Converting to Advisor Workstation from Principia: The Research Module

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Converting to Advisor Workstation from Principia: The Research Module

This manual will assist in your transition from Principia to Advisor Workstation. It discusses key elements you've worked with in the Research mode of Principia, and explains how to perform equivalent functions in Advisor Workstation.

Advisor Workstation would not exist without Principia. In fact, the original conception of Advisor Workstation was that it would be "Principia on the web." The fact that Principia served as the original basis of Advisor Workstation should encourage you that you will quickly be able to learn this new tool for your practice.

The following topics are covered in this manual:

- ► Understanding the layout of the Research Module
- ► How to manage the spreadsheet area
- ► How to find investments
- ► Working with lists of saved securities, and
- ► Generating graphs and reports.

The Research Module in Advisor Workstation has a number of tools to assist you in selecting investments for your clients. Like Principia, you can search for investments by name, ticker, or by defining criteria for a search. You can also save a list of investments, create a custom view of data points you choose, and generate a number of graphs and reports.

Overview

Overview of the Research Module in Advisor Workstation The securities available in Advisor Workstation depends on your subscription. In addition to the different security universes, Advisor Workstation displays the following items in the Research Module:

What data is available in the Research Module?

Item	Description
All Securities Universe	This universe shows you all security types available to you, at once. This allows you to search for, say, mutual funds to ETFs and closed-end funds, without having to switch back and forth between each universe.
Benchmark Universe	This universe shows you almost 38,000 global indexes you can use to create custom benchmarks. Be sure to note which indexes have both return and composition data available, as these will be more meaningful when comparing to a client's portfolio.
Research Lists	Here you can see any list you have saved from any universe in the Research Module. Each user can save up to 100 lists, with up to 500 items per list.
Research Searches	Here you can see any search by criteria you have saved in the Research Module. Each user can save up to 100 searches. Each search can contain up to 100 lines of criteria.
Research Custom Views	This universe shows you all of custom views you have created. Each user can save up to 100 custom views, with as many as 100 columns in each custom view.
Alerts	This area is for alerts you have created for securities, rather than those you have created for client portfolios.

Portfolio and pricing data in Principia were updated with the most recent month-end data. In Advisor Workstation, portfolio information for most managed securities (mutual funds, ETFs, etc.) is continually refreshed throughout the day to reflect the most recent month-end or guarter-end information reported.

The Composition view for each data universe has a Portfolio Date column (scroll to the far right to see it) to confirm when this data was last updated.

For pricing information in Advisor Workstation, note the following points:

- ► The Price column for mutual funds reflects the price as of the previous market day's close, unless a mutual fund lacks a daily NAV.
- ► For closed-end funds and ETFs, both the Market Price Close and NAV Close columns are available from the Basics and Operations views. These prices also reflect the previous market day's closing price.
- ► For VA Subaccounts, the AUV is updated monthly.
- ► For real-time, intra-day pricing for certain securities (stocks, ETFs and closed-end funds) click the name of a security in a spreadsheet area to open the Morningstar Quicktake report.

How often is the portfolio data and price information updated for securities in Advisor Workstation?

Understanding the Layout of the Research Module

This section will orient you to the Research Module's interface, and explain how you can best navigate through it. Mastering these basic concepts will assist you in making the most efficient use of the Research Module, and speed your learning of the entire Advisor Workstation application, since the knowledge you gain here can be applied to other areas of the application that also use a spreadsheet interface.

Overview

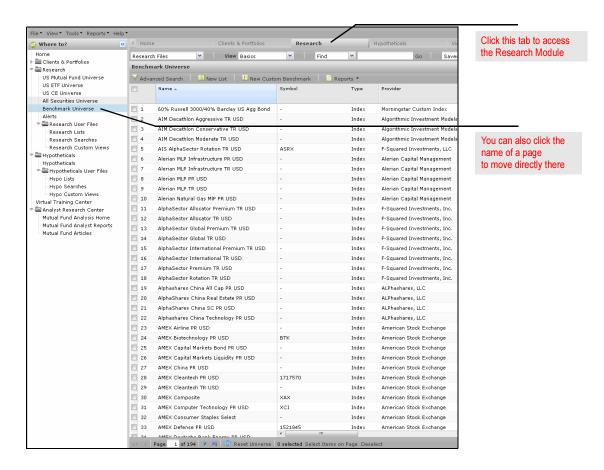
You will learn the following:

- ► How to access the Research Module, and
- ▶ What are the different parts of the screen.

You can access the Research Module one of two ways while working in Advisor Workstation:

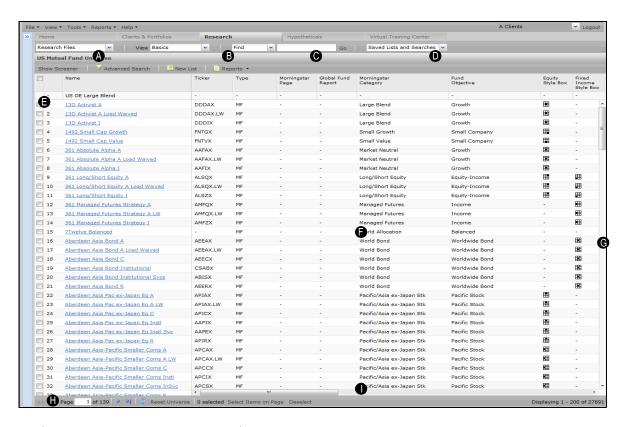
- ► At the top of the Advisor Workstation window, click once on the Research tab. This takes you directly to the US Mutual Fund universe.
- ► In the left-hand navigation pane, click once on the universe or page (Research Lists, Research Searches. etc.) you'd like to move to directly.

How do I access the Research module in Advisor Workstation?



Note the screenshot and table below for details on the different parts of the Research Module. Certain features, such as custom views and working with saved searches and lists are discussed in greater detail later in this manual.

What are the different parts of the Research Module?



Letter	Name	Description
А	Universe selection drop-down field	This field allows you to choose the investment universe (mutual funds, ETFs, etc.) you want to see in the spreadsheet area. If the left-hand navigation pane is collapsed, as shown in the screenshot above, this field allows you to see other parts of the Research Module without having to expand the left-hand navigation pane.
В	View drop-down field	This field allows you to select a pre-built view, or one you created.
С	Find field	This field allows you to look for items by name or ticker.
D	Saved Searches and Lists drop-down field	This field shows you the lists and searches saved for a specific universe.
E	Benchmark row	This row displays data (where appropriate) for the index you select for the spreadsheet area.
F	Spreadsheet area	The main area of the screen, containing the rows and columns of data.
G	Vertical scroll bar	Allows you to scroll up and down through the rows displayed on a page.
Н	Page selector and Page icons	Shows you which page you are on among the items in a universe. The Page Next/Previous Page icons move you one page at a time, or you can type in a page number to go to, or move to the last page or first page in a set.
I	Horizontal scroll bar	Allows you to scroll left or right, in order to see additional columns.

Navigating the Research Module

This section will show you how to make the best use of the spreadsheet area in the Research Module. You will learn how to do the following:

- ► change the universe being displayed in the spreadsheet area
- ► sort the columns in the spreadsheet area
- ▶ change the number of rows being shown in the spreadsheet area, and
- ▶ scroll through the pages in the spreadsheet area.

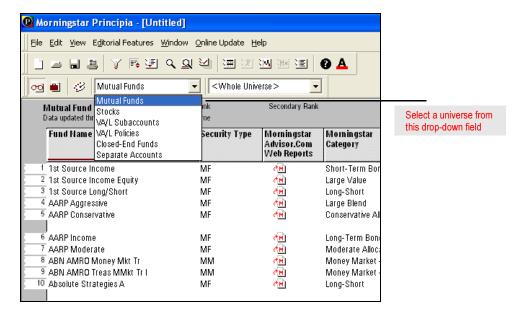
When you launched Principia, the system automatically opened to Research mode. To access another universe, you used the database drop-down field below the toolbar.

Also, remember the following about the data in Principia's Research mode:

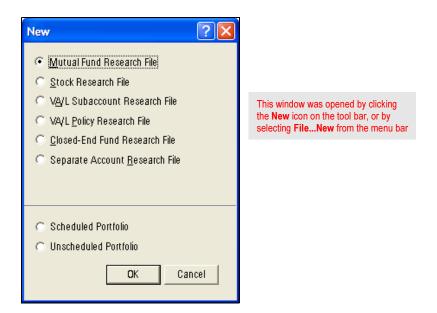
- ➤ You could see only one data universe at a time. That is, you could not see both Stocks and Mutual Funds at once; it was one or the other.
- ► A number of indexes and category averages were displayed in each database universe.

Overview

How does switching the database view in Advisor Workstation compare to the way it worked in Principia?

