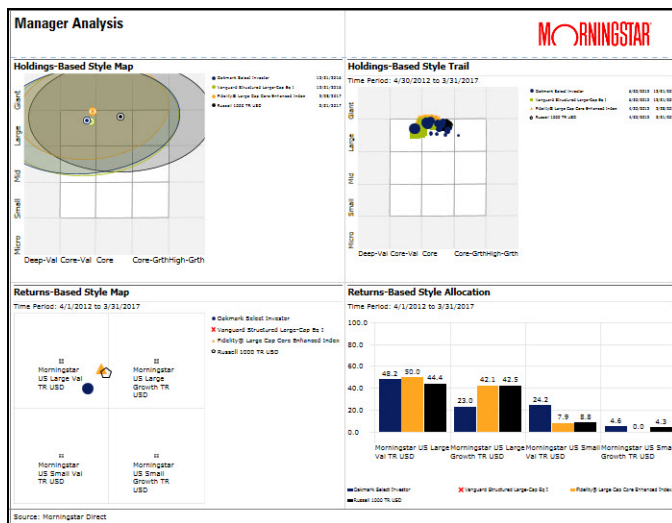
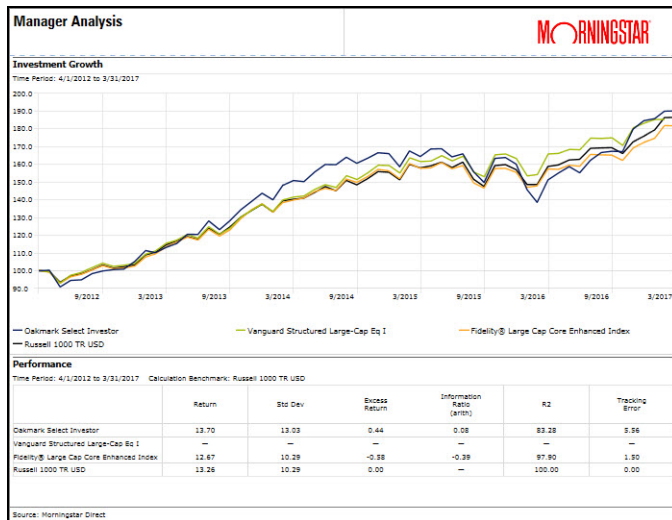
The cells are outlined in light blue

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

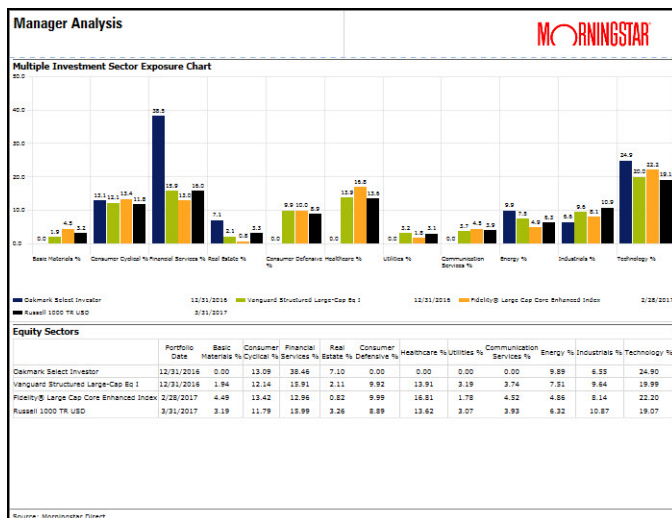


Each cell now contains a chart, table, or text representing Morningstar data and analysis.

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

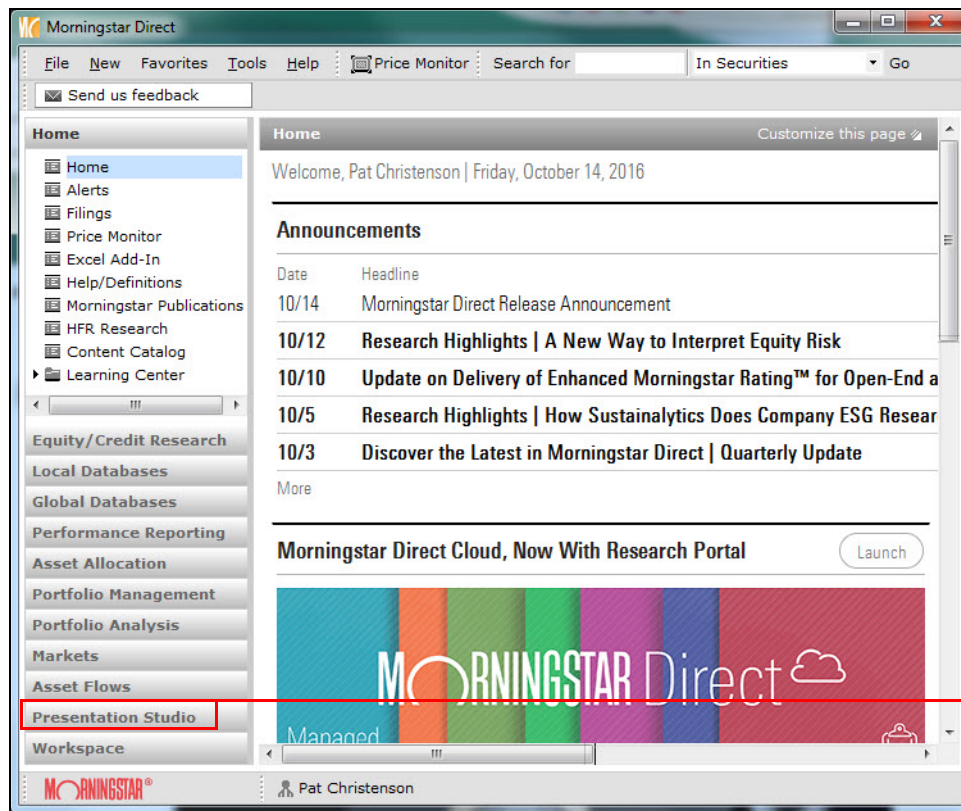


The three pages shown here are all from a single Presentation Studio workbook



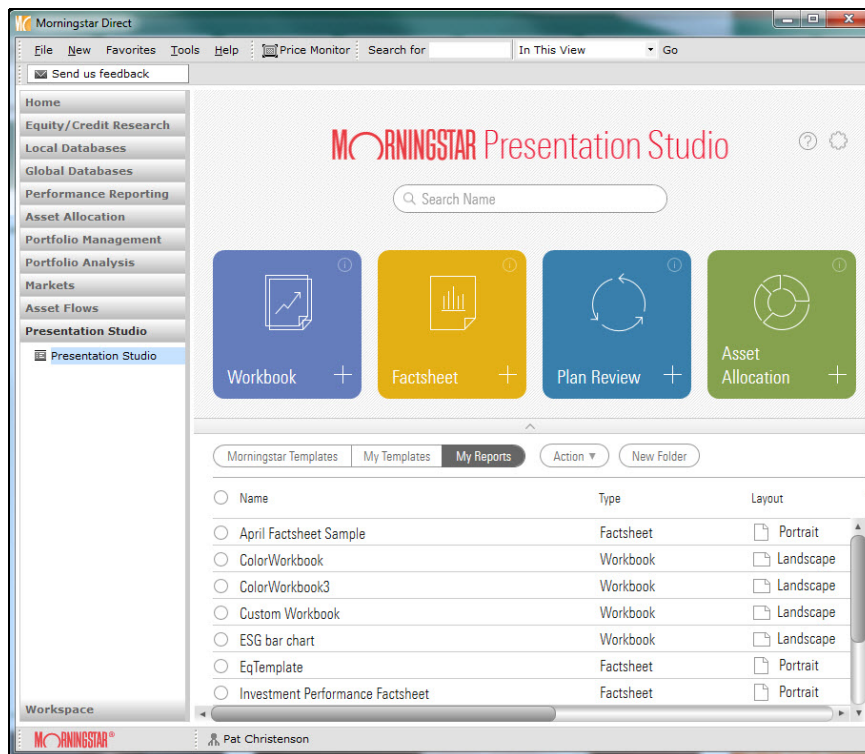
After logging into Morningstar Direct, select the **Presentation Studio** module.

Exercise 1: Launch Presentation Studio



Select the Presentation Studio module to open the Presentation Studio Home page.

The Presentation Studio Home page opens.

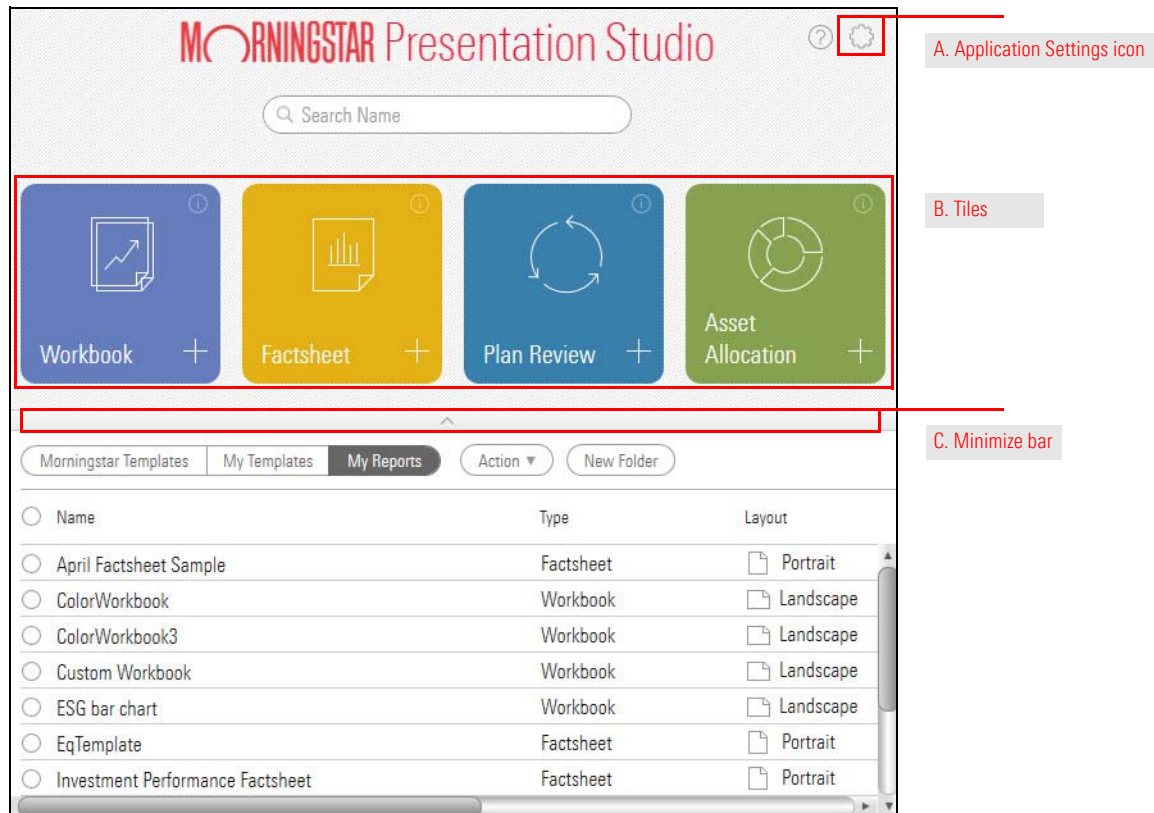


From here, you can create new reports and templates, as well as access existing ones.

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 7](#) to review the definitions of workbook, factsheet, template, and other terms.

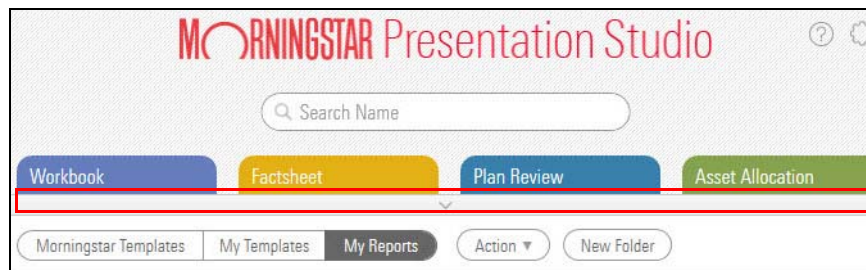
What can I do on the Presentation Studio Home page?



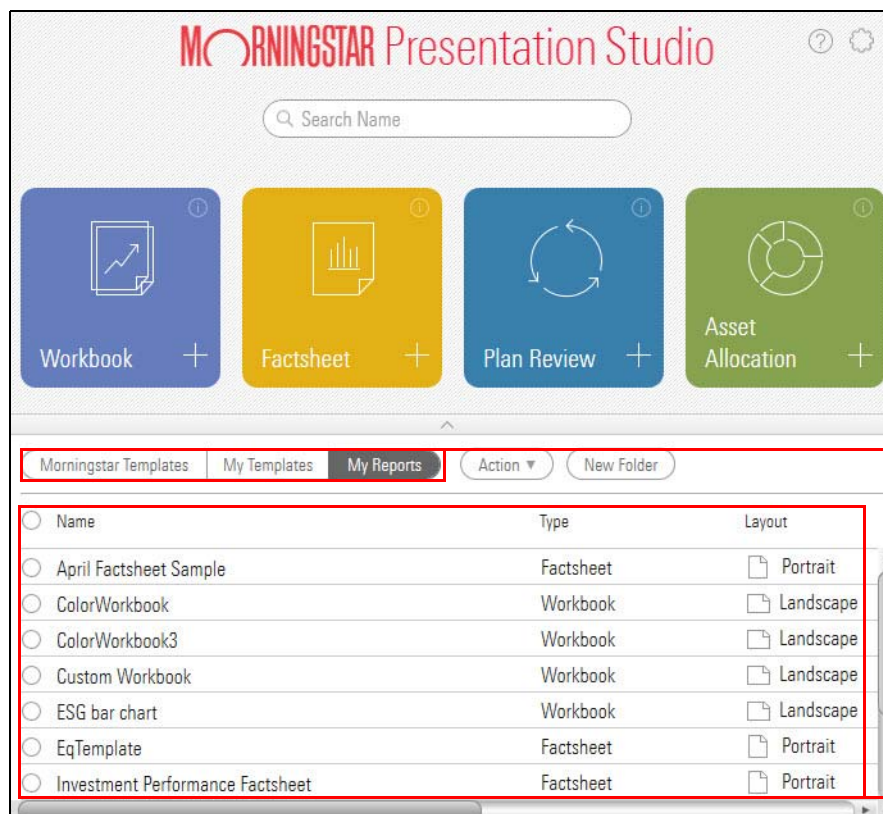
- A. Click the **Application Settings** icon to open the Application Settings. For information about the Application Settings, see [What can I do in the Application Settings? on page 16](#).
- B. Click a **tile** to create a new report of that type.

- 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



C. If the top portion of the Home page is minimized (shown here), click the Minimize bar maximize it



D. Toggle

E. List of templates or reports

- 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:

- ▶ 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.

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.

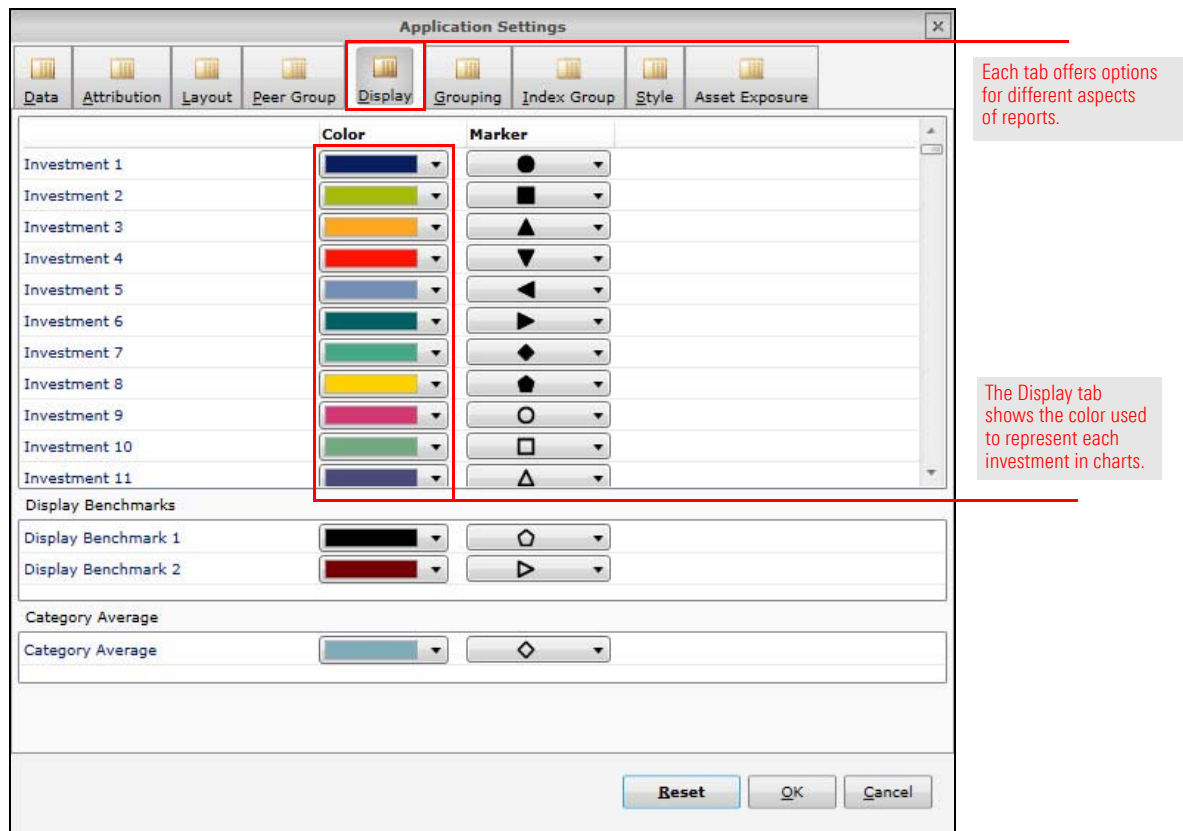


Click here to access the Application Settings.

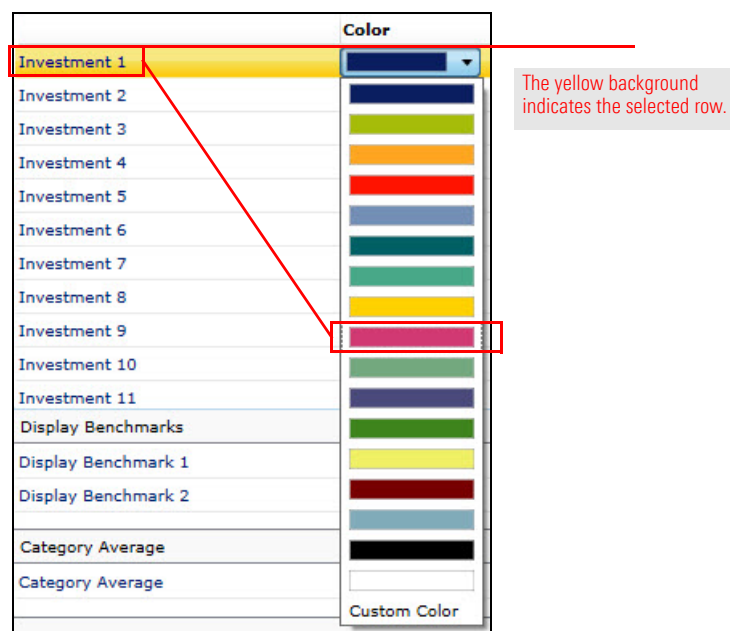
What can I do in the Application Settings?

Exercise 2: Change the colors used in charts

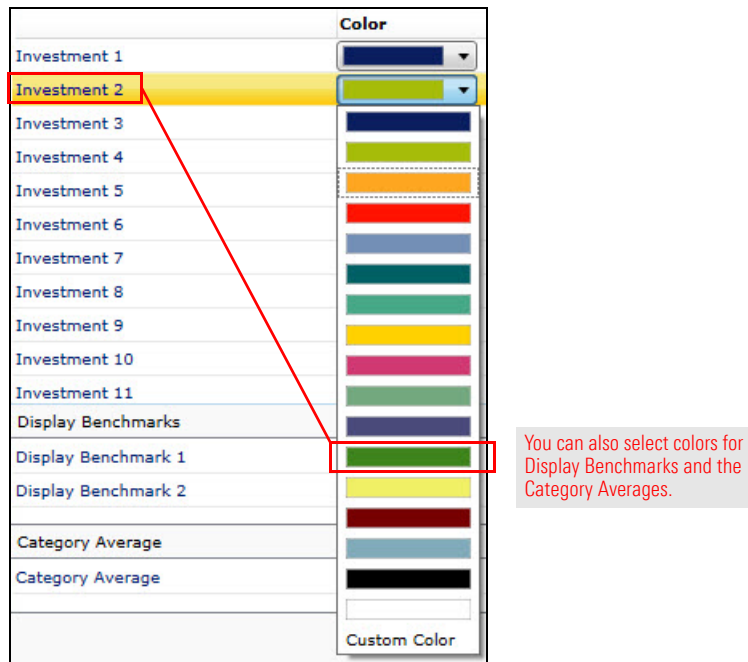
2. Select the **Display** tab.



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.

 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 21](#)), and
- ▶ what a workbook is ([page 23](#)).

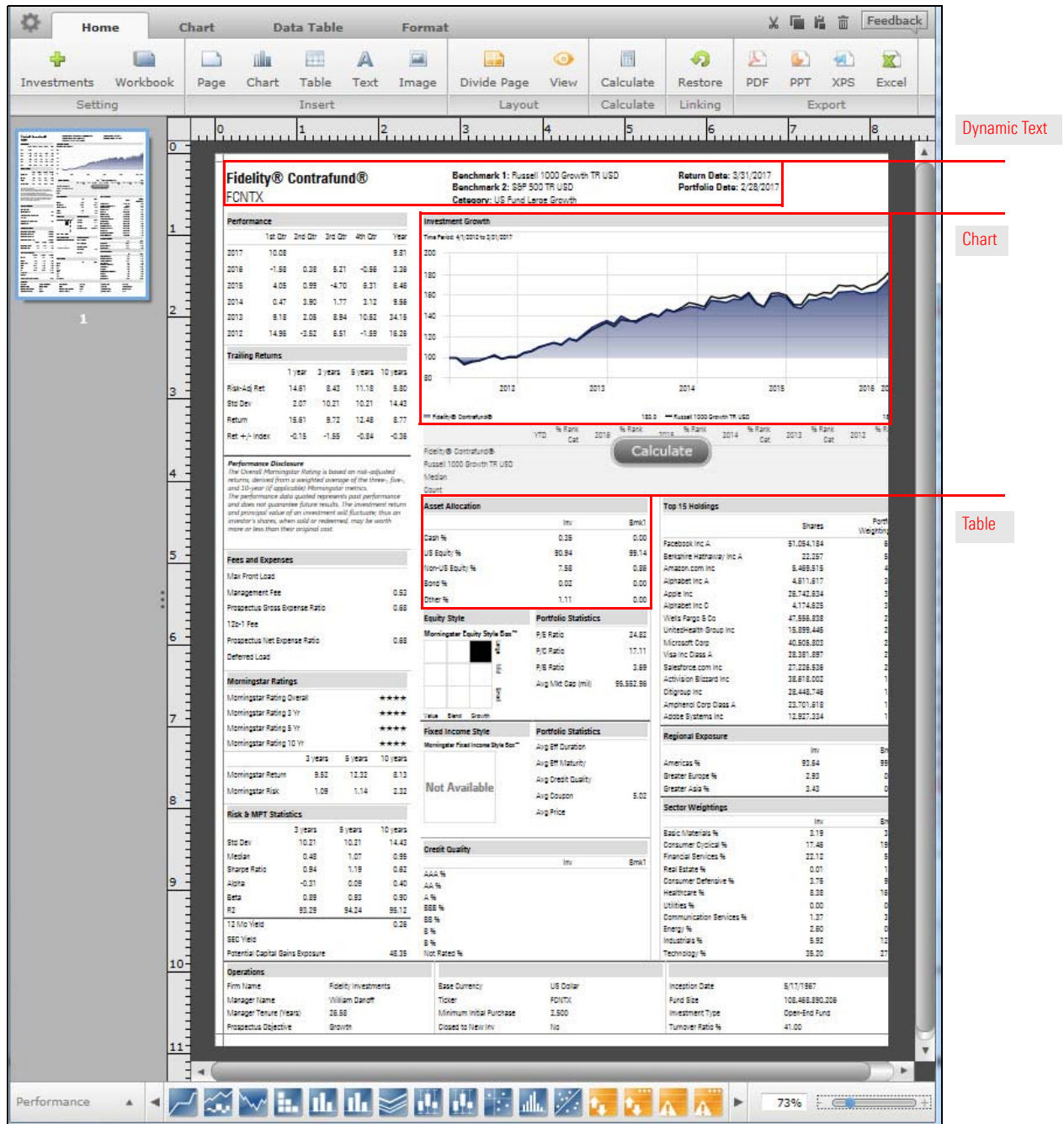
A factsheet is a document containing information (rating, performance, holdings, and so on) about an investment. It cannot depict information for multiple investments. It presents key data as tables, charts, and text.

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).

Overview

What is a factsheet?

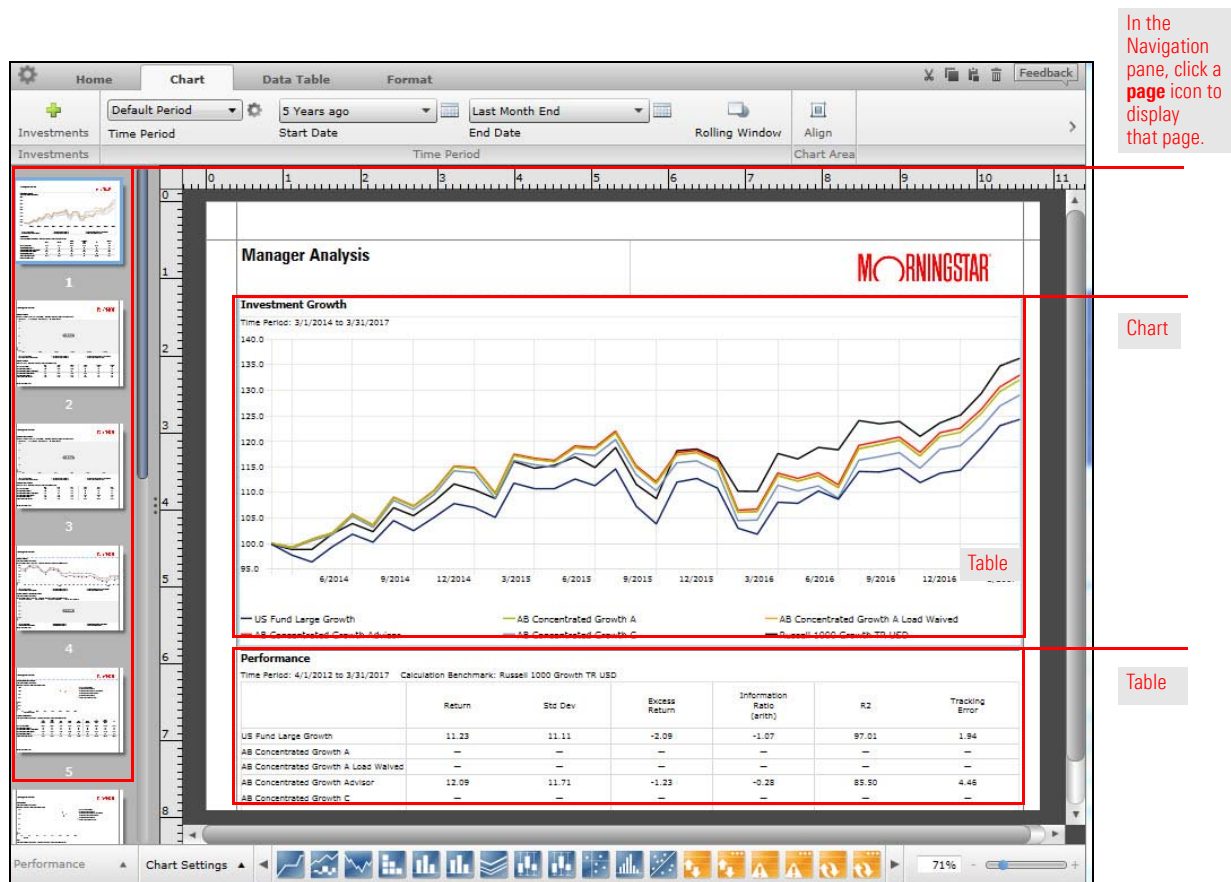
The called-out features are described in [Working with a Template on page 24](#).



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

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 24](#))
- ▶ how to select a template for a new report ([page 25](#))
- ▶ how to use Search to select an investment for a new report ([page 27](#))
- ▶ how to create a list of investments ([page 34](#)) and
- ▶ how to use a saved list to select investments to a new report ([page 35](#)).

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 114](#).

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

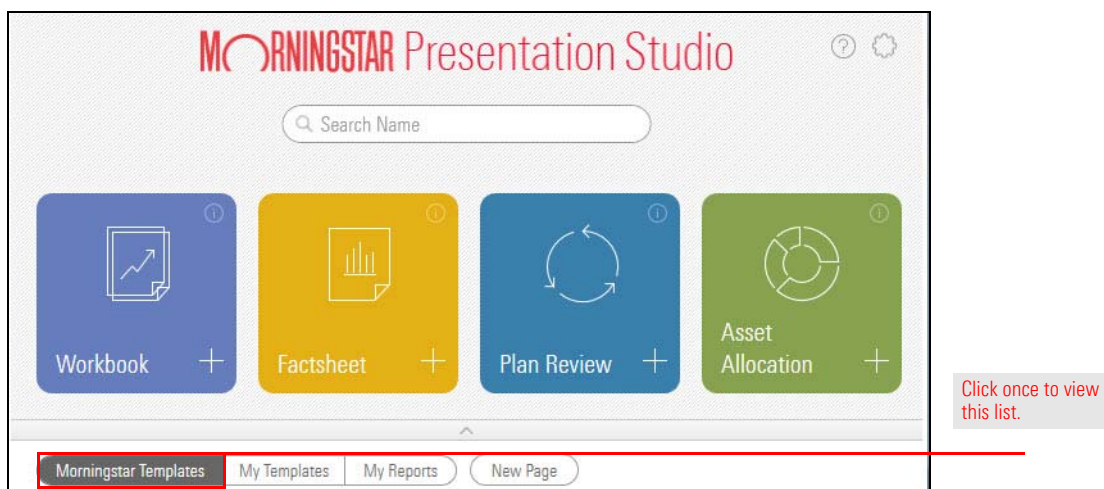
Why should I use a template or an existing report to create a new report?

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:

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

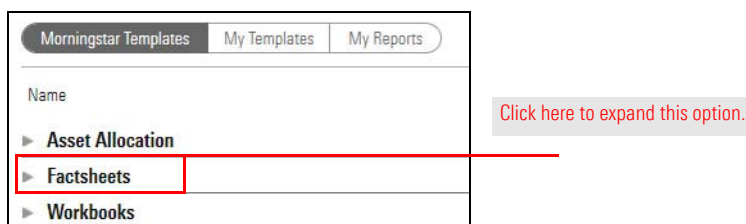


The list of Morningstar template categories opens, displaying the following:

- ▶ 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.



Morningstar Templates

My Templates

My Reports

Name	Type	Layout	Version	Date Created	Date Modified
▶ Asset Allocation					
▼ Factsheets					
Attribution Highlights 3 New	Factsheet Template	 Landscape	3.19.8	8/10/2016	8/10/2016
Attribution Highlights 4 New	Factsheet Template	 Portrait	3.19.8	8/10/2016	8/10/2016
Comprehensive Product Review New	Factsheet Template	 Landscape	3.18.3	11/20/2015	11/20/2015
Current Portfolio Analysis New	Factsheet Template	 Portrait	3.19.5	5/24/2016	5/24/2016
Equity Attribution Detail New	Factsheet Template	 Landscape	3.19.8	8/10/2016	8/10/2016

If you cannot see all columns shown here scroll right.

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.

Name	Type	Layout
► Asset Allocation		
▼ Factsheets		
Attribution Highlights 3 New	Factsheet Template	Landscape
Comprehensive Product Review New	Factsheet Template	Landscape
Equity Attribution Detail New	Factsheet Template	Landscape
Equity Attribution Highlights New	Factsheet Template	Landscape

When you sort on the Layout column, all the Landscape templates are displayed together at the top of the list, and all the Portrait templates are further down.

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

Morningstar Templates		My Templates	My Reports	New Page
Name	Type			
Fixed Income Manager Factsheet 3	Factsheet Template			
Holdings Based Style Consistency	Factsheet Template			
Investment Detail Report	Factsheet Template			
Investment Performance Factsheet	Factsheet Template			
Morningstar ETF Analysis	Factsheet Template			

Open this template.

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.

The screenshot shows the 'Investments: Settings' dialog box. At the top, there is a table with columns: Name, Inception Date, Category, Show, Display Name, Calculation Benchmark, Color, and Marker. The 'Name' column has a search icon. Below the table, there are sections for 'Display Benchmarks' and 'Category Average'. The 'Display Benchmarks' section has two rows, each with a dropdown menu for 'Display Benchmark 1', a color selection, and a marker selection. The 'Category Average' section has a dropdown menu for 'Display Benchmark 1', a color selection, and a marker selection. At the bottom right, there are 'OK' and 'Cancel' buttons.

You must select an investment for a factsheet or investments for a workbook.

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.

This screenshot is identical to the previous one, showing the 'Investments: Settings' dialog box with the search icon highlighted in the 'Name' field.

A factsheet template allows you to search for only one investment.

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**.

Find Investment

Within: ☒ Universes ☐ My Lists ☐ My Searches

Open End Funds

Find By: Name ☐ Begins with ☐ Contains

☒ Include Only Surviving Investments

Fidelity Contrafund Go

Available records

Total records:

Jump to record name:

Help OK Cancel

You can also search your lists and saved searches.

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.

