

Advisor Workstation Training Manual: Working in the Research Module

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Advisor Workstation Training Manual: Working in the Research Module

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

In addition, efficient use of the Research module saves you time in other areas of Advisor Workstation, particularly when creating portfolios or hypothetical illustrations.

In this section, you will learn how to do the following with the Research module in Advisor Workstation:

- Understanding the layout of the Research module
- Find an individual security
- Find a list of investments by name or ticker
- Conduct a search by criteria
- Navigate through the Research module
- Create and manage lists of investments
- Create custom views
- Set a default view
- Create reports, and
- Generate graphs.

Overview of the Research module

What you will learn in this section

The data universes (Stocks, Mutual Funds, ETFs, etc.) available to you in the Research module depend on those licensed by your institution. The universes your institution subscribes to are shown in the left-hand navigation pane.

What data is available in the Research module?



Note the data universes available under the Research module


In addition to the different security universes, you will also find the following items 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 compare, say, mutual funds to ETFs and stocks, 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 100 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. No limit exists on the number of criteria you can use in each search. |
| 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 | These will be alerts you have created for securities, rather than those you have created for client portfolios. |

The following table details the frequency with which each investment type is updated in Advisor Workstation:

How often are the returns for each database updated?

| The price of this investment type... | Is updated at this rate... |
|---|-----------------------------------|
| Mutual funds | NAVs updated daily |
| Stocks | Current, with 20-minute delay. |
| Variable Annuities/Universal Life | AUVs updated at month end |
| Exchange-Traded funds | Current, with 20-minute delay |
| Closed-End funds | Current, with 20-minute delay |

 In addition to the daily NAV update, holdings/composition information for many mutual funds is updated on a monthly basis. The remaining mutual funds are updated quarterly.

Understanding the Layout of the Research Module

This section will orient you to the Research module’s interface, and 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 2.0 application, since the knowledge you gain here can be applied to other areas of the application that also use a spreadsheet interface.

Overview

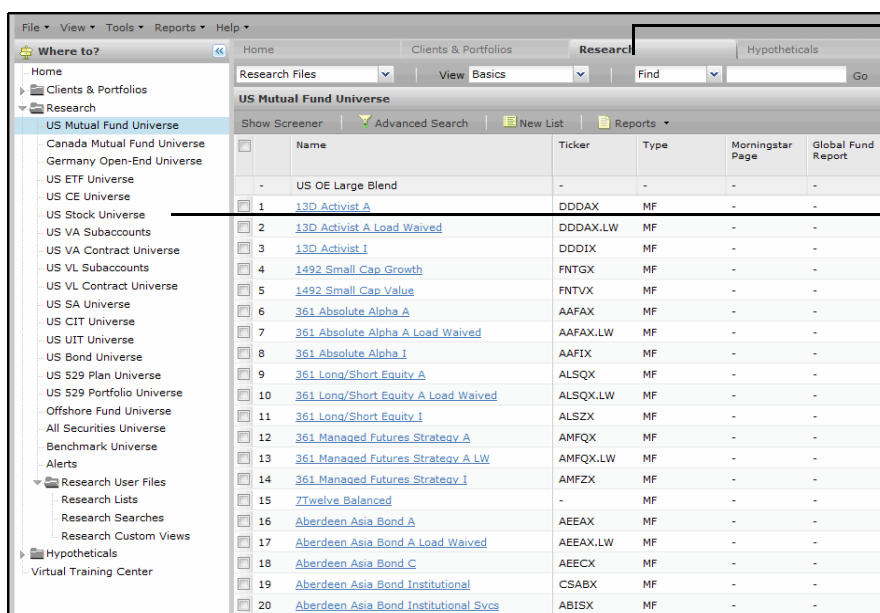
You will learn the following:

- 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:

How do I access the Research module?

- At the top of the Advisor Workstation 2.0 window, click once on the **Research** tab. This will take you directly to the US Mutual Fund universe.
- In the left-hand navigation pane, click once on the universe or area (Research Lists, Research Searches, etc.) you’d like to move to directly.

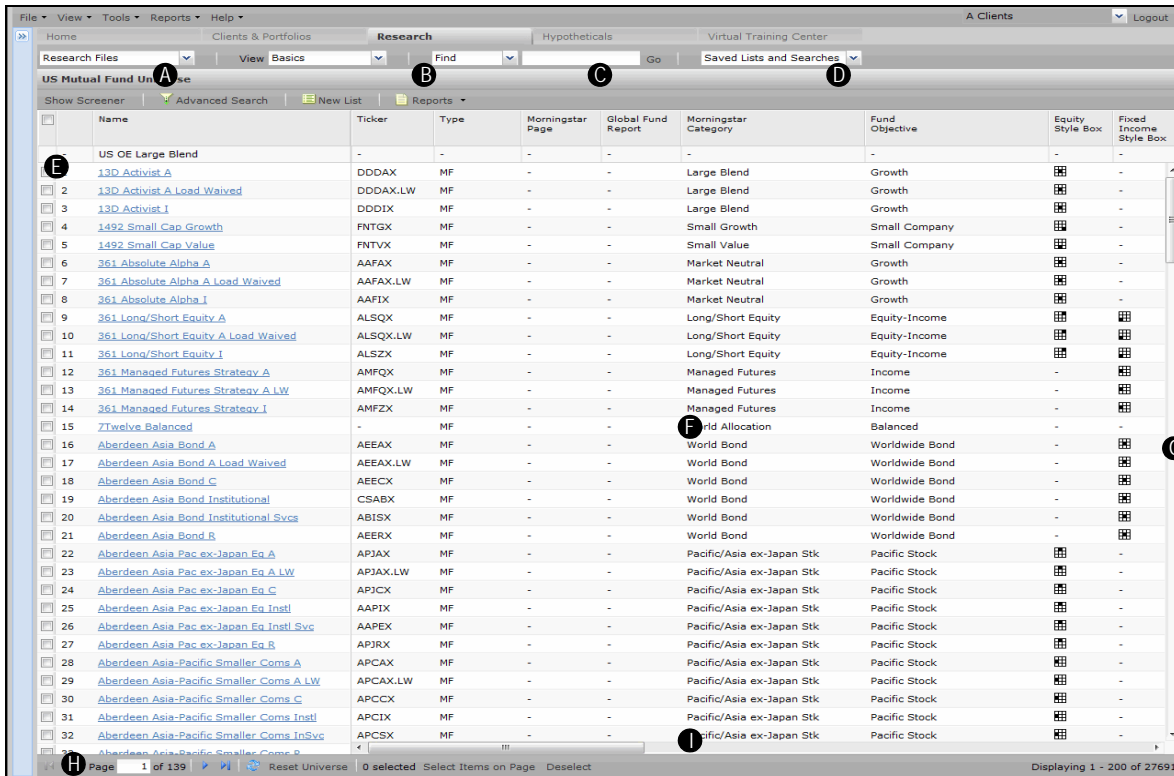


Click on this tab to access the Research module

You can also click the name of an item in this list to move to that area

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 |
|--------|--|---|
| A | Universe selection drop-down field | This field allows you to choose the investment universe (mutual funds, stocks, etc.) you want to see in the spreadsheet area. If the left-hand navigation area 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 lefthand navigation pane. |
| B | View drop-down field | This field allows you to select a pre-built view, or one you created. |
| C | 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. |
| H | 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. |

Managing the Spreadsheet Area

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:

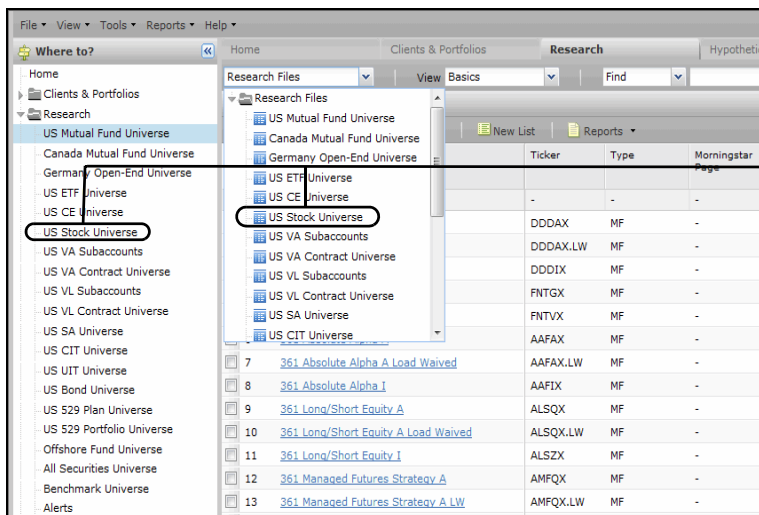
- Change universes displayed in the spreadsheet
- Update the benchmark being used in the spreadsheet
- Resize columns in the spreadsheet
- Sort the columns in the spreadsheet
- Use the drag-and-drop feature for creating a custom view
- Lock the columns in a spreadsheet
- Change the number of rows being shown in a spreadsheet, and
- Scroll through the pages in a spreadsheet.