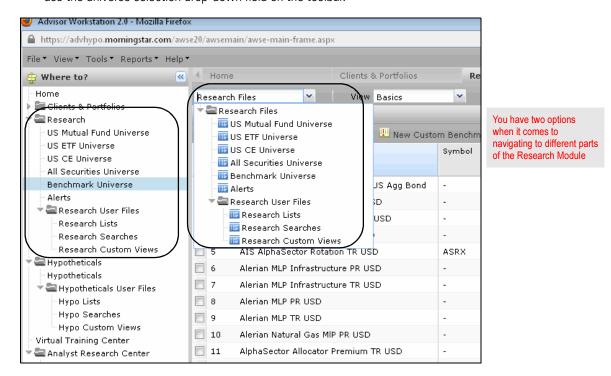


An alternate way to switch investment universes in Principia was to use the New window.



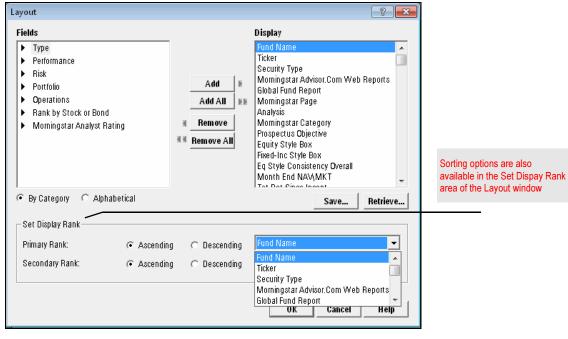
In Advisor Workstation, you can change the data universe you see in the Research Module spreadsheet area one of two ways:

- ► click the name of the page you want to go to in the left-hand navigation pane, or
- ▶ use the universe selection drop-down field on the toolbar.



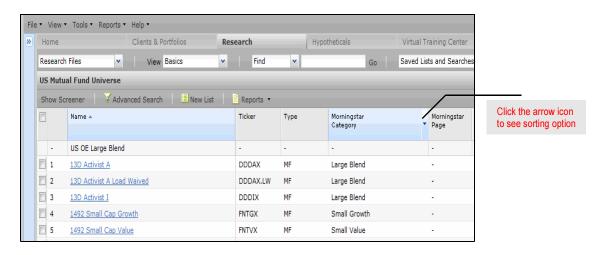
Principia allowed you to sort the Research module by any data column, just by double-clicking a column header. This would sort the universe in descending order. Double-click again to rank in ascending order. Alternatively, the Layout dialog box provided sorting options as well, including sorting on up to two columns.

How does sorting work in Advisor Workstation compared with Principia?



In Advisor Workstation, note the following rules for sorting items in a spreadsheet area:

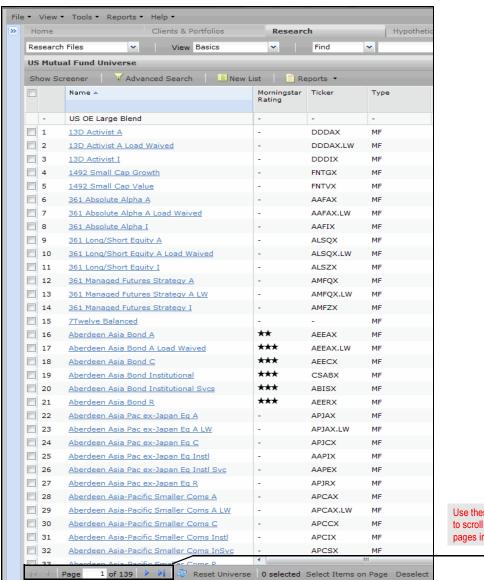
- ➤ You can sort items in ascending order by clicking once on a column's header name.
- Clicking the header name a second time will sort the column in descending order
- ➤ You can also sort by clicking the drop-down arrow in a column's header name and selecting either Sort Ascending, or Sort Descending.
- ► You can sort on only one column at a time; no secondary sort is available.
- ➤ You can determine which column is controlling the sort order by noting which column header is highlighted, and the arrow icon to the right of the column's name.



Advisor Workstation has both a vertical and horizontal scroll bar to see additional rows and columns in a spreadsheet area. At most you can see 200 items on any one page, based on the preferences you have set.

To scroll further vertically through a list of items in a spreadsheet area, use the page arrow icons at the bottom-left corner of the screen. The four arrow icons allow you to move forward or backward one page at a time, or all the way to the end, or all the way back to the beginning. You can also type in a page number to which you want to move.

How do I scroll through the pages in a spreadsheet view in Advisor Workstation?



Use these icons to scroll through the pages in a spreadsheet

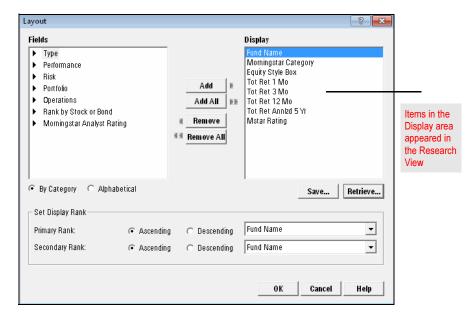
Creating a Custom View in Advisor Workstation

By default, Principia's Research mode showed all available data points at once. You could either scroll to the right to find the data point you wanted, or use the Find a Field function.

In contrast to Principia, Advisor Workstation has pre-built views that joins data points into related groupings: Risk, Returns, Composition, Operations, etc. You can build a custom view from scratch, or you can edit and save an existing view as a custom view by dragging and dropping columns into place.

An added benefit of Advisor Workstation is that you can create custom views in areas other than the Research Module, such as the Clients & Portfolios Module.

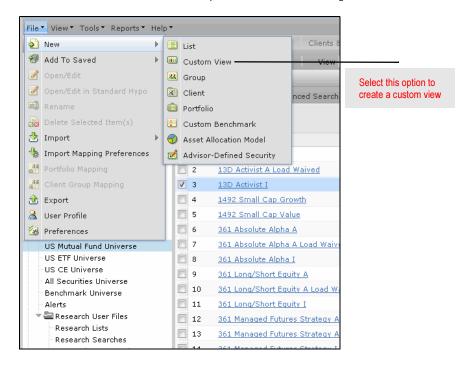
Principia's Layout dialog box (shown below) allowed you to customize the Research View to display only the data points of interest to you.



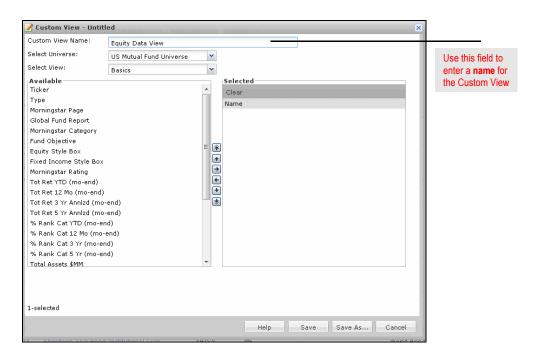
Overview

How does customizing a spreadsheet area in Advisor Workstation compare with changing a layout in Principia? To create a new custom view in Advisor Workstation, do the following:

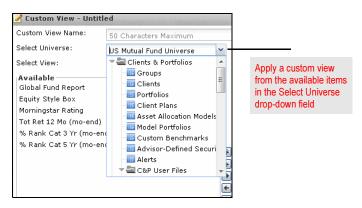
1. Select File...New...Custom View to open the Custom View dialog box.



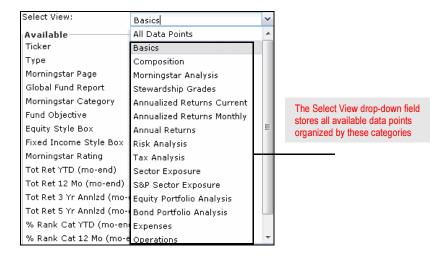
2. In the Custom View Name field, enter a **name** for the custom view.



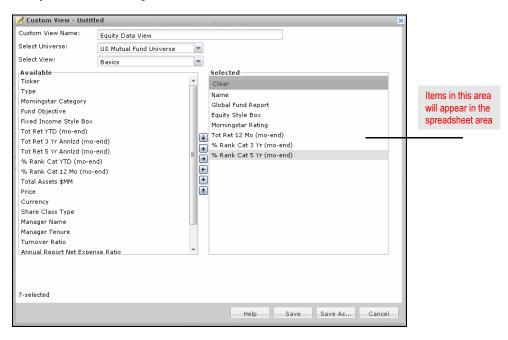
- 3. Click the **Select Universe** drop-down field, and select the **universe** for which you want to create a custom view.
 - Note: You can select a Clients & Portfolios universe or a Research universe.