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

The screenshot shows the 'Find Investment' dialog box. At the top, there are three radio buttons: 'Universes' (selected), 'My Lists', and 'My Searches'. Below them is a dropdown menu showing 'Open End Funds'. Under 'Find By', there is a dropdown menu showing 'Name', and two radio buttons: 'Begins with' (selected) and 'Contains'. There is also a checked checkbox for 'Include Only Surviving Investments'. A text input field contains 'Fidelity Contrafund', and a 'Go' button is next to it. Below the search criteria, the 'Available records' section shows 'Total records: 2' and a 'Jump to record name:' field with 'Fidelity Contrafund'. A list box contains two records: 'Fidelity® Contrafund® (USD,XNAS,FCNTX,Port+Perf,Oldest,RepPerf)' and 'Fidelity® Contrafund® K (USD,XNAS,FCNKX,Port+Perf,RepPerf)'. A red box highlights these two records. At the bottom of the dialog are 'Help', 'OK', and 'Cancel' buttons.

Available records
Total records: 2
Jump to record name: Fidelity Contrafund
Fidelity® Contrafund® (USD,XNAS,FCNTX,Port+Perf,Oldest,RepPerf)
Fidelity® Contrafund® K (USD,XNAS,FCNKX,Port+Perf,RepPerf)

Two funds meet the search criteria.

5. 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.

The 'Find Investment' dialog box is shown. It has tabs for 'Universes', 'My Lists', and 'My Searches'. Under 'Within', 'Open End Funds' is selected. Under 'Find By', 'Name' is selected, with 'Begins with' and 'Include Only Surviving Investments' checked. The search term 'Fidelity Contrafund' is entered in the text box, and the 'Go' button is visible. Below, the 'Available records' section shows 'Total records: 2'. A 'Jump to record name:' field contains 'Fidelity Contrafund'. The list of records shows two entries: 'Fidelity® Contrafund® (USD,XNAS,FCNTX,Port+Perf,Oldest,RepPerf)' and 'Fidelity® Contrafund® K (USD,XNAS,FCNKX,Port+Perf,RepPerf)'. The first entry is highlighted with a red box. At the bottom are 'Help', 'OK', and 'Cancel' buttons.

More than one fund might be displayed in the Available Records list.

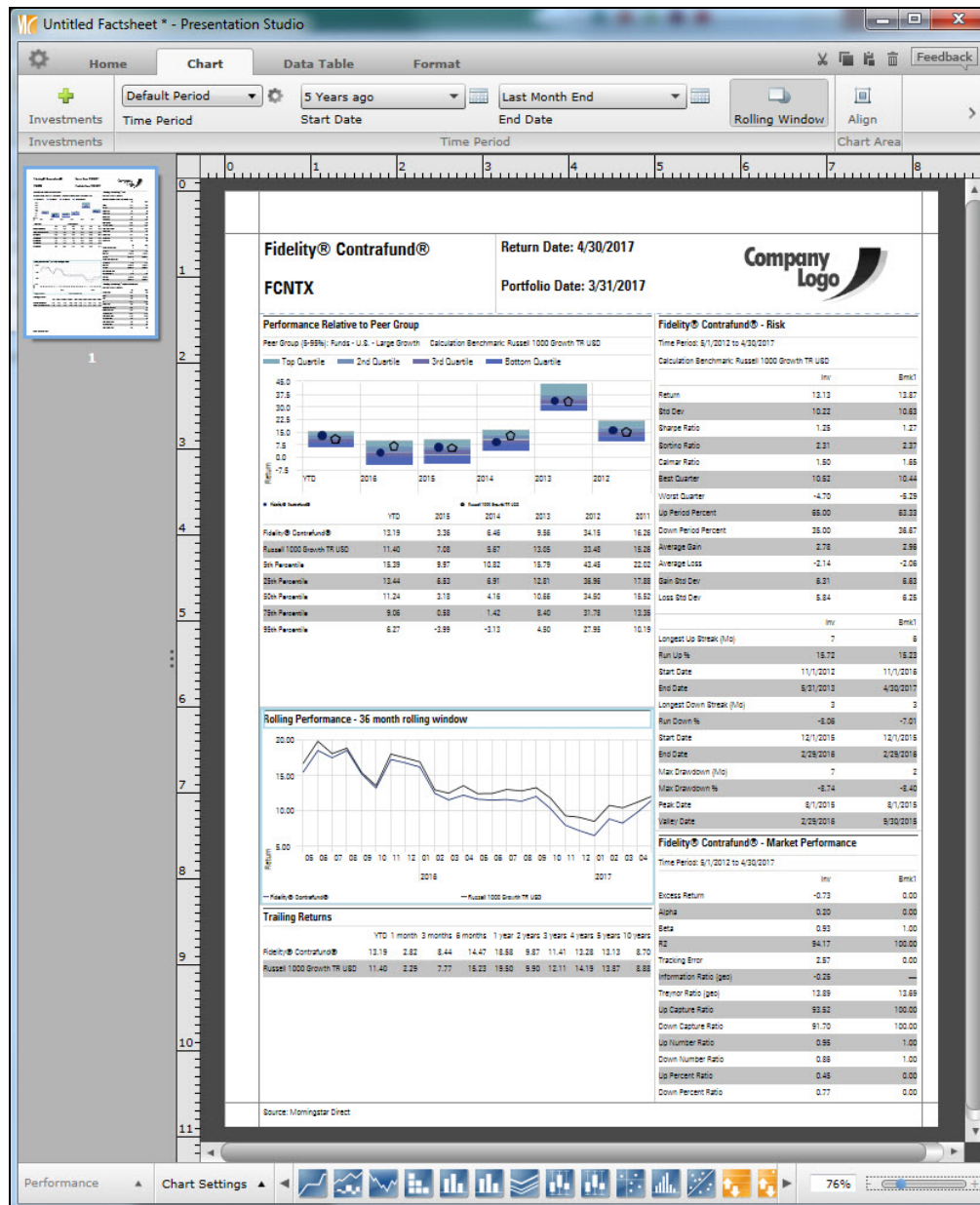
6. Click **OK**. The Investment Settings dialog box is displayed.

The 'Investment Settings' dialog box is shown. It displays details for 'Fidelity® Contrafund®' with an inception date of '5/17/1967' and category 'US OE Large'. The 'Display Name' is 'Fidelity® Contrs'. Below, the 'Display Benchmarks' section shows 'Morningstar Category' and 'MPT Index'. The 'Category Average' section shows 'US OE Large Growth' with an inception date of '12/1/1925'. The 'Calculation Benchmark' is 'Display Benchmark 1'. The 'Color' is blue and the 'Marker' is a black circle. The first row of the table is highlighted with a red box.

Name	Inception Date	Category	Show	Display Name	Calculation Benchmark	Color	Marker
Fidelity® Contrafund®	5/17/1967	US OE Large	<input checked="" type="checkbox"/>	Fidelity® Contrs	Display Benchmark 1	Blue	Black Circle
Display Benchmarks							
Morningstar Category			<input checked="" type="checkbox"/>		Display Benchmark 1	Black	Home
MPT Index			<input type="checkbox"/>		Display Benchmark 1	Red	Play
Category Average							
US OE Large Growth	12/1/1925	Large Growth	<input checked="" type="checkbox"/>	US OE Large Gr	Display Benchmark 1	Blue	Diamond

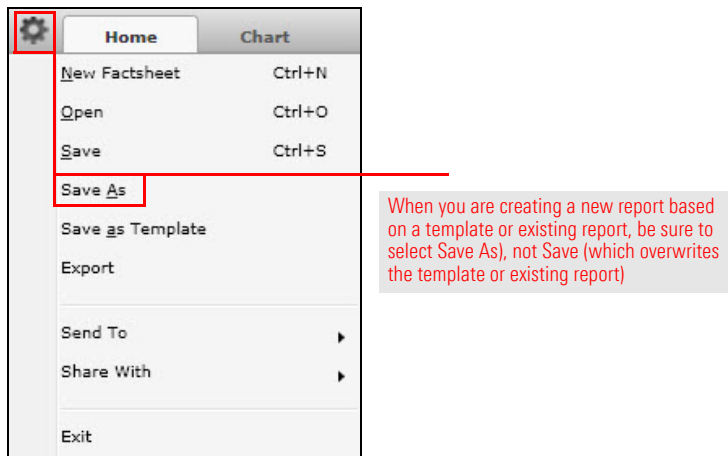
The highlighted settings automatically populate based on the selected investment.

- 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.

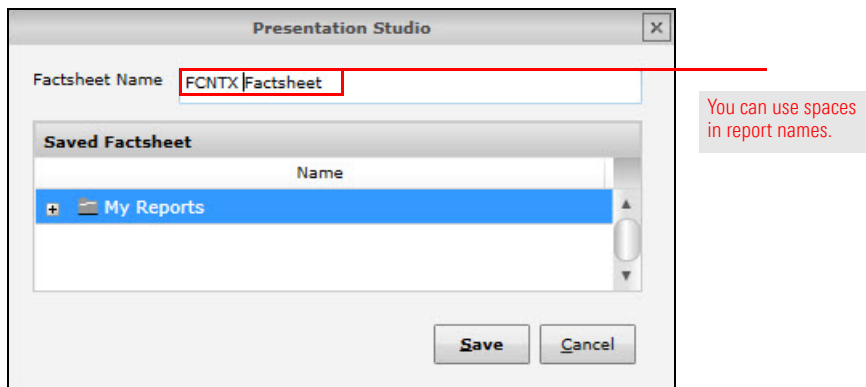
8. At the top-left corner of the window, click the **Application Settings** icon and from the menu, select **Save As** to give the report a name and save it. A dialog box opens.



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

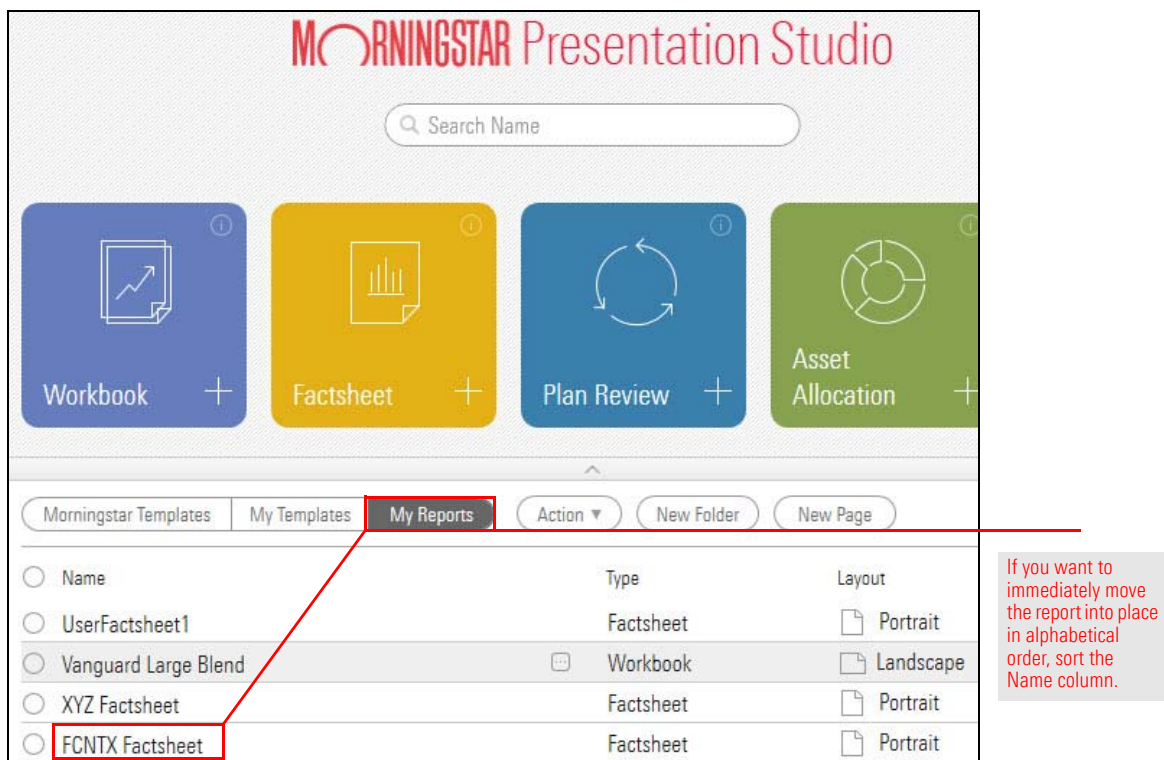
When you are working in a...	And you select...	The result is...
Report	Save	The report is updated.
	Save As	A copy of the report is created as a new report (with a name you enter). The original report is unchanged from the last time you saved it.
	Save As Template	A copy of the report is created as a 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.

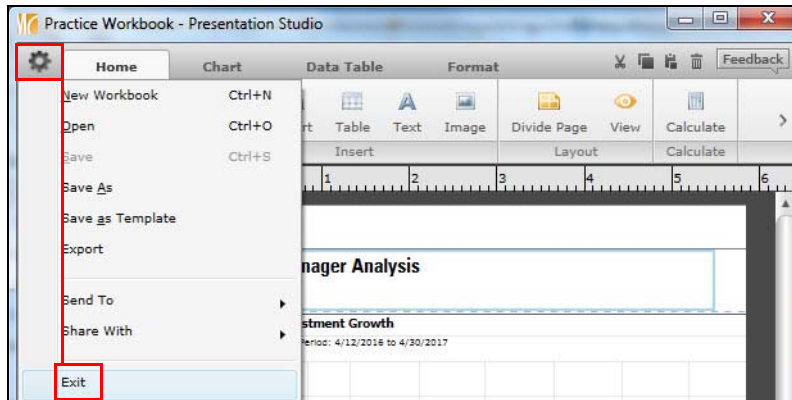
- ☞ Note: On the Presentation Studio Home page, the new report is initially shown at the bottom of the My Reports list.



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 Morningstar Direct, 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 (VOO)**
- ▶ **PSDR SSGA US Large Cap Low Volatility ETF (LGLV), and**
- ▶ **iShares Morningstar Large-Cap ETF (JKD).**

2. Name the list **Large Blend ETFs**.

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

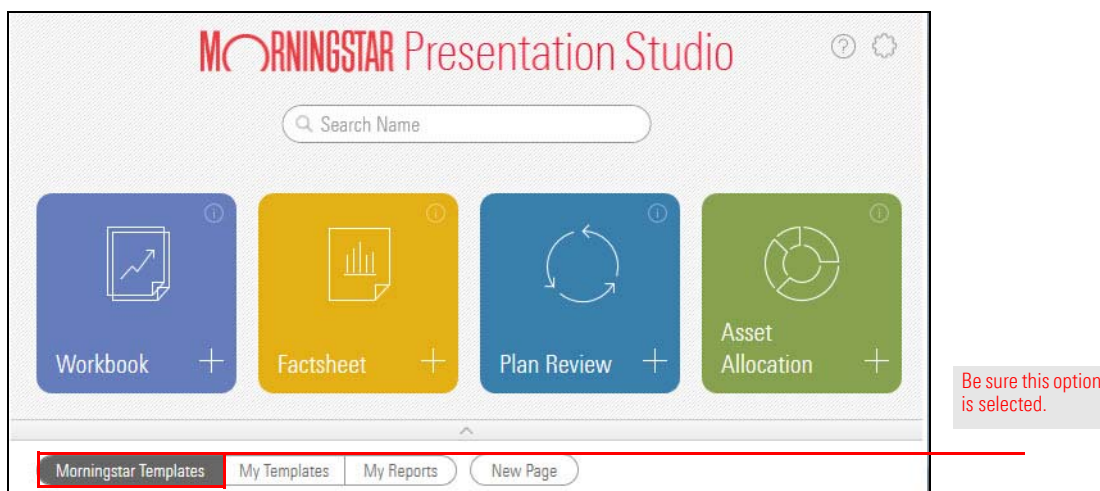
The Morningstar template, Equity Manager Analysis, is used to demonstrate the process of using a workbook template; however, the steps for using any Morningstar template, a custom template, or an existing report are the same, except where noted.

 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.

Exercise 6: Select investments from a saved list

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

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



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



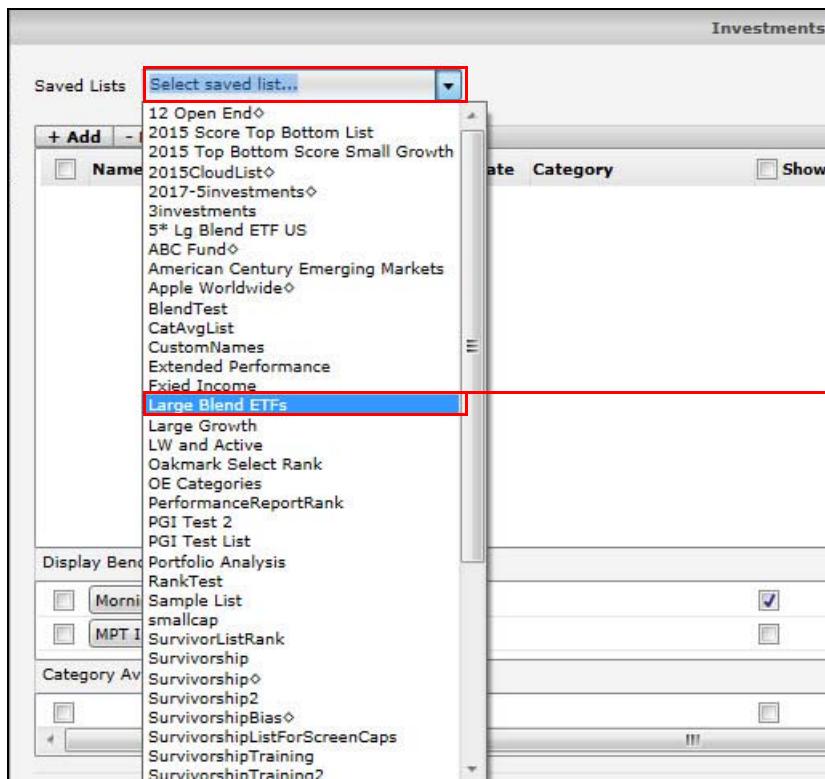
3. In the list, **double-click Equity Manager Analysis**. (You might need to scroll down to find this template.) The Investments: Settings dialog box opens.

Note: In this exercise, the Equity Manager Analysis template is used to compare two funds.

Morningstar Templates	
My Templates	My Reports
New Page	
Name	Type
▶ Asset Allocation	
▶ Factsheets	
▼ Workbooks	
Current versus Proposed Portfolio Comparison	Workbook Template
Equity Manager Analysis	Workbook Template
Fixed Income Manager Analysis	Workbook Template

Open this template.

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.



A saved list allows you to quickly access investments you have worked with before.

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

Investments: Settings

Saved Lists: Large Blend ETFs

+ Add - Delete

Name	Inception Date	Category	Show	Display Name
ProShares Large Cap Core Plu	7/13/2009	US Fund Large Blend	<input checked="" type="checkbox"/>	ProShares Large Cap Core I
Vanguard S&P 500 ETF	9/7/2010	US Fund Large Blend	<input checked="" type="checkbox"/>	Vanguard S&P 500 ETF
Vanguard S&P 500 ETF	9/7/2010	US Fund Large Blend	<input checked="" type="checkbox"/>	Vanguard S&P 500 ETF
ProShares S&P 500 Dividend	10/9/2013	US Fund Large Blend	<input checked="" type="checkbox"/>	ProShares S&P 500 Dividen
SPDR® SSGA US Large Cap L	2/20/2013	US Fund Large Blend	<input checked="" type="checkbox"/>	SPDR® SSGA US Large Cap
ProShares S&P 500 Dividend	10/9/2013	US Fund Large Blend	<input type="checkbox"/>	ProShares S&P 500 Dividen
iShares Morningstar Large-Ca	6/28/2004	US Fund Large Blend	<input type="checkbox"/>	iShares Morningstar Large-

Display Benchmarks

☐ Morningstar Category In ☒

☐ MPT Index ☐

Category Average

☐ US Fund Large Blend ☐ 7/1/1924 Large Blend ☐ US Fund Large Blend

In a list of multiple investments, the Show checkboxes are checked for the top five investments.

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.

Investments: Settings

Saved Lists: Large Blend ETFs

+ Add - Delete

Name	Inception Date	Category	Show	Display Name
ProShares Large Cap Core Plu	7/13/2009	US Fund Large Blend	<input checked="" type="checkbox"/>	ProShares Large Cap Core I
Vanguard S&P 500 ETF	9/7/2010	US Fund Large Blend	<input checked="" type="checkbox"/>	Vanguard S&P 500 ETF
Vanguard S&P 500 ETF	9/7/2010	US Fund Large Blend	<input type="checkbox"/>	Vanguard S&P 500 ETF
ProShares S&P 500 Dividend	10/9/2013	US Fund Large Blend	<input type="checkbox"/>	ProShares S&P 500 Dividen
SPDR® SSGA US Large Cap L	2/20/2013	US Fund Large Blend	<input type="checkbox"/>	SPDR® SSGA US Large Cap
ProShares S&P 500 Dividend	10/9/2013	US Fund Large Blend	<input type="checkbox"/>	ProShares S&P 500 Dividen
iShares Morningstar Large-Ca	6/28/2004	US Fund Large Blend	<input type="checkbox"/>	iShares Morningstar Large-

Display Benchmarks

☐ Morningstar Category In ☒

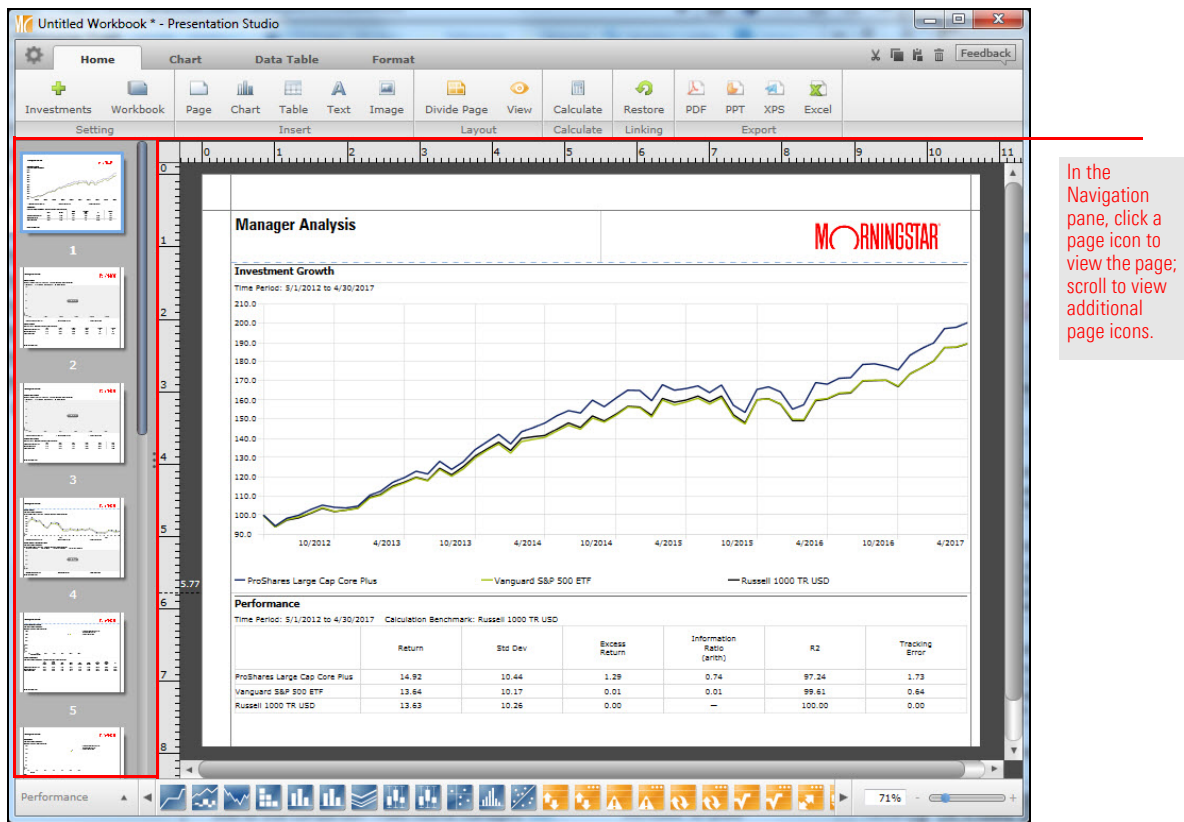
☐ MPT Index ☐

Category Average

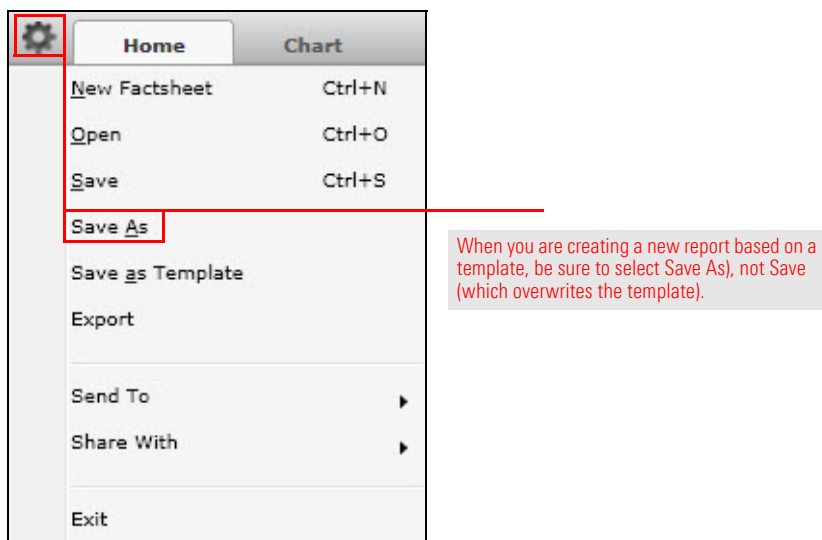
☐ US Fund Large Blend ☐ 7/1/1924 Large Blend ☐ US Fund Large Blend

These investments are the focus of the workbook

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

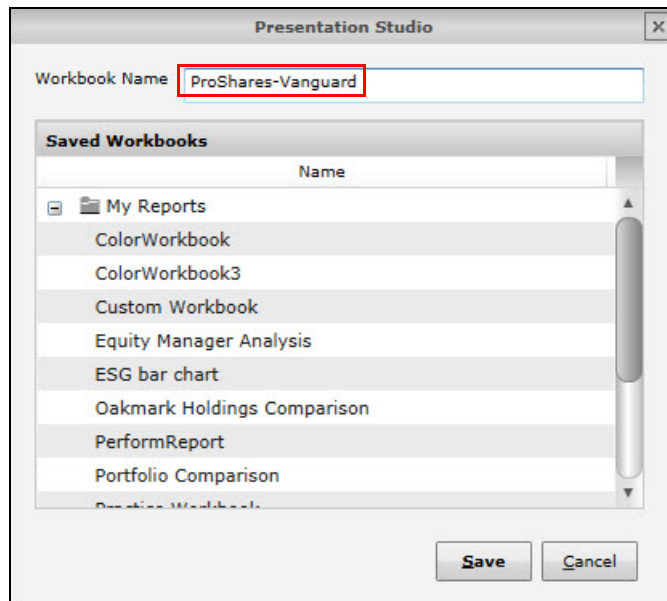


8. At the top-left corner of the Presentation Studio window, click the **Application Settings** icon and select **Save As**. A dialog box opens.



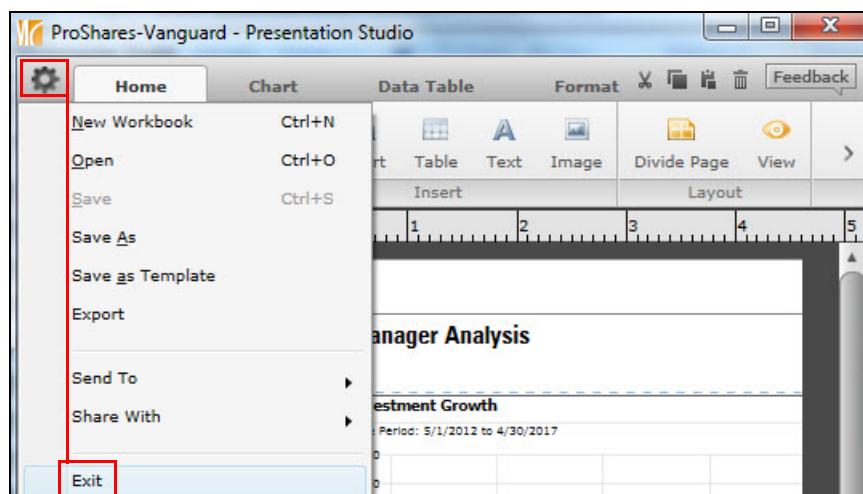
9. In the dialog box, in the **Workbook Name** field, enter **ProShares-Vanguard** then click **Save**.

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.

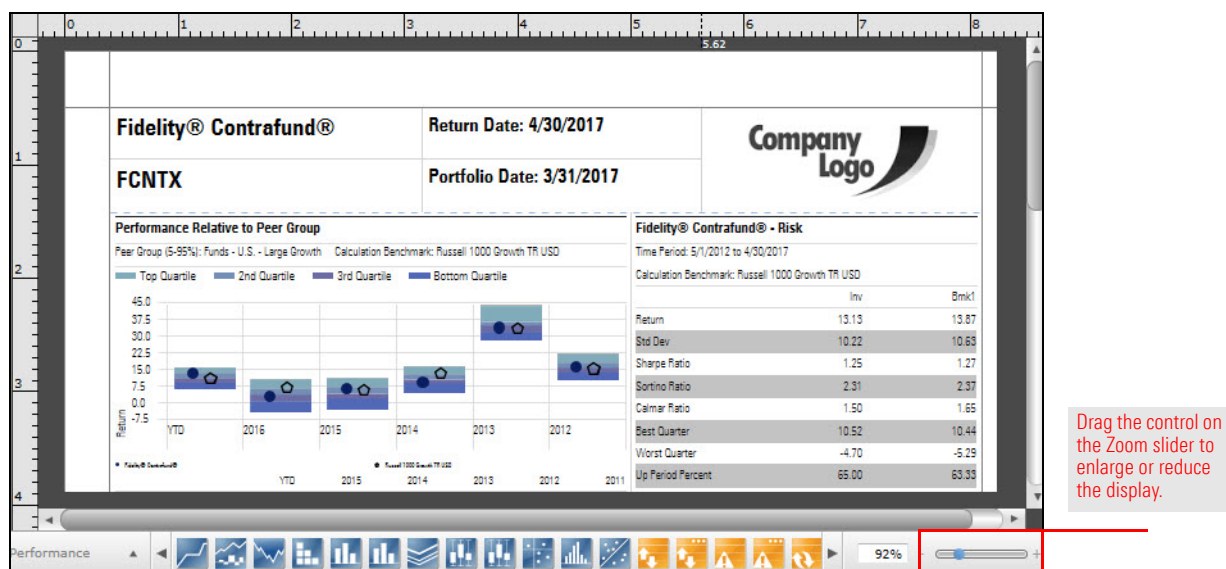
Working with Chart and Table Components

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:

- ▶ 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.

Overview



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.

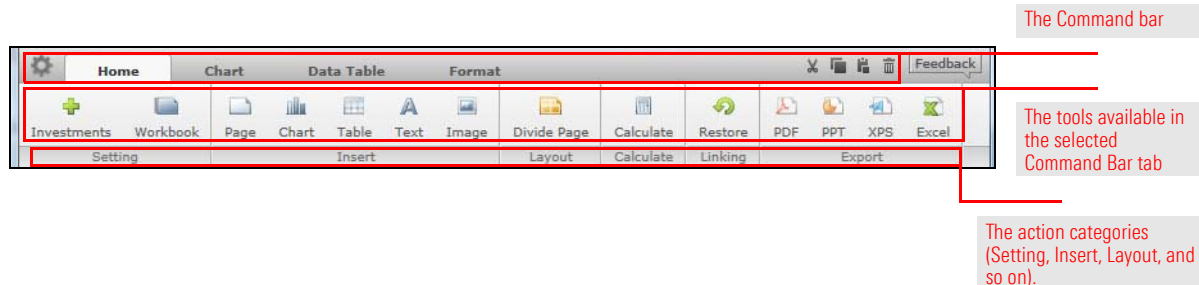
Note: The same components are available in both factsheets and workbooks; however, plan reviews and portfolios are more limited. Plan reviews and portfolios are not covered in this guide.

This section helps you do the following:

- ▶ understand what the Command bar is ([page 41](#))
- ▶ use the Command bar to replace a component ([page 41](#))
- ▶ understand what the Component bar is ([page 47](#))
- ▶ use the Component bar to replace a component ([page 48](#))
- ▶ resize a cell ([page 51](#))
- ▶ rearrange components ([page 54](#))
- ▶ delete a component ([page 58](#)), and
- ▶ remove a cell ([page 60](#)).

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.