Overview

You can change the information you see in the spreadsheet area one of two ways:

- Click the name of the area you want to go to in the left-hand navigation pane, or
- Use the universe selection drop-down field on the toolbar.

How do I change the data universe I see in the spreadsheet?



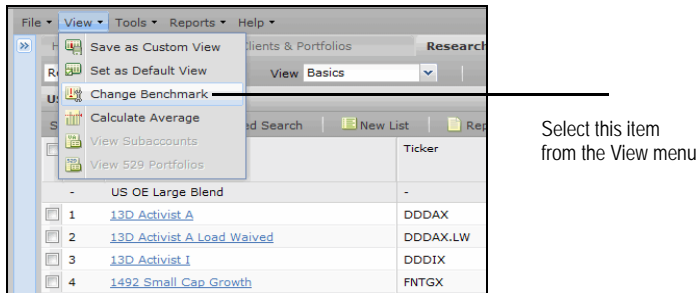
You have two options when it comes to navigating to different parts of the Research module

The first row for each data universe is the benchmark for that universe. Each data universe has its own benchmark. You can change the benchmark to use a different index, a Morningstar Category, or another security from the data universe. This can be particularly useful after you have run a Search by Criteria to find a specific set of investments.

How do I update the benchmark being used in the spreadsheet?

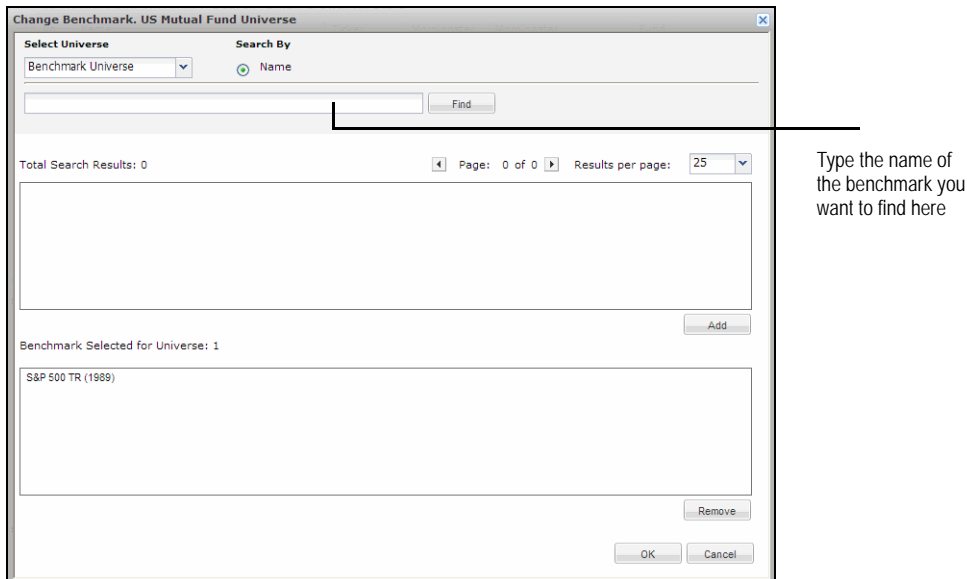
To change the benchmark for a data universe, do the following:

1. From the **View** menu, select **Change Benchmark**. The Change Benchmark dialog box appears.



Select this item from the View menu

2. From the **Select Universe** drop-down field, choose an option for the search. If you want to use an index, you can leave Benchmark universe selected.



Type the name of the benchmark you want to find here

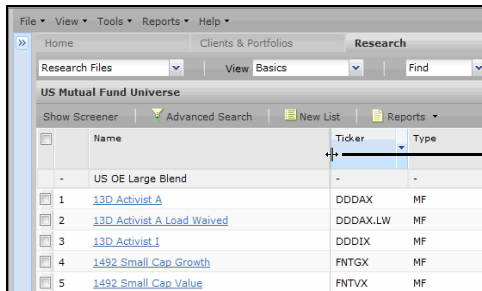
3. In the search field, type a portion of the item's **name** you want to use. You do not need to type the item's full name, but if you type fewer than four letters, the system will look only for items that begin with the text string you entered. To find items that contain (but do not necessarily begin with) the search string, be sure to enter at least four letters.
4. Click the **Find** button. The results matching your search will appear in the Total Search Results area.
5. If an item already appears in the Benchmark Selected for Universe area, click once to highlight the item, then click **Remove**.
6. Scroll through the set of results and click once to select the **item** you want to use.
7. Click the **Add** button. The item should now appear in the Benchmark Selected for Universe area.
8. Click **OK** to close the dialog box. The new benchmark is applied automatically.

You can make the columns in a spreadsheet wider or more narrow, in order to make it easier to see the data in a column, or to fit more of them onto the screen. The changes you make to a column’s width cannot be saved and will be reset once you refresh the screen. For example, if you change the width of columns in the US Mutual Fund universe, then move to the US ETF universe and back to the US Mutual Fund universe, the columns will revert to their default width.

How do I resize the columns in the spreadsheet?

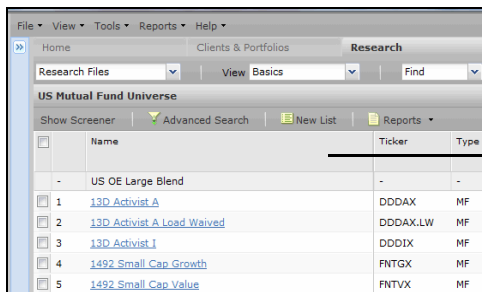
To change the width of columns in a spreadsheet, do the following:

1. Move your mouse cursor over the border between two columns. It will change to a two-headed arrow.



When the cursor changes to this icon, you can click and drag to resize the column

2. Left-click and drag the column until it is the width you want, then release the left mouse button.

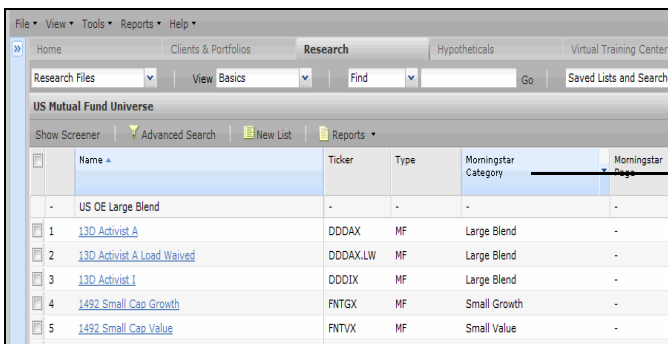


Note the new width of the Name column in this screen shot compared to the one above

Note the following rules that apply to sorting items in any spreadsheet view:

- 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.
- 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.

How do I sort the columns in the spreadsheet?