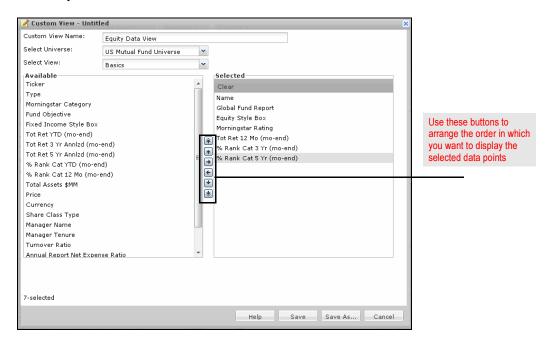
- Click the **Select View** drop-down field and select a **view** from which to select data points.
 - PNote: You can add data points from different standard views to your custom view.



5. In the Available box, double-click the **data point** you want to add or click to highlight the **data point** and click the **right arrow icon**.



- 6. To move a data point to the top or bottom of the list, click highlight the **data point**, then click the **up** or **down** double arrow icon.
- 7. To re-order the Selected list, click to highlight the **data point** you want to move and click the **up** or **down arrow**.



8. When you are finished, click **Save**.

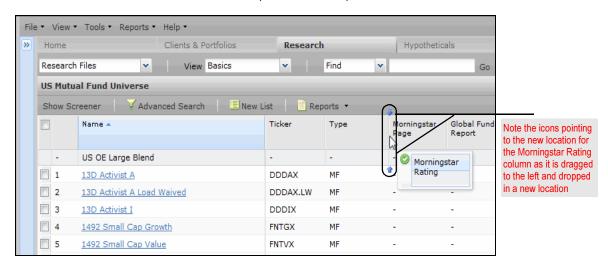
Advisor Workstation also provides a function where you can create a custom view by dragging and dropping columns in place. Note the following points about this feature:

- ► You can work only with the columns that are presently showing on the screen; there is no way to incorporate columns from other views.
- ► The changes are only temporary unless you save them. The view will reset to its default arrangement once the screen is refreshed, such as when you go to another view, or click on a different module in Advisor Workstation.
- ➤ You can save the rearranged columns as a custom view by going to the menu bar and selecting **View**...**Save as Custom View**.

How do I use the drag-and-drop function in Advisor Workstation to create a custom view?

To use this feature, do the following:

- 1. Move your mouse cursor over a column's header name.
- 2. Left-click and drag the column left or right.
- 3. Release the left mouse button when the column is positioned where you want it.



Finding Investments in the Research Module

This section shows you two ways to search for investments in Advisor Workstation:

Overview

- ▶ using the Find field on the toolbar, and
- ► creating an Advanced Search.

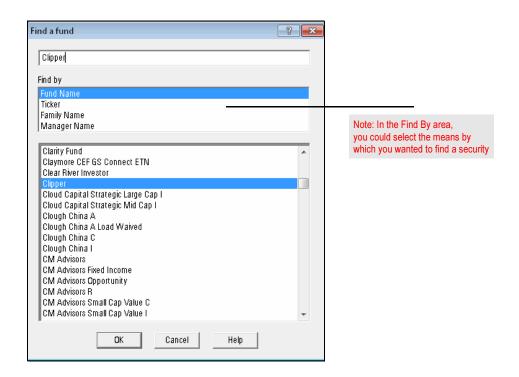
You will also learn how to save, open and delete saved searches.

In Principia, you could use the Find a Fund icon to locate a security by one of the following criteria:

- ► fund name
- ► ticker symbol
- ► fund family name, or
- ► fund manager name

You could also open the Find a Fund window from the Edit menu.

How does finding investments in Principia compare with find investments in Advisor Workstation?



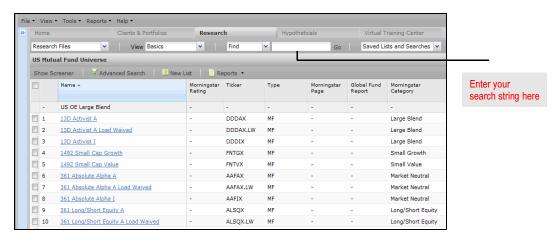
In Advisor Workstation, you can find investments by name or ticker symbol using the Find field on the toolbar above the spreadsheet area. Note the following rules when using this feature:

- ► Unless you are in the All Securities universe, you can search by only one universe (Mutual Fund, ETF, Closed-end, etc.) at a time. Select the universe you want to search on first, then enter your search string.
- ➤ You do not need to enter the complete name of an item. For instance, to find all mutual funds that begin with "Fidelity," you can simply type Fid.
- ▶ If you know only a portion of a security's name and you aren't sure about the beginning portion of the name be sure to enter at least four characters. That triggers the system to use not only a "name begins with" methodology when searching, but also a "name contains" methodology.
- PNote: Separating items with a comma (agthx,contrafund) uses an OR methodology: find agthx OR contrafund. Separating items with a space (muni ca) uses an AND methodology: find funds that have both "muni" and "ca" in the name.
 - ► You can enter up to 100 characters at once in the Find field.
- ➤ You cannot enter part of a ticker symbol, as you can with a name. Each ticker symbol you enter must be complete and accurate. Partial ticker symbols will not have a record returned.

In Advisor Workstation, to use the Find field, do the following:

- 1. On the toolbar, click in the **Find** field.
- 2. Type in your search string.

How do I use the Find field in Advisor Workstation?



3. Press **<ENTER>**, or click the **Go** button. The results are displayed in the main spreadsheet area.

Note: The breadcrumb trail above the spreadsheet area will update to reflect your search.

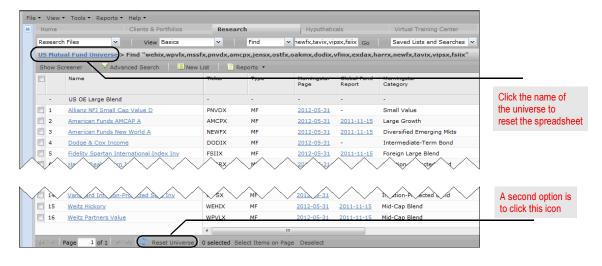
In Principia, you could click the **New** icon on the toolbar to reset the universe and view all available rows in a particular investment universe. You could also reset the universe from the menu bar by selecting **File...New**.

In Advisor Workstation, once you use the Find field, the breadcrumb trail below the toolbar reflects the search filter. Depending on how you have your Preferences set, if you return to the Find field and enter a new search string, you could be searching within this filter. Otherwise, the filter will automatically reset.

After running a search, you can reset the spreadsheet area to show all items by doing one of the following:

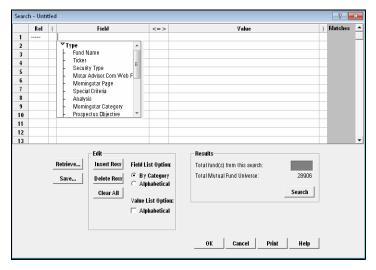
- ► In the breadcrumb trail, click the **name of the universe** that precedes the name of the search.
- ► At the bottom of the screen, click the **Reset Universe** icon.

How does resetting the Research mode of Principia compare with resetting the Research Module in Advisor Workstation?



The Principia Search window is launched by clicking the **Search** icon on the toolbar. You can also click **Edit...Search** from the menu bar. In this window, you can enter multiple criteria for a search. Click the **Search** button to view the total number of investments from the search. The number of securities for each row appear in the **Matches** column.

How does Principia's Search window compare to the Advanced Search tool in Advisor Workstation?

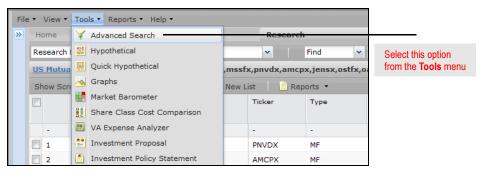


In Principia, the Search tool allowed you to narrow the database to find the securities meeting your needs

Advisor Workstation also has a search by criteria tool, called Advanced Search. It works nearly identically to the one in Principia, except the number of matching securities does not show automatically. Also, you can save up to 100 searches using this tool

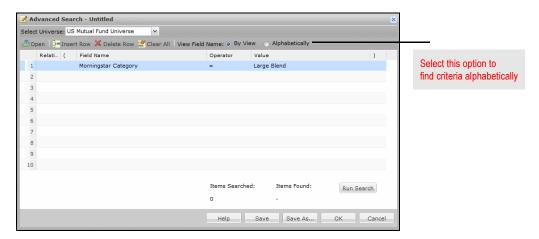
To create a search using the Advanced Search tool, do the following in Advisor Workstation:

1. From the menu bar, select **Tools...Advanced Search**. The Advanced Search dialog box appears.



- 2. Select an item from the **Field Name** column. The list of options available from this drop-down field can be scrolled through By View (the default setting) or Alphabetically. The views presented here match the system views available in the spreadsheet area.
 - You can alternate between By View or Alphabetically by selecting the appropriate option button in the **View Field Name** area.
- 3. From the **Operator** column, select an option. The default value is =.
 - Only options that make logical sense based on your selection from the Field Name column will be available here. For example, if you select Morningstar Category as the Field Name, you cannot use < or > as the Operator.