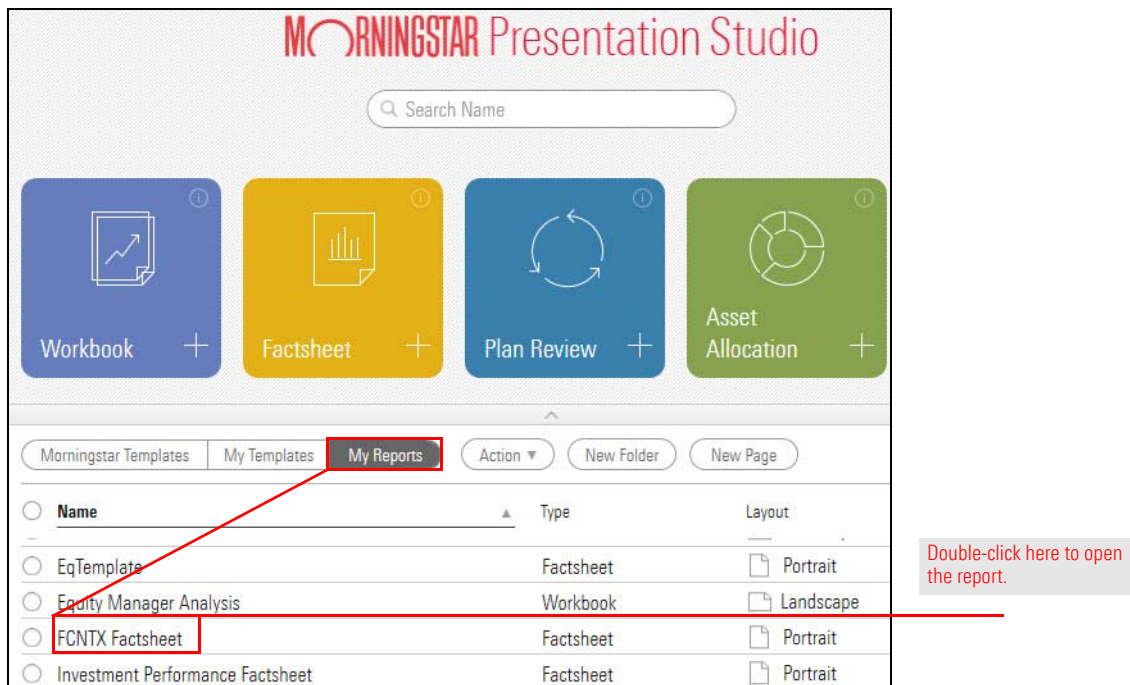
Exercise 7: Use the Command bar to replace a component

When replacing components, you should understand the following:

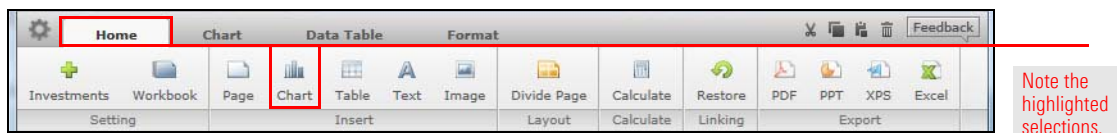
- ▶ A table can be replaced with a chart and vice versa.
- ▶ A component from one category can be replaced with a component from another category, and
- ▶ A table component requiring a full page (represented by a green icon on the Component bar) cannot replace a component in a cell occupying only part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

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

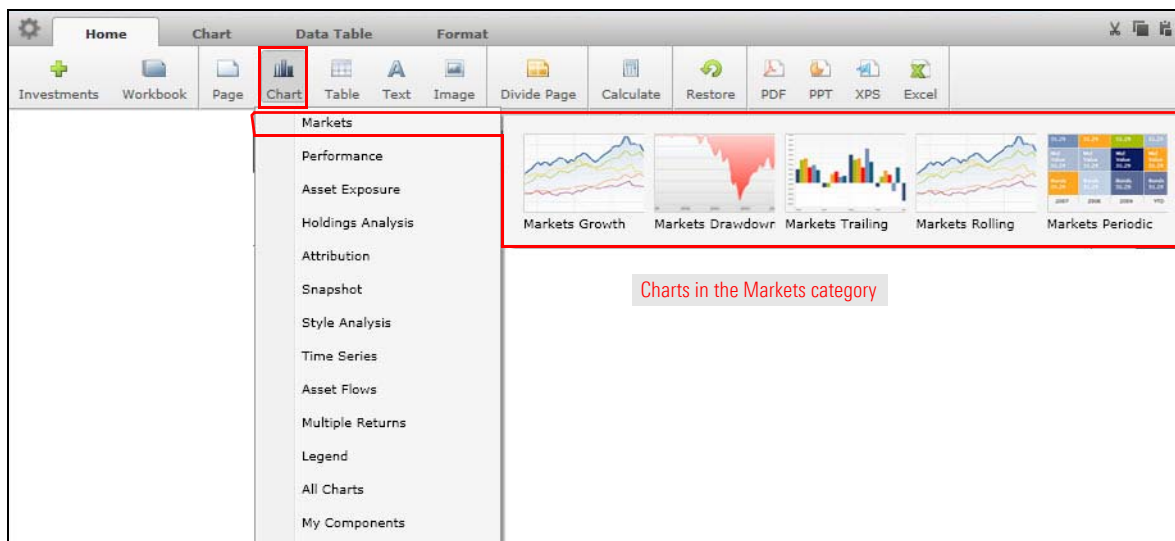
1. On the Presentation Studio Home page, on the toggle, select **My Reports**, then in the list of your reports, **double-click FCNTX Factsheet**.



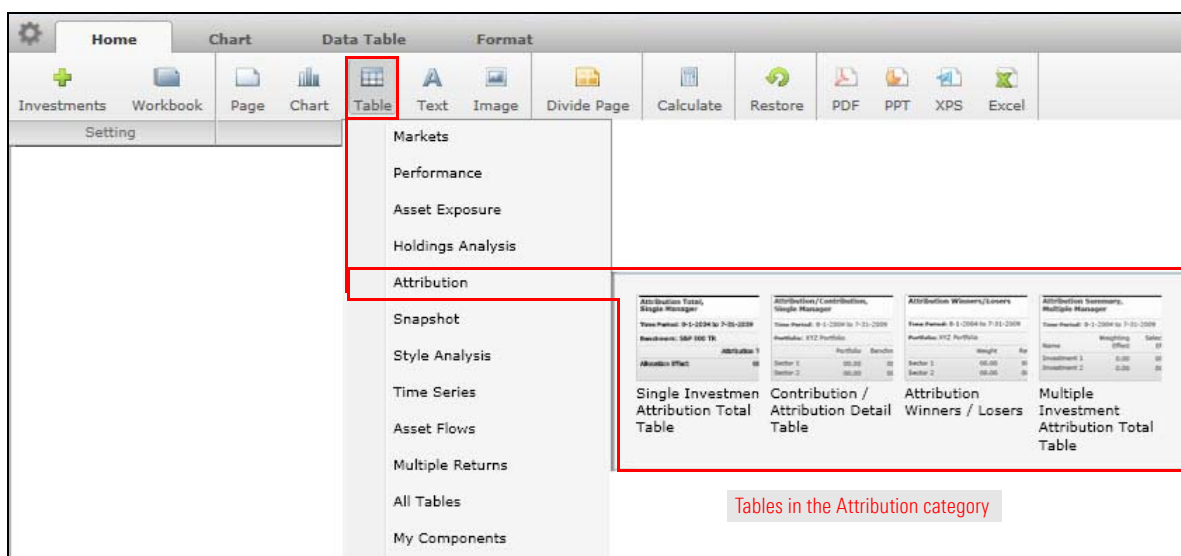
2. On the Command bar, be sure the **Home** tab is selected.
3. Click the **Chart** icon.



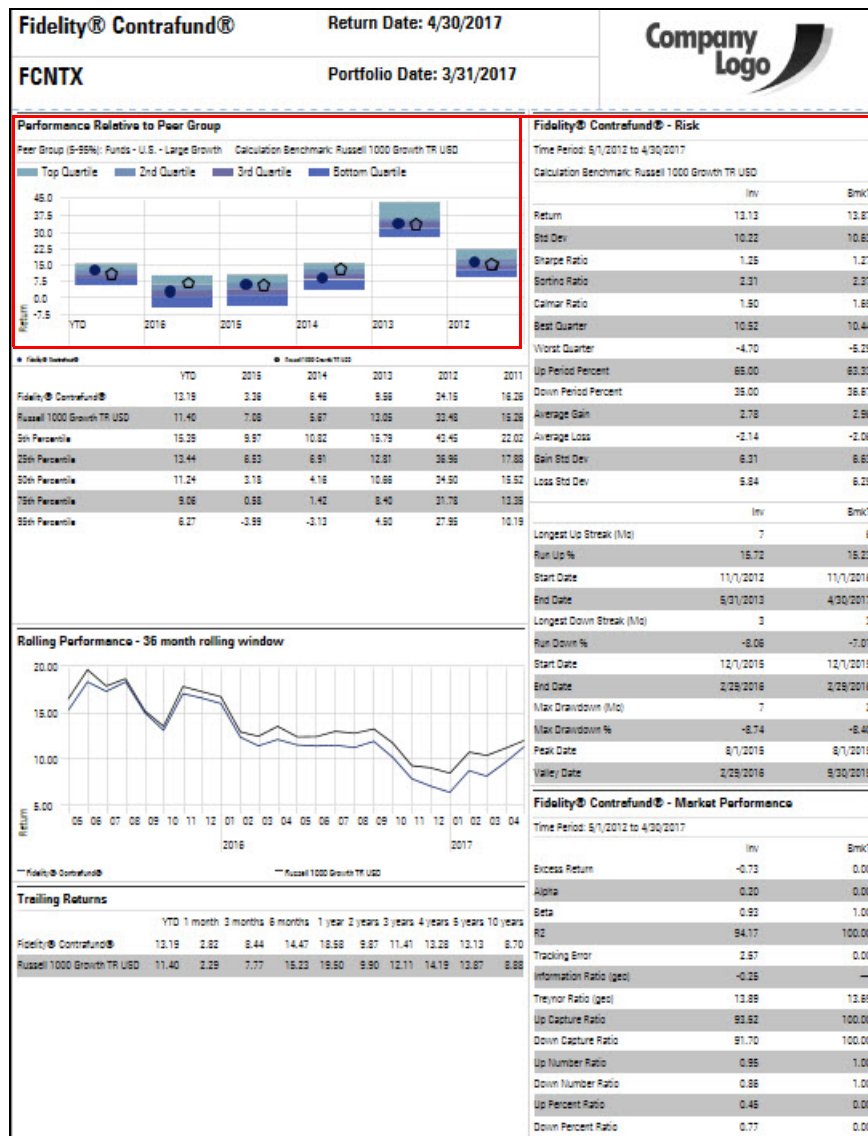
The Chart menu opens, displaying the chart categories (Markets, Performance, and so on). When you select a category from the Chart menu, a window opens to the right, showing representations and names of the chart components in that category.



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.



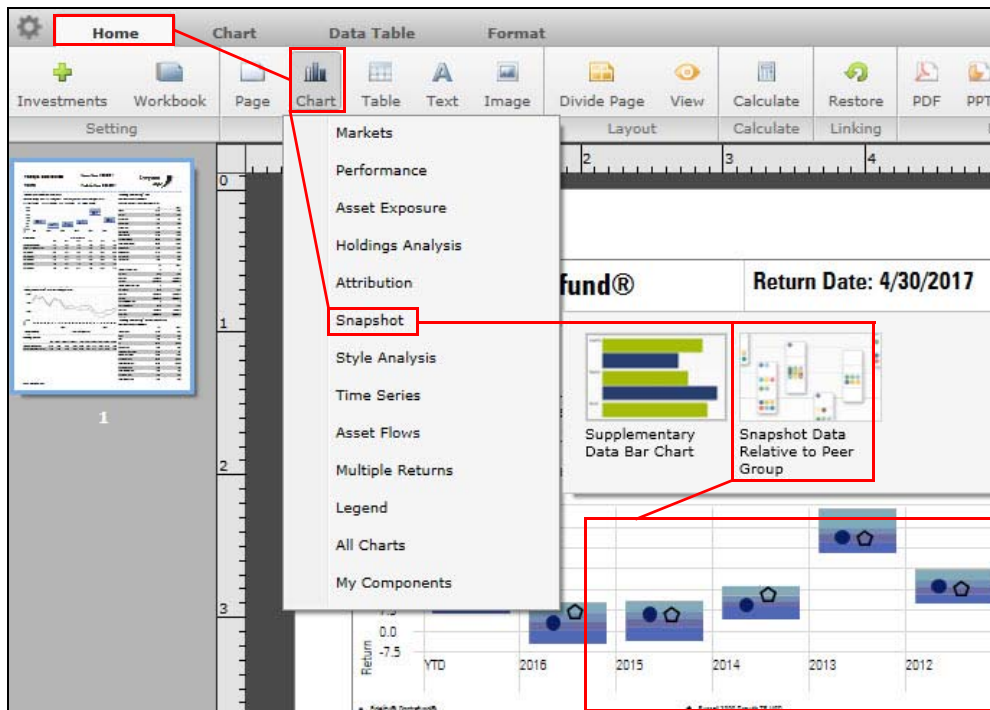
Notice the Performance Relative to Peer Group chart near the top of the report.



The charts and tables are in the report because they were in the template, but the data is specific to the fund—in this case, Fidelity Contrafund.

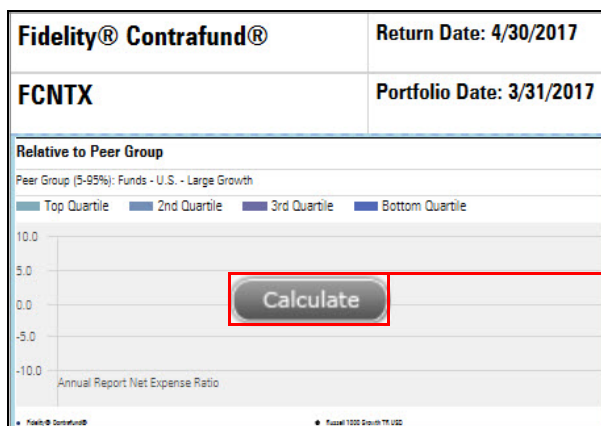
- To replace the Performance Relative to Peer Group chart with a Snapshot Data Relative to Peer Group chart, select the **Home** tab, then select **Chart...Snapshot**.
- Drag the **Snapshot Data Relative to Peer Group** icon to anywhere in the cell occupied by the Performance Relative to Peer Group chart.

Note: The area containing a component is called a cell.



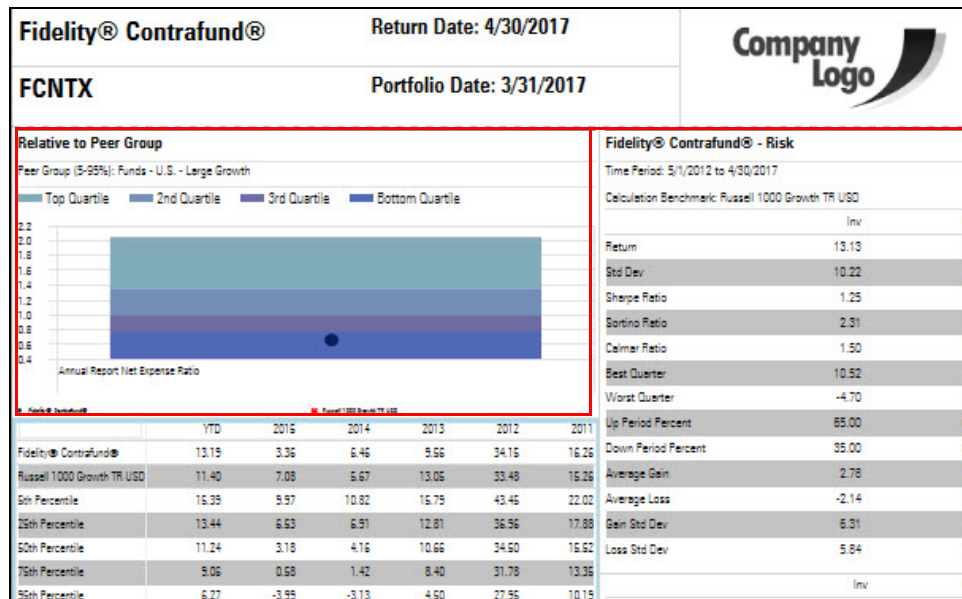
The new component proportionally sizes to fit the cell.

- In the chart, click **Calculate**.



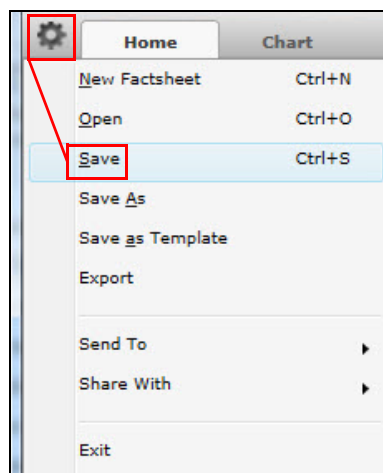
Peer group data refreshes daily; therefore, the Calculate button appears in components associated with a peer group.

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



The Snapshot Data Relative to Peer Group chart now occupies the cell.

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.

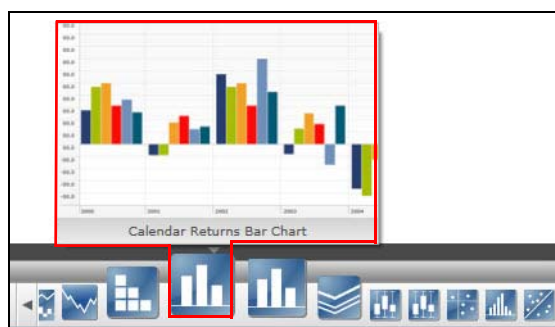


This table lists the component categories (indicated by different colors) displayed in the component bar.

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.

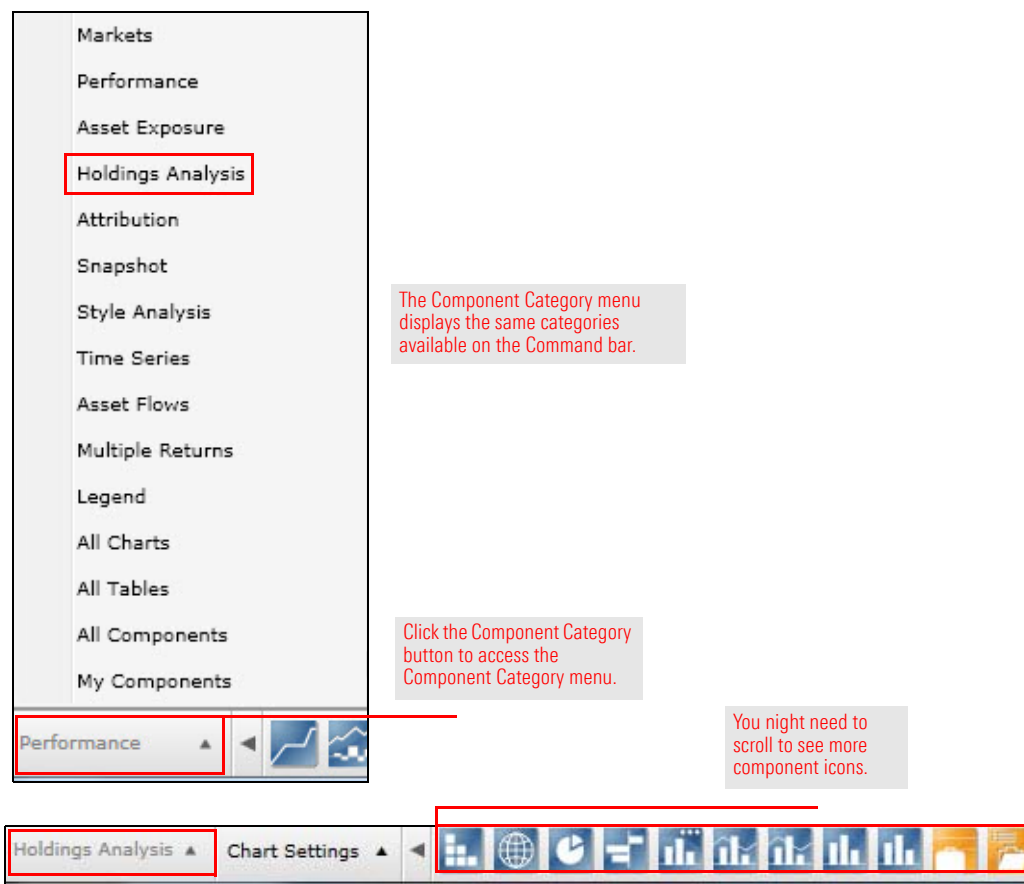
When replacing components, you should understand the following:

- ▶ 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 a page.

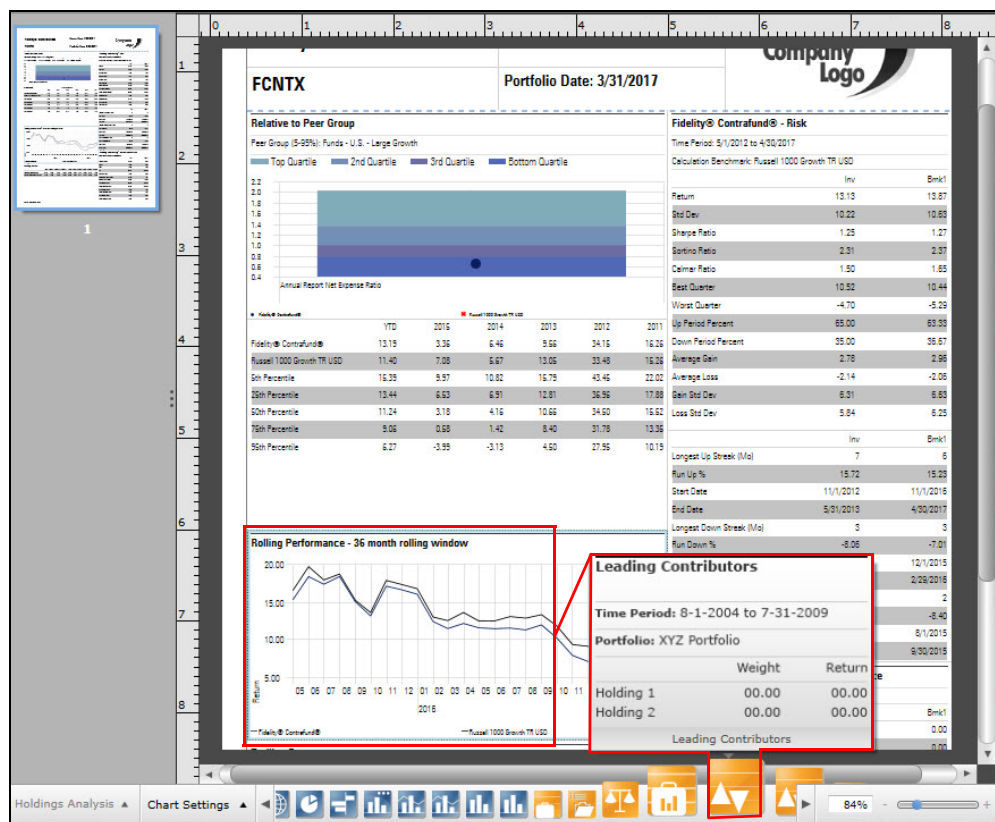
In this exercise, a chart (Rolling Performance - 36 month rolling window) is replaced with a table (Leading Contributors).

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.



- 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.

- If necessary, click **Calculate**.

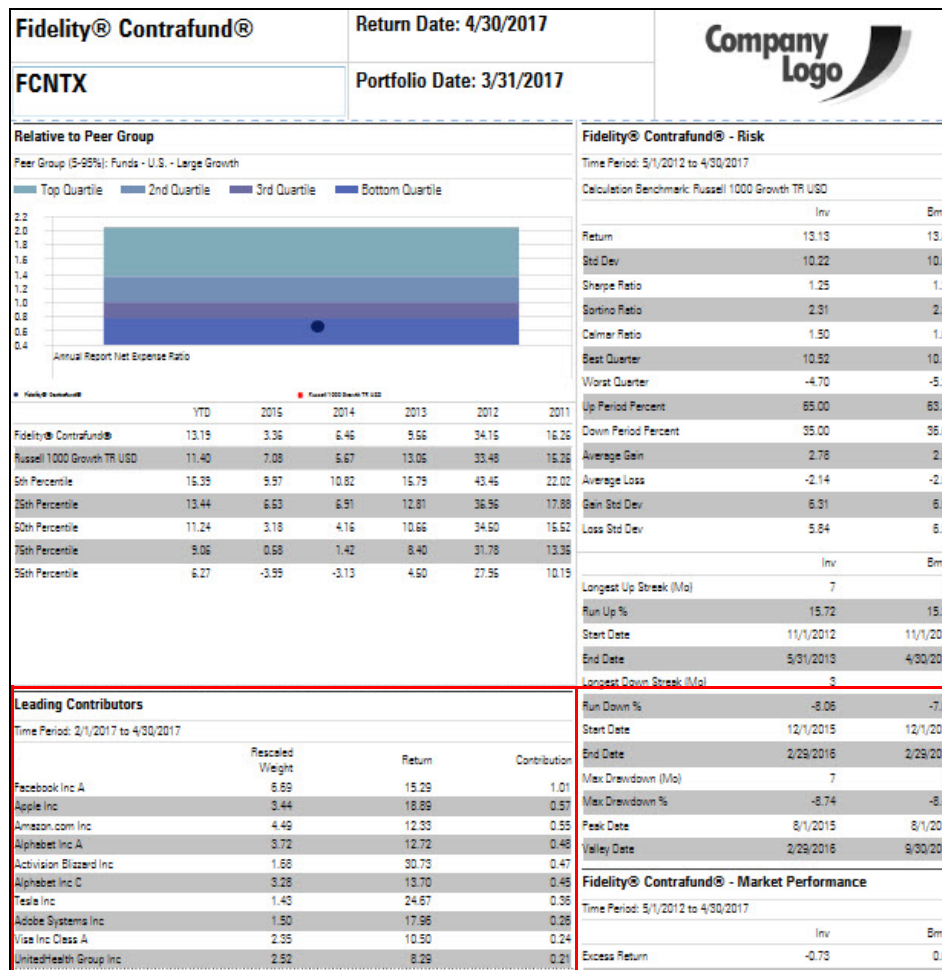
Leading Contributors
Time Period: 2/1/2017 to 4/30/2017

Rescaled Weight	Return	Contribution

Calculate

Click here to access the most current data.

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



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



Note the highlighted selections.

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:

1. 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	3.36	6.46	9.56	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	6.93	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			
Time Period: 2/1/2017 to 4/30/2017			
Company	Market Weight	Return	Contribution
Facebook Inc A	6.69	15.29	1.01
Apple Inc	3.44	18.89	0.57
Amazon.com Inc	4.49	12.33	0.55
Alphabet Inc A	3.72	12.72	0.48
Activision Blizzard Inc	1.68	30.73	0.47
Alphabet Inc C	3.28	13.70	0.45
Tesla Inc	1.43	24.67	0.36
Adobe Systems Inc	1.50	17.96	0.26
Visa Inc Class A	2.35	10.50	0.24
UnitedHealth Group Inc	2.52	8.29	0.21

This arrow can be dragged up or down.

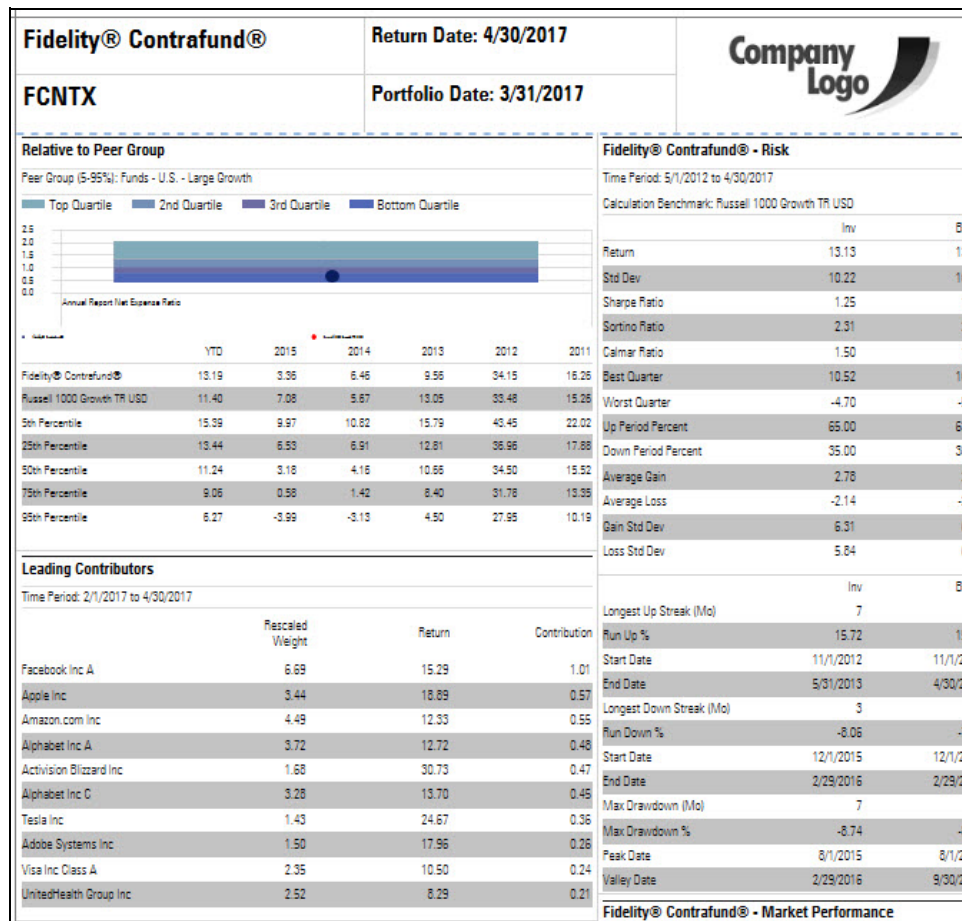
- Drag the **arrow** up to enlarge the cell containing the Leading Contributors table.
- ☞ Note: To resize a cell horizontally, select the cell, hover the cursor over one of the side borders, then drag the arrow left or right.
- As you drag the arrow, use the rulers at the top and left of the page as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

	YTD	2015	2014	2013	2012	2011
Fidelity® Contrafund®	13.19	3.36	6.46	9.56	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	10.62	15.79	43.45	22.02
25th Percentile	13.44	6.53	6.91	12.81	36.96	17.88
50th Percentile	11.24	3.16	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			
Time Period: 2/1/2017 to 4/30/2017			
A	B	C	D
	Rescaled Weight	Return	Contribution
Facebook Inc A	6.69	15.29	1.01
Apple Inc	3.44	18.89	0.57
Amazon.com Inc	4.49	12.33	0.55
Alphabet Inc A	3.72	12.72	0.48
Activision Blizzard Inc	1.68	30.73	0.47
Alphabet Inc C	3.28	13.70	0.45
Tesla Inc	1.43	24.67	0.36
Adobe Systems Inc	1.50	17.96	0.26
Visa Inc Class A	2.35	10.50	0.24
UnitedHealth Group Inc	2.52	8.29	0.21

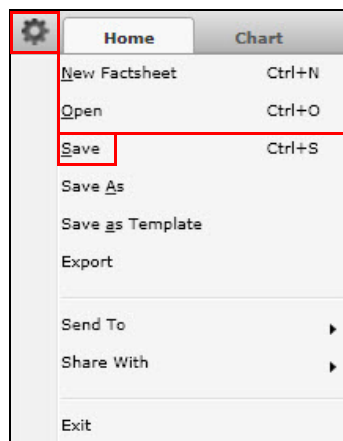
As you resize a cell, the top and side rulers display the position of the border.

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.

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



Be sure to save frequently.

- Close **FCNTX Factsheet**.

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.

Exercise 10: Rearrange components

- 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.