Note how the Morningstar Category column is highlighted, and has the arrow icon to the right of its name

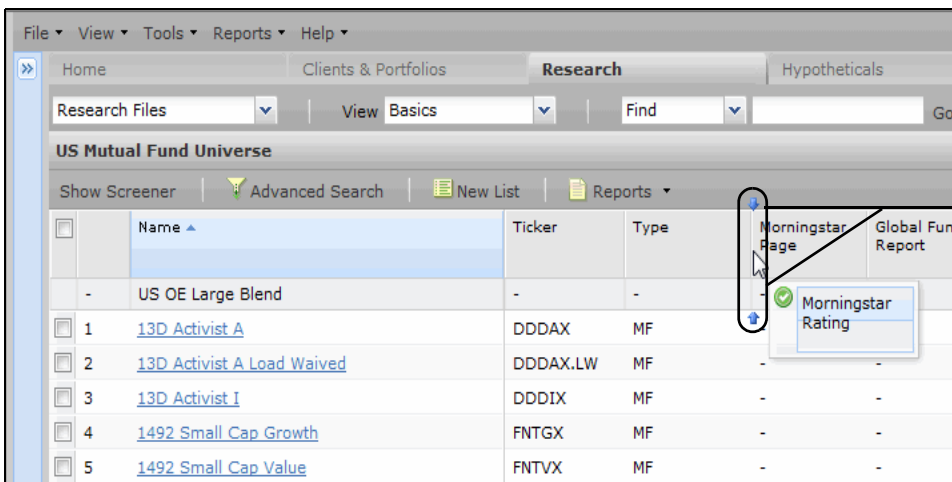
You can create a custom view by dragging and dropping columns in place. Note the following about this feature:

- 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; 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 feature for the columns in the spreadsheet?

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.

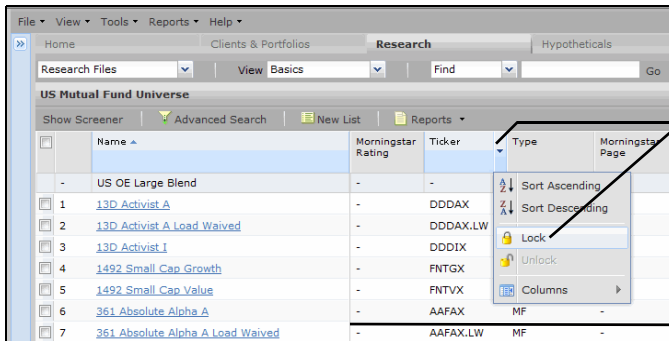


Note the icons pointing to the new location for the Morningstar Rating column as it is dragged to the left and dropped in a new location

You can lock columns in place, to keep them from moving as you scroll to the right. (This is similar to freezing a worksheet in Microsoft Excel.) The Name column is locked by default. You can lock columns one of two ways:

How do I lock columns in the spreadsheet?

- Click the drop-down arrow in a column’s header and select **Lock**. This automatically moves the column to the locked area at the left side of the spreadsheet. You can use the same method to unlock a column.
- Drag-and-drop a column to the left of the locked area (on the left side of the spreadsheet). The locked area of the spreadsheet is denoted by a solid vertical line.



Click the drop-down arrow in the column header and select Lock to freeze a column in place

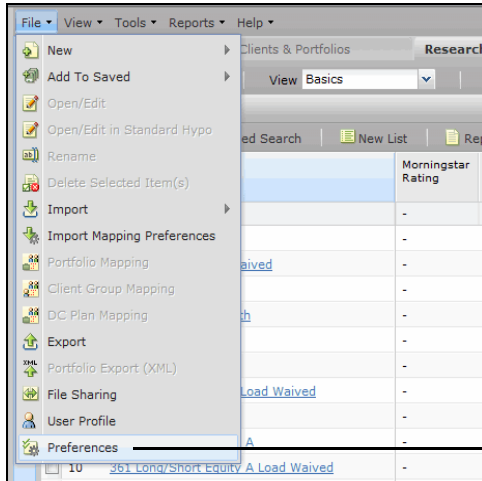
The solid vertical line marks the locked area. Drag-and-drop a column to the left of this area to automatically lock it in place.

By default, each spreadsheet displays up to 25 rows at once, but you can elect to display up to 100 rows at once.

How do I change the number of rows in the spreadsheet area?

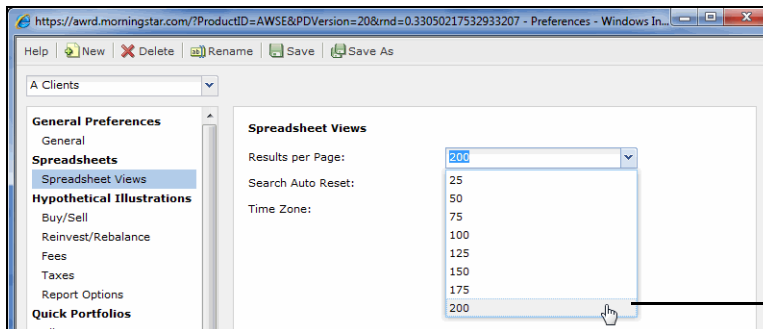
To change the number of rows being displayed in a spreadsheet, do the following:

1. From the **File** menu, select **Preferences**. The Preferences dialog box appears.



From the File menu, select Preferences

2. Under Spreadsheets, click **Spreadsheet Views**.
3. Click the **Results per Page** drop-down field.
4. Select the number of rows you would like to see at once.



Select the number of rows you would like to see on each spreadsheet page

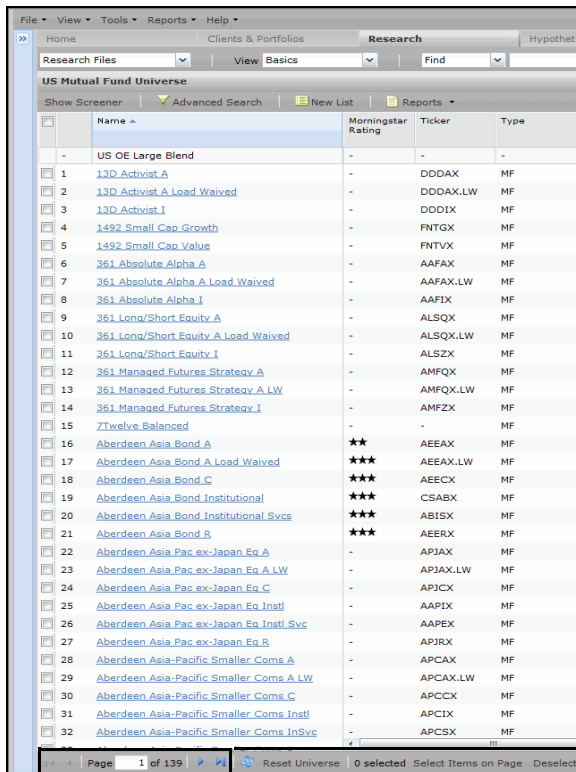
5. Click **Save** to save your changes.

If you were previously using the Morningstar Preference set, you will be prompted to create a new set of preferences. Click **New** or **Save As** to create a custom set of preferences.

Depending on the number of items being displayed in a spreadsheet and the number of items your Preferences are set to display, you can scroll vertically to see additional items in a spreadsheet. But at most you will be able to see 100 items on any one page.

How do I scroll through the pages in a spreadsheet?

To scroll further through a list of items in a spreadsheet, 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.



Use these icons to scroll through the pages in a spreadsheet

Finding Investments in the Research Module

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

- using the Find field on the toolbar, and
- Running a Search by Criteria.

☞ A third method is available, but it involves building a list and is discussed in the next main section, beginning on page 24.

You can find investments by name or ticker using the Find field on the toolbar. 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, Stock, 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.

☞ Note: 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.