4. From the **Value** column, make a selection from the options provided, or enter a value of your own.



- Repeat steps 2-4 for all additional criteria you wish to add. Note that for these additional lines, you must make a selection from the **Relationship** column. The options here are explained in the following table.
 - If you click in the Field Name field for a subsequent row, the Relationship column defaults to the value of the previous row. For the second row, the Relationship column defaults to AND.

When the Relationship between two rows is	It means
AND	Consecutive search criteria will be used together; that is both must be true (X and Y).
OR	Only one of the search criteria needs to be true (X or Y).
Repeat	The previous line will be copied, so you do not have reselect a Field Name, Operator and Value, just change the Operator or Value.

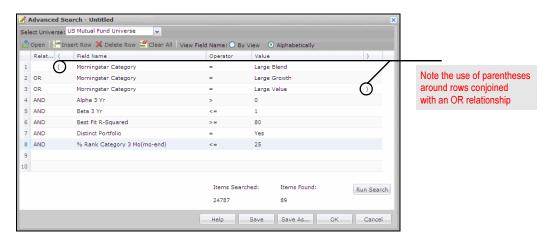
- 6. To see the number of records returned by your criteria, click **Run Search**. You can then modify your criteria to expand or narrow the number of items returned.
- 7. To see the results of your search displayed in the spreadsheet area, click **OK**.

A complex search employs both the OR as well as the AND relationship between its criteria, effectively combining multiple searches into one query statement. For example, you might want to look for large-cap funds that appear in the top category quartile for the trailing three- and five-year periods.

Performing complex searches with the Advanced Search dialog box

Note the following when running a complex search:

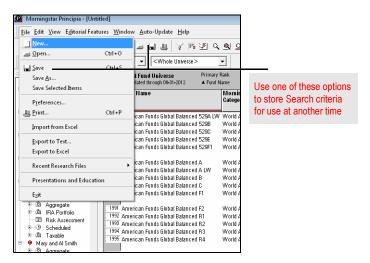
- ► When combining the same Field Name in multiple consecutive rows (such as Morningstar Category in the screen shot below), use the OR relationship between those rows.
- ► Remember to use the Open and Closed Parentheses columns, marked by (and), to encapsulate the rows and help the system understand the order of operations when running the search.



The criteria you enter in the Advanced Search dialog box can be saved for easy retrieval in the future. Each user can save 100 searches.

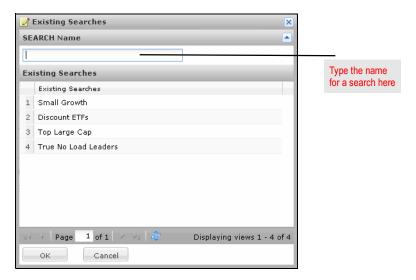
Note: When you save a search, you are saving only the criteria that comprise the search, and not the results of the search. After conducting a search in Principia, you could save the criteria for future use. To save a Search in Principia, you would click **File...Save**. Or from the toolbar, click the **Save** icon. Unless you specified otherwise, files are stored in the Use folder of the Principia directory.

How does saving a search in Principia compare with saving a search in Advisor Workstation?

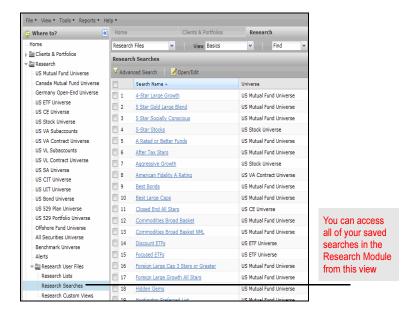


You can also save the criteria for an advanced search in Advisor Workstation. To save an advanced search based on criteria you entered, do the following:

- 1. From the Advanced Search dialog box where your criteria are entered, click **Save**. The Existing Searches dialog box appears.
- 2. Type in a **name** for the search; note that you are limited to 40 characters, including spaces and punctuation.



3. Click **OK**. The name of the search now appears in the title bar of the Advanced Search dialog box. You can also find the search on the Research Searches page in the left-hand navigation pane.



Look in: User

😈 Small Value.msv

Small Growth.msv

DC Plan List.msv

SmallGrowth.msv

ETF Financial.msv

quickscr

InvestList

Nortfolio

File name:

Stock Cat Averages.msv

Domestic Stock Cat Averages.msv

Foreign Stock Cat Averages.msv

Files of type: Mutual Fund Research Files (*.msv)

Principia research files were stored in the User folder of the Principia directory on your hard drive, or a network folder. To access the files, you would click the **Open** icon from the toolbar, or select File...Open from the menu bar.

4 KB

4 KB

3 KB

3 KB

Open

Date modif... Type

4/24/2012 ...

2/27/2012 ...

3/2/2009 4...

9/13/2012 ...

5/22/2012 ...

6/5/2012 3... Mutual Fu...

5/18/2012 ... Mutual Fu...

3/1/2012 2... Mutual Fu...

2/27/2012 ... Mutual Fu...

Mutual Fu..

File folder 7/31/2012 ... File folder 7/31/2012 ...

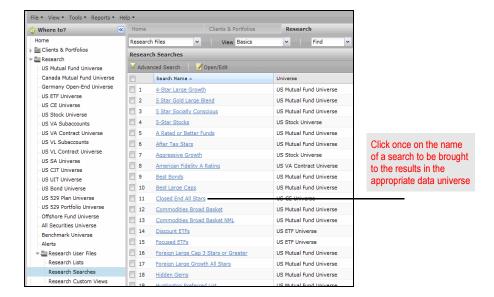
File folder

File folder



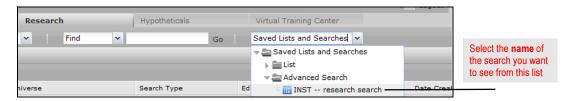
How does opening a saved search in Principia compare with opening a saved search in Advisor Workstation?

In Advisor Workstation, you can retrieve the results of a saved search by clicking once on its **name** in the Research Searches view. This will immediately bring you to the correct universe, and the breadcrumb trail at the top of the screen will reflect the name of the search.



You can also retrieve the latest results of a search from within a data universe, such as the US Mutual Fund universe. Do the following:

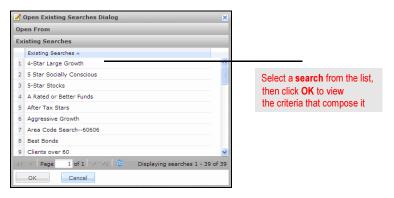
- In the upper-right corner of the screen, click the Saved Lists and Searches drop-down field.
- 2. Click once on the **arrow** to the left of the Advanced Search folder.
- Click once on the name of the search whose results you want to see in the spreadsheet area.



You can review (and change, if needed) the criteria used to build a search by double-clicking a saved search's row in the Research Searches view. Be careful not to click on the hyperlink for a search's name, as that will bring to the results for the search.

You can also review the criteria for a search from anywhere in Advisor Workstation, by doing the following:

- 1. From the menu bar, select **Tools**...**Advanced Search**. The Advanced Search dialog box appears.
- 2. Click **Open**. The Open Existing Searches dialog box appears.
- 3. Click once to select the **name** of the search whose criteria you want to see.



4. Click **OK**. The criteria automatically appear in the Advanced Search dialog box.

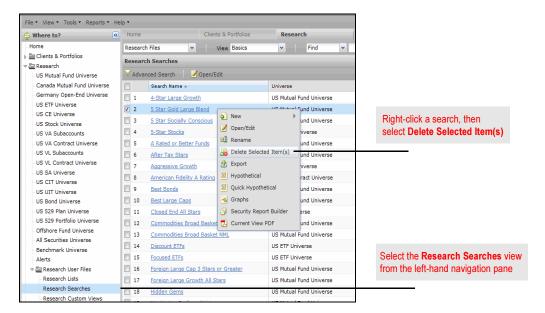
How do I modify a saved search in Advisor Workstation?

Because you are limited to saving 100 searches, you might occasionally need to delete one or more searches you no longer need, in order to enable you to save new searches.

How do I delete a saved search in Advisor Workstation?

To delete a search, do the following:

- 1. Go to the **Research Searches** view (via the left-hand navigation pane).
- 2. Right-click on the **name** of the search you want to delete. A list of options appears.
- 3. Select **Delete Selected Item(s)** from the list of options. A new window appears.