Fidelity® Contrafund®
FCNTX

Benchmark 1: Russell 1000 Growth TR USD
Benchmark 2: S&P 500 TR USD
Category: US Fund Large Growth

Performance					
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Year
2017	10.08				14.57
2016	-1.58	0.38	5.21	-0.56	3.36
2015	4.05	0.99	-4.70	6.31	6.48
2014	0.47	3.90	1.77	3.12	9.56
2013	9.18	2.05	8.94	10.52	34.15
2012	14.96	-3.52	6.51	-1.59	16.26

Trailing Returns					
	1 year	3 years	5 years	10 years	
Risk-Adj Ret	17.48	10.08	11.81	9.77	
Std Dev	2.09	10.15	10.22	14.42	
Return	18.58	11.41	13.13	8.70	
Ret +/- Index	-0.92	-0.70	-0.73	-0.18	

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 results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Fees and Expenses		
Max Front Load		
Management Fee		0.53
Prospectus Gross Expense Ratio		0.68
12b-1 Fee		
Prospectus Net Expense Ratio		0.68
Deferred Load		

Morningstar Ratings		
Morningstar Rating Overall	★★★★★	
Morningstar Rating 3 Yr	★★★★	
Morningstar Rating 5 Yr	★★★★	
Morningstar Rating 10 Yr	★★★★★	
	3 years	5 years
Morningstar Return	11.18	12.96
Morningstar Risk	1.10	1.15
	10 years	8.10

Investment Growth
 Time Period: 5/1/2012 to 4/30/2017

	YTD	% Rank Cat	2016	% Rank Cat
Fidelity® Contrafund®	13.19	28	3.36	49
Russell 1000 Growth TR USD	11.40	47	7.08	21
Median	11.23		3.21	
Count	1,479		1,421	

Asset Allocation		
	Inv	Bmk1
Cash %	1.03	0.00
US Equity %	90.20	99.13
Non-US Equity %	7.65	0.87
Bond %	0.02	0.00
Other %	1.10	0.00

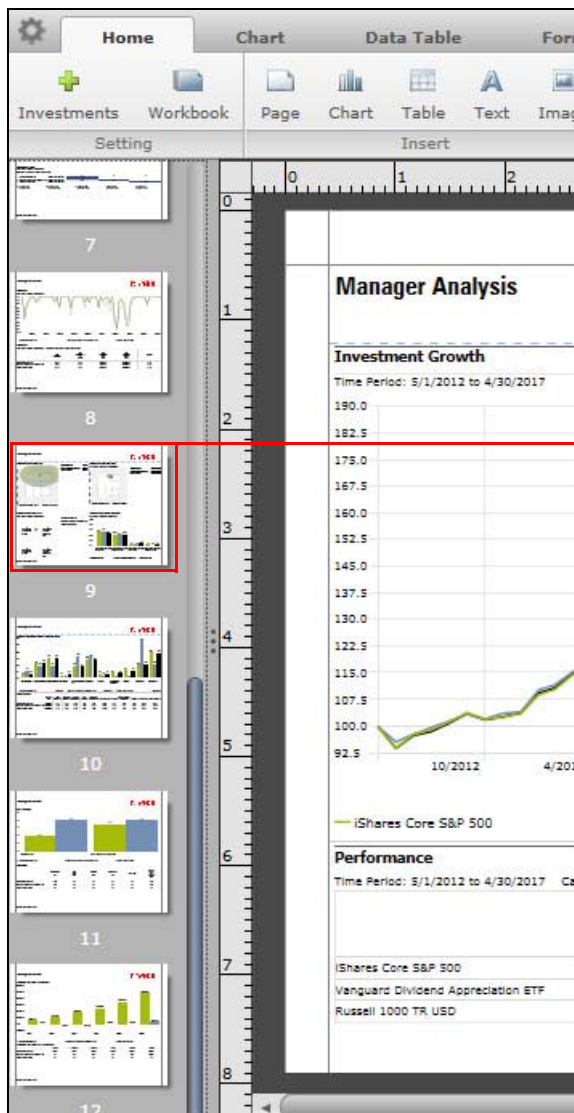
Equity Style	Portfolio Statistics
Morningstar Equity Style Box™	P/E Ratio 25.08
	P/C Ratio 17.47
	P/B Ratio 3.69
	Avg Mkt Cap (mil) 98,969.14
Value Blend Growth	

Fixed Income Style	Portfolio Statistics
Morningstar Fixed Income Style Box™	Avg Eff Duration
	Avg Eff Maturity
	Avg Credit Quality
	Avg Coupon 4.44

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

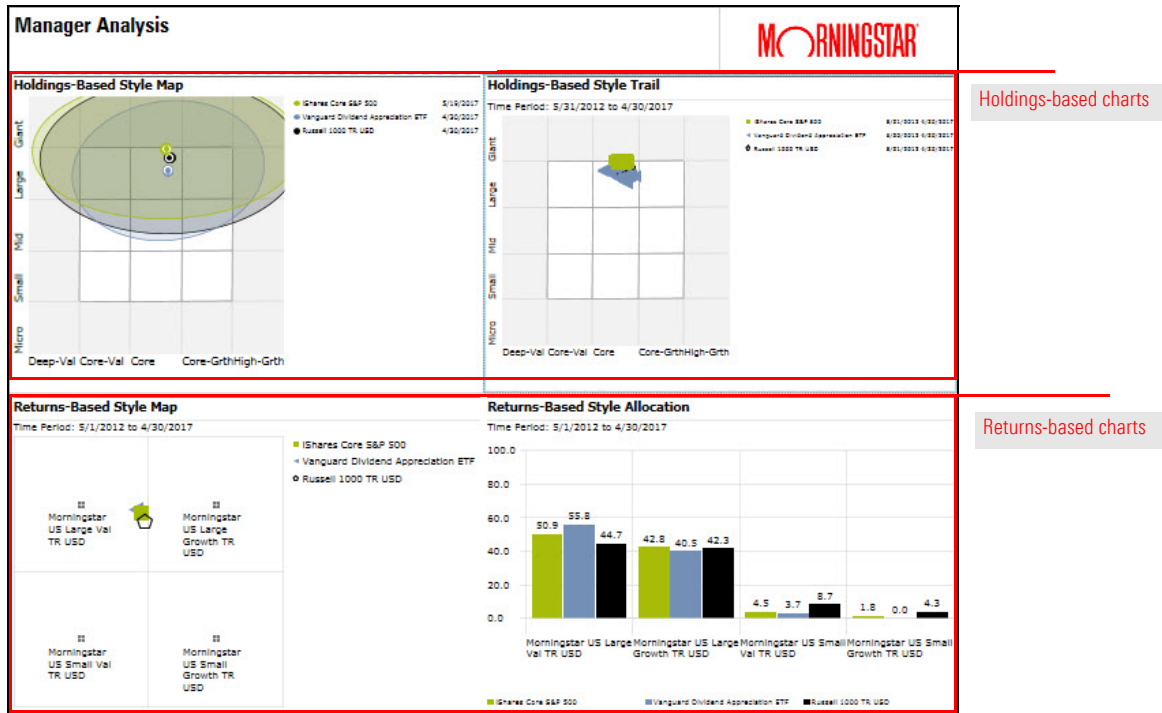
To switch the positions of two components, do the following:

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

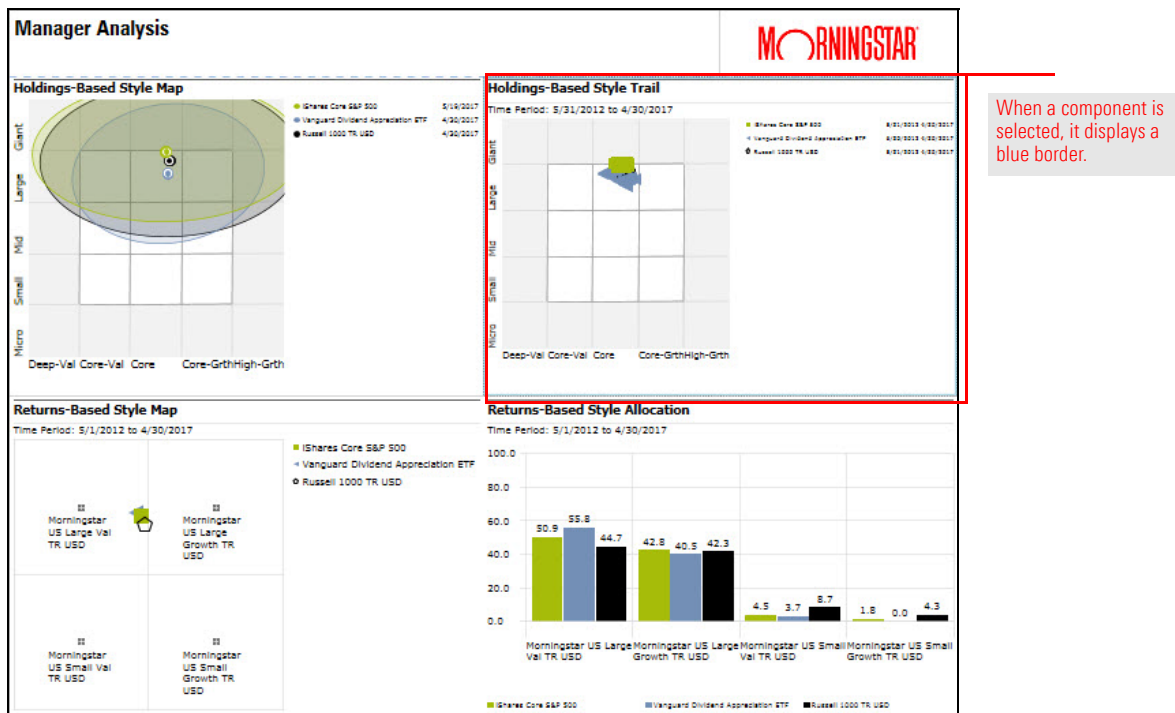


[Click here to display page 9.](#)

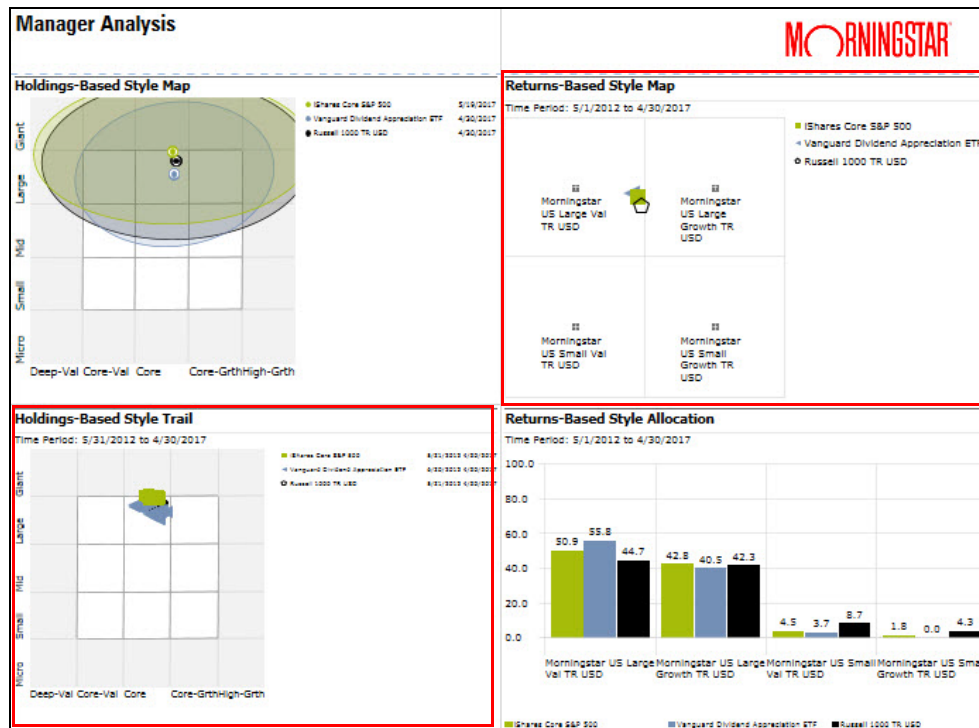
On page 9, you see the Holdings-Based Style Map and Holdings-Based Style Trail near the top of the page, and the Returns-Based Style Map and Returns-Based Style Allocation at the bottom. If the Holdings-Based Style Trail chart and the Returns-Based Style Map switch places, the Holdings-Based components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



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

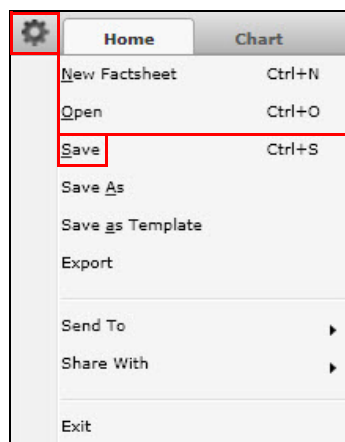


4. Drag the **Holdings-Based Style Trail** chart to the cell occupied by Returns-Based Style Map. The two components switch places.



The two 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**.



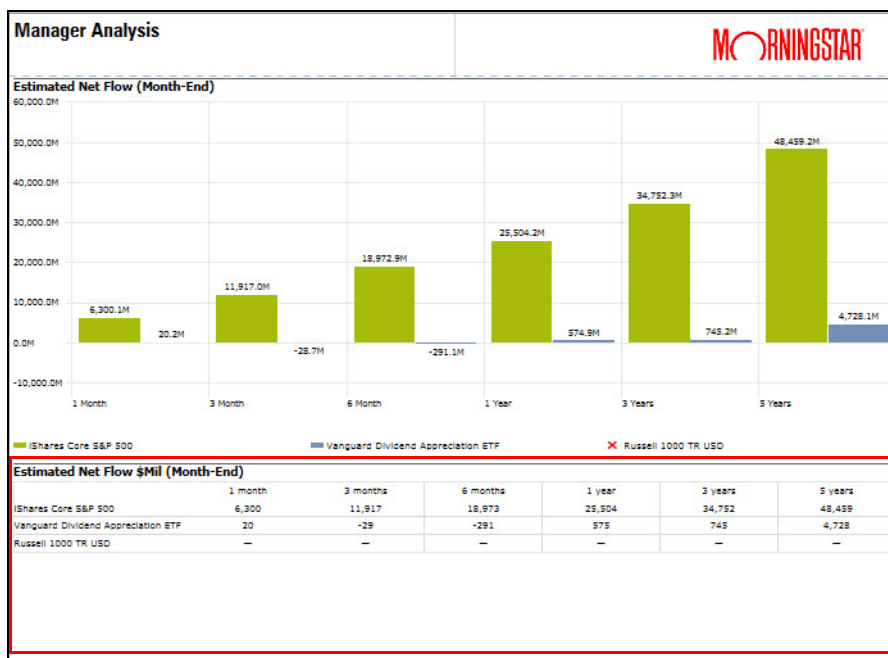
Be sure to save frequently.

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

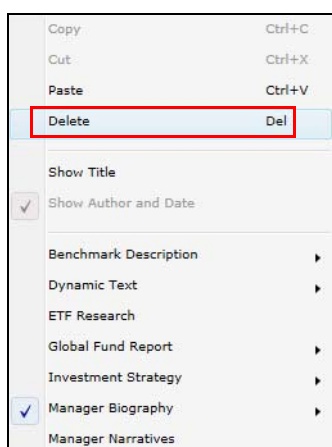
To delete a component, do the following:

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.



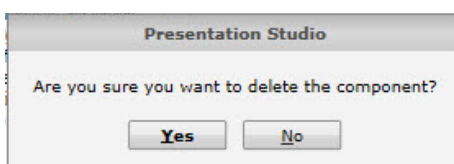
Click anywhere in the table's cell to select it.

3. **Right-click** and select **Delete**.



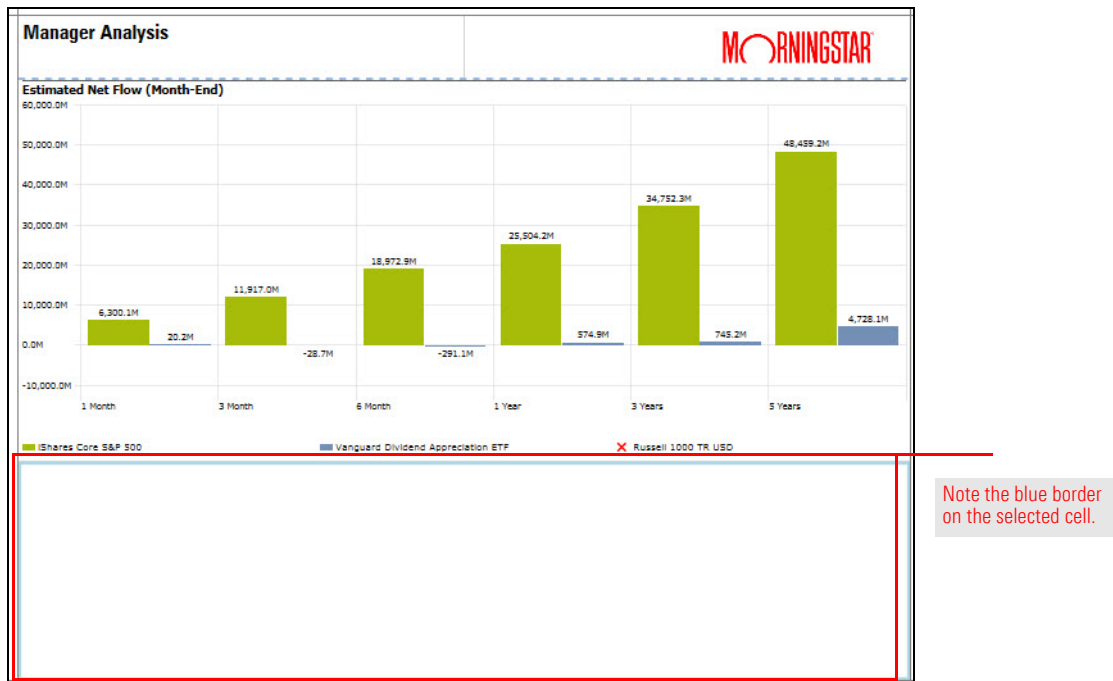
The options displayed on the menu change, depending on what is selected.

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.



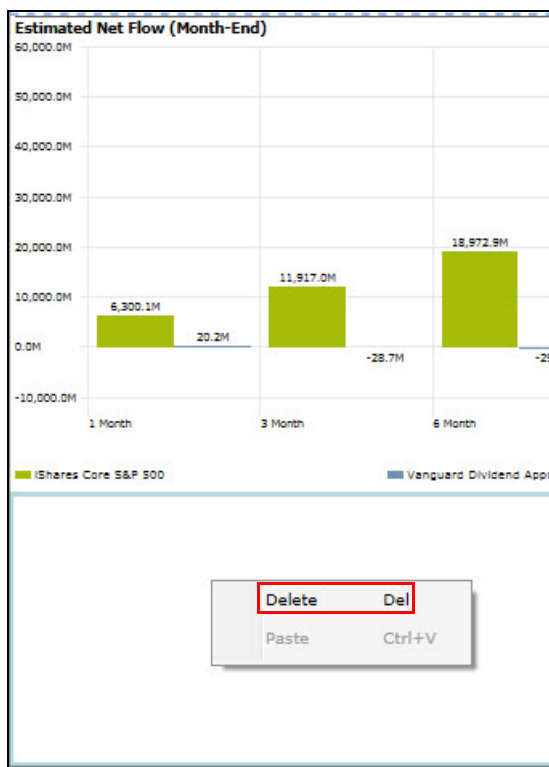
Go to the next exercise, [Exercise 12 on page 60](#), to learn how to remove the empty cell.

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

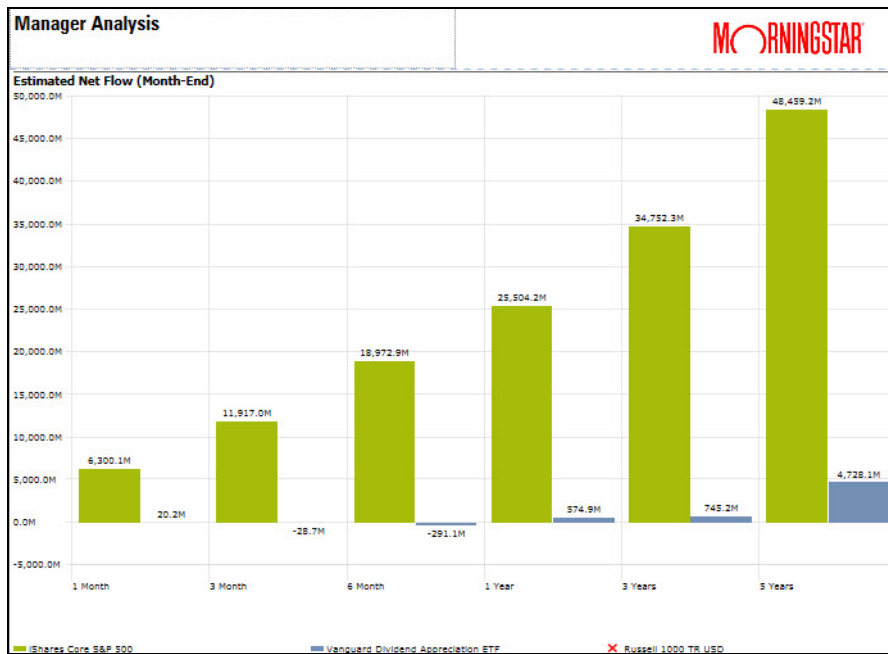
Do the following:

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



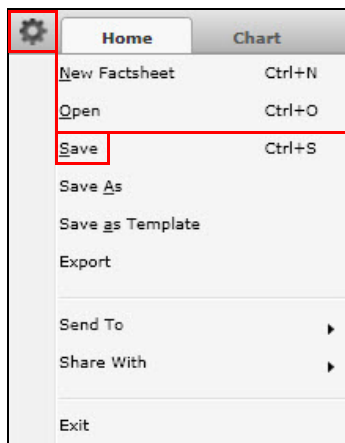
The selected cell is outlined in blue.

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



The chart now occupies the full page area.

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



Be sure to save frequently.

Using Workbook Settings and Component Settings

In [What can I do in the Application Settings? on page 16](#), 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.

Before starting the exercises, you might want to review [How do Application, Workbook, and Component Settings relate to each other? on page 19](#).

This section helps you do the following:

- ▶ understand what Workbook Settings are ([page 62](#))
- ▶ understand your options when changing a time period ([page 63](#))
- ▶ understand the Start Date and End Date selections ([page 64](#))
- ▶ modify the Start Date and End Date for a report ([page 66](#))
- ▶ understand what Component Settings are ([page 69](#))
- ▶ modify the Start Date and End Date for a component ([page 69](#))
- ▶ understand what a linked time period is ([page 72](#))
- ▶ create multiple time periods ([page 73](#)), and
- ▶ apply a time period ([page 75](#)), and
- ▶ reset a time period ([page 77](#)).

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

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

Overview

What are Workbook Settings?

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.

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

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

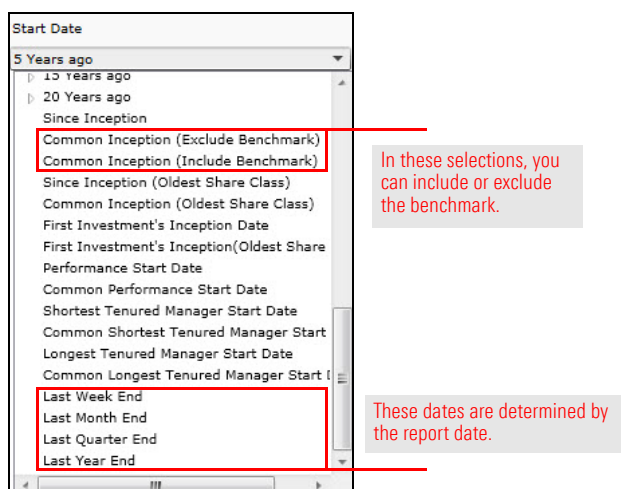
When changing the time period for this...	Using Start Date and End Date selections here...	The result is...
Report ☞ Note: Selecting a component is optional.	Command bar...Home tab... Workbook icon...Workbook Settings: Data window	The default time period is changed for the report. All components, both existing and yet-to-be created, are affected. See Exercise 13 on page 66 . ☞ Note: 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 69 . ☞ 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.

What are the start and end date selections?

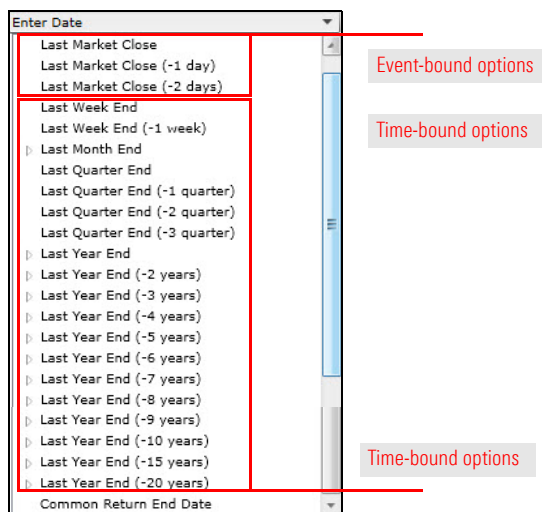
In the Start Date drop-down field, the selections at the top range from one day to 20 years ago. You can also enter a date. However, the drop-down field also offers flexible selections for dates associated with specific content or events, such as the following:

- ▶ 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.

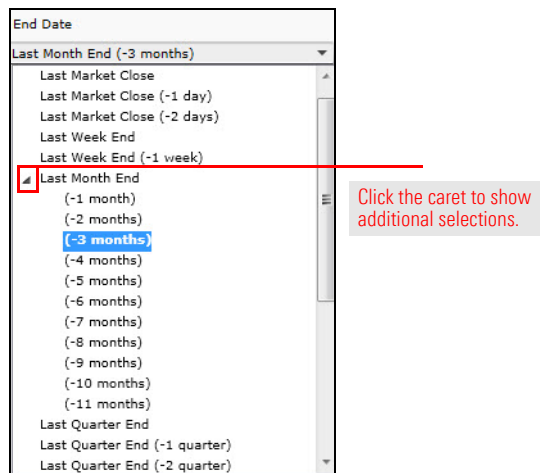


Note: In any component with start and end dates, when a Common Inception option is selected as the Start Date, the common inception date is displayed in the legend.

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 141](#)
- ▶ [How does the portfolio date affect the end date in a stacked bar chart? on page 143, and](#)
- ▶ [How does the portfolio date affect the end date in a stacked bar chart? on page 143.](#)

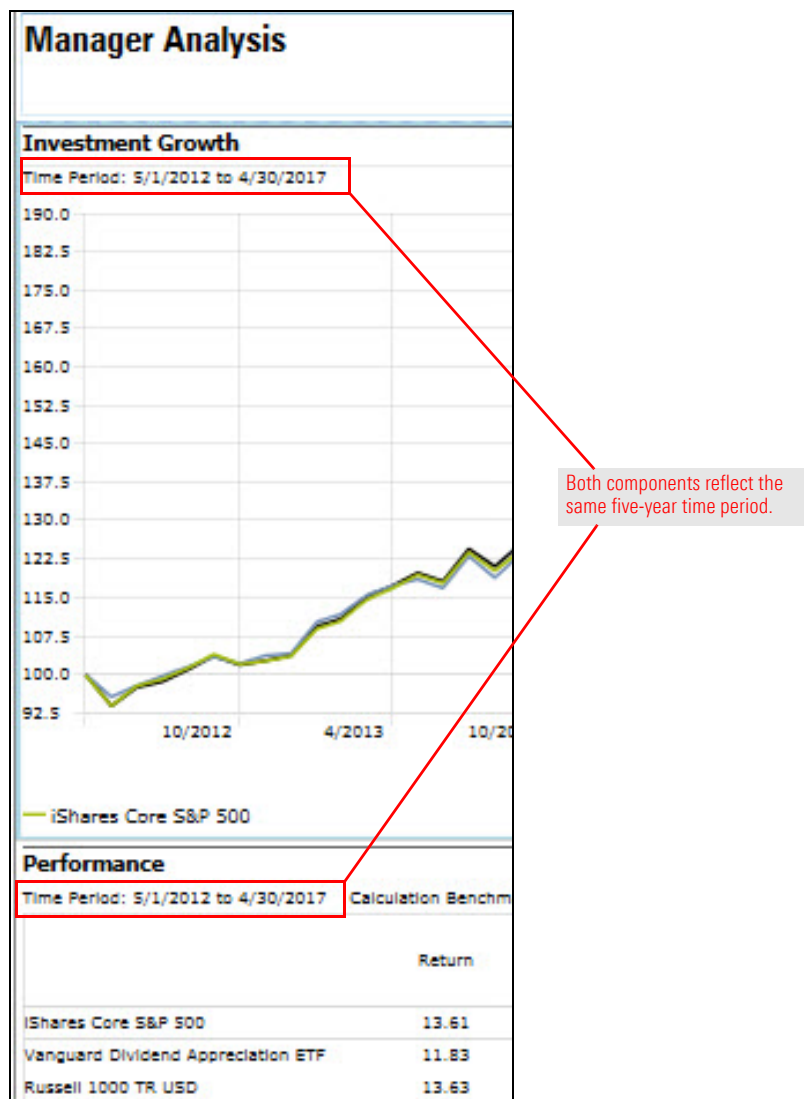
Before starting this exercise, you might want to review [What do I need to know before changing a time period? on page 63](#).

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.



- 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.
- From the **Start Date** drop-down field, select an **1 Year ago**.
- From the **End Date** drop-down field, select **Last Quarter End**.

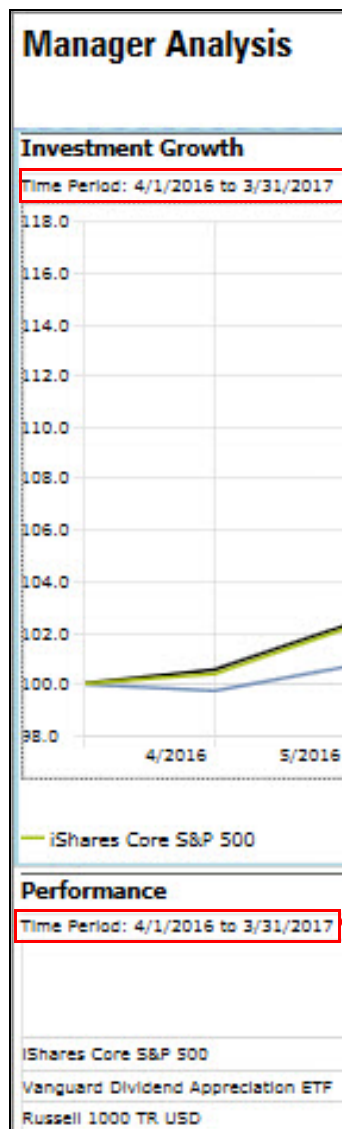
The screenshot shows the 'Workbook Settings: Data' window. The 'Home' tab is selected on the Command bar, and the 'Workbook' icon is highlighted. The 'Data' tab is selected in the Workbook Settings window. The 'Time Period' section shows 'Start Date' set to '5 Years ago' and 'End Date' set to 'Last Month End'. The 'Data Source' section shows 'Return Type' set to 'Total Return' and 'Return Series' set to 'Monthly Return'. The 'Risk-free Rate' is set to 'USTREAS T-Bill Auction Ave 3 Mon'. The 'Require Continuous Source Data' checkbox is checked.

When the Workbook Settings window first opens, the Data tab is selected.

Note the settings for Start Date and End Date.

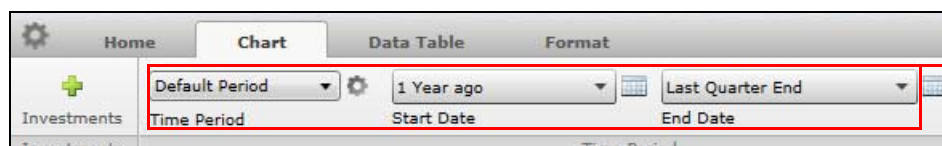
- Click **OK**. The Workbook Settings window closes. You have changed the default for the report.

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.



Both components reflect the new default time

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.



The selected component reflects 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:

- ▶ 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 63](#)

Before starting this exercise, you might want to review [What do I need to know before changing a time period? on page 63](#).

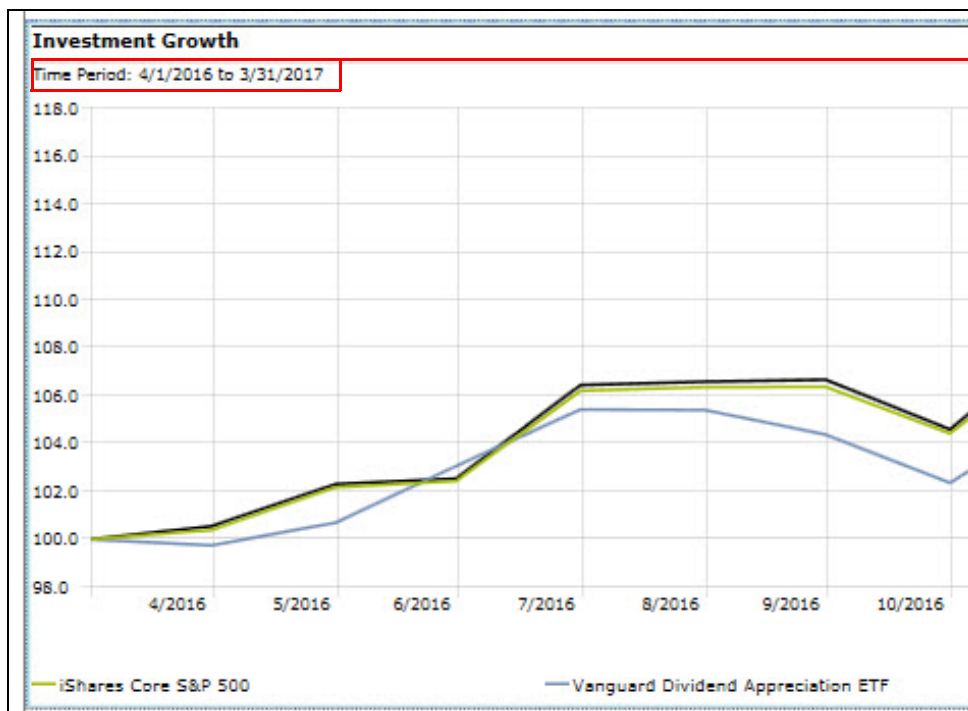
When you modify the settings of an individual component (such as a chart or table), the new settings override the Application and Workbook Settings, but only for that component.

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.

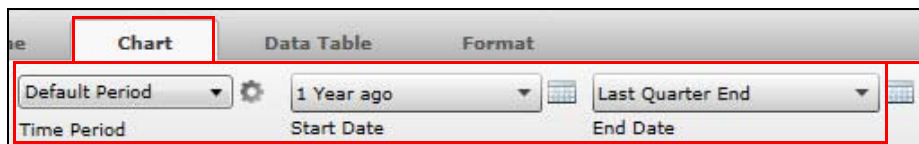
What are Component Settings?

Exercise 14: Change the time period in a component



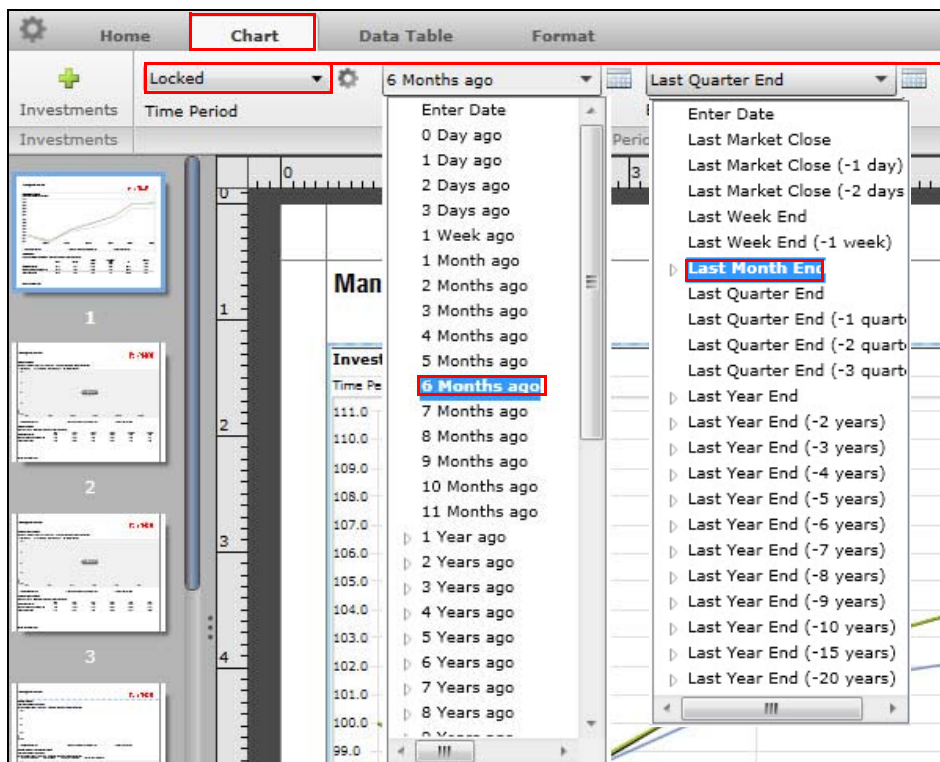
The time period reflects the default.

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



Note that the Time Period displays Default Period.

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



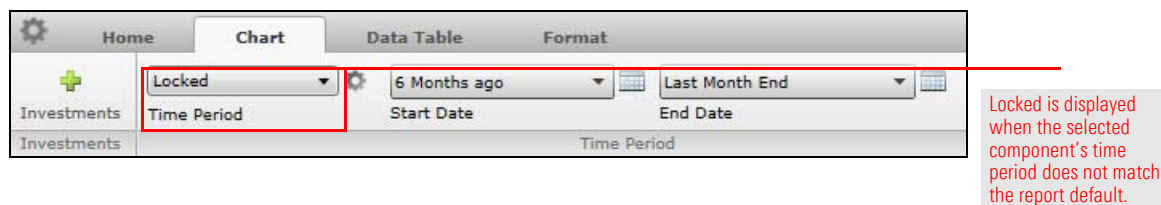
If the report includes other predefined Time Periods, you could select one of them from here.