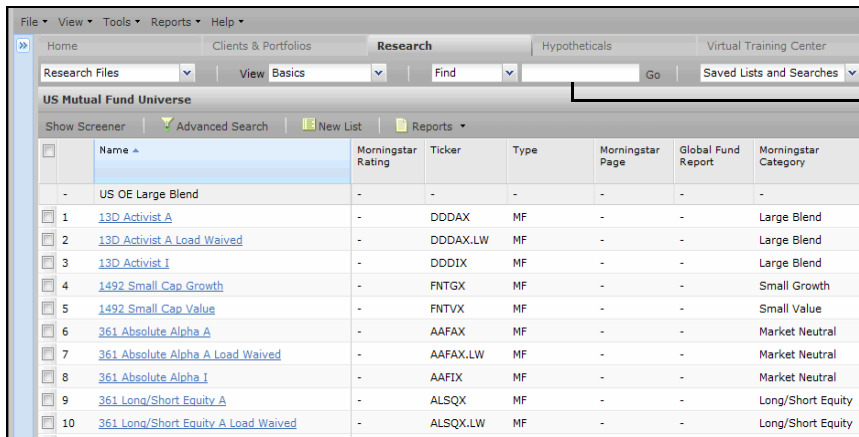
Overview

What are the rules for finding investments by name or ticker symbol?

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?



Enter your search string here

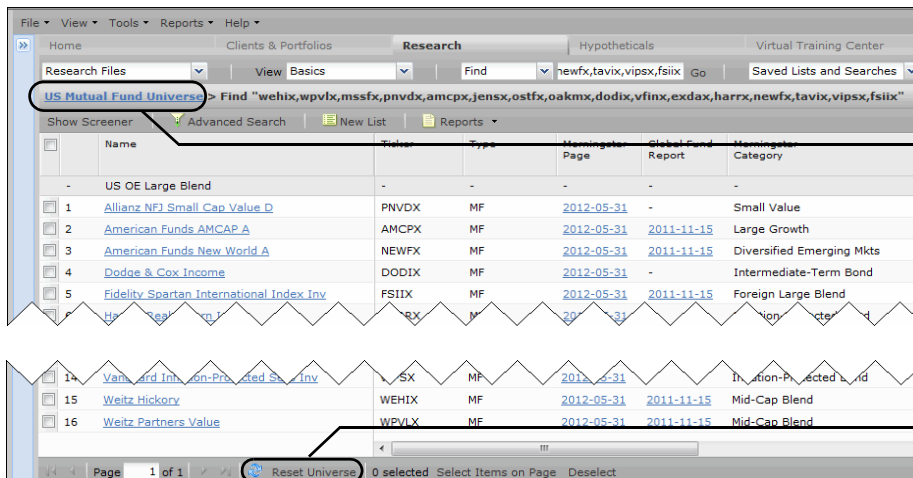
3. Press **<ENTER>**, or click the **Go** button. The results are displayed in the main spreadsheet area.

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

Once you use the Find field, the breadcrumb trail below the toolbar reflects the search filter. If you return to the Find field and enter a new search string, you will be searching within this filter. After running a search, you can reset the spreadsheet view to show all items by doing one of the following:

How do I reset the Research module after a search?

- 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.



Click the name of the universe to reset the spreadsheet

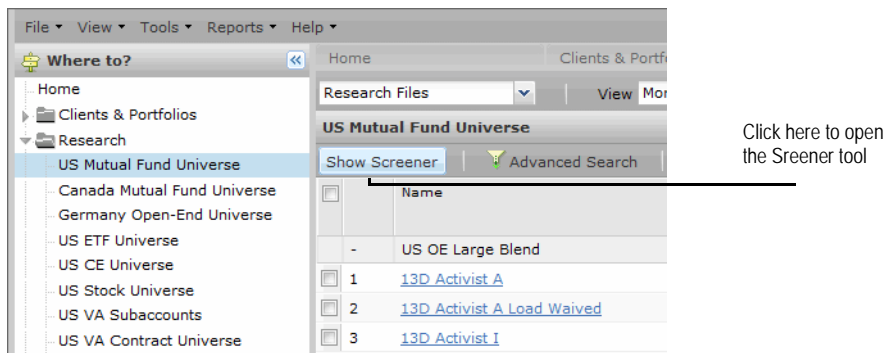
A second option is to click this icon

The Screener tool is available in the following Research Module universes: Mutual Funds, ETFs and Stocks. The Screener tool allows you to search for securities based on pre-defined criteria. The criteria available to you in the Screener tool will vary based on the universe you are in.

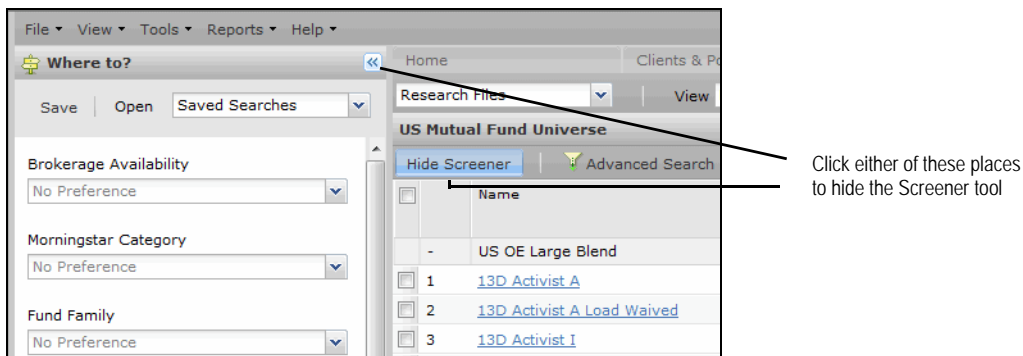
How do I create a search with the Screener tool?

When using multiple criteria in a search, all of them work together to filter the result set in the grid view. The default selection for each criterion is No Preference. If you select certain categories and later want to remove all of them, note that you can simply check the No Preference box again.

The Screener panel itself can be both hidden, and collapsed. To display the Screener tool, click the **Show Screener** icon. You can begin to build your search by selecting options from the criteria available.

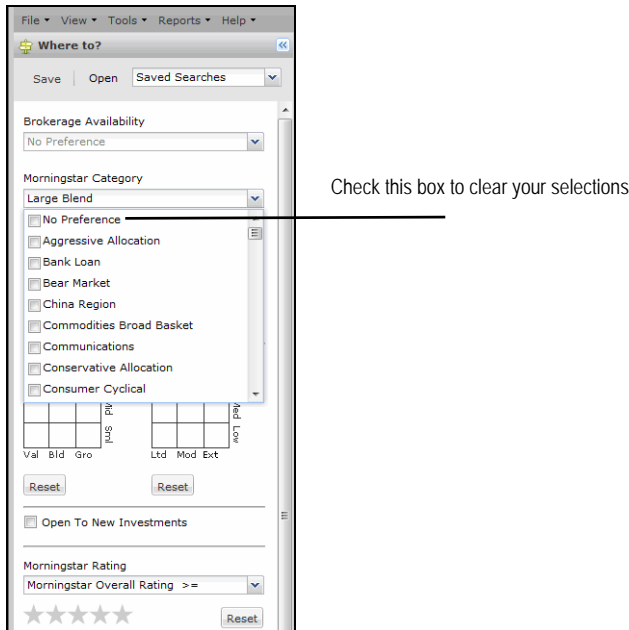


To collapse the Screener panel, click the **double-arrow** icon at the top of the panel. To hide it altogether, click the **Hide Screener** icon.



The Screener panel immediately appears on the left side of the screen. You can begin to build your search by selecting options from the criteria available.