4. Confirm the name(s) of the item(s) you want to delete, then click **Yes**. The item is now removed from the Research Searches view.

Working with Lists in the Research Module

You can save a set of investments as a list for later recall. This list is static (unlike a search, whose results are dynamic and could change each time you run it), and will not change unless you add items to or delete items from the list. Each user can save up to 100 lists, and each list is limited to 500 items.

Saved lists can be seen in the Research Lists view, which is available from the left-hand navigation pane. Any item in a spreadsheet can be saved to a list. Therefore, you can actually save a list of lists. For instance, you could save all of your lists related to mutual funds or ETFs to its own list.

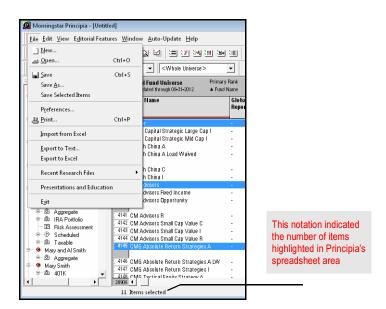
In this section, you will learn how to do the following with lists:

- ► Save a list
- ► Retrieve a list
- ► Add items to a list
- ► Delete items from a list, and
- ► Delete a saved list

In Principia, the Find a Fund feature allows you to create an investment list composed of securities. After finding the investments, you could save them for use at a later time. Highlighted investments were stored to the system by clicking **File...Save Selected Items** from the menu bar. The items were stored as a static file and the number of investments wouldn't change when you updated the system.

Overview

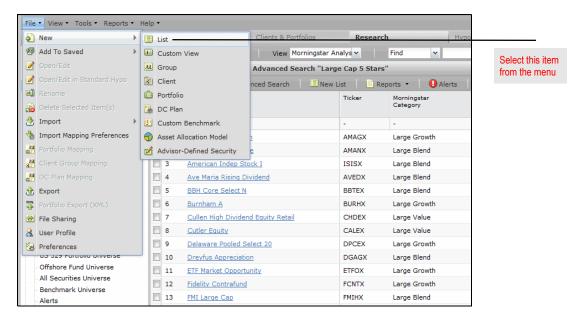
How does working with an investment list in Principia compare with working with lists in Advisor Workstation?



Remember, Principia's research files were retrieved by clicking the **Open** icon on the toolbar.

In Advisor Workstation, you can also save a static list of securities. To save a list of investments in Advisor Workstation, do the following:

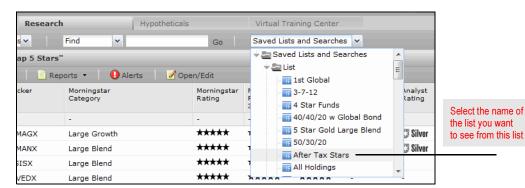
- In the spreadsheet area, highlight the items (up to 500) you want to save. You can click
 an investment's row number to highlight a single investment, <SHIFT>+click to
 select multiple consecutive investments, or <CTRL>+click to select multiple nonconsecutive items.
- 2. From the menu bar, select **File...New...List**. The Save as List dialog box appears.



- 3. Type in a **name** for this list. The name cannot be more than 40 characters long.
- Click Add All to move the items from the Total Search Results area to the Items selected for List area.
- 5. Click **Save**. A confirmation message appears.
- 6. Click **OK** to clear the confirmation message.
- 7. Close the List dialog box. The list is now available from the Research Lists view.
 - You can also save lists in Advisor Workstation by just clicking File...New List and using the Find field to search for investments. The list can contain securities from more than one investment universe.

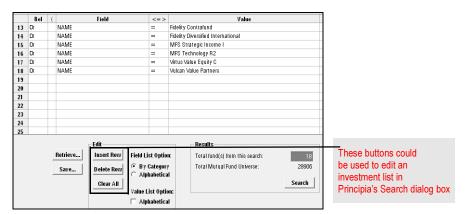
Once a list is saved in Advisor Workstation, you can go to the Research Lists page in the left-hand navigation pane and click on its name, or do the following from the data universe where you want to see the items on the list:

- How do I retrieve a list in Advisor Workstation?
- In the upper-right corner of the screen, click the Saved Lists and Searches drop-down field.
- 2. Click once on the **arrow** to the left of the Lists folder.
- 3. Click once on the **name** of the list you want to see in the spreadsheet area. The items in the list automatically appear in the spreadsheet area.



If you click on the Research Lists universe in the left-hand navigation pane, you can double-click the name of a list to see the items on the list (via the List dialog box). You can also add or remove items from the list in the List dialog box.

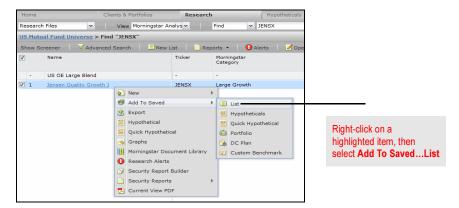
When you saved items as a list in Principia, the system automatically stored the investments in the Search window. You could then add or delete securities from the Search window to modify the investments on the list.



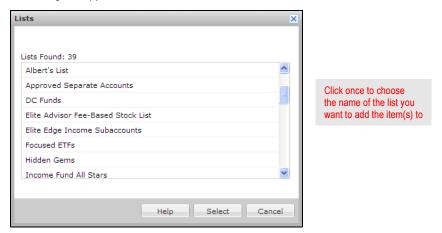
How does modifying an investment list in Principia compare with modifying an investment list in Advisor Workstation?

In Advisor Workstation, once a list is saved, you can add or remove items without having to retrieve, recreate and resave the entire list. To add to an existing list, do the following:

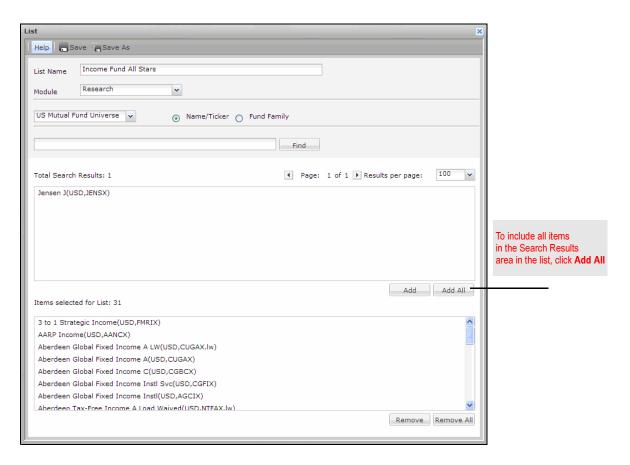
- 1. Navigate to the data universe where you will find the items to add to the list.
- 2. Run a search to isolate the item(s) you want to add to the list.
- 3. Click to select the item(s) in the spreadsheet area, so the rows are highlighted.
- 4. Right-click on one of the selected items.
- 5. From the right-click menu, select **Add To Saved...List**. The Lists dialog box appears.



6. Click once on the **name** of the list you want to add the item(s) to, then click **Select**. The List dialog box appears.



- 7. The items you selected in the spreadsheet area appear in the Total Search Results area. To include all of the items in the list, click the **Add All** button.
 - Remember, each list is limited to 500 items.



- 8. Click Save.
 - If you want to save the items as a new list, while preserving the original list, click Save As.
- 9. Click the **X** in the upper-right corner of the dialog box to close it.

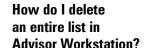
You can delete selected items from a list in Advisor Workstation, without having to delete the entire list and save a new one. To delete selected items from a list, do the following:

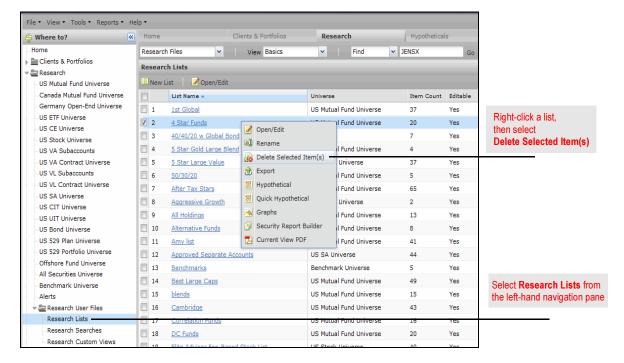
- How do I delete items from a list in Advisor Workstation?
- 1. Go to the **Research Lists** universe (click on its name in the left-hand navigation pane)
- 2. Right-click on the list's **row**(s) in the spreadsheet area.
- 3. From the right-click menu, select Open/Edit.
- 4. In the Items selected for List: area, highlight the **investment** you wish to delete, then click the **Remove** button.
- 5. Click the **Save** button.
- 6. Click the **X** in the upper-right corner of the dialog box to close it.