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

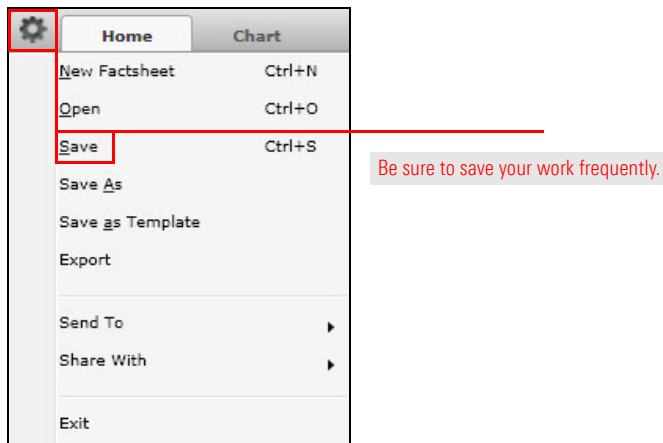


- With the Investment Growth chart still selected, select the **Home** tab, then select the **Chart** tab. The information in the Time Period portion of the selected tab tells you the following:

- 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.



6. 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.

When you change a component's time period (as described in [Exercise 14: Change the time period in a component on page 69](#)), 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 66](#) and [Exercise 14: Change the time period in a component on page 69](#).

What is a linked time period?

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:

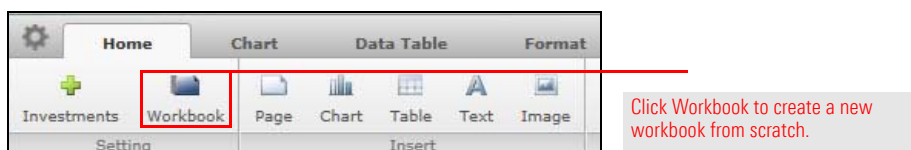
Exercise 15: Create multiple time periods

- ▶ 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.

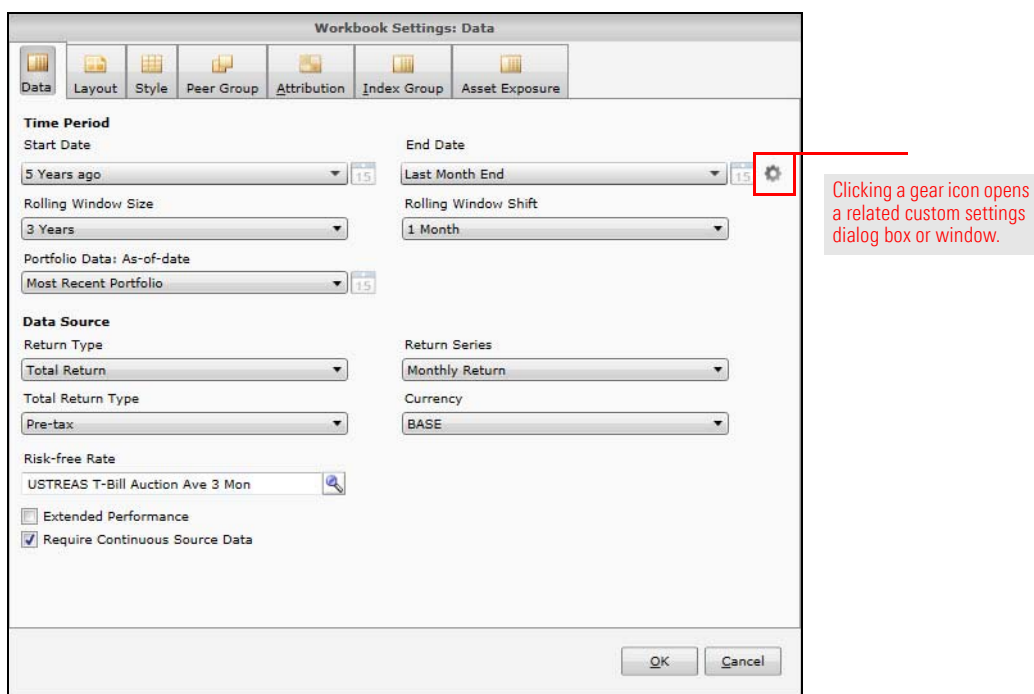
 Note: When you create time periods as described in this exercise, those time periods are available in all components in the report.

To create additional time periods, do the following:

1. 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.



- 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."

Name	Start Date	End Date
Default Period	5 Years ago	Last Month End
Time Period 1	Last Year End	Last Quarter End
Time Period 2	1 Year ago	Last Quarter End
Time Period 3	3 Years ago	Last Quarter End
Time Period 4	5 Years ago	Last Quarter End
Time Period 5	10 Years ago	Last Quarter End
Time Period 6	15 Years ago	Last Quarter End
Time Period 7	20 Years ago	Last Quarter End
Time Period 8	Common Inception	Last Quarter End

Click a calendar icon to open a calendar and select a date

You can name any of the time periods, except the default

OK Cancel

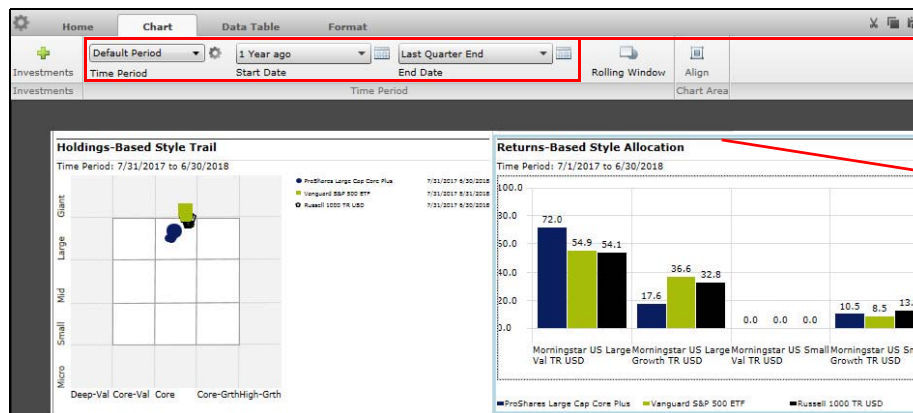
- In the Name column, name the **time period(s)** you changed to indicate its range. For instance, the name 1YrAgo-LastQtrEnd describes its range.
- Click **OK**.
- In the Workbook Settings: Data window, click **OK**.

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:

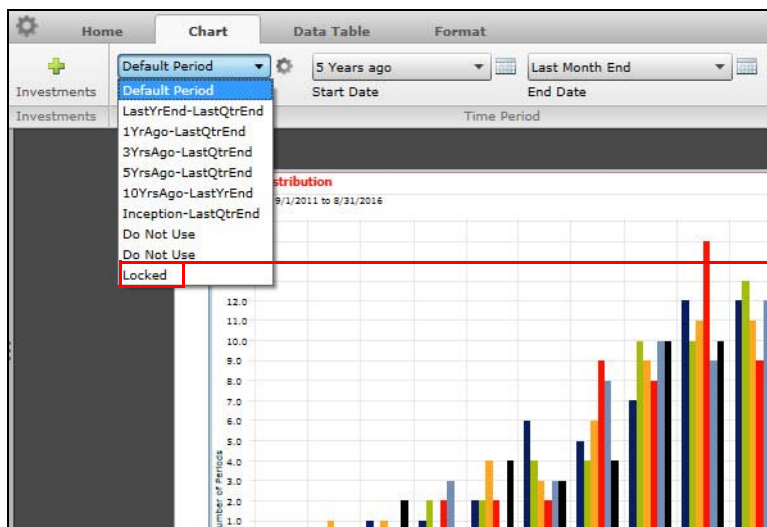
1. In ProShares-Vanguard, on page 9, select the **Returns-Based Style Allocation** chart. On the Command bar, the Chart tab is now selected.



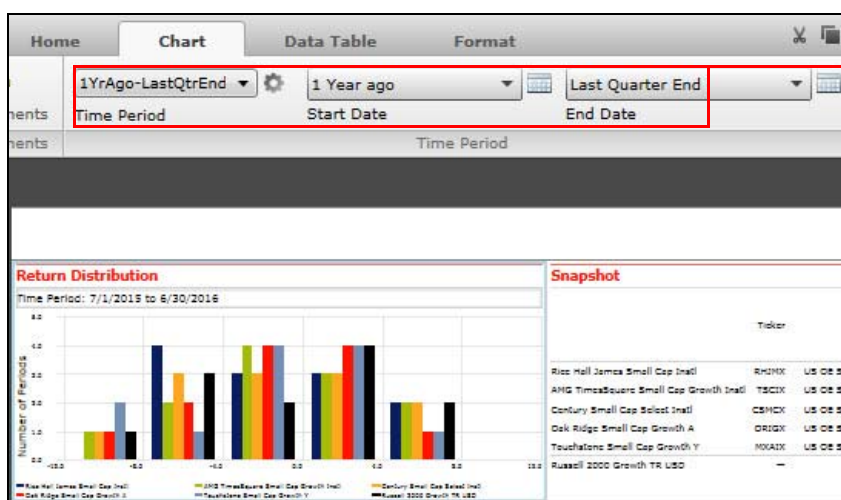
The time period of the selected chart is displayed on the Chart tab.

The selected chart displays a blue border.

- 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).



If you select Locked and later change the Default Period, the locked component will not change to the new default.



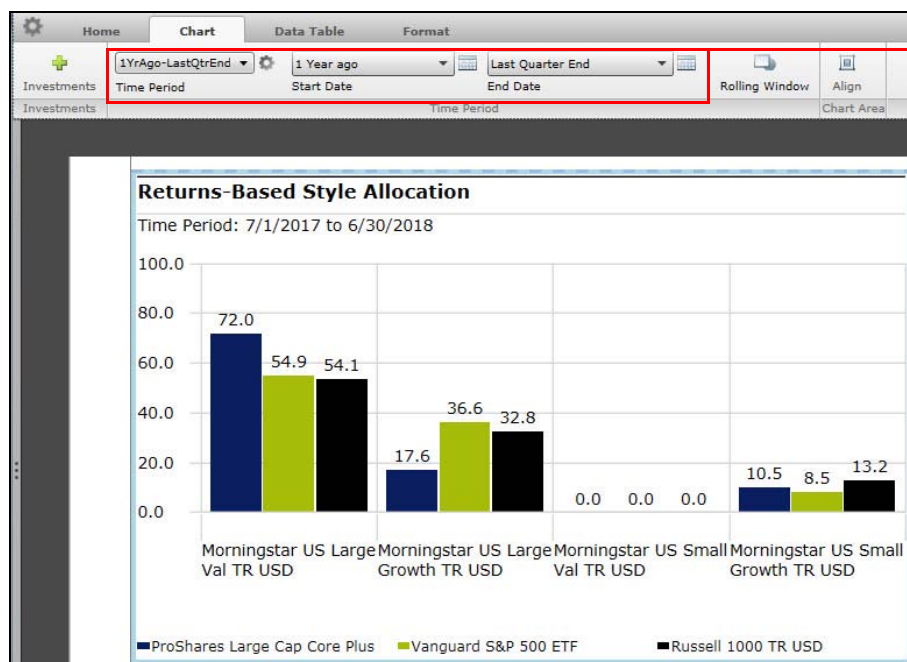
The time period information for the selected chart is displayed at the top of the window.

When you created additional time periods in [Exercise 15 on page 73](#), 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:

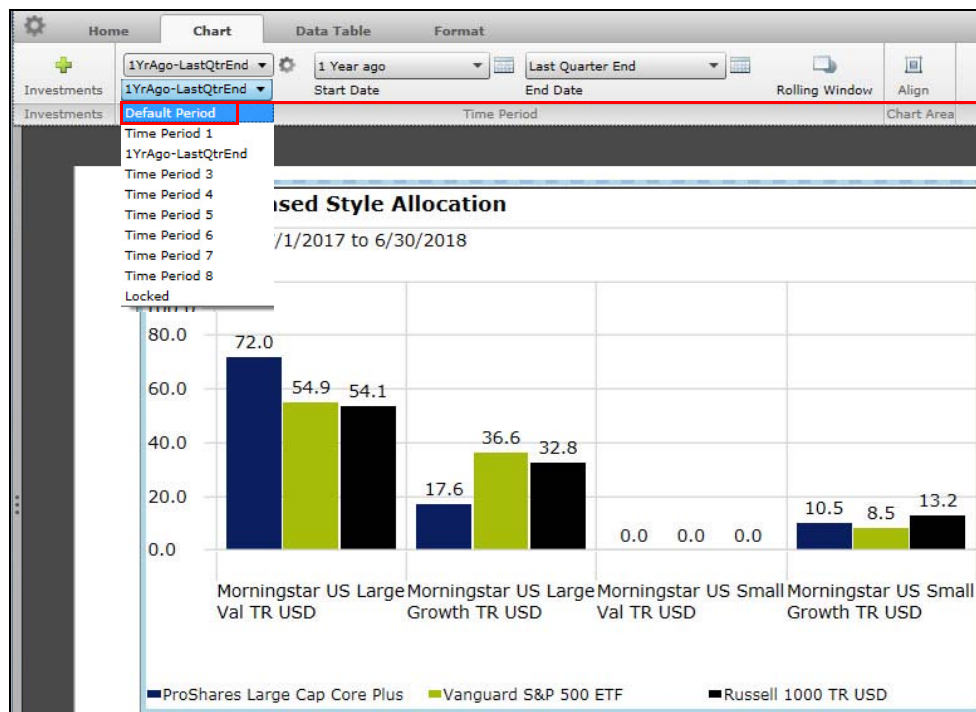
1. In ProShares-Vanguard, on page 9, select the **Returns-Based Style Allocation** chart. On the Command bar, the Chart tab is now selected.



The time period of the selected chart is displayed on the Chart tab.

The selected chart displays a blue border.

- 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).



If you select Locked and later change the Default Period, the locked component will not change to the new default.

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 135](#).

How can I learn more about customizing components?

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 79](#))
- ▶ create a page layout ([page 80](#))
- ▶ use Snap to Grid to precisely resize a cell ([page 83](#)), and
- ▶ insert a component into a cell ([page 84](#)).

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:

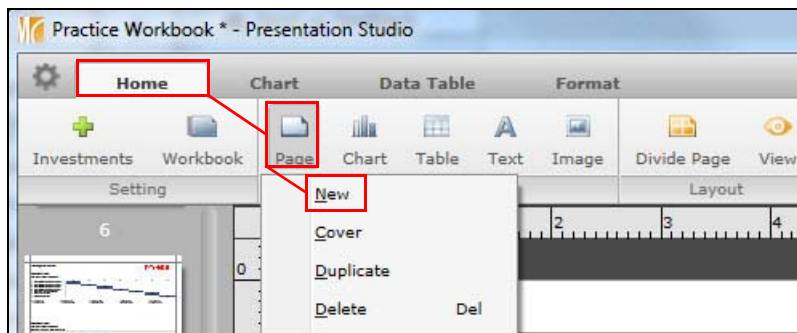
1. In the Navigation pane of ProShares-Vanguard, **scroll** to the bottom and click the **last page** to select it.

Overview

Exercise 18: Create a new page

The screenshot shows the ProShares-Vanguard report interface. On the left is the Navigation pane with a vertical scroll bar. The pane contains a list of pages numbered 6 through 12. Page 11 is highlighted with a blue border, indicating it is the selected page. On the right is the Manager Analysis page, which is also outlined in blue. The page displays a bar chart titled 'Estimated Net Flow (Month-End)' and a table titled 'Estimated Net Flow \$Mil (Month-End)'. The table lists various fund names and their corresponding net flow values. A red line points from the scroll bar in the Navigation pane to a text box that says 'Drag the scroll bar to move up and down in the Navigation pane.' Another red line points from the blue outline of the Manager Analysis page to a text box that says 'The selected page is outlined in blue.'

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).



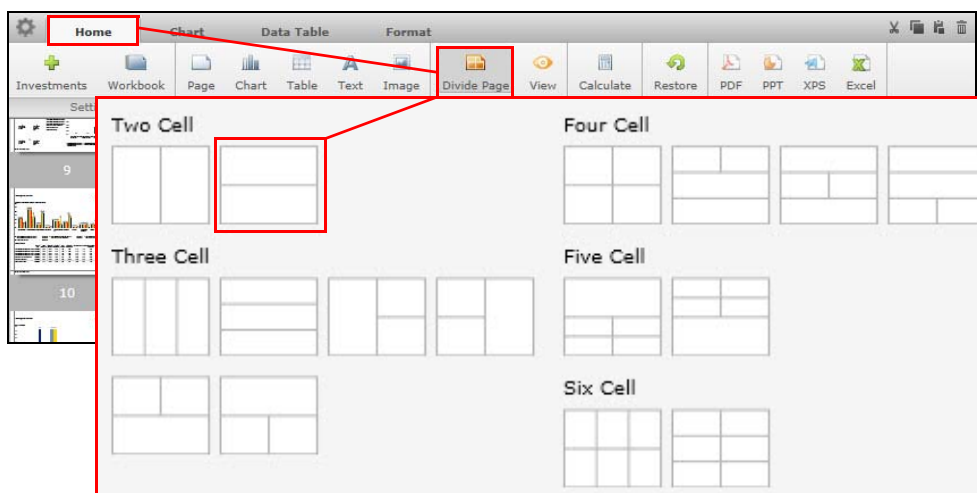
If you select Duplicate, a copy of the selected page is created.

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.



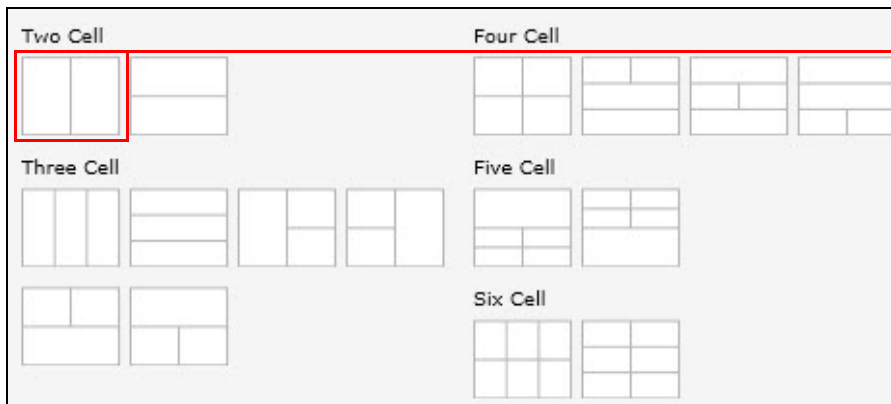
The Two Cell options divide the page into two cells of equal width.

The page is now divided into two cells.



Note that the top cell is selected.

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



This option divides the selected cell into two side-by-side cells of equal width.

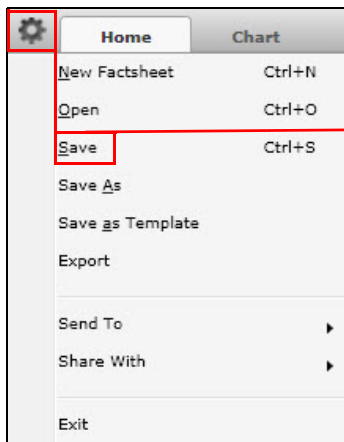
The top cell is now divided into two cells.



You might need to click each cell to see the 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 51](#).

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



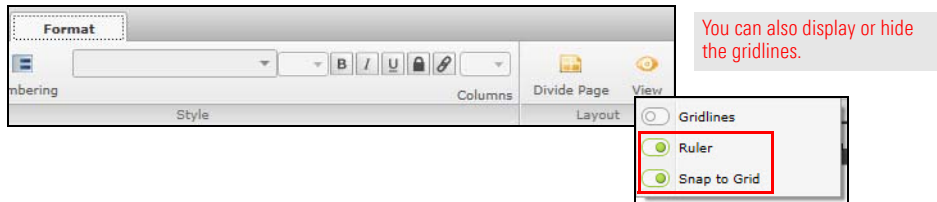
Be sure to save frequently.

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".

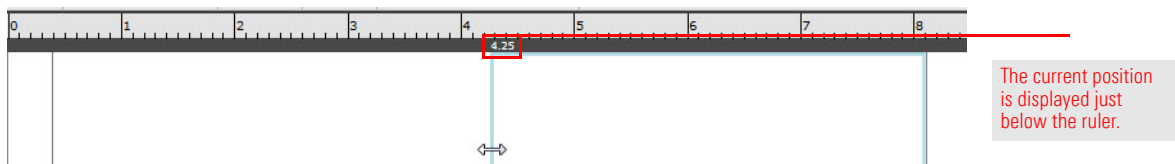
You can resize cells by dragging the margin and cell borders, but even with the ruler and gridlines visible, it can be difficult to set an exact measurement, such as 0.75". Snap to Grid makes it simple to precisely resize and position cells.

To enable Snap to Grid, do the following:

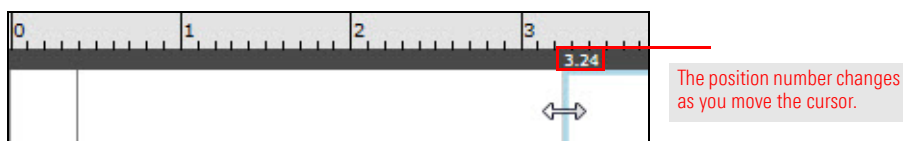
1. On the **Home** tab, click **View**, then from the menu, select **Snap to Grid**.
2. If Ruler is not already selected, select **Ruler**.



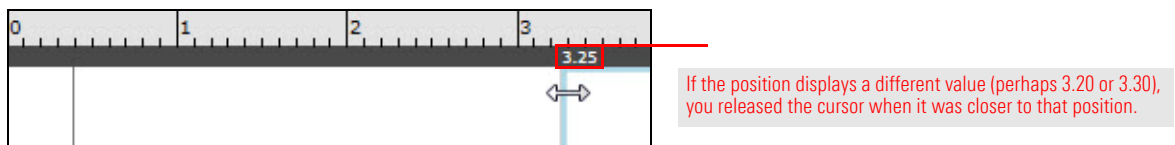
3. On the page, **hover your cursor** over the vertical border between the two top cells. The cursor changes to a double-sided arrow.



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".

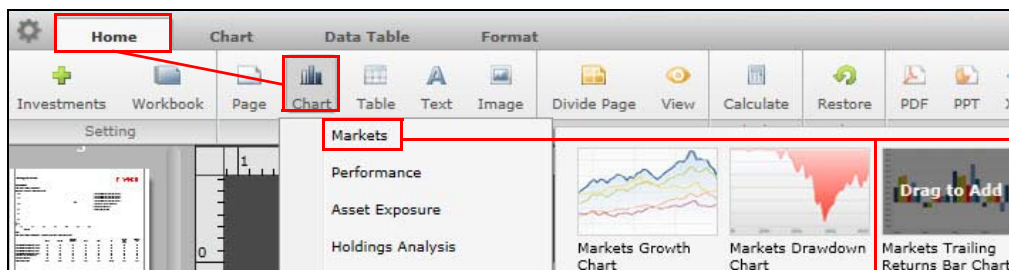


Inserting a component into a cell is the same process as replacing a component — drag-and-drop.

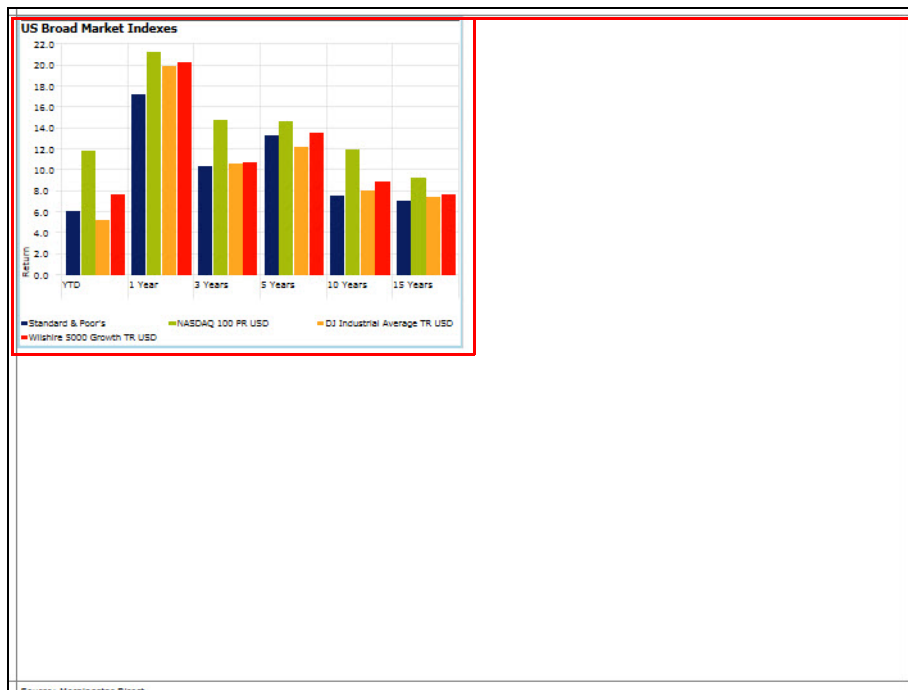
Exercise 21: Insert a component into a cell

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.

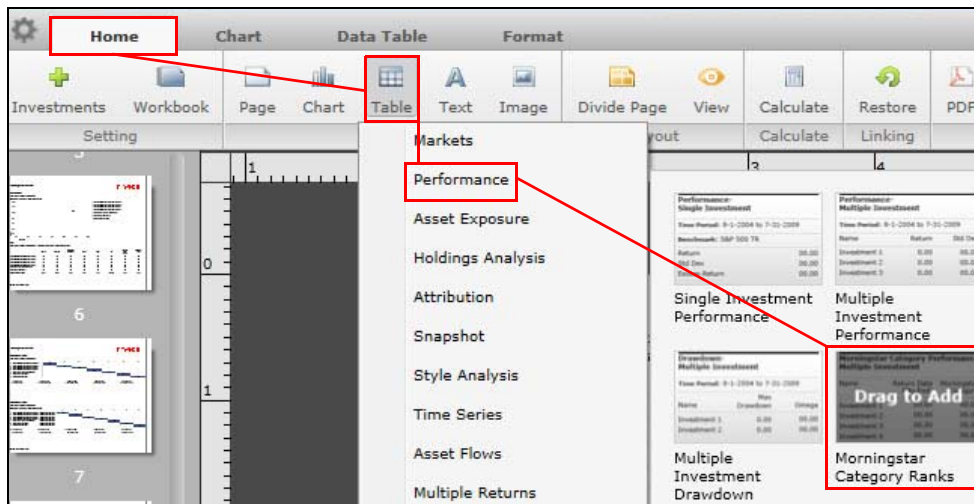


Note the highlighted selections.

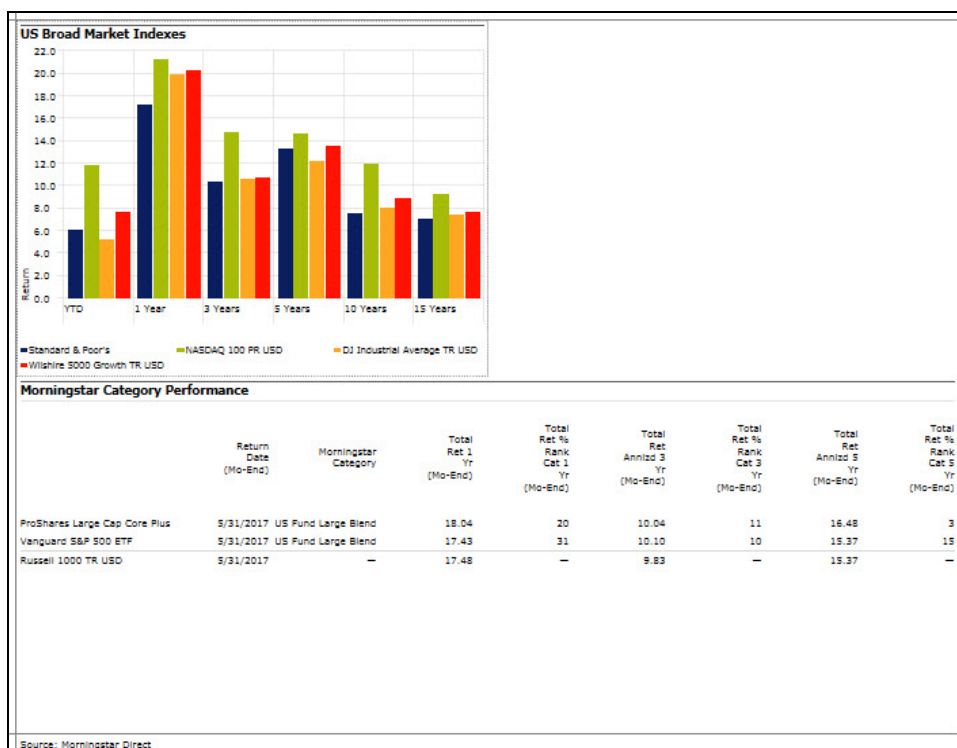


The chart occupies the top-left cell.

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



The page should now look like this.



Note: You will Insert an image into the top-right cell in [Exercise 27 on page 100](#).

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



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 69](#)), 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 19](#).

This section describes using Component Settings to do the following:

- ▶ customize a bar chart by hiding values and changing the orientation ([page 87](#))
- ▶ customize a table by changing the portfolio date and removing a row ([page 90](#))
- ▶ add a data point to a table component ([page 92](#)), and
- ▶ change a data point in a table component ([page 94](#)).

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.

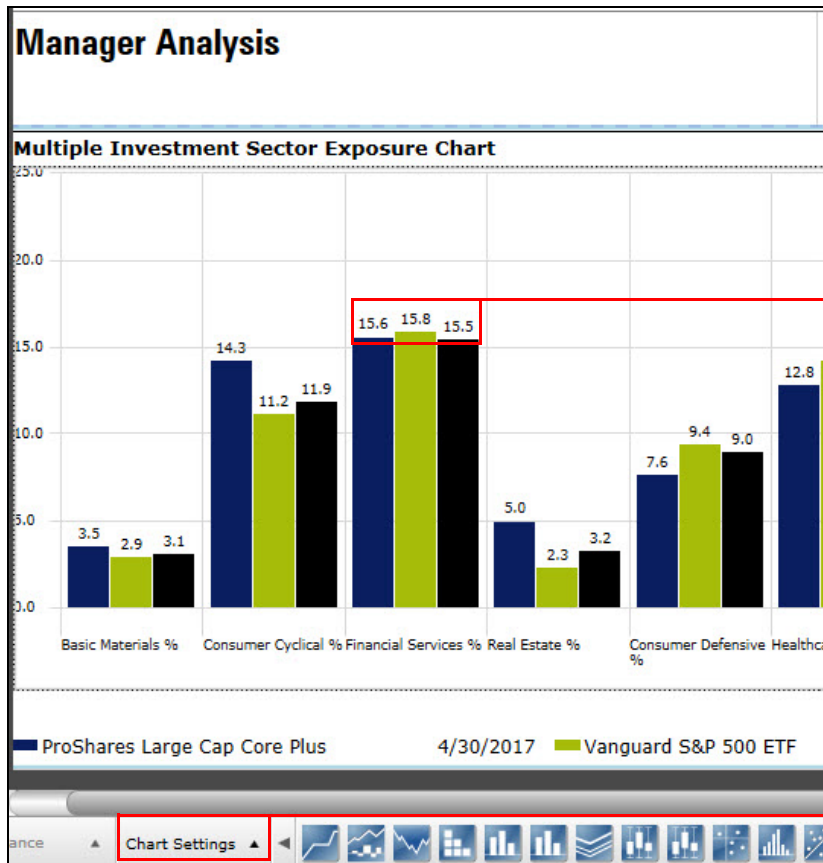
Do the following:

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.

Chart Settings

Chart Title: Multiple Investment Sector Exposure Chart

Currency: BASE

Orientation: Vertical Bar

Data Set: Select from Morningstar Database

Values: ☒ (Eye icon)

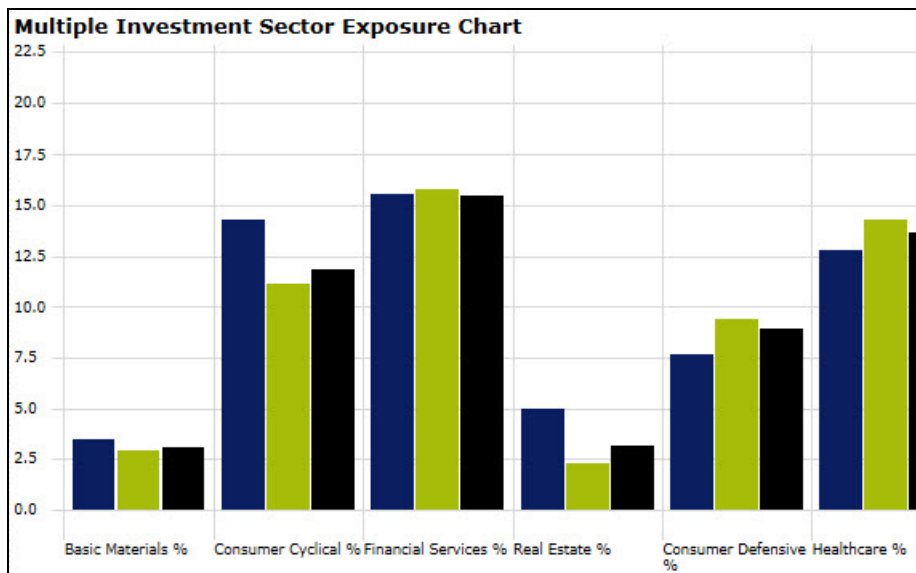
Portfolio Date: Most Recent Portfolio

Investments	Available Portfolios
ProShares Large Cap Core Plus	4/30/2017
Vanguard S&P 500 ETF	4/30/2017
Russell 1000 TR USD	5/31/2017

If the Chart Settings window obscures your view of the chart, drag here to move the window, but do not click the X.

The Eye icon is available in many settings, allowing you to display or hide a variety of features.