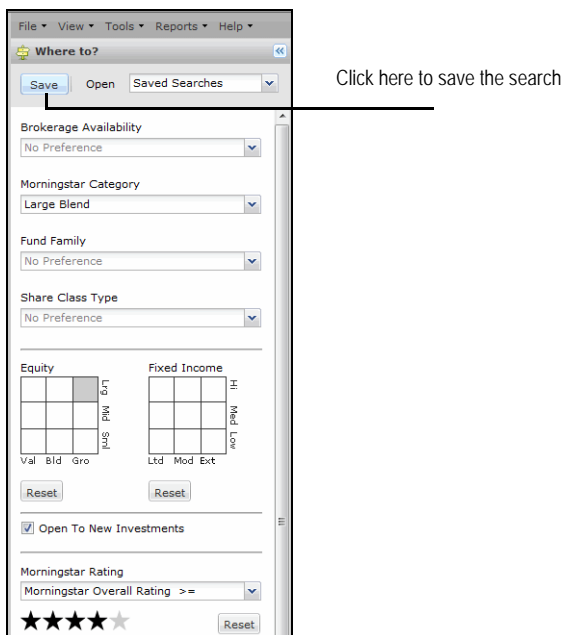
The default selection is No Preference. If you select certain criteria and later want to remove all of them, note that you can simply check the No Preference box again.



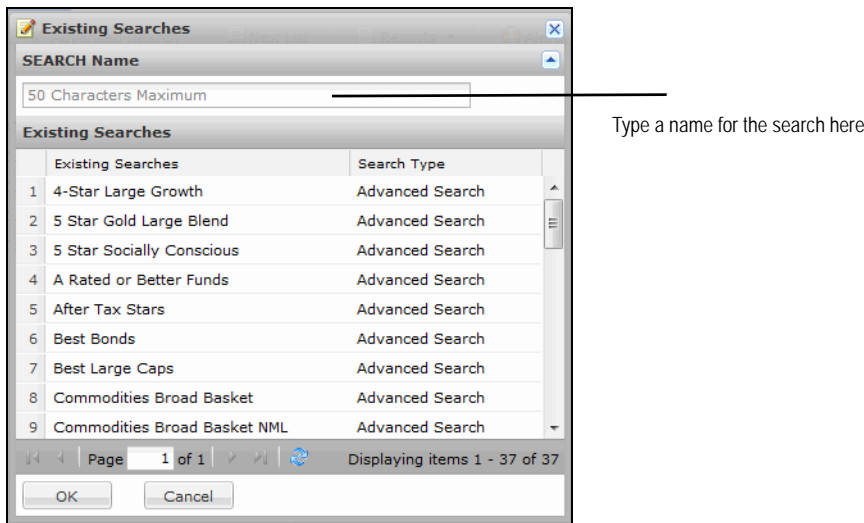
You can save the searches you create in the Screener tool, and retrieve them later from the same area, or by using the Advanced Search dialog box or the Research Searches page. To save a search within Screener, do the following:

How do I save a Screener search?

1. Click **Save** at the top of the Screener panel.



- In the dialog box that appears, type a **name** for the search.



Note: This dialog box shows searches created either in the Screener panel, or in the Advanced Search dialog box.

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

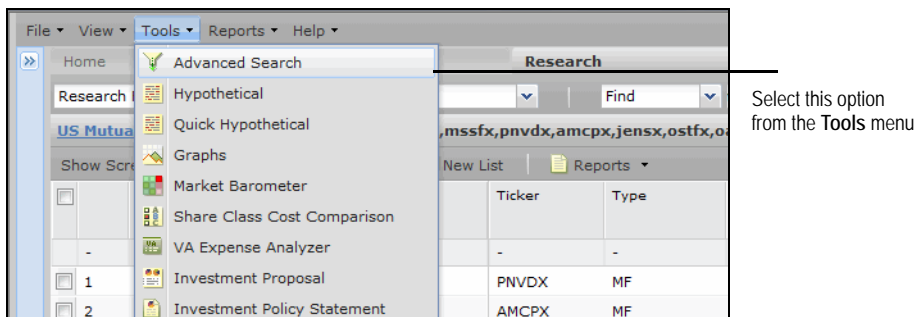
Searches created and saved in the Screener tool can be accessed from the Research Searches page or opened in the Advanced Search dialog box.

Beyond just the ticker symbol or an investment’s name, one of the most powerful features of Advisor Workstation’s Research module is its ability to sort and search based on hundreds of data fields per investment universe using the Advanced Search dialog box. Further, you can save up to 50 searches using this tool.

How do I create an advanced search?

To create a search using custom criteria, do the following:

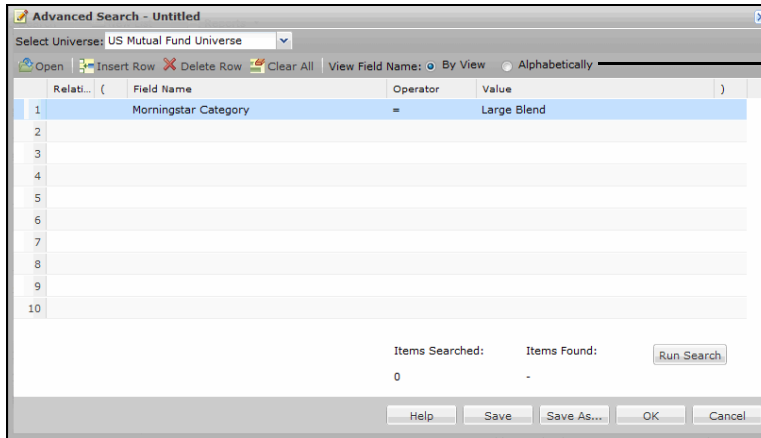
- From the menu bar, select **Tools...Advanced Search**. The Advanced Search dialog box appears.



- 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 change 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.



Select this option to find criteria alphabetically

5. 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 re-select a Field Name, Operator and Value, just change the Operator or Value. |

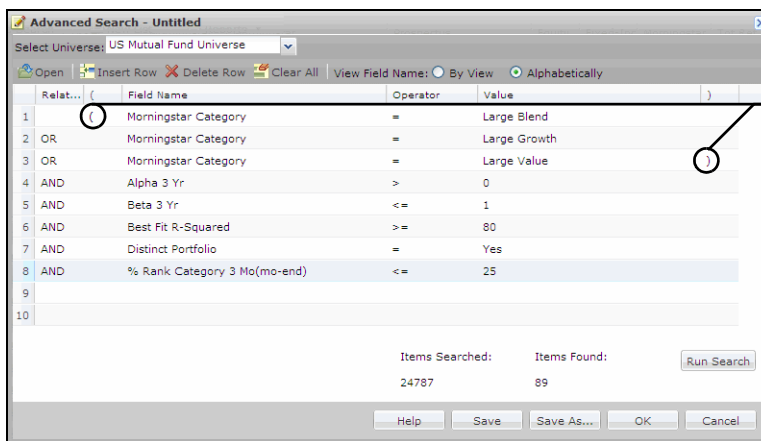
- To see the number of records returned by your criteria, click **Run Search**. You can then modify your criteria to expand or narrow the number of items returned.
- To see the results of your search displayed in the spreadsheet area, click **OK**.

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.



Note the use of parentheses around rows conjoined with an OR relationship

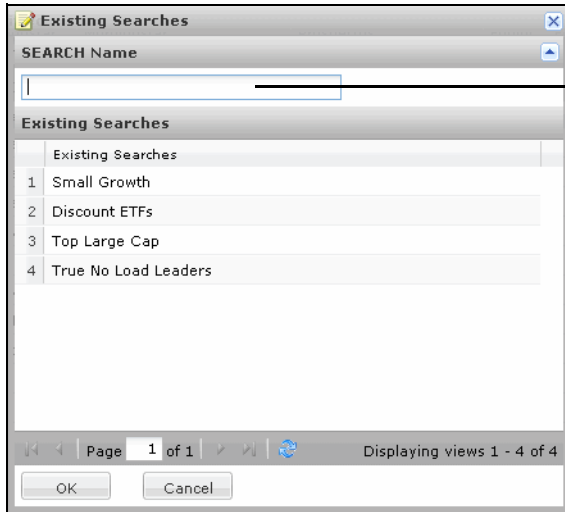
The criteria you enter in the Advanced Search dialog box can be saved for easy retrieval in the future. Each user can save 100 searches.