Because you are limited to saving 100 lists, you might occasionally need to delete one or more lists you no longer need, in order to enable you to save new searches.

To delete a list in Advisor Workstation, do the following:

- 1. Go to the **Research Lists** view. (via the left-hand navigation pane.)
- 2. Right-click on the **name** of the list you want to delete. A list of options appears.
- 3. Select **Delete Selected Item(s)** from the list of options. A new window appears.





4. Confirm the name(s) of the item(s) you want to delete, then click **Yes**. The item is now removed from the Research Lists page.

Generating Graphs Overview

Generating Graphs

This section covers the graphs available in Advisor Workstation. You can generate graphs from any location in Advisor Workstation from the Tools menu; you do not need to be in the Research Module in order to generate a graph. Still, it can be most useful to begin in the Research Module, since you can retrieve a list (or search) and select the items you want to have appear before you generate the graphs.

Also, note that you do not need to select a particular graph to appear. All graphs appear in a new window, and you can select which graph you want to see by selecting its tab.

You will learn the following in this section:

- ► What graphs are available
- ▶ What features are common to all graphs
- ► What each graph shows, and
- ► How to generate graphs.

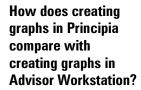
The table below illustrates which graphs were found only in Principia, which are found only in Advisor Workstation, and which are available in both applications.

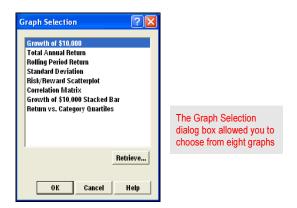
Graph Name	Available in Principia?	Available in Advisor Workstation?
Growth of \$10,000	Yes	Yes (known as Investment Growth)
Total Annual Return	Yes	Yes
Rolling Return	Yes	Yes
Standard Deviation	Yes	No
Risk/Reward Scatterplot	Yes	Yes
Correlation Matrix	Yes	Yes
Growth of \$10,00 Stacked Bar	Yes	No
Return vs. Category Quartiles	Yes	Yes
Premium Discount	Yes (used only with Closed-End Funds)	Yes (used only with ETFs and Closed-End Funds)

Overview

How do the graphs available in Principia compare to those available in Advisor Workstation?

Before generating a graph in Principia, you had to make sure you selected an investment (or investments). Then, you would go to the menu bar and select **View...Graph**, or click the **Graph** icon in the toolbar. You could also right-click anywhere in the spreadsheet area and select **Graph** from the menu options.





In Advisor Workstation, you can generate a graph from one of the following areas:

- ▶ by clicking the Graphs link in the Quick Start widget on the Home page
- ▶ from the Tools menu at the top of the screen, and
- ▶ by selecting securities in a spreadsheet area, then using the right-click menu.

To generate a graph from a spreadsheet area, do the following:

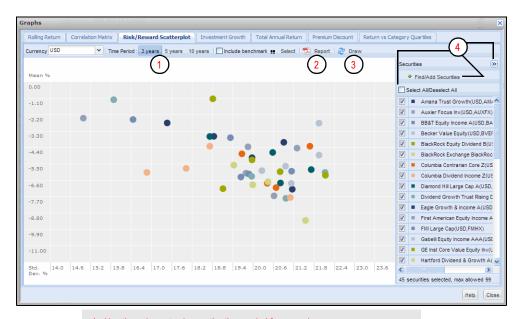
- 1. In the spreadsheet area, click the **row numbers** to highlight the investments you want included on the graph.
 - You can click one item, or <SHIFT>+click to select multiple consecutive items, or <CTRL>+click to select multiple non-consecutive items.
- 2. Right-click on any highlighted item, the select **Graphs**. The Graphs window appears.
- 3. Select the **tab** for the graph you want to see.

You do not have to select items before generating a graph, but it will save you the time of having to look them up within the Graph window.

Certain elements are common to all graphs in Advisor Workstation. These features allow you to manipulate or update the graphs, without having to leave the graph window. These features are explained in the following table.

What features are common to all graphs in Advisor Workstation?

Feature	Description
Time Period	The Time Period buttons (3 years, 5 years, etc.) allow you to select a different trailing time period for a graph. Keep in mind that if a security lacks sufficient history, it will not appear when you change to a longer time period.
Report	The Report icon allows you to generate a PDF version of the graph. Some PDF graph reports have been reviewed by FINRA for client use, while others have not. Check the header area of each report to see whether this is appropriate. Also, adding certain elements to a graph, such as an index or proxy, can trigger the header warning.
Draw	The Draw icon needs to be clicked each time you change an element of a graph — adding or removing a security, changing the time period or benchmark, etc. It's only after you click the Draw icon that you will see the updated graph.
Securities panel	This panel shows you which investments are available to be displayed in the graph. If the graph limits the number of securities that can be shown, the items at the top of the panel will be selected first by default. You can choose to add securities from here, and you can hide this panel as well.



- 1 Use these icons to change the time period for a graph
- 2 Click this icon to generate a PDF version of a graph
- 3 Click the Draw icon any time you make a change to a graph
- 4 Use the elements in this area to hide the securities, choose different securities, select or deselect all securities, or select or deselect individual securities

The Rolling Returns graph shows you the monthly returns of a security over a rolling period of time. Only one security can be displayed at a time in the graph.

What does the Rolling Return graph show?

Positive returns are displayed as green bars, while negative returns are red bars. You can also elect to highlight both the highest and lowest returns within a set.

The following rolling time periods are available:

- ► 3 months
- ► 6 months
- ► 12 months
- ► 36 months
- ► 60 months, and
- ► 120 months.

You can also select the time period you want to cover in the graph. The default options are for a 3-month rolling return covering the trailing one-year period. If you elect to change either the rolling time period or the date range being graphed, you'll need to click the **Draw** icon above the graph to reflect the changes.



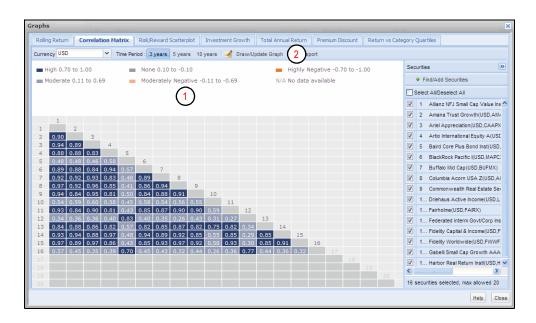
- 1 Select the rolling return interval from this drop-down field
- 2 Click the check box to see the highest and lowest returns during the period being graphed
- 3 Choose the time period to display
- 4 If you move your mouse over a bar, a tooltip appears to show you the return for that month

The Correlation Matrix shows you the similarity of returns among a group of investments over a certain time period. You must include at least two securities, and can include up to 20.

What does the Correlation Matrix graph show?

The scale of correlation ranges from -1.0, which indicates that securities moved in the opposite direction, and 1.0, which means securities moved in the same direction over the time period being displayed.

The default time period in the Correlation Matrix is the trailing three-year period, but you can change this to either the trailing five-year or 10-year period.



- 1 Note the color-coded key showing the different ranges of correlation
- 2 If you change the Time Period, or add or remove items, be sure to click the **Draw** icon to reflect those changes in the graph

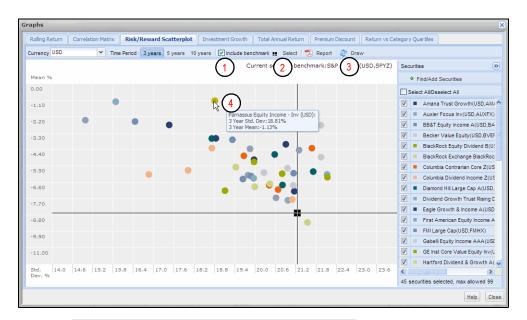
The Risk/Reward Scatterplot allows you to select up to 99 securities at once, to compare performance and risk (standard deviation) over a certain time period. The default time period is the trailing three-year period, but you can change this to either the trailing five-year or 10-year period.

What does the Risk/Reward Scatterplot graph show?

On the Scatterplot, dots appearing higher have performed better than lower dots, and those appearing to the left have had experienced less volatility than those appearing to the right.

If you move your mouse over a dot, you can see the following information:

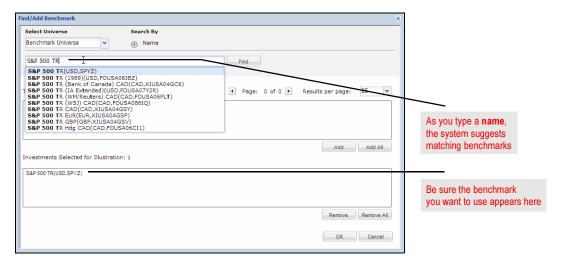
- ► the name of the investment
- ▶ the standard deviation, and
- ▶ the return.