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



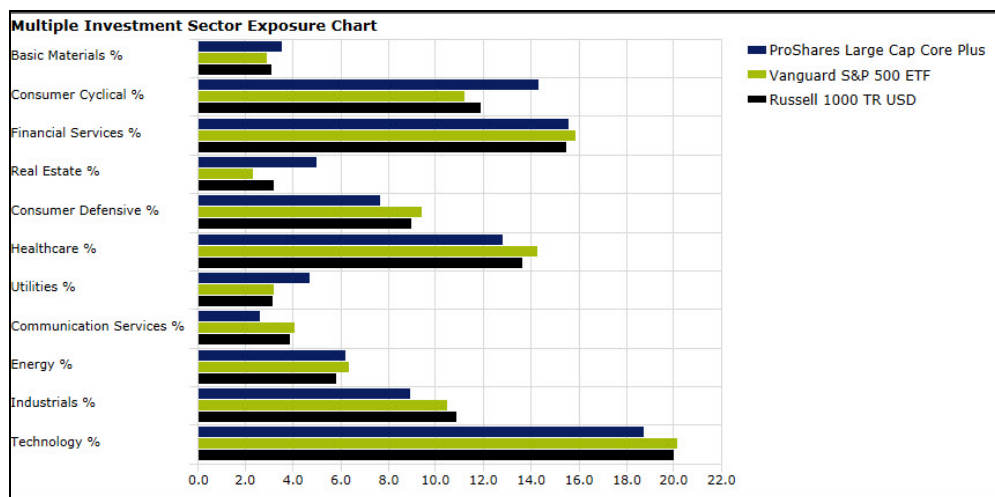
The new setting takes effect immediately; the Component Settings window does not have buttons for Apply or OK.

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

Investments	Available Portfolios
ProShares Large Cap Core Plus	4/30/2017
Vanguard S&P 500 ETF	4/30/2017
Russell 1000 TR USD	5/31/2017

The default orientation for this chart is vertical bar.

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.

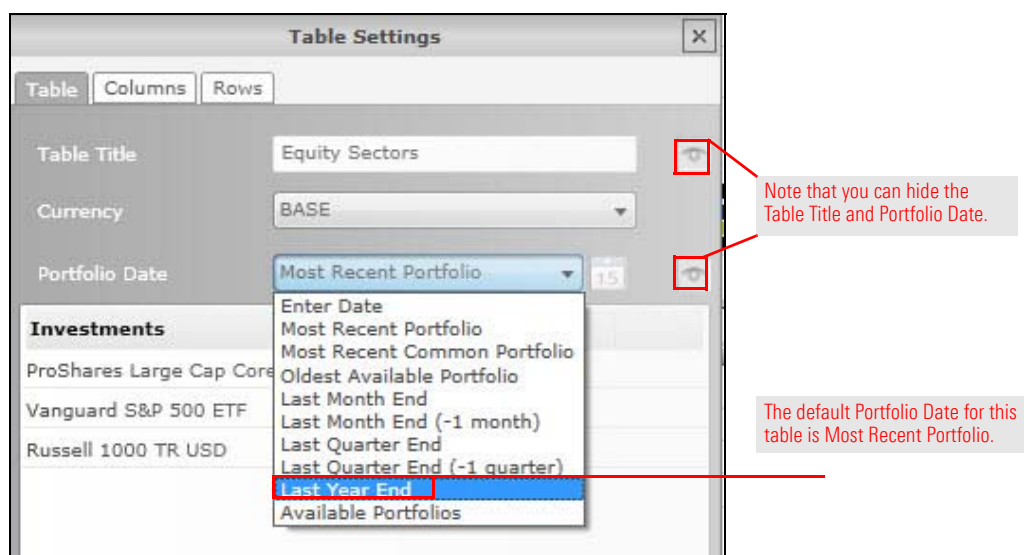
2. At the bottom of the window, click the **Table Settings** button. The Table Settings window opens.

A	B	C	D	E	F
	Portfolio Date	Basic Materials %	Consumer Cyclical %	Financial Services %	Real Estate %
ProShares Large Cap Core Plus	4/30/2017	3.53	14.29	15.61	5.02
Vanguard S&P 500 ETF	4/30/2017	2.90	11.17	15.83	2.32
Russell 1000 TR USD	5/31/2017	3.11	11.88	15.50	3.22

Note the portfolio dates do not match.

The Component Settings button now displays "Table Settings."

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.

Equity Sectors					
Portfolio Date: 12/31/2016					
	Basic Materials %	Consumer Cyclical %	Financial Services %	Real Estate %	Consumer Defensive %
ProShares Large Cap Core Plus	3.47	12.44	15.22	4.31	9.21
Vanguard S&P 500 ETF	2.68	10.97	16.21	2.33	9.49
Russell 1000 TR USD	3.02	11.62	16.10	3.37	8.91

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:

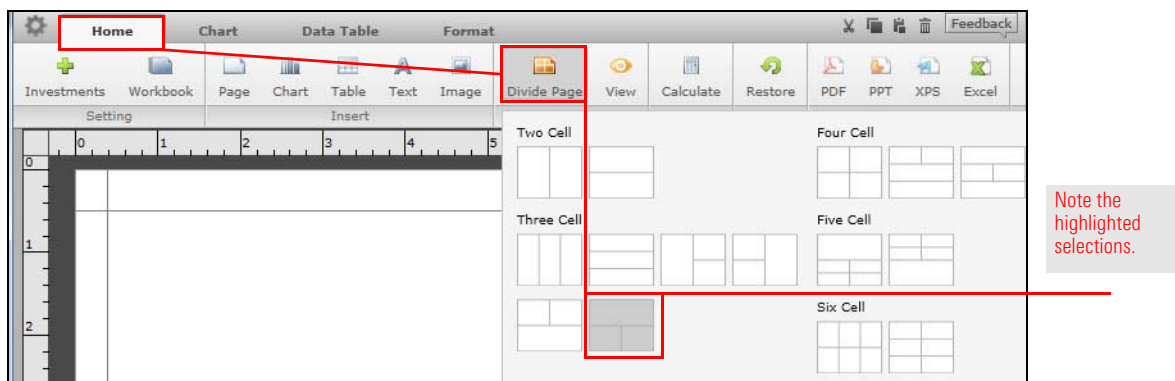
- ▶ add a page
- ▶ insert a table component, and
- ▶ add a data point to the table.

Note: You may want to review [Exercise 18: Create a new page on page 79](#), [Exercise 19: Create the page layout on page 80](#), and [Exercise 21: Insert a component into a cell on page 84](#).

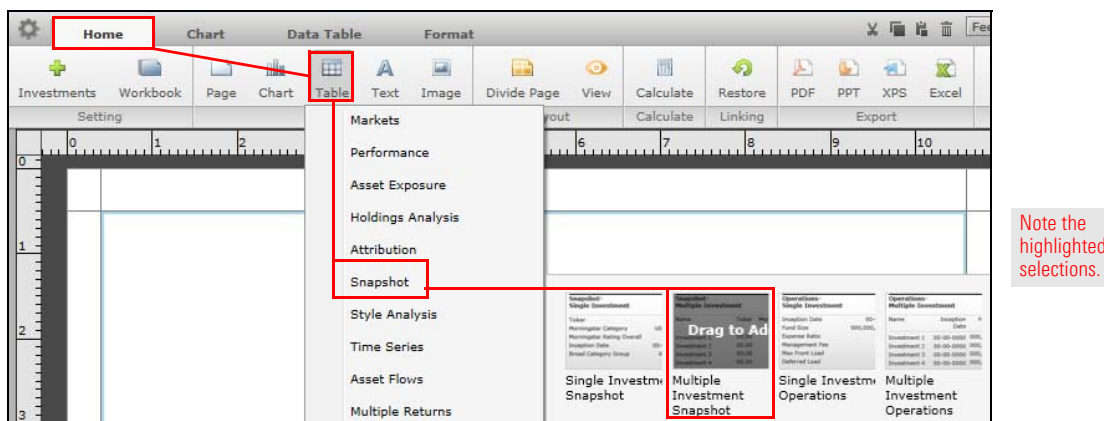
Exercise 24: Add a data point to a table

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.

The screenshot shows a table titled "Snapshot" with columns A through F. The data rows are:

A	B	C	D	E	F
	Ticker	Morningstar Category	Morningstar Rating Overall	Inception Date	Broad Category Group
	ProShares Large Cap Core Plus	CSM	US Fund Large Blend	*****	Equity
	Vanguard S&P 500 ETF	VOO	US Fund Large Blend	*****	Equity
	Russell 1000 TR USD	—	Large Blend	—	Equity

A right-click context menu is open over the "Inception Date" column header (column E). The menu options are: Cut, Copy, Paste, Delete, Select, Transpose, **Insert Column** (highlighted with a red box), Delete Column, and Data Settings. A red line points from the "Insert Column" option to a text box that says "... then select Insert Column." Another red line points from the "Inception Date" column header to a text box that says "Right-click in this area..."

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

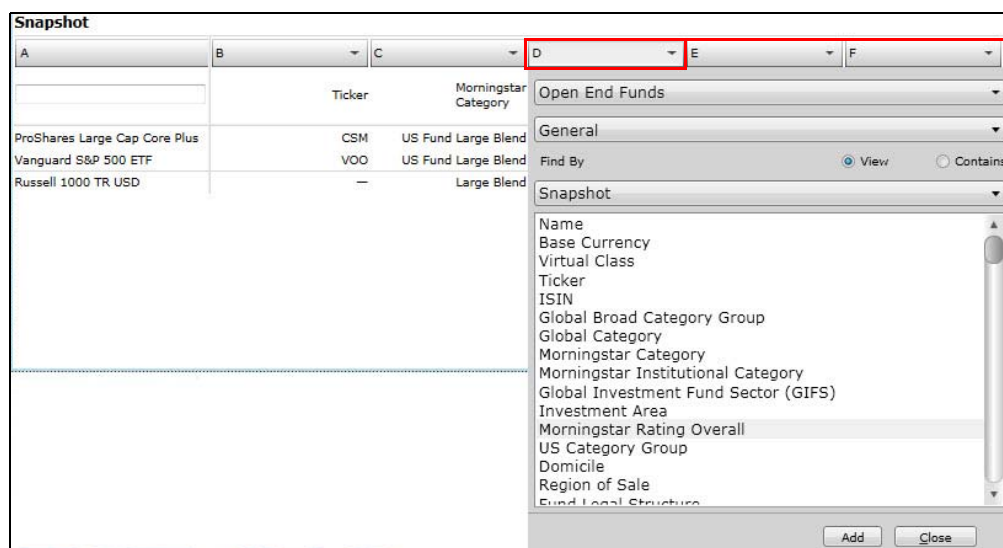
As you saw in the previous exercise, when you create a new column, it defaults to Morningstar Rating Overall. In this exercise, you will select a different data point for that column.

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**.
2. Click the **drop-down field** above the column header (Morningstar Rating Overall). The drop-down field opens.



Click here to select a different data point for this column.

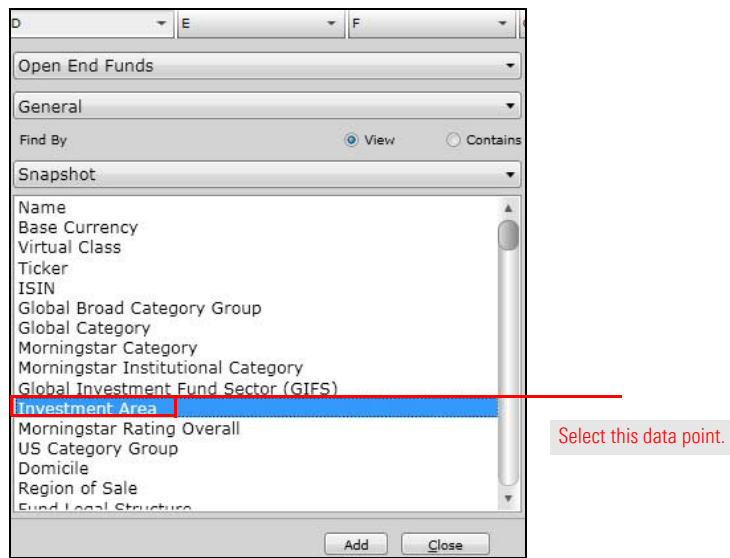
The options in this drop-down field are similar to those you see throughout Morningstar Direct, whenever you search for a data point to use. You can select from the following fields to find the data point you want:

- ▶ 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.

Snapshot			
A	B	C	D
	Ticker	Morningstar Category	Investment Area
ProShares Large Cap Core Plus	CSM	US Fund Large Blend	—
Vanguard S&P 500 ETF	VOO	US Fund Large Blend	United States of America
Russell 1000 TR USD	—	Large Blend	United States of America

Note the highlighted selections.


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 96](#))
- ▶ add a header ([page 98](#))
- ▶ insert an image into the header ([page 100](#))
- ▶ change the position of an image ([page 102](#))
- ▶ understand what dynamic text is ([page 103](#))
- ▶ use dynamic text in the header ([page 103](#))
- ▶ change font properties ([page 104](#))
- ▶ use the same header on every page of a report ([page 105](#))
- ▶ change the size of an image in a body cell ([page 107](#)), and
- ▶ add a watermark ([page 111](#)).

 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

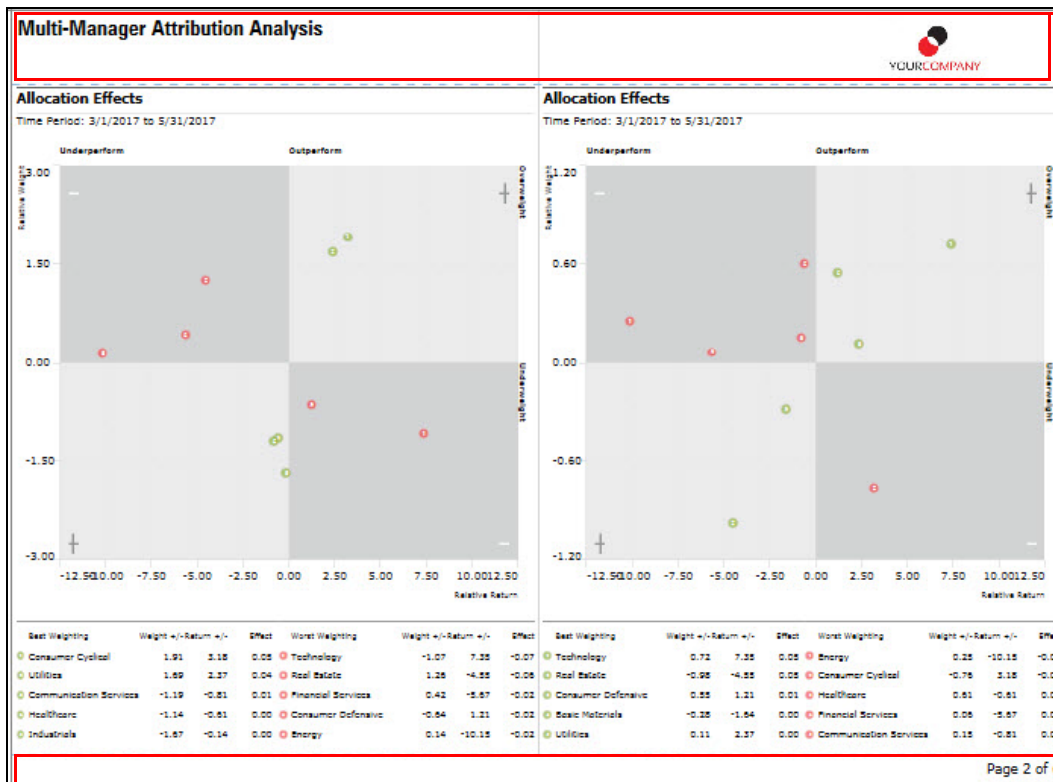
What content should I include in a header and footer?

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



On the first page, the header displays the type of report and a company logo.

The first page does not have a footer.



On the second page, the header matches the header on page 1.

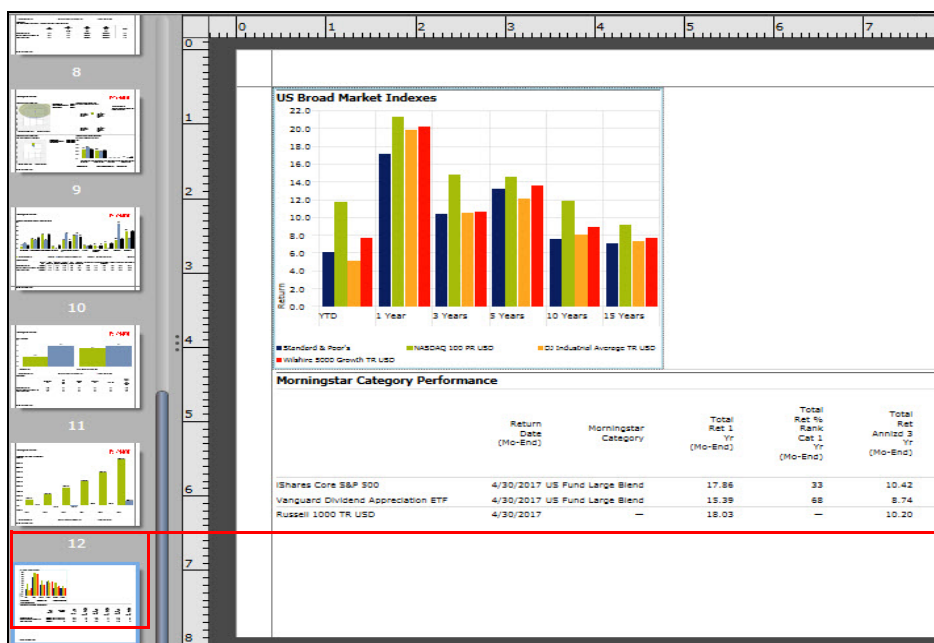
The second page has a footer in which the page number and page count are displayed.

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

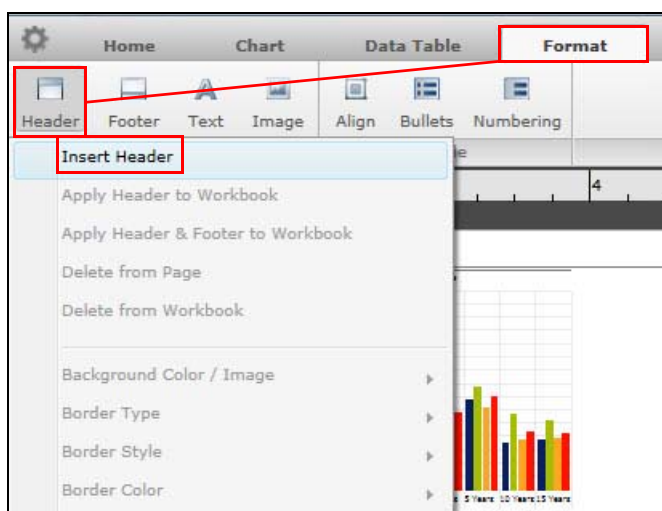
To add a header, do the following.

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 79](#)).



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**.



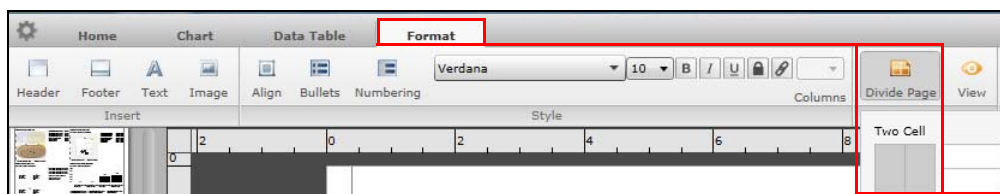
The other selections on the Header menu become available after you have inserted a header.

A new cell opens at the top of the page.



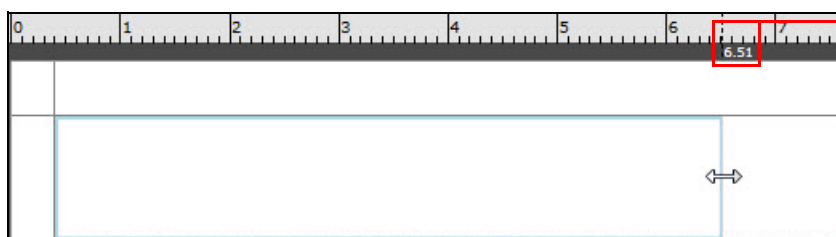
To make room for the header, space was removed from the two rows of cells.

- 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.



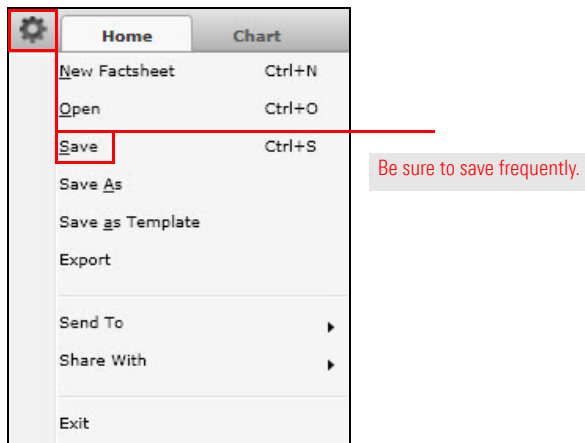
With two cells in the header, you can have two components in the header.

- 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).



You can use the ruler as a guide when you move a border.

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



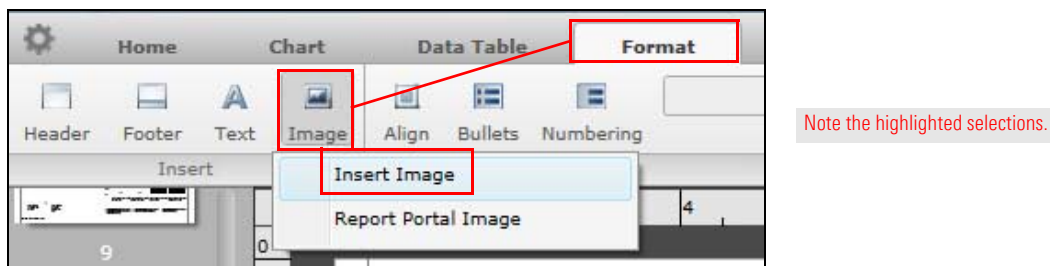
In this exercise, you should use an image available on your network or drive.

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

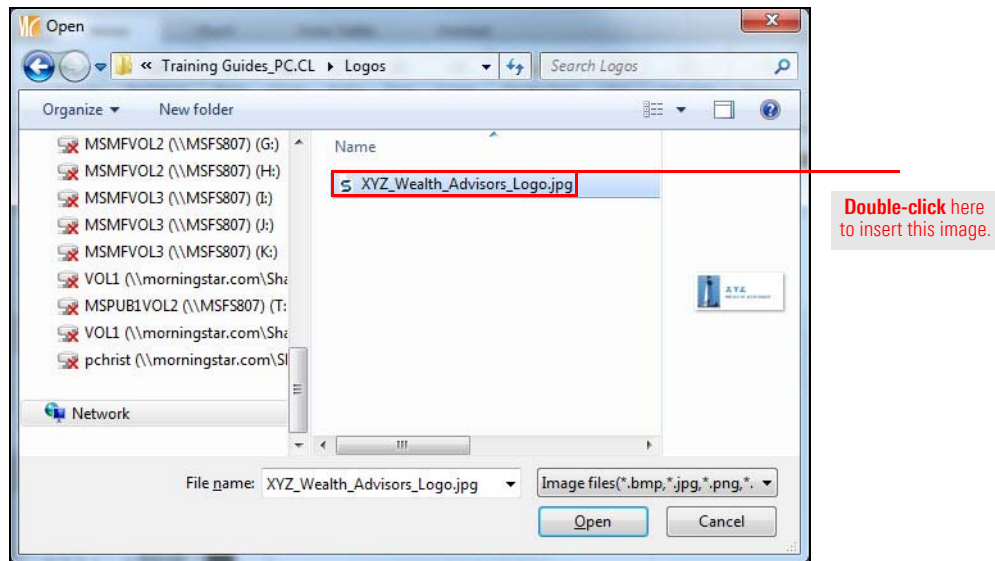
Exercise 27: Add an image

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.



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.

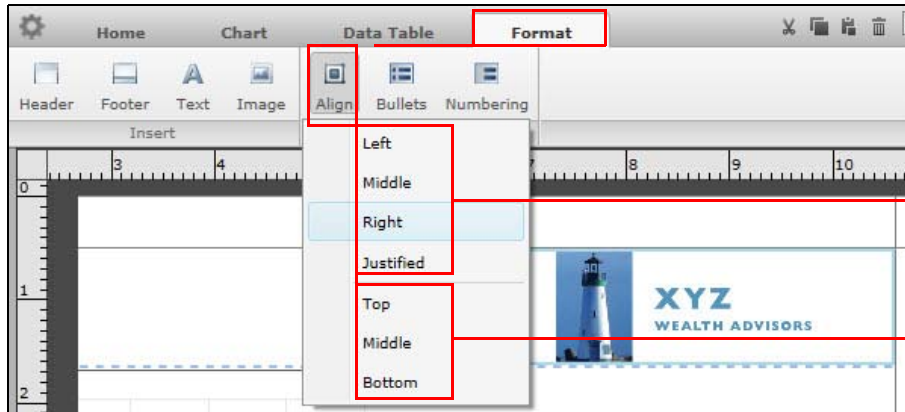


When you insert an image, it is centered in the cell.

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

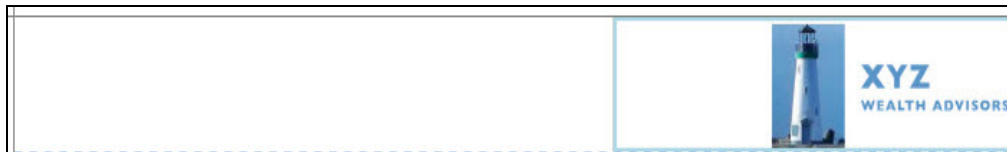
1. Select the **cell** containing the image.
2. On the Command bar, select the **Format** tab, then click **Align... Right**.

Exercise 28: Change the position of an image



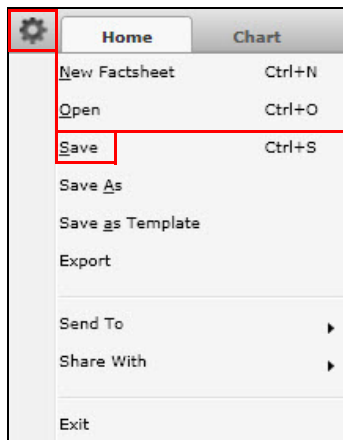
You can select one option from each section of the Align menu; the top four selections position the component horizontally, and the bottom three selections position it vertically.

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



The size of the image does not change.

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



Be sure to save frequently.

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.

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.

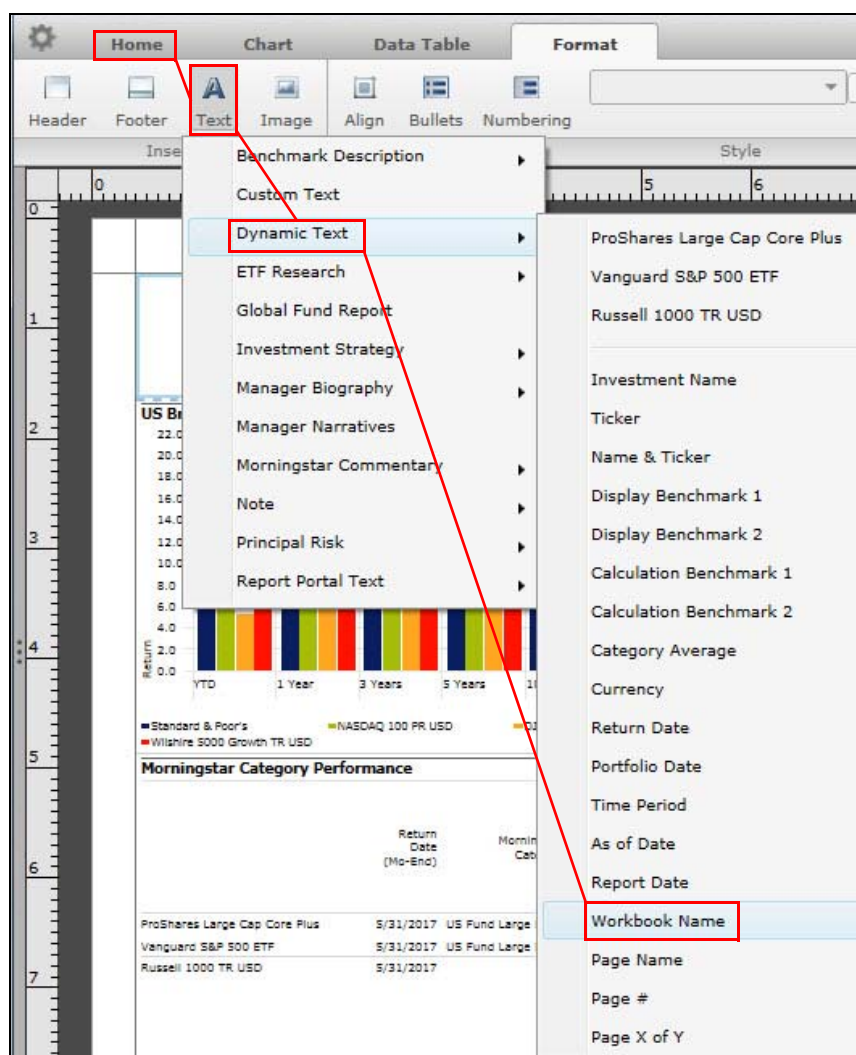
Exercise 29: Use dynamic text in a header

Do the following:

1. In ProShares-Vanguard, in the last page’s header, select the **left cell**.

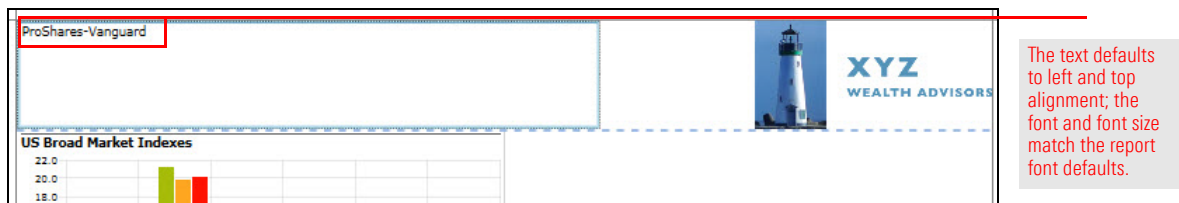
Note: Because a cell cannot accommodate more than one component, the text and image must be in separate cells.

2. On the Command bar, select the **Format** tab, then click **Text...Dynamic Text...Workbook Name**.



Note the highlighted selections.

The workbook name is displayed in the header.



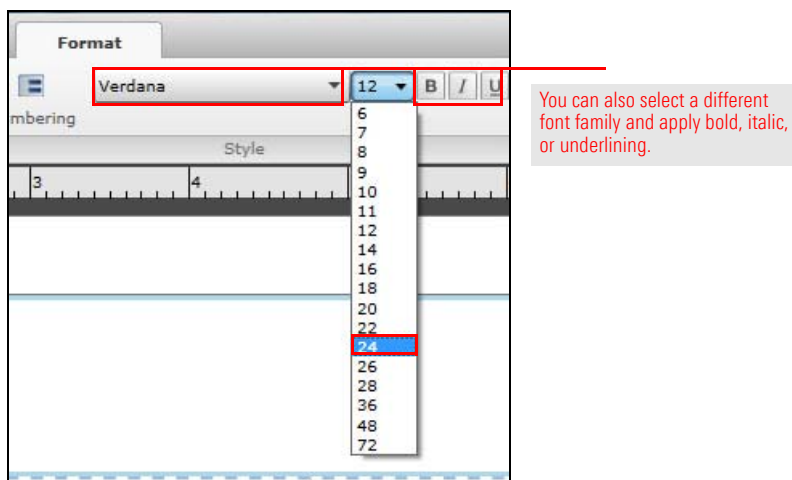
You can change font properties of a text component (whether dynamic or not) from the Command bar. Some of the font properties are as follows:

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

Exercise 30: Change font properties

Do the following

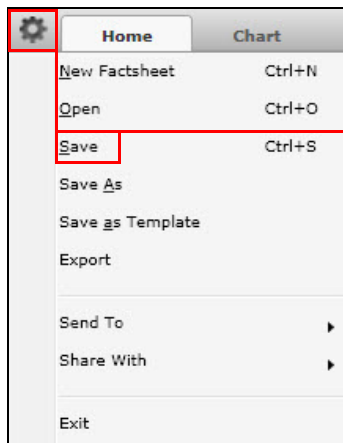
1. In ProShares-Vanguard, with the Format tab and the left header cell selected, from the **Font Size** drop-down field, select **24**.



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**.



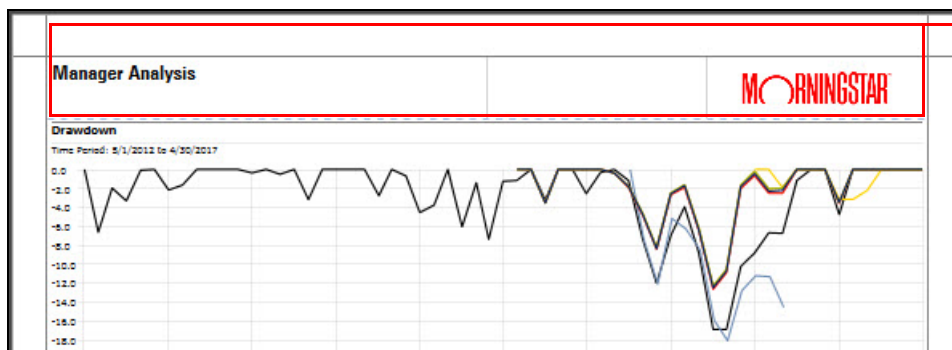
Be sure to save frequently.