Saving a search

Note: When you save a search, you are saving only the criteria that comprise the search, and not the results of the search.

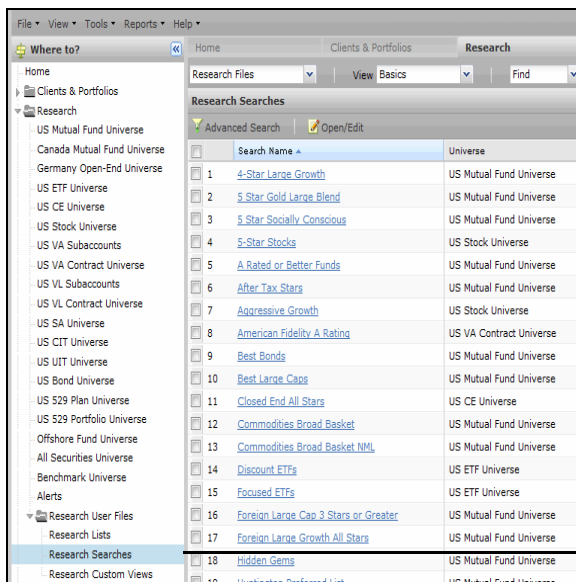
To save a search based on criteria you have entered, do the following:

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.



Type the name for a search here

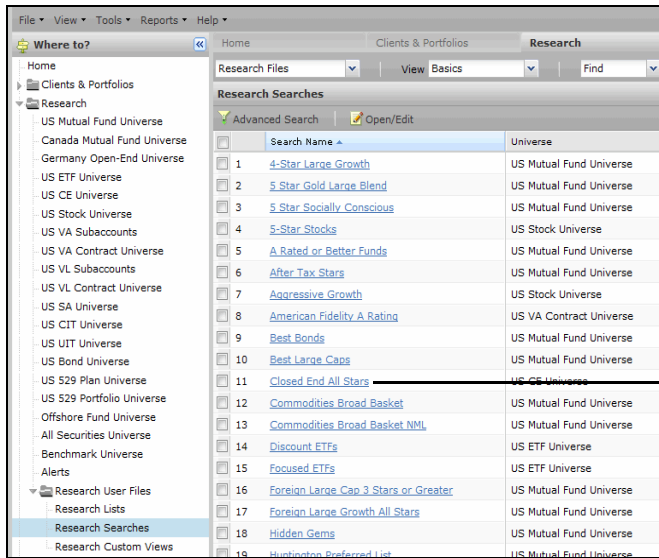
3. Click **OK**. The name of the search now appears in the title bar of the Advanced Search dialog box. You can also find the search on the Research Searches page in the left-hand navigation pane.



You can access all of your saved searches in the Research module from this view

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.

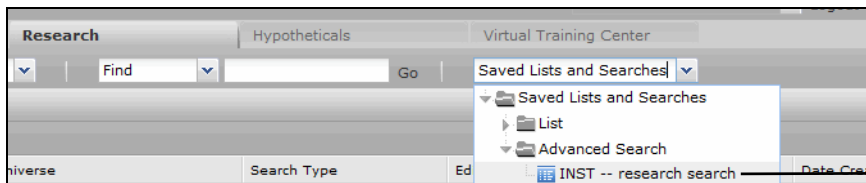
Retrieving a saved search



Click once on the name of a search to be brought to the results in the appropriate data universe

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:

1. 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.
3. Click once on the **name** of the search whose results you want to see in the spreadsheet area.



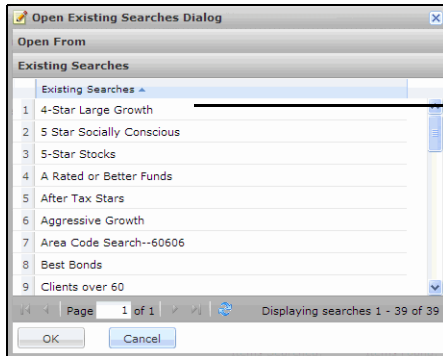
Select the name of the search you want to see from this list

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.

Modifying a saved search

You can also review the criteria for a search from anywhere in Advisor Workstation 2.0, 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.



Select a search from the list, then click **OK** to view the criteria that compose it

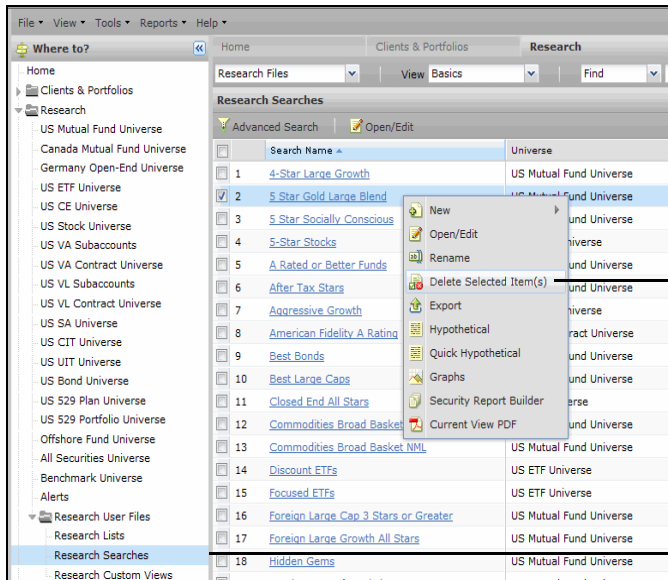
4. Click **OK**. The criteria automatically appear in the Advanced Search dialog box.

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.

Deleting a saved search

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.



Right-click a search, then select Delete Selected Item(s)

Select the Research Searches view from the left-hand navigation pane

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.

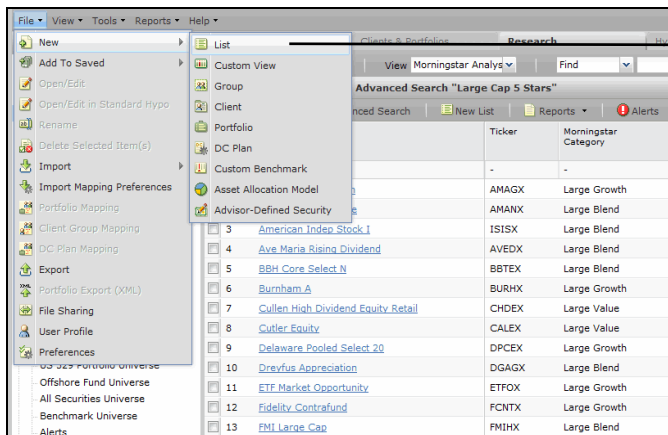
Saved lists can be seen in the Research Lists view, which is available from the left-hand navigation pane. Any item in a spreadsheet can be saved to a list. Therefore, you can actually save a list of lists. For instance, you could save all of your lists related to mutual funds or ETFs to its own list.

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

Before following the steps below, be sure the items you want to save are displayed in the spreadsheet area. To save a list of investments, do the following:

1. 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 non-consecutive items.
2. From the menu bar, select **File...New...List**. The Save as List dialog box appears.



Select this item from the menu

3. Type in a **name** for this list. The name cannot be more than 40 characters long.
4. 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.