- 1 Click the **checkbox** to include a benchmark
- 2 Click the Select button to choose a benchmark
- 3 Click **Draw** after selecting a benchmark
- 4 A pop-up window appears when you move your mouse over a dot

You can include a benchmark on the Risk/Reward Scatterplot as well. To include a benchmark, do the following:

- 1. Click the **Include benchmark** box above the Scatterplot area.
- 2. Click the **Select** button to the right of the Include benchmark box. The Find/Add Benchmark dialog box appears.
- 3. In the search field, type the **name** of the benchmark you want to find.
 - The intelligent search agent automatically suggests results as you type. If you see the benchmark you want to use, click once on its name to automatically move it to the Investments Selected area. To use the S&P 500 index as the benchmark, type **S&P 500 TR**.
- 4. If needed, click **Find** to search for the benchmark you want to use. Click once to select its **name** in the Total Search Results area, then click **Add**.



- 5. Click **OK** to close the dialog box.
- 6. Click the **Draw** button above the Scatterplot area to apply the benchmark.

The Investment Growth graph, by default, shows the growth of \$10,000 from the earliest common time period for the selected investments. You can select up to 10 investments at once. You can change the investments that appear on the graph, the time period being reflected, and the initial investment amount. The returns shown are net of fees and expenses (except for Separate Accounts).

If you move your mouse over a line in the graph, a pop-up message appears showing you the investment value as of the date at that point in the graph's timeline, and the cumulative return percentage as well. You can also elect to show annualized returns on the graph by using the checkbox on the toolbar above the graph.

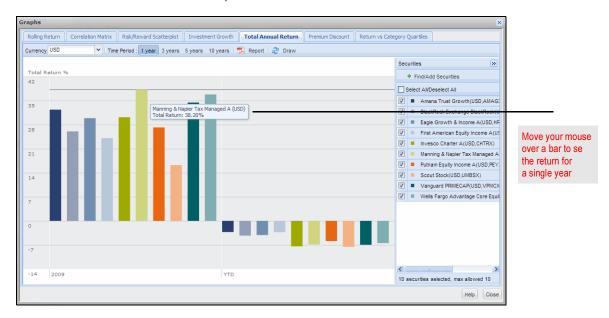
What does the Investment Growth graph show?



The Total Annual Return graph shows you the annual return for up to 10 securities. You can see both the annual return for the previous calendar year, as well as year-to-date returns for the current year (through the prior month-end period). You can also elect to see annual returns for the 3-, 5- or 10-year periods.

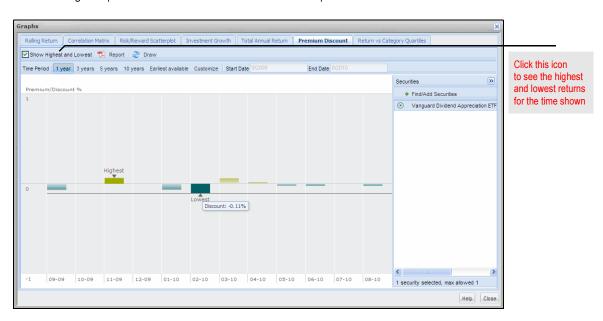
What does the Total Annual Return graph show?

If you move your mouse over a bar in the graph, a pop-up message appears, showing you the total return for an investment for that year.



The Premium Discount graph applies only to ETFs and Closed-End funds, and you can display only one security at a time. The default time period is for the trailing one-year period. Other time periods are available, or you can elect to see values from the earliest available time, or a custom date range. Monthly results are always shown. You can also elect to see the highest premium and lowest discount for a time period.

What does the Premium Discount graph show?



The Return vs. Category Quartiles graph allows you to compare an investment's return to its Morningstar category, as well as to a primary and secondary benchmark. You can display only one investment at a time, and it must be a managed product. (The graph will not work with individual stocks.)

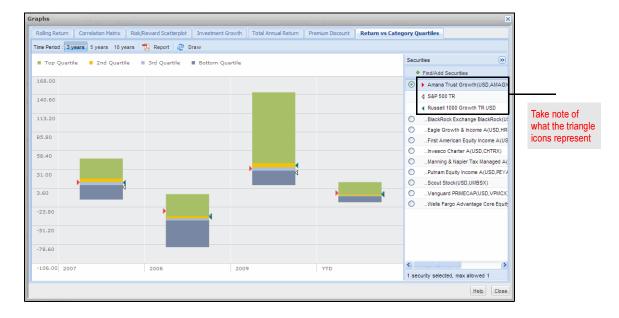
By default, returns for each of the trailing three years is shown (along with YTD information), but you can elect to see returns for the trailing 5- or 10-year periods as well.

For each year in the graph, you will see a stacked bar chart with four different colored sections. The top quartile for each category is green, the next quartile is yellow, the third quartile is light blue, and the lowest quartile is dark blue. The height of each section indicates the range of returns for that quartile.

Next to each stacked bar chart is a set of triangles. The red triangle to the left of the bar chart is the fund itself; take note of which quartile it points to. This is where the fund ended the year. To the right of the bar chart are two triangles. The white arrow represents the primary benchmark, while the green triangle represents the secondary benchmark. Where does the triangle for the fund appear compared to the triangles for the benchmarks? Did it outperform or underperform one or both benchmarks?

Note the following additional points about this graph:

- ► It is not possible to change the primary or secondary benchmarks; these are assigned automatically to each investment.
- ▶ If you move your mouse over one of the stacked bar charts, you will see a pop-up message that shows you the return of the fund, as well as the high and low returns for the category.



What does the Return vs. Category Quartiles graph show?

Creating Reports for Securities

This section explains how to create reports for securities in Advisor Workstation. Note that in Advisor Workstation, you do not need to be in the Research Module to create reports for securities; you can use the Security Report Builder (available from the Reports menu or the Quick Start widget on the Home Page) at any time. You also have access to the Security Finder widget on the Home page, which allows you to create either an Investment Detail Report or Morningstar Report for a single security.

Overview

The table below illustrates which reports were found only in Principia, which are found only in Advisor Workstation, and which are available in both applications.

Report Name	Available in Principia?	Available in Advisor Workstation?
Morningstar Report (aka Quicktake)	Yes	Yes
Investment Detail Report	Yes	Yes
Fund vs. Fund Report	Yes (not FINRA reviewed)	Yes (FINRA reviewed)
Current View	No	Yes
Underlying Holdings	No	Yes
Price and Distribution Report	No	Yes

How do the reports available for securities in Principia compare with those in Advisor Workstation?

See the table below for information about each report.

Report	Comments
	A PDF report that replicates the spreadsheet area. This report has not been reviewed by FINRA.
	Note the following points about this report:
Current View	 You must highlight the investments you want to see on the report before running the report Be sure to select the correct view before running the report If the view contains more than 11-12 columns, it is likely that the data will spill over onto secondary pages in the report, which can make it harder to read Using a custom view with fewer than 12 columns with this report is usually recommended, to ensure all of the data columns appears on one page for a row

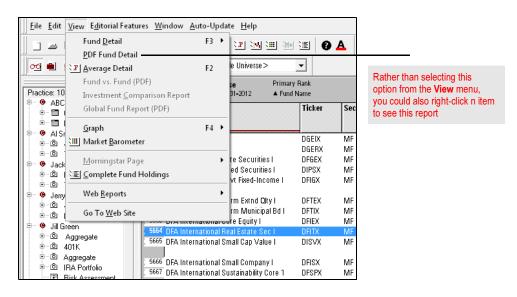
Report	Comments
Investment Detail	A PDF report that has been reviewed by FINRA. Check both the report's header, and with your compliance department before leaving this report with a client.
	This report contains the following main sections:
	 Performance Portfolio Analysis Fees and Expenses Risk and Return Profile, and Operations
	This is the same report as you generated from Principia.
Morningstar (Quicktake)	An HTML report with multi-tab interface. This report is has not been reviewed by FINRA. Note the following about this report:
	 If you run this report for multiple investments, a dropdown field is available in the upper left part of the screen to toggle to a different investment. The Ownership Zone graph is available from the Portfolio tab You can use the Actions menu (just above the tabs) to
	view the data dictionary for the report, generate an Investment Detail report for the investment selected, or print the HTML report.
	This report could be generated from Principia as well.
	A PDF report that has been reviewed by FINRA. Check both the report's header, and with your compliance department before leaving this report with a client.
	This report contains the following main sections:
Price and Distribution	Historical change in NAV, andHistorical income and capital gain data.
	This report can be used to show how an equity fund's value has steadily climbed over the years, or how a fixed-income fund has provided reliable, growing dividends.
Fund vs. Fund Report	A PDF report that has been reviewed by FINRA. Check both the report's header, and with your compliance department before leaving this report with a client.
	This report places two open-end mutual funds side-by- side so you can compare the following elements:
	 Return History Portfolio Profiles Asset Allocation, and Stock Sectors.
	This report is similar to the one you generated from Principia, but it has additional data points, and has been reviewed by FINRA.