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:

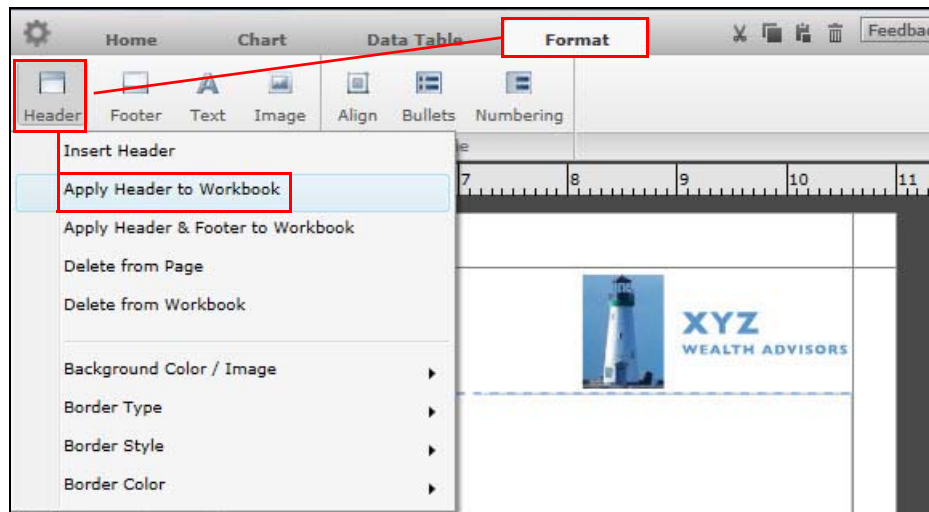
1. In ProShares-Vanguard, in the Navigation pane, click a few **pages** to view them. Note that, except for the page you created, they all display the original header from the template.



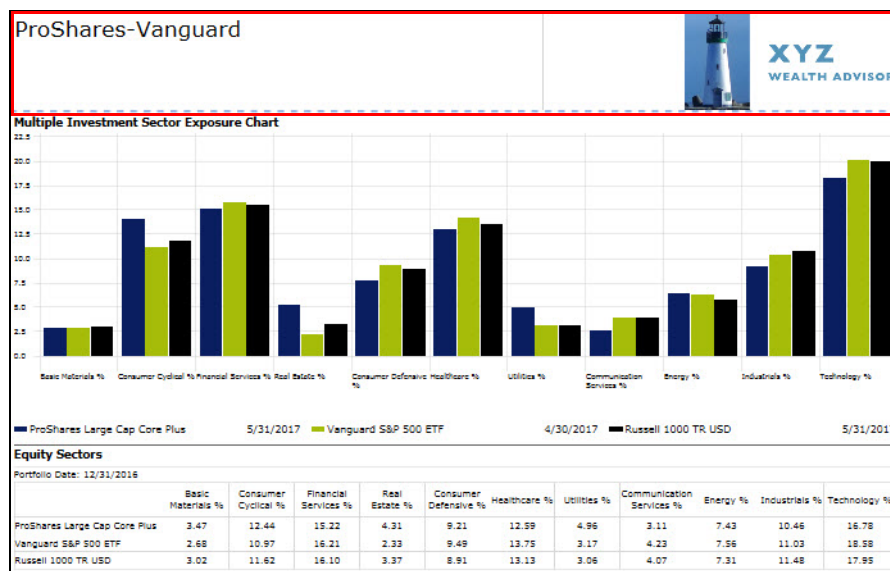
This is the header from the Equity Manager Analysis template.

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

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

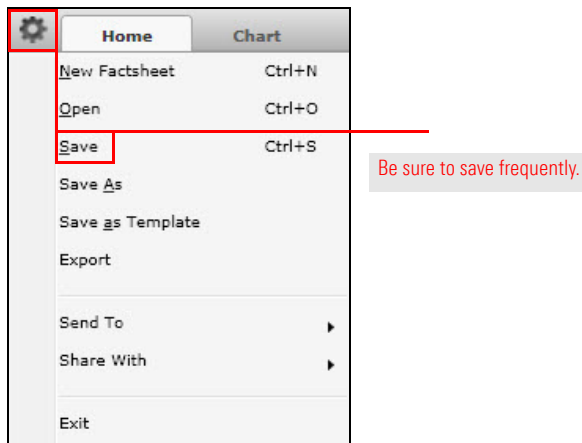


4. In the Navigation pane, click a few **pages** to view them. Now they all display the header you built.



When applied to the Workbook, the header does not change from page to page.

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



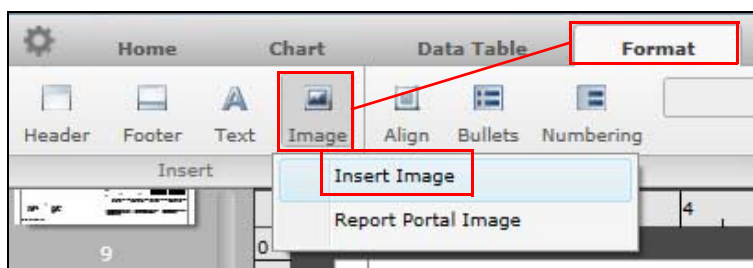
When working with an image, keep the following in mind:

- ▶ 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.

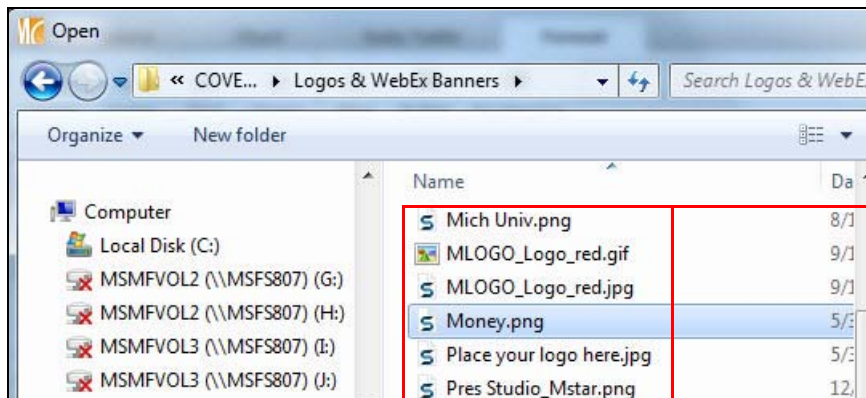
Do the following:

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

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.



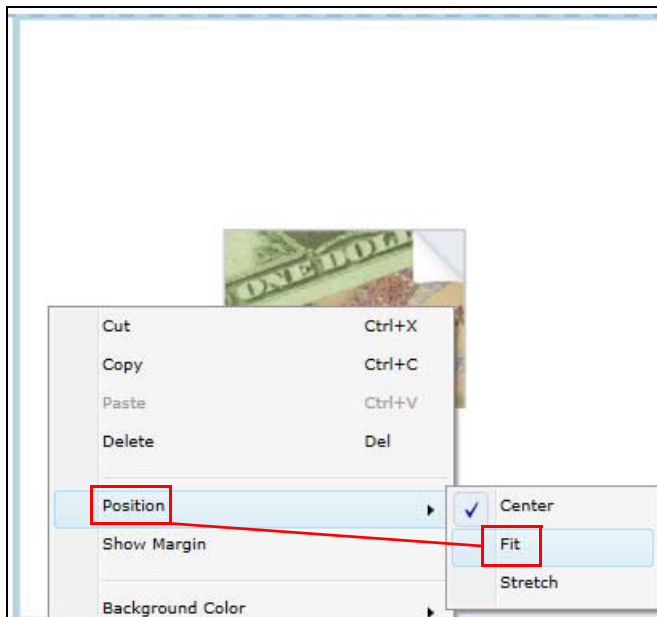
Double-click an image file to insert it into the selected cell.

The selected image appears in the cell.



The image is centered in the cell and does not change size.

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



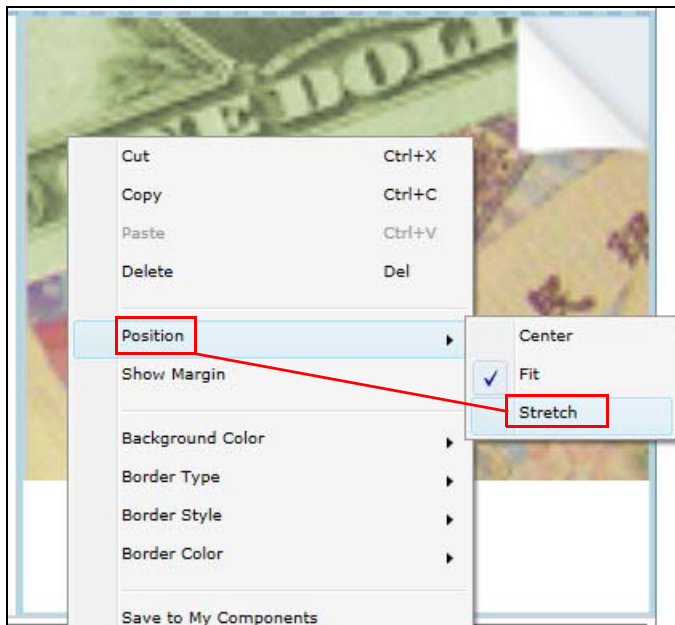
Note the highlighted selections.

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**.



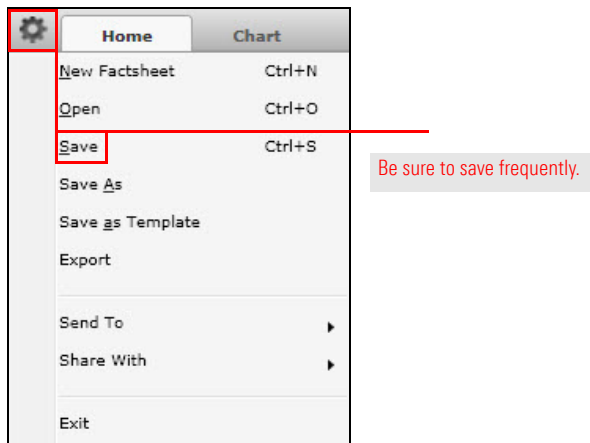
Note the highlighted selections.

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



Note the distortion in the image.

- 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."

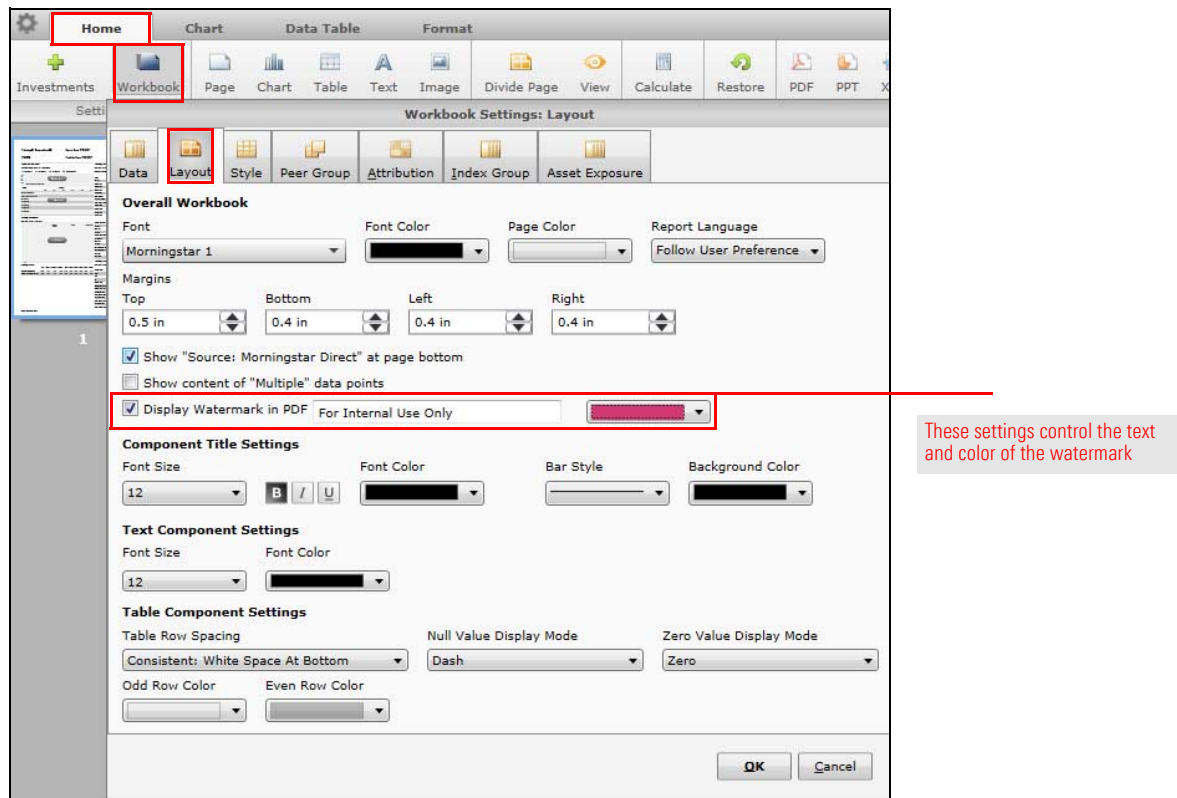
Exercise 33: Add a watermark to a report

To add a watermark, do the following:

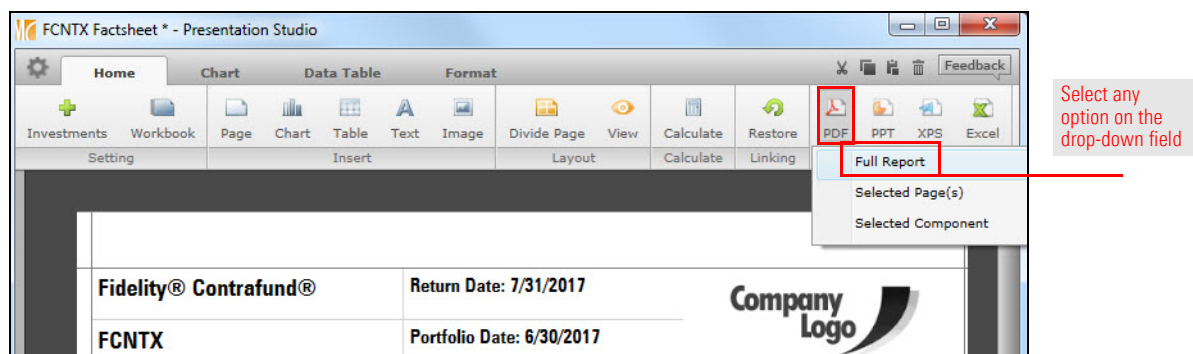
- In a report, select the **Home** tab, then click **Workbook**. The Workbook Settings window opens.
- Select the **Layout** tab.
- Click the **Display Watermark in PDF checkbox**.
- In the text field to the right of the checkbox, type the **watermark text**.

 Note: The maximum number of characters is 50, including spaces.

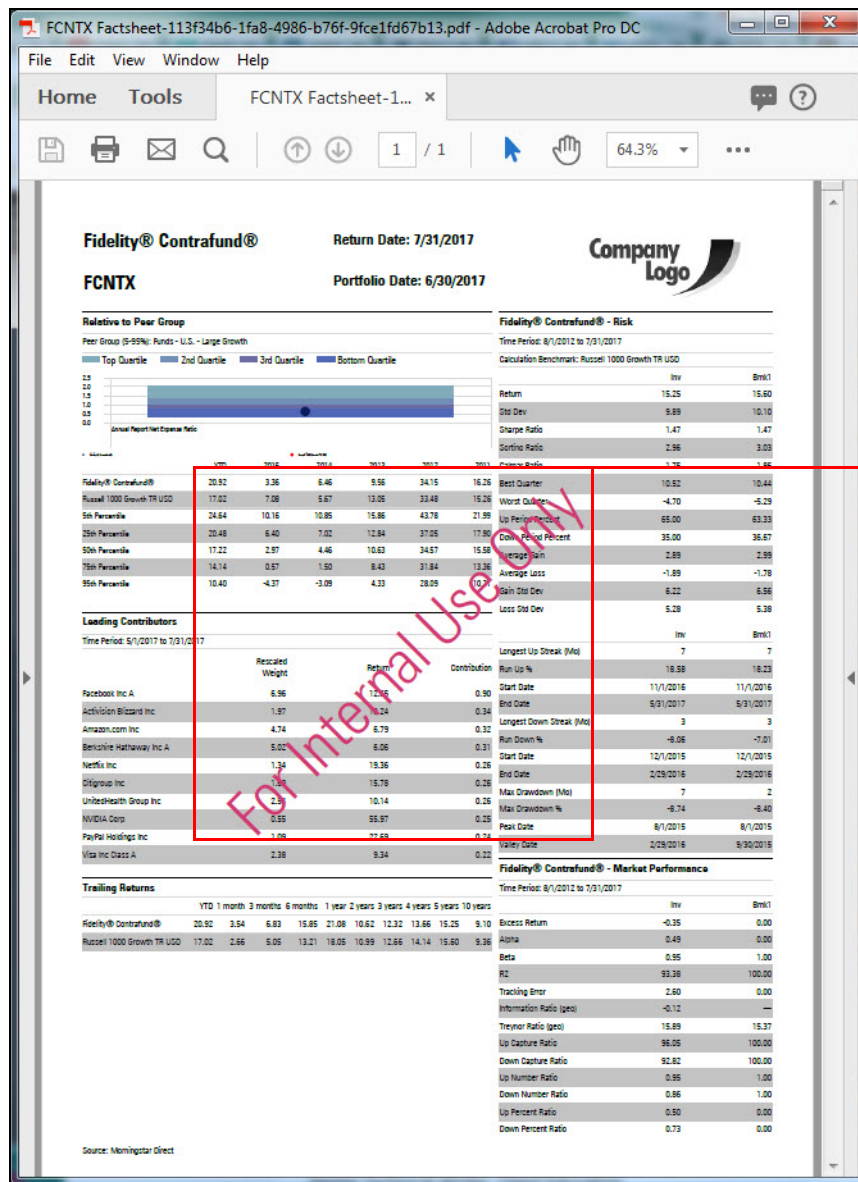
5. (Optional) From the drop-down field to the right of the text field, select a **color**.



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.



The watermark text is displayed on every page

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.

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

- ▶ what is involved in creating a template ([page 114](#))
- ▶ how to save a report as a template ([page 116](#)), and
- ▶ how to create a portfolio template ([page 119](#)).

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.

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.


Overview

What is involved in creating a template?

Task	Click to review the topic
Created a report based on an existing template	Working with a Template on page 24
Replaced, removed, rearranged, deleted, and resized components	Working with Chart and Table Components on page 40
Set a time period for the report	Using Workbook Settings and Component Settings on page 62
Created a new page with a custom layout and inserted components in cells	Creating a New Page on page 79
Customized individual components using Chart and Table Settings	Working with Chart and Table Components on page 40
Added a header and inserted an image and dynamic text	Working with Headers, Footers, Images, and Watermarks on page 96


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 98](#) 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 27](#) and [Select investments from a saved list on page 35](#).) The sample investments in the report are replaced by the investments you selected and the report accesses the data related to the selected investments.

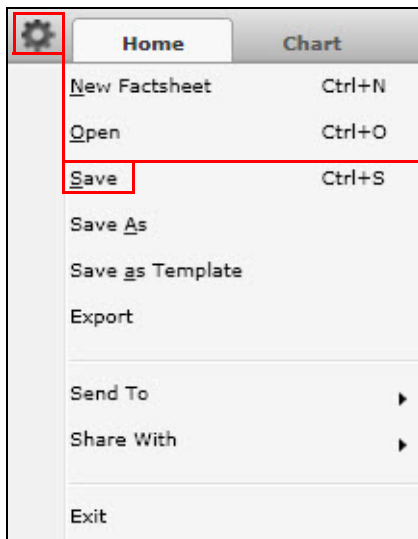
When you are satisfied that your report is as template-ready as possible, save it as a template.

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.

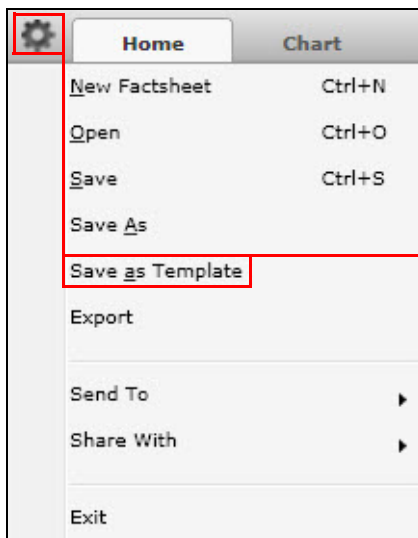
Do the following:

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



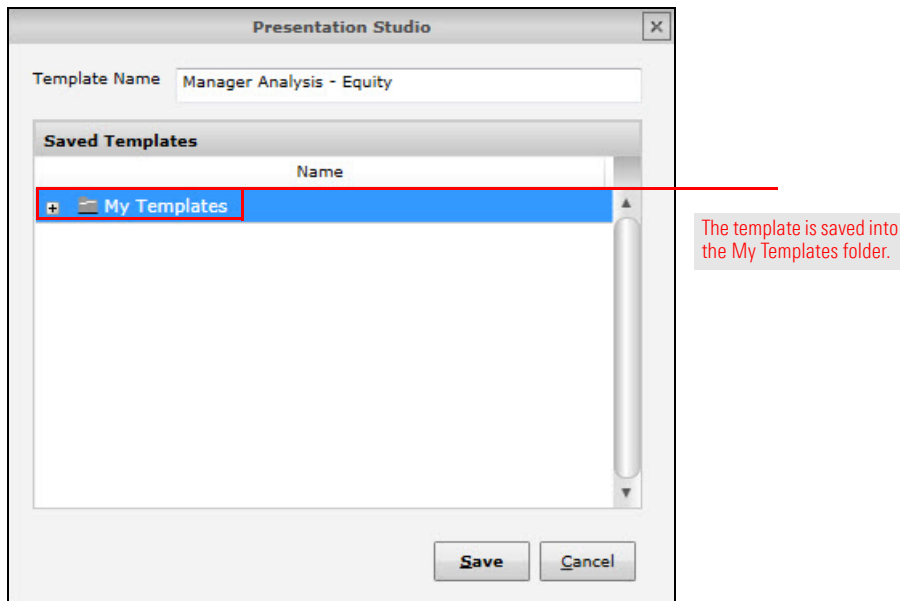
Saving the report ensures its current condition is saved when you save it as a template.

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



Saving the report as a template creates a new file; the report is not affected.

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.

Morningstar Templates My Templates My Reports Action ▼ New Folder		
<input type="radio"/> Name		Type
<input type="radio"/> 2 Portfolios Comparison		Workbook Template
<input type="radio"/> Current versus Proposed Portfolio Comparison		Workbook Template
<input type="radio"/> Current vs Proposed Portfolio		Workbook Template
<input type="radio"/> Custom Workbook Sample		Workbook Template
<input type="radio"/> Equity Manager Analysis		Workbook Template
<input type="radio"/> Investment Detail Workbook		Workbook Template
<input type="radio"/> Investment Performance Factsheet		Factsheet Template
<input type="radio"/> Manager Analysis - Equity		Workbook Template

Your new template is displayed at the bottom of the list.

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?

Choose Template

New Template

Template Name	Owner	Type

Click here to begin.

When you have created a portfolio templates, its name, owner, and template type are displayed here. It can then be used as the basis for a portfolio report.

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 119](#).
- ▶ Use the **Portfolios Comparison template**, to compare multiple model portfolios. Go to [Exercise on page 120](#).

These templates contain components appropriate to portfolios.

After completing the steps in [What do I need to know before creating a portfolio template? on page 118](#), 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.

A client account and at least one proposal are required.

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:

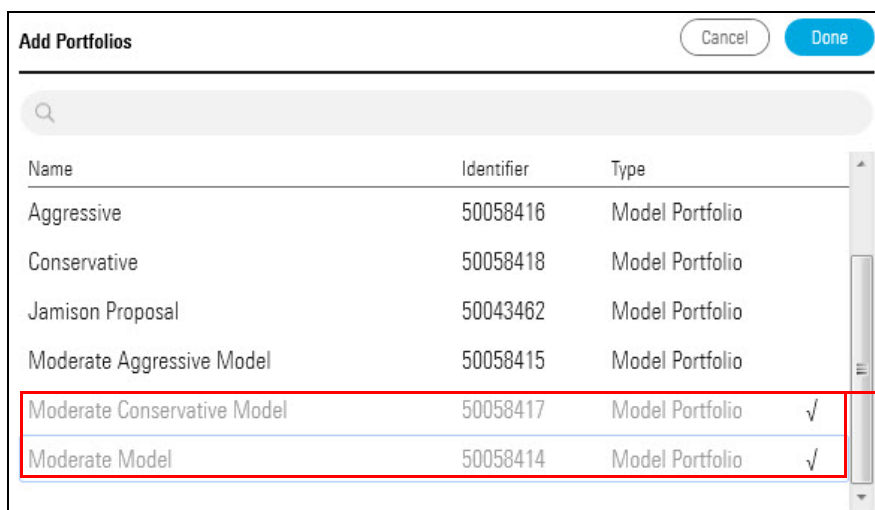
- ▶ Multiple Investment Performance
- ▶ Multiple Investment Snapshot
- ▶ Multiple Investment Calendar Returns
- ▶ Multiple Investment Trailing Returns, and
- ▶ Portfolio Holdings.

Continue creating the template, using the processes in this document and following the guidelines in [What is involved in creating a template? on page 114](#).

After completing the steps in [What do I need to know before creating a portfolio template? on page 118](#), do the following:

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

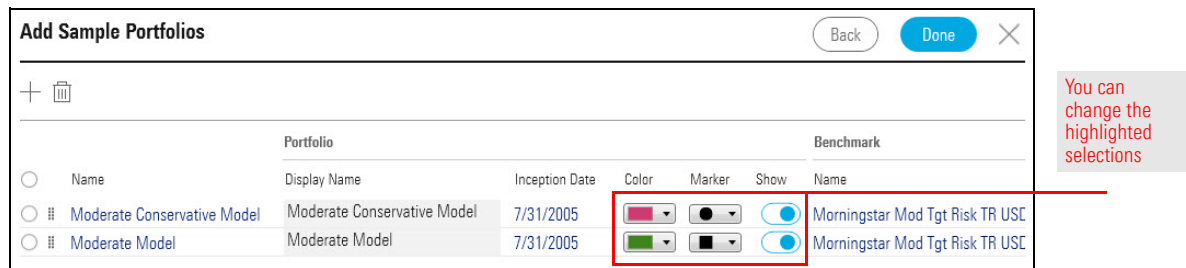
Exercise 36: Create a Portfolios Comparison template



When you select a portfolio, a checkmark is shown to its right.

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

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 114](#).

Publishing a Presentation Studio Template

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

- ▶ Morningstar Direct, 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 125](#).
3. You need permission to publish a Presentation Studio template. If you cannot complete the steps in [Exercise 37 on page 123](#), 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:

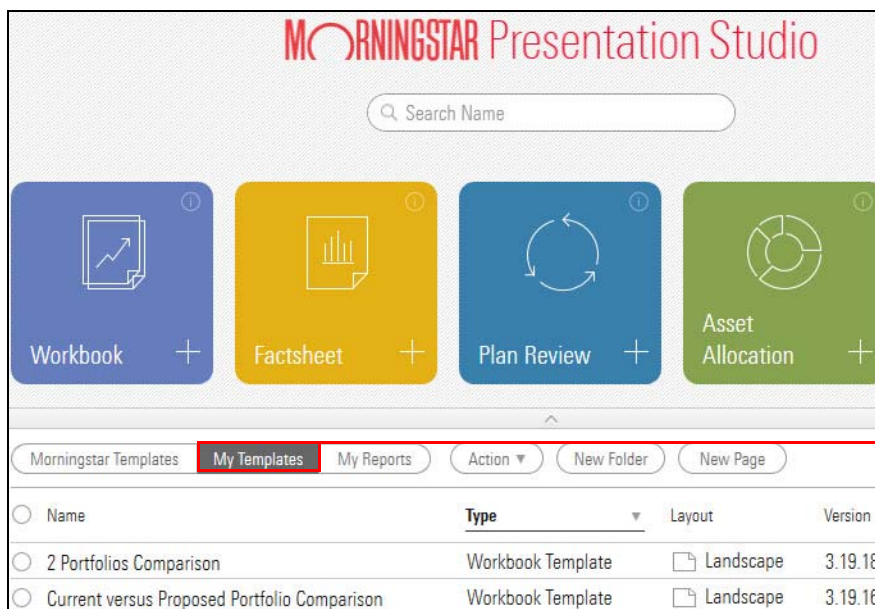
- ▶ publish a Presentation Studio template ([page 123](#)), and
- ▶ save a copy of a Presentation Studio template you do not own ([page 125](#)).

Overview

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

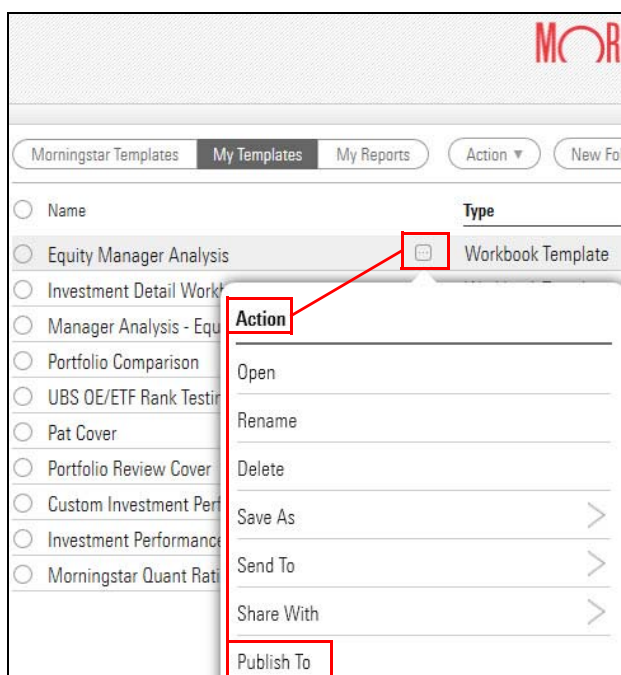
1. On the Morningstar Presentation Studio Home page, click **My Templates**.



Click here to access your 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.

Publish [Cancel] [Done]

Template Name
Investment Performance Factsheet

Investment Range (Min/Max) **Sample Report** (Optional)
1 to 1 [Upload PDF]

Access List

[Search for User or Group] [Cancel] [OK]

Name	Email
ALL	
All Firm Users	
INDIVIDUAL USERS	
.	u@morningstar.com
0803 1	ig@morningstar.com
1 1	n.cen@morningstar.com

Click in this field to make the Individual Users list appear.

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.

Name	Type	Layout	Published
Custom Investment Performance Factsheet	Factsheet Template	Portrait	Yes
Equity Manager Analysis	Workbook Template	Landscape	Yes
Investment Detail Workbook	Workbook Template	Landscape	Yes
2 Portfolios Comparison	Workbook Template	Landscape	No
Current versus Proposed Portfolio Comparison	Workbook Template	Landscape	No

You might need to scroll right to see the Published column.

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](#).

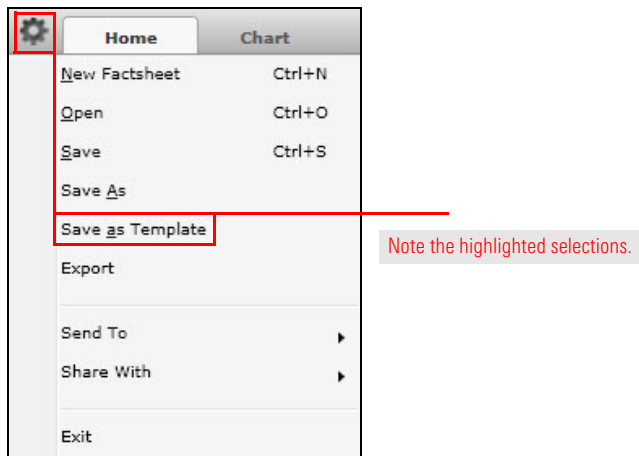
If you built a template based on a Morningstar template or one built by another user, when you saved it, you became the owner. If you need to publish a Morningstar template or one built by another user, simply save a copy of it. You do not have to make any changes to the original template to own a copy.

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

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

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 123](#).

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:

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 126](#))
- ▶ creating a batch report ([page 127](#))
- ▶ testing a batch report ([page 131](#)), and
- ▶ download all reports from a batch ([page 133](#)).

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.

Overview

What is the process for generating reports in a batch?

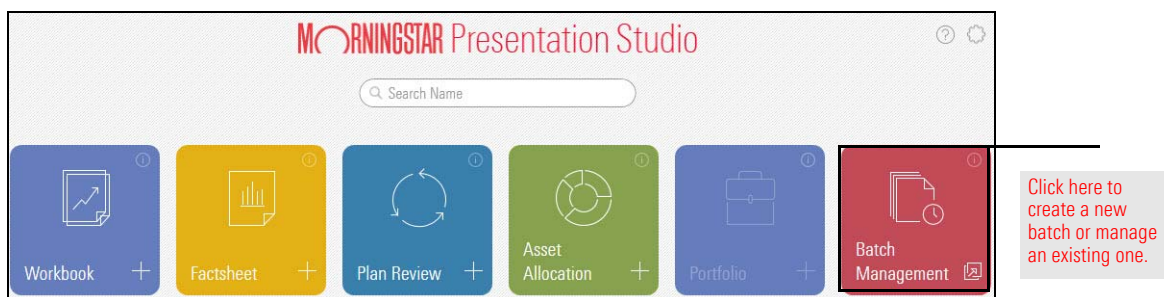
In this exercise, create a batch to generate monthly ETF Analysis reports for several ETFs.

Exercise 39: Create a batch

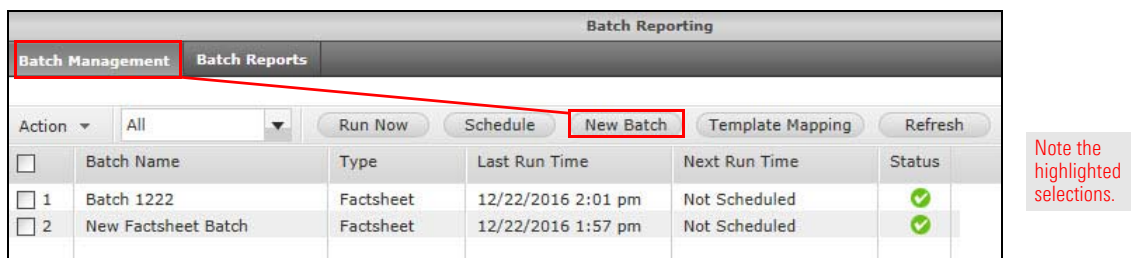
Note: If you don't have an investment list or saved search of ETFs, use another investment type and an appropriate template.