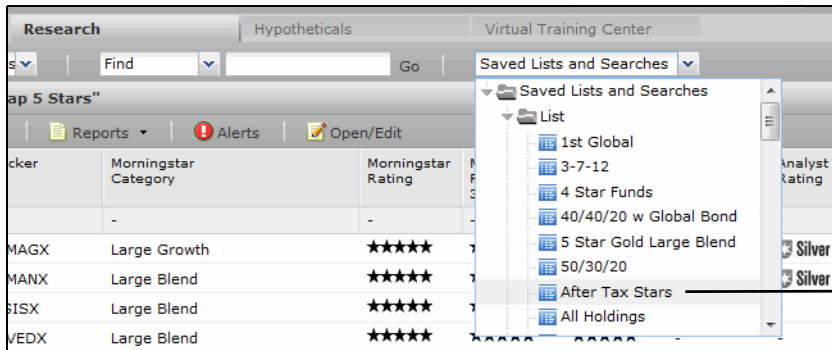
Overview

Saving a list of investments

Once a list is saved, there is only one way to display the list in the spreadsheet area. Do the following from the data universe where you want to see the list:

Retrieving a list

1. 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.



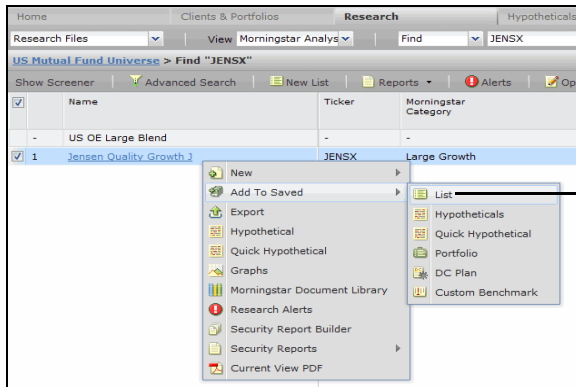
Select the name of the list you want to see from this list

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.

Once a list has been saved, you can add additional items to it, without having to retrieve, recreate and resave the entire list. To add to an existing list, do the following:

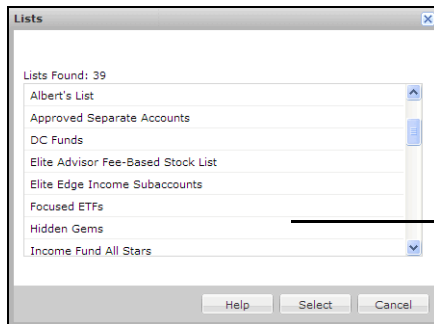
Adding items to a list

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.



Right-click on a highlighted item, then select **Add To Saved...List**

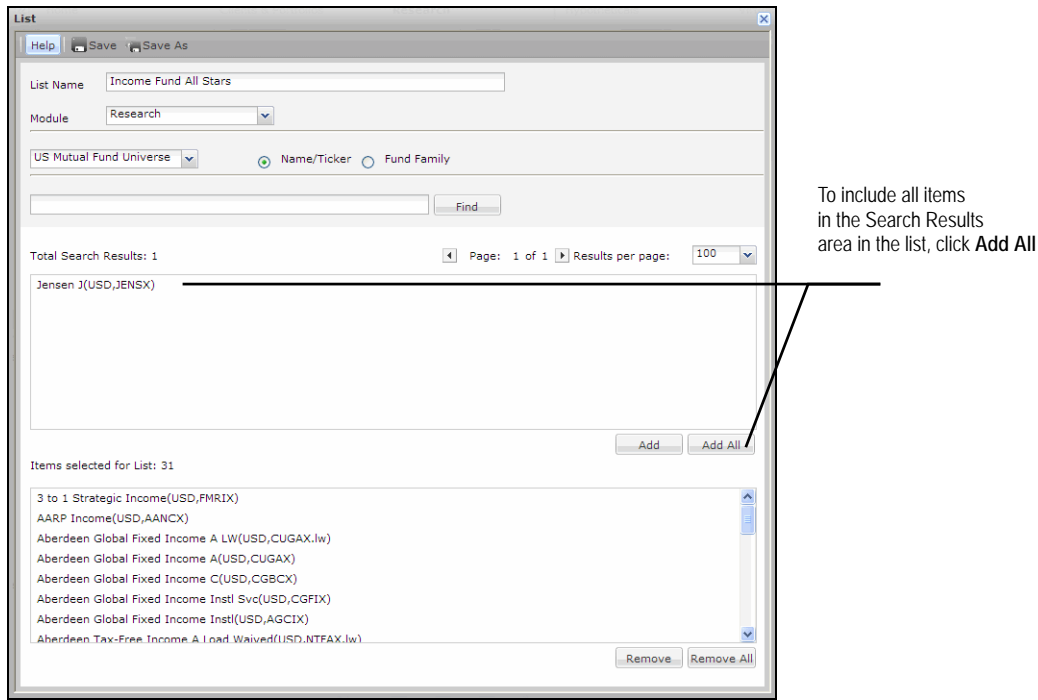
6. Click once on the **name** of the list you want to add the item(s) to, then click **Select**. The List dialog box appears.



Click once to choose the name of the list you want to add the item(s) to

- The items you selected in the spreadsheet view 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 100 items.



- Click **Save**.

☞ You could also click Save As if you wanted to save the items as a new list, while preserving the original list.

- Click the **X** in the upper-right corner of the dialog box to close it.

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

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 view.
3. From the right-click menu, select **Delete Selected Item(s)**.
4. Click **Yes** at the confirmation message.

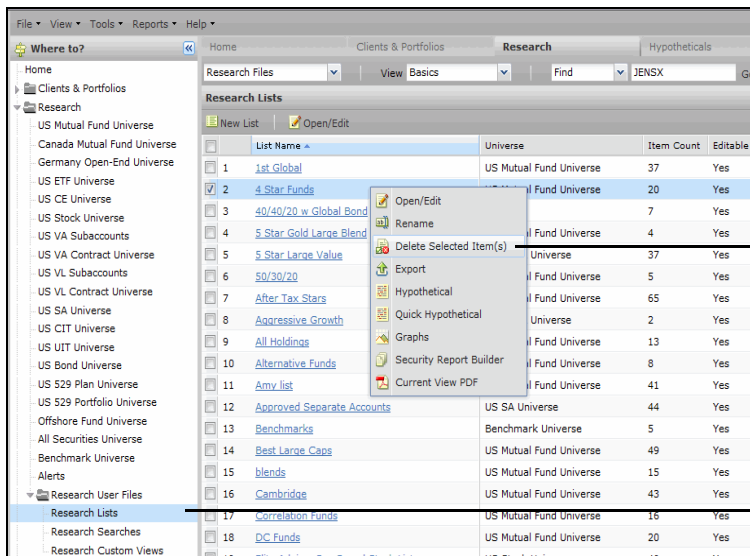
Deleting items from a list

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.

Deleting a list

To delete a search, 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.



Right-click a list, then select **Delete Selected Item(s)**

Select **Research Lists** from the left-hand navigation pane

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 view.

Working with Custom Views in the Research Module

The view you choose in Advisor Workstation's Research module changes the columns you see in the spreadsheet area. A series of pre-defined views can be selected from the View drop-down field on the toolbar (the Basics view appears by default).

- ☞ The data universe (Mutual Fund, Stock, ETF, etc.) you choose determines which views are available to you.

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

- Sort columns in a spreadsheet
- Resize columns in a spreadsheet
- Drag-and-drop columns into place in a spreadsheet
- Save a custom view after dragging and dropping
- Lock columns in place in a spreadsheet
- Create a custom view from scratch
- Set a custom view as the default view for a data universe, and
- Delete a custom view.

Each user can create and save 100 custom views. Each custom view can contain up to 100 columns.

You can sort on any column in a spreadsheet view, but you can sort on only one column at a time.

To sort a column, click once on its **name**. The spreadsheet will re-sort in ascending order. To re-sort the spreadsheet in descending order, click the column header once more.

The column header of the column sorting the spreadsheet is highlighted, and an arrow to the right of the column name indicates the sort order.