Report	Comments
Underlying Holding Report	A PDF report that has been reviewed by FINRA. Check both the report's header, and with your compliance department before leaving this report with a client.
	This report provides the underlying holdings of managed products. In evaluating a managed product, it can be instructive to consider the holdings of that product.
	The report contains the following main sections:
	► Holdings Summary► Holdings Detail

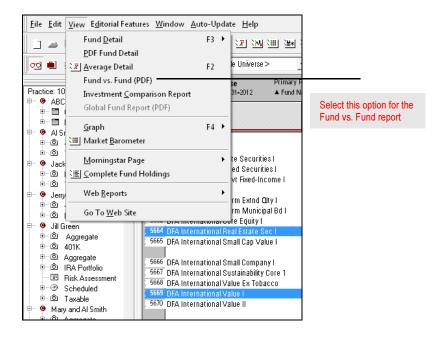
Principia's Research mode allowed you to create both the FINRA-reviewed Investment Detail Report and the Fund vs. Fund Report. Both reports could be generated electronically as a PDF. While working in the Research mode, you could also launch the Fund Detail window to quickly view four pages of in-depth information on a fund. Advisor Workstation does not have the Fund Detail window.

How does generating reports in Principia compare with generating reports in Advisor Workstation?

For the Investment Detail Report In Principia, you'd have to make sure a security was selected in the Research mode, then click **View...PDF Fund Detail** from the menu bar to open the report.



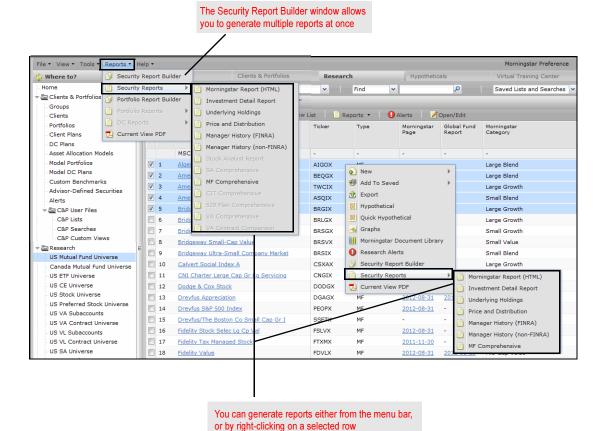
For the Fund vs. Fund report, you had to highlight two mutual funds, then click **View...Fund vs. Fund (PDF)** from the menu bar.



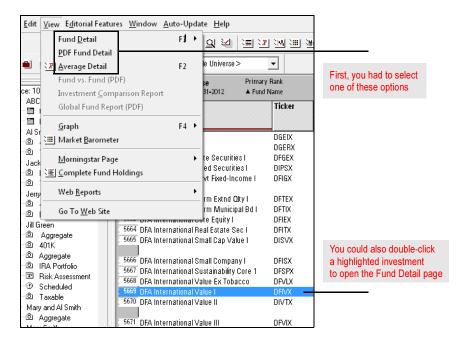
You can also open this report by selecting **Fund vs. Fund (PDF)** from the right-click menu.

In Advisor Workstation, you have three ways to generate reports for securities:

- ► Use the Security Report Builder (available from the Reports menu at the top of the window, or from the right-click menu), which allows you to create multiple reports for multiple securities at once.
- ➤ Right-click on a highlighted item (or items) and select the report from the right-click menu.
- ► Use the Reports menu at the top of the window to select the report you want to see.

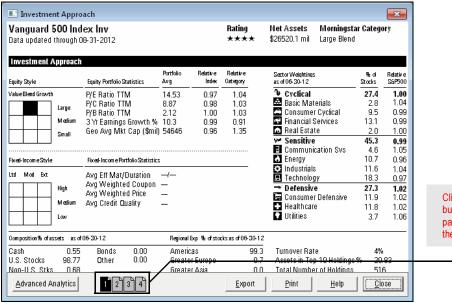


The fund detail window in Principia provided four pages of formatted, in-depth information on fund. To open the window, you had to first **highlight** an investment, then from the menu bar, select **View...Fund Detail**.



How does the Fund Detail window compare with a similar offering in Advisor Workstation?

Principia's Fund Detail page brought together key data points from the spreadsheet area of the system.



Click the **page number** buttons at the bottom of page to move through the Fund Detail window

While Advisor Workstation does not have this specific report, you could use the Morningstar Report as a substitute. Like the Fund Detail page, the Morningstar Report appears as a new window, and has a tabbed interface with data pulled from the Research Module.

Other Differences Between Advisor Workstation and Principia

This section reviews features you have access to in Advisor Workstation, but were not available or shown in Principia, and features you had access to in Principia, but which are not available in Advisor Workstation.

Overview

In Advisor Workstation, you have access to the following features, which either were not found in Principia, or work differently:

- ► The Market Barometer shows intra-day changes, rather than simply monthend data.
- ► The Screener tool is an alternative means of conducting a search by criteria. It is explained on page 48.
- ► Unless you were a Principia Advanced subscriber, you would not have had access to the Fund vs. Fund report.

What features are found in Advisor Workstation that were not available in Principia?

The following features were available in Principia, but are not available in Advisor Workstation:

- ► The Market Cap Breakpoints, Editorial Features and Category Averages are not shown in Advisor Workstation.
- ► The Fund Detail page is not available, but much of the same data can be found in the Morningstar Report.
- ► Advisor Workstation does not have the Rank by Stock or Bond feature from Principia.
- ► Advisor Workstation does not have a Complete Fund Holdings window, but it does have the Underlying Holdings report. Note that the report is a PDF, which cannot be sorted the way you could the Complete Fund Holdings window.

What features were found in Principia that are not available in Advisor Workstation?

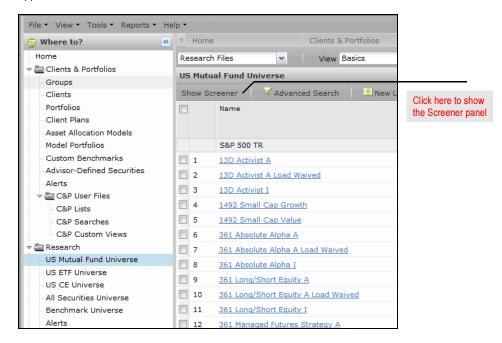
The Screener tool is available from the Research Module for all security types (mutual funds, stocks, etc.). The Screener is a modified search by criteria tool. In the Screener panel, you have access to some of the most popular search criteria for a particular universe. If you can't find a criterion you are looking for in the Screener tool, you can use the Advanced Search tool.

Working with the Screener tool saves you the time of having to select criteria yourself. You simply need to choose the value(s) for each one. These searches can be saved and later retrieved from either the Screener tool, or the Advanced Search tool (in case you want to add more criteria there, which are not available in the Screener tool).

A search you saved in the Advanced Search tool cannot be opened in the Screener tool.

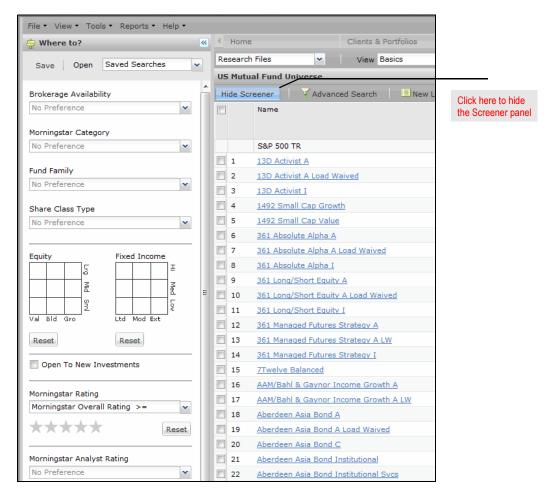
To use the Screener tool, do the following:

- 1. Go to a **universe** in the Research Module, such as US Mutual Funds.
- 2. Click the **Show Screener** button above the spreadsheet area. The Screener panel appears to the left.



How do I use the Screener tool?

Using the various **fields** available to you, select a value for the criteria you want to use for a search. Note that each time you make a selection, the spreadsheet area updates in real time.



- 4. To save a search you create in Screener, click the **Save** button at the top of the Screener panel.
- When finished, you can click **Hide Screener** to remove the Screener panel and reset the universe.