Do the following:

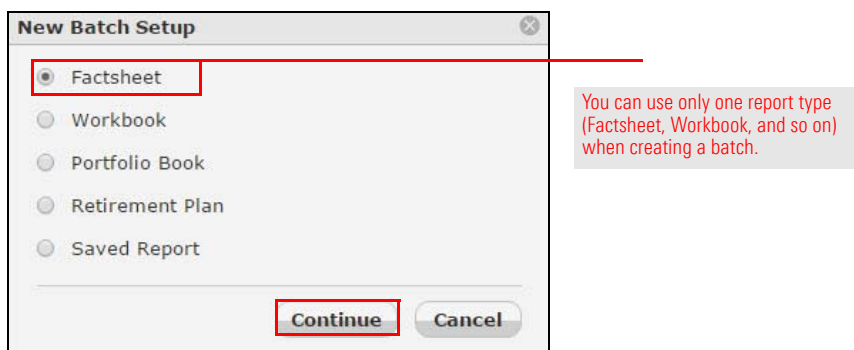
1. On the Presentation Studio Home page, click **Batch Management**. The Batch Reporting window opens.



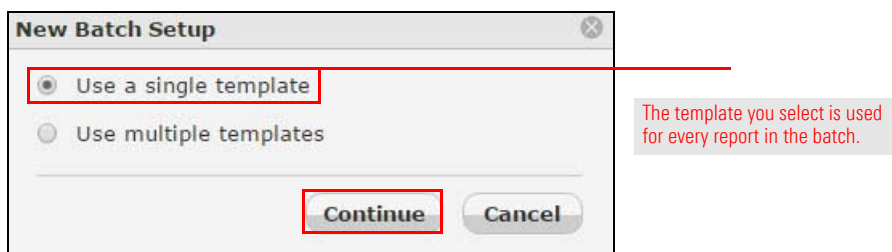
2. Select the **Batch Management** tab and click **New Batch**. The New Batch Setup dialog box opens.



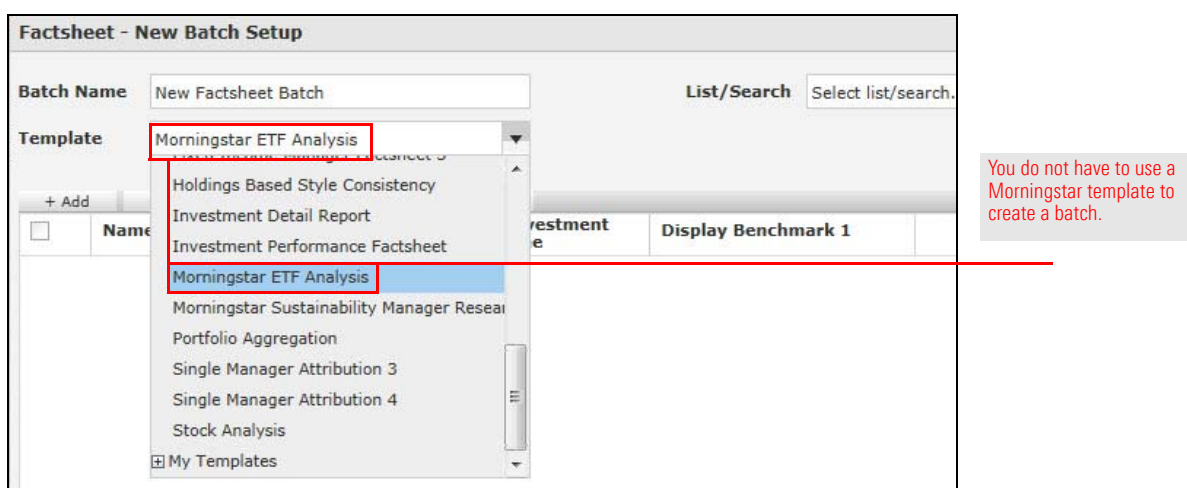
3. Select **Factsheet** and click **Continue**. The New Batch Setup dialog box opens.



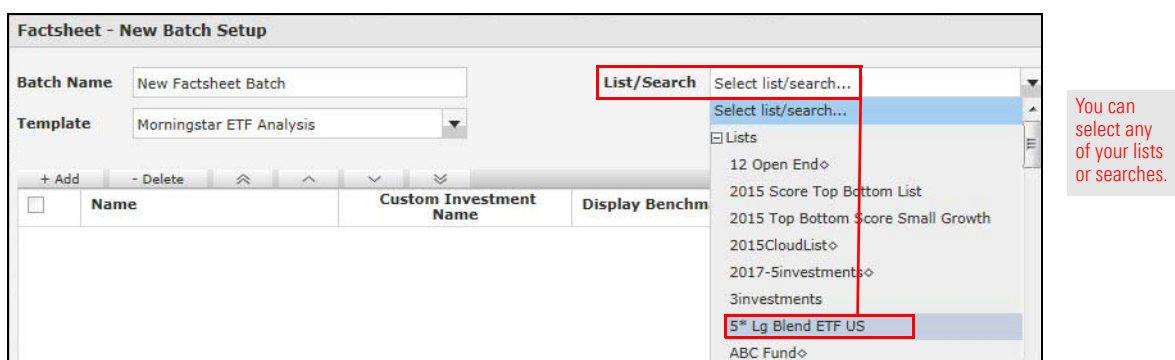
4. Select **Use a single template** and click **Continue**. The Factsheet - New Batch Setup dialog box opens.



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**.



6. 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.

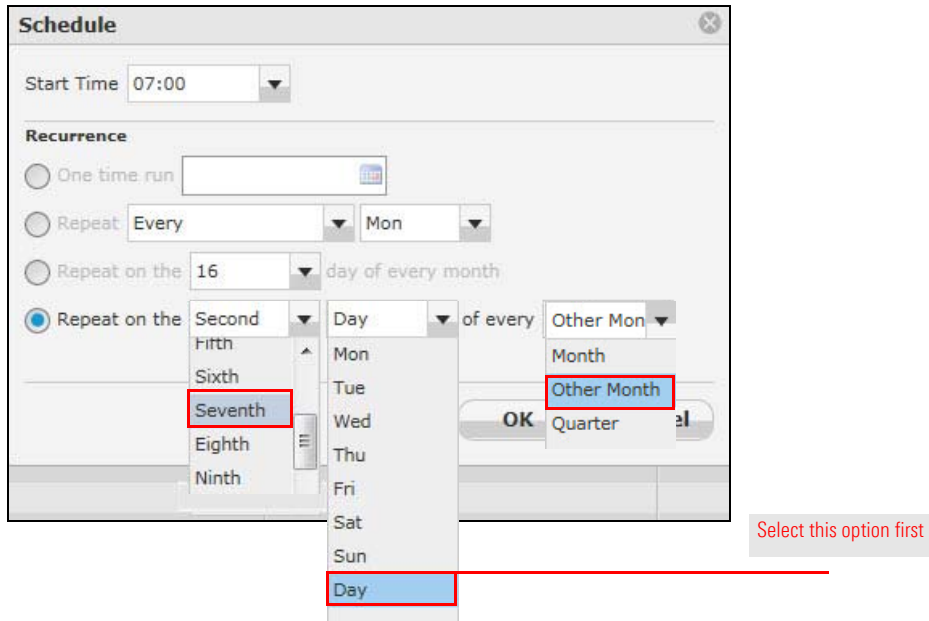
	Name	Custom Investment Name	Display Benchmark 1	C Ben
<input type="checkbox"/>	iShares Edge MSCI Min Vol USA Q	Select Custom Name...	Primary Prospectus Benc	Select d
<input type="checkbox"/>	iShares Edge MSCI USA Size FacQ	Select Custom Name...	Primary Prospectus Benc	Select d
<input type="checkbox"/>	iShares Morningstar Large-Cap Q	Select Custom Name...	Primary Prospectus Benc	Select d
<input type="checkbox"/>	ProShares Large Cap Core Plus Q	Select Custom Name...	Primary Prospectus Benc	Select d
<input type="checkbox"/>	ProShares S&P 500 Dividend AriQ	Select Custom Name...	Primary Prospectus Benc	Select d
<input type="checkbox"/>	SPDR® SSGA US Large Cap LowQ	Select Custom Name...	Primary Prospectus Benc	Select d
<input type="checkbox"/>	VanEck Vectors Morningstar WidQ	Select Custom Name...	Primary Prospectus Benc	Select d
<input type="checkbox"/>	Vanguard S&P 500 ETF	Select Custom Name...	Primary Prospectus Benc	Select d
<input type="checkbox"/>	WisdomTree US Quality DividendQ	Select Custom Name...	Primary Prospectus Benc	Select d

Note the nine funds; each is the topic of a separate report.

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 report is to run at 7:00 a.m. on the 16th day of each month.

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.

Batch Reporting					
Batch Management		Batch Reports			
Action ▾		All ▾	Run Now	Schedule	New Batch
			Template Mapping	Refresh	
<input type="checkbox"/>	Batch Name	Type	Last Run Time	Next Run Time	Status
<input type="checkbox"/> 1	Monthly ETF Analysis	Factsheet		6/16/2017 7:00 am	
<input type="checkbox"/> 2	Batch 1222	Factsheet	12/22/2016 2:01 pm	Not Scheduled	✓
<input type="checkbox"/> 3	New Factsheet Batch	Factsheet	12/22/2016 1:57 pm	Not Scheduled	✓

Note the next run time.

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 40: Test a batch

1. 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**.

Batch Reporting			
Batch Management		Batch Reports	
Action	All	Run Now	Schedule
<input type="checkbox"/>	Batch Name	Type	Last Run Time
<input checked="" type="checkbox"/>	1 Monthly ETF Analysis	Factsheet	
<input type="checkbox"/>	2 Batch 1222	Factsheet	12/22/2016 2:01 pm
<input type="checkbox"/>	3 New Factsheet Batch	Factsheet	12/22/2016 1:57 pm

Running the batch now does not affect the scheduled batch run.

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.

Batch Reporting					
Batch Management		Batch Reports			
Action	All	Run Now	Schedule	New Batch	Template Mapping
<input type="checkbox"/>	Batch Name	Type	Last Run Time	Next Run Time	Status
<input type="checkbox"/>	1 Monthly ETF Analysis	Factsheet	5/25/2017 4:43 pm	6/16/2017 7:00 am	<input checked="" type="checkbox"/>
<input type="checkbox"/>	2 Batch 1222	Factsheet	12/22/2016 2:01 pm	Not Scheduled	<input checked="" type="checkbox"/>
<input type="checkbox"/>	3 New Factsheet Batch	Factsheet	12/22/2016 1:57 pm	Not Scheduled	<input checked="" type="checkbox"/>

The Last Run Time is just a few minutes ago

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.


Batch Management		Batch Reports	
Retirement Plan	Factsheet	Workbook	Saved Reports
Browse By	Batch		
Batch Name	Last Run Time		
Monthly ETF Analysis	5/25/2017 4:43 pm		
Batch 1222	12/22/2016 2:01 pm		
New Factsheet Batch	12/22/2016 1:57 pm		

Note the highlighted selections.

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.

Batch Management Batch Reports		
Batch > Monthly ETF Analysis		
Retirement Plan	Factsheet	Workbook Saved Reports
Run Date	# of Reports	Download
7/16/2018 7:00 am	9	










Note the batch contains nine reports.

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.

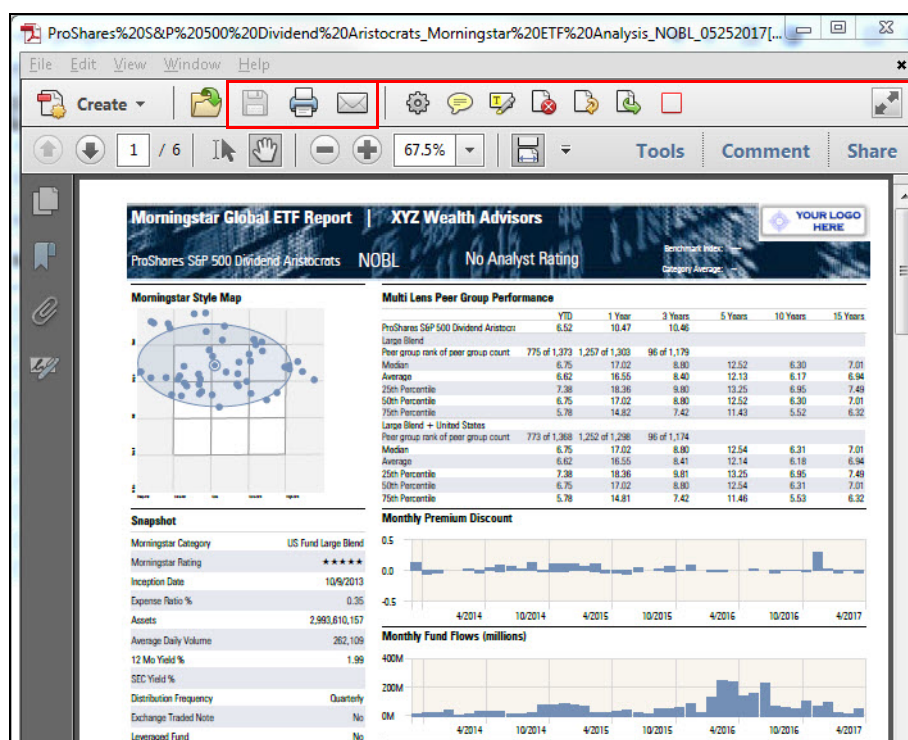
To view a report, click its **PDF** icon. The report PDF opens. Depending on the settings in your internet browser, you might see a Download message.

☞ 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.

Batch Reporting		
Batch Management Batch Reports		
Batch > Monthly ETF Analysis > 5/25/2017 4:17 pm		
Retirement Plan	Factsheet	Workbook Saved Reports
Action	Q	In Securities
Monthly ETF Analysis		
File Name	Report	Created On
<input type="checkbox"/> ProShares S&P 500 Dividend Aristocrats_Morningstar ETF Analysis_NOBL_05252017		5/25/2017 4:43 pm
<input type="checkbox"/> iShares Edge MSCI Min Vol USA_Morningstar ETF Analysis_USMV_05252017		5/25/2017 4:18 pm
<input type="checkbox"/> Vanguard S&P 500 ETF_Morningstar ETF Analysis_VOO_05252017		5/25/2017 4:18 pm
<input type="checkbox"/> iShares Morningstar Large-Cap_Morningstar ETF Analysis_JKD_05252017		5/25/2017 4:18 pm
<input type="checkbox"/> VanEck Vectors Morningstar Wide Moat ETF_Morningstar ETF Analysis_MOAT_05252017		5/25/2017 4:18 pm
<input type="checkbox"/> WisdomTree US Quality Dividend Gr ETF_Morningstar ETF Analysis_DGRW_05252017		5/25/2017 4:18 pm
<input type="checkbox"/> ProShares Large Cap Core Plus_Morningstar ETF Analysis_CSM_05252017		5/25/2017 4:18 pm
<input type="checkbox"/> SPDR® SSGA US Large Cap Low Volatil ETF_Morningstar ETF Analysis_LGLV_05252017		5/25/2017 4:18 pm
<input type="checkbox"/> iShares Edge MSCI USA Size Factor_Morningstar ETF Analysis_SIZE_05252017		5/25/2017 4:18 pm

Click here to view this report.

6. Look through the PDFs.



Click these icons to save, print, or email the PDF.

In [Exercise 40: Test a batch on page 131](#), 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 41: 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.

Batch Management	
Batch Reports	
Retirement Plan	Factsheet
Workbook	Saved Reports
Browse By	Batch
Batch Name	Last Run Time
Monthly ETF Analysis	5/25/2017 4:43 pm
Batch 1222	12/22/2016 2:01 pm
New Factsheet Batch	12/22/2016 1:57 pm

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.



Batch Management Batch Reports

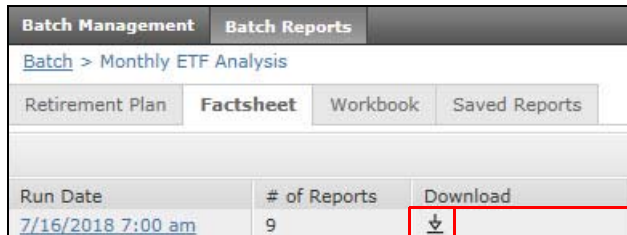
Batch > Monthly ETF Analysis

Retirement Plan Factsheet Workbook Saved Reports

Run Date	# of Reports	Download
7/16/2018 7:00 am	9	

Click here to begin the downloading process.


4. Click the **Down Arrow**.



Batch Management Batch Reports

Batch > Monthly ETF Analysis

Retirement Plan Factsheet Workbook Saved Reports


Run Date	# of Reports	Download
7/16/2018 7:00 am	9	

Click here to continue the downloading process.

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.



Downloads

Share with E-mail New folder

Name
Monthly ETF Analysis_20180716070000_59e354d8.zip
ProShares S&P 500 Dividend Aristocrats_Morningsta...
SPDR® SSGA US Large Cap Low Volatil ETF_Mornin...
iShares Edge MSCI Min Vol USA ETF_Morningstar ET...
iShares Edge MSCI USA Size Factor ETF_Morningstar...
iShares Morningstar Large-Cap ETF_Morningstar ET...
ProShares Large Cap Core Plus_Morningstar ETF An...
VanEck Vectors Morningstar Wide Moat ETF_Morni...
Vanguard S&P 500 ETF_Morningstar ETF Analysis_V...
WisdomTree US Quality Dividend Gr ETF_Morningst...

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,

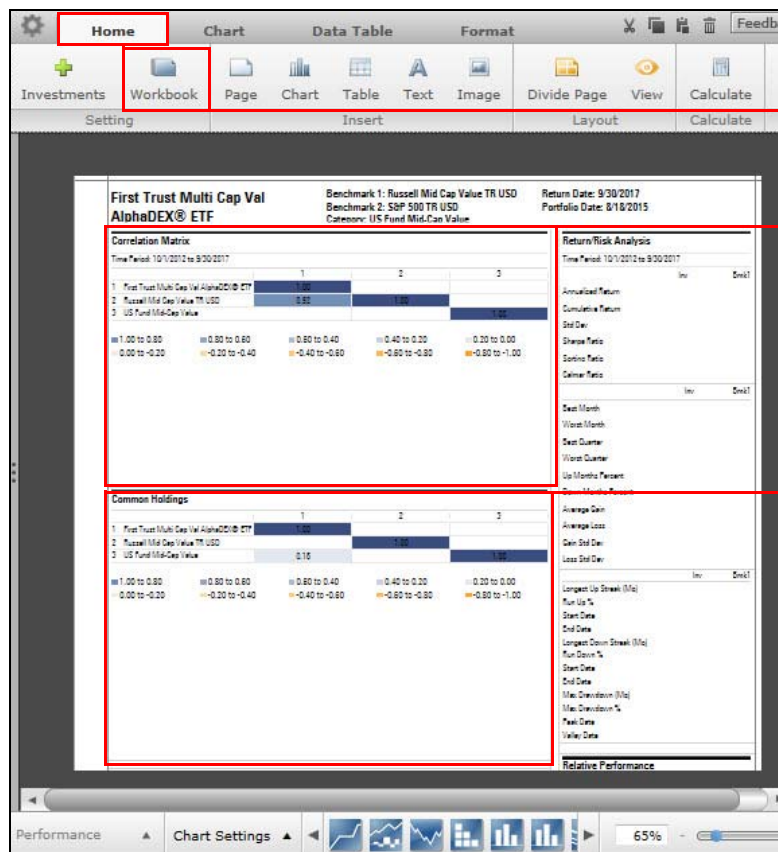
You will learn how to do the following:

- ▶ expand a Holdings Similarity Matrix or Returns Correlation Matrix ([page 136](#))
- ▶ customize a component to display multiple values ([page 139](#))
- ▶ understand the Asset Allocations pie chart ([page 141](#))
- ▶ compare holdings according to their most recent common portfolio date ([page 141](#)), and
- ▶ compare holdings in a stacked bar chart ([page 143](#)).

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.



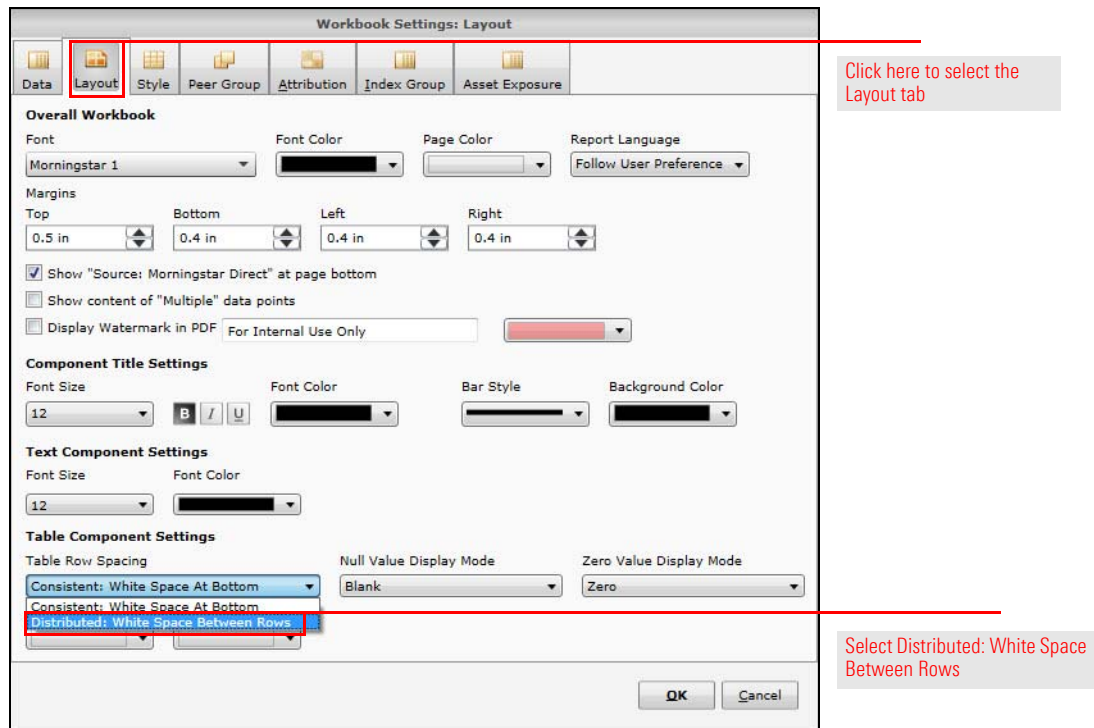
Note the highlighted selections

Returns Correlation Matrix

Holdings Similarity Matrix

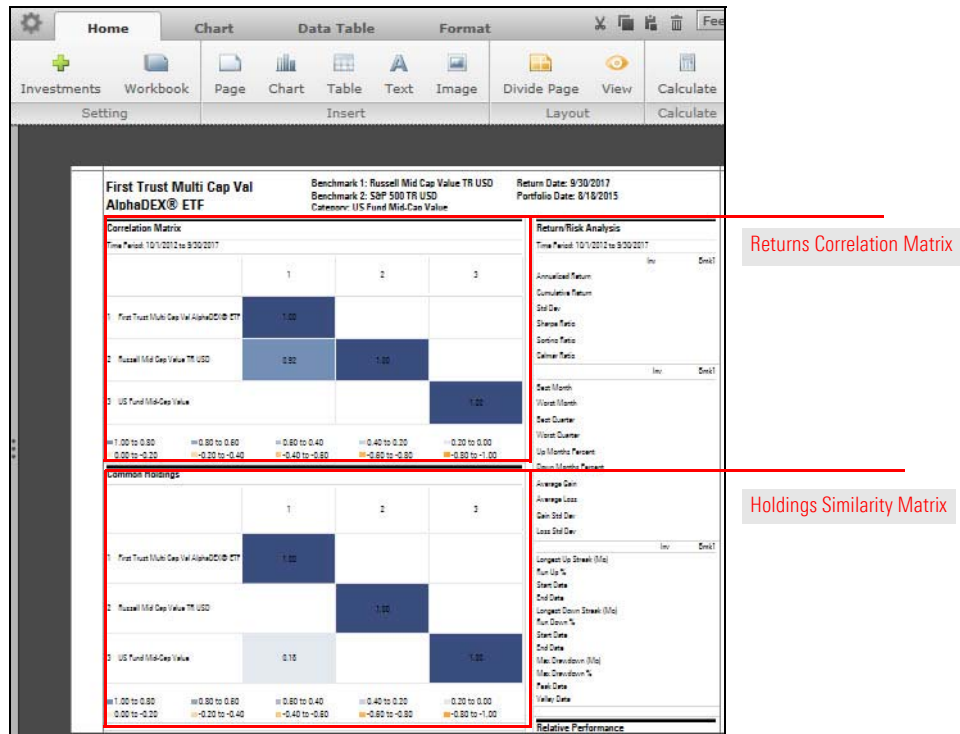
3. In the Workbook Settings window, select the **Layout** tab.
4. In the Table Component Settings area, from the **Table Row Spacing** drop-down field, select **Distributed: White Space Between Rows**.

☞ 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.

A	F
	Country Available for Sale
ProShares Large Cap Core Plus	United States
Vanguard S&P 500 ETF	Multiple
Russell 1000 TR USD	United States

2. On the Command bar, select the **Home** tab, then click **Workbook**. The Workbook Settings window opens.
3. Select the **Layout** tab.
4. 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.

This option is also available in Application Settings on the Layout tab.

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

Snapshot	
A	F
	Country Available for Sale
ProShares Large Cap Core Plus	United States
Vanguard S&P 500 ETF	Mexico, United States
Russell 1000 TR USD	United States

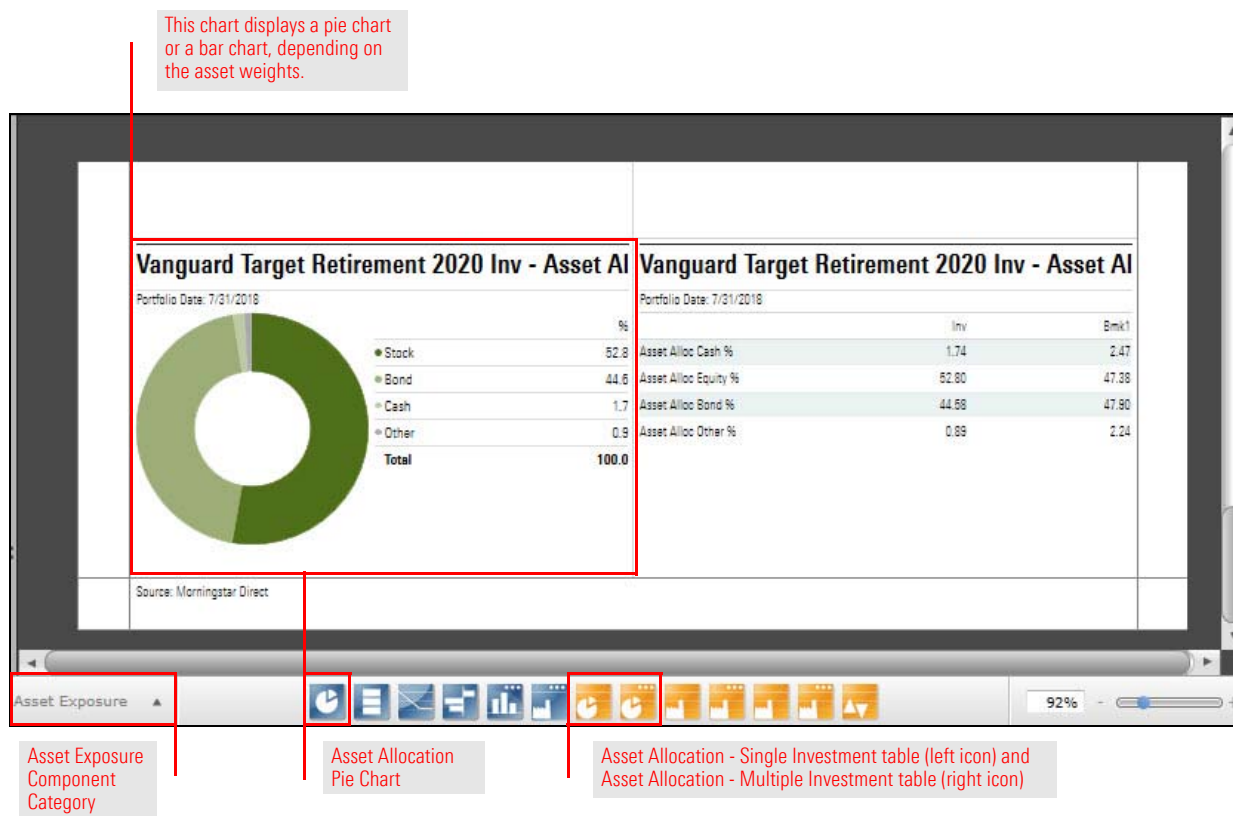
Columns B through E are hidden for readability.

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).

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

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.



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).

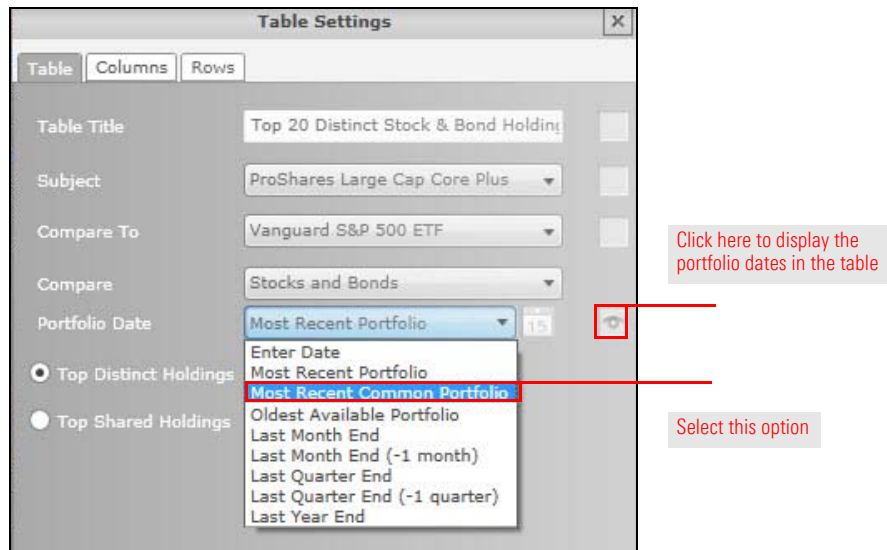
How can I compare funds' holdings using their most recent common portfolio date?

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

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).

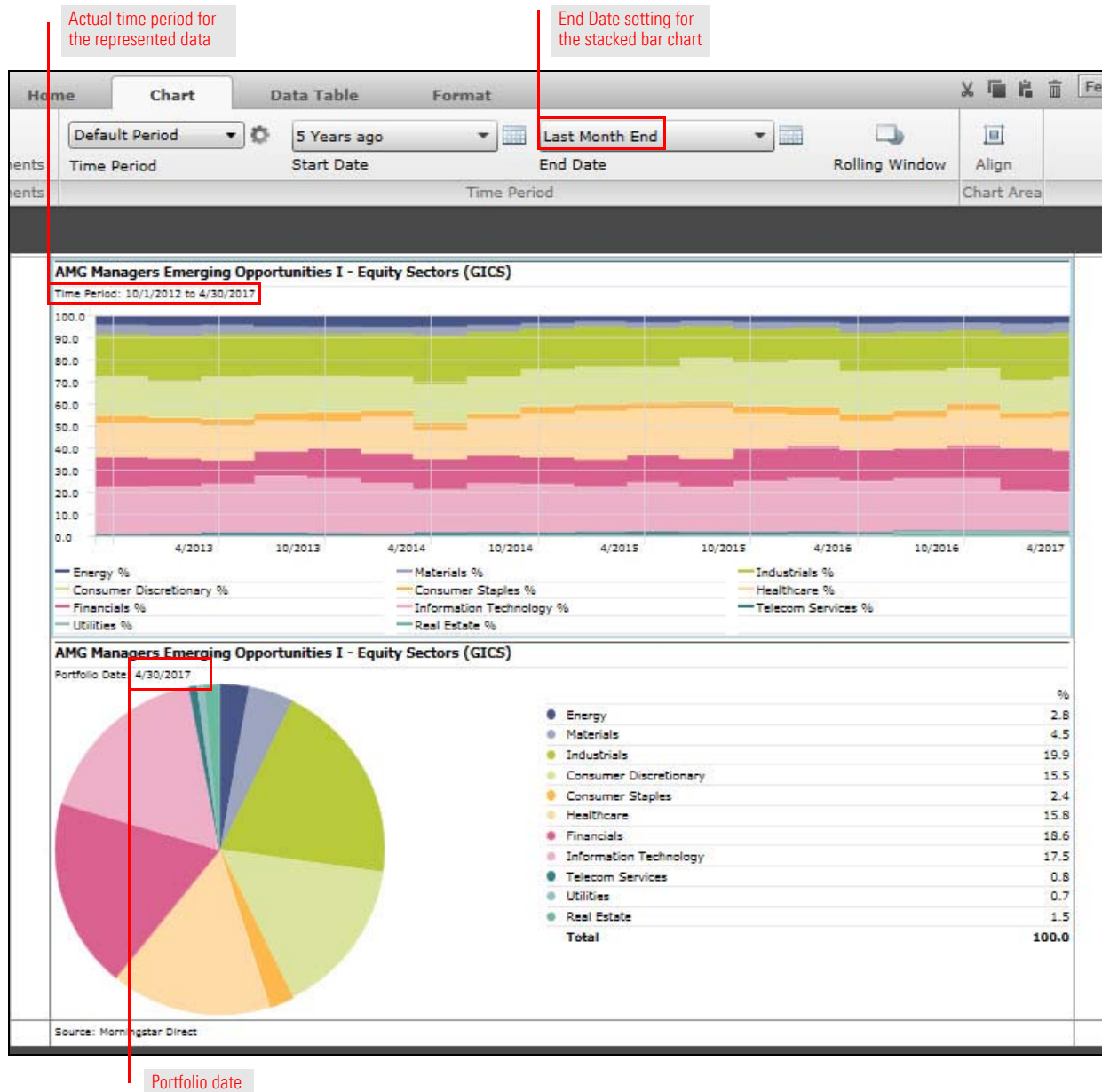


In a stacked bar chart representing a portfolio's holdings, if the end date is later than the most recent portfolio date, the automatically adjusts to the most recent portfolio date.

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).



...