Overview

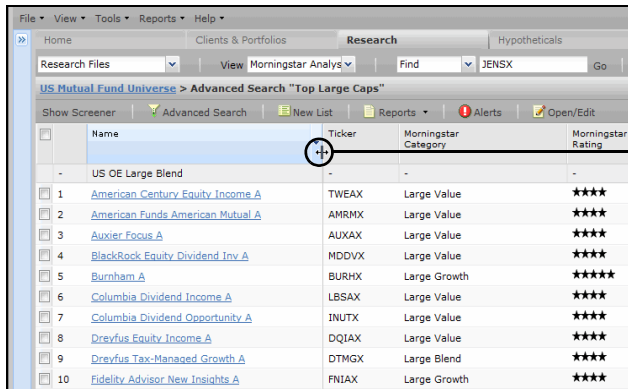
Sorting columns in a spreadsheet

| List Name | Universe | Item Count | Editable |
|------------------------------------|-------------------------|------------|----------|
| 1 Benchmarks | Benchmark Universe | 5 | Yes |
| 2 Hypo video list | Mixed | 5 | Yes |
| 3 IRA Holdings | Mixed | 8 | Yes |
| 4 40/40/20 w Global Bond | Mixed | 7 | Yes |
| 5 User Forum | Mixed | 13 | Yes |
| 6 Top 529 Plans | US 529 Plan Universe | 5 | Yes |
| 7 YTD Top Performers | US ETF Universe | 61 | Yes |
| 8 iShares List | US ETF Universe | 201 | Yes |
| 9 PowerShares List | US ETF Universe | 118 | Yes |
| 10 Focused ETFs | US ETF Universe | 11 | Yes |
| 11 After Tax Stars | US Mutual Fund Universe | 65 | Yes |
| 12 Top 25 Socially Conscious Funds | US Mutual Fund Universe | 25 | Yes |

This view is being sorted by the Universe column, in ascending order

You can change the width of any (or all) column(s) in a spreadsheet. Simply move your mouse cursor over the border between two columns, wait for the cursor to change to a double-headed arrow, then **click and drag** to the desired width.

Resize columns in a spreadsheet

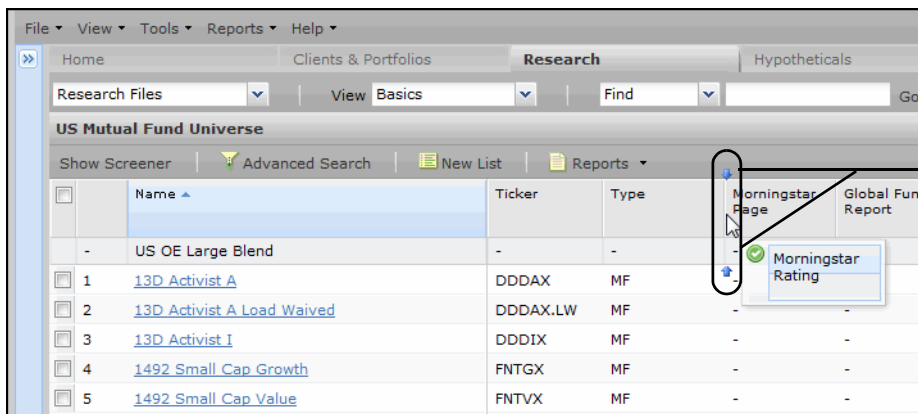


Note how the cursor changes when you move over the border between two columns

The column width (as you change it) cannot be saved; it will reset as soon as you leave the module or reset the universe.

You can create a custom view on the fly by dragging-and-dropping columns into place. Simply left-click and hold on a column's header, then drag it left or right until it appears in the location you want and release the left mouse button.

Dragging-and-dropping columns into place in a spreadsheet



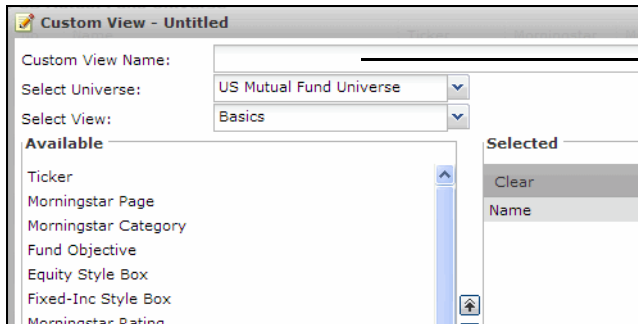
Note the icons pointing to the new location for the Morningstar Rating column as it is dragged to the left and dropped in a new location

After dragging-and-dropping columns into new locations, you must explicitly save such a view if you want to preserve it. Otherwise, as soon as you leave the view, conduct a search or reset the universe, it will automatically reset to its original form.

Once you have dragged-and-dropped columns into place for a custom view, you can save it as a custom view. Do the following:

Saving a custom view after dragging-and-dropping columns

1. From the menu bar, select **View... Save as Custom View**. The Custom View dialog box appears.
2. In the Custom View Name field at the top of the dialog box, enter a **name** for the custom view.
3. Click **Save**.



Type a name for the custom view here

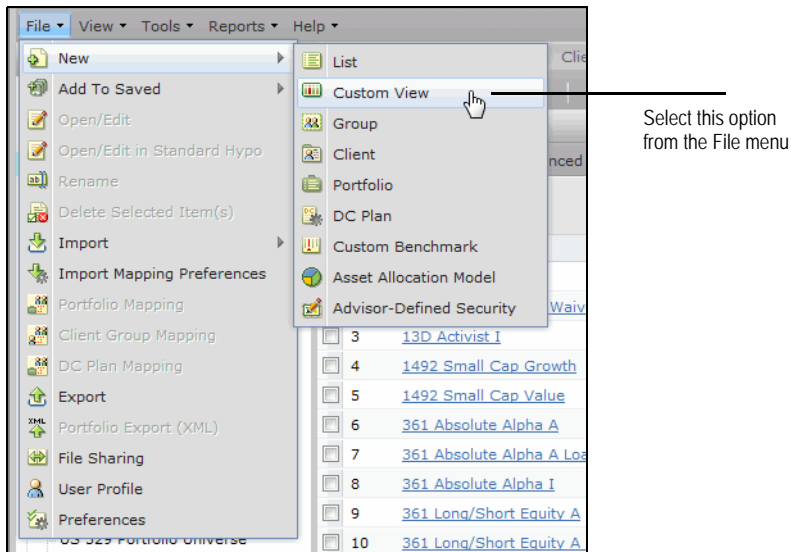
4. Click **Cancel** to close the dialog box. After resetting the universe, you will be able to retrieve this custom view from the View drop-down list above the spreadsheet area.

The limitation of creating a custom view by dragging-and-dropping columns into place is that you can work only with the columns available in the view you are in. You can, however, also create a custom view by using any available data field from a universe. Each user can create up to 100 custom views, with up to 100 columns in each view.

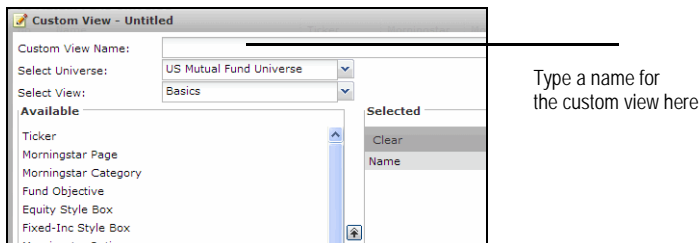
Creating a custom view from scratch

To build a custom view using any column available in a data universe, do the following:

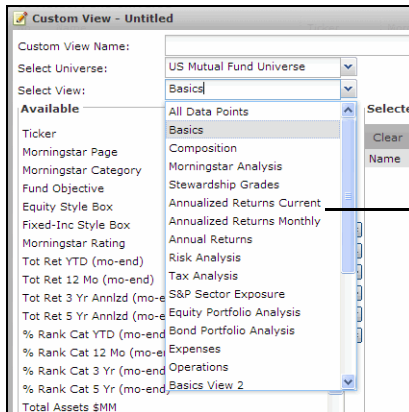
1. From the menu bar, select **File...New...Custom View**. The Custom View dialog box appears.



2. In the Custom View Name field at the top of the dialog box, enter a **name** for the custom view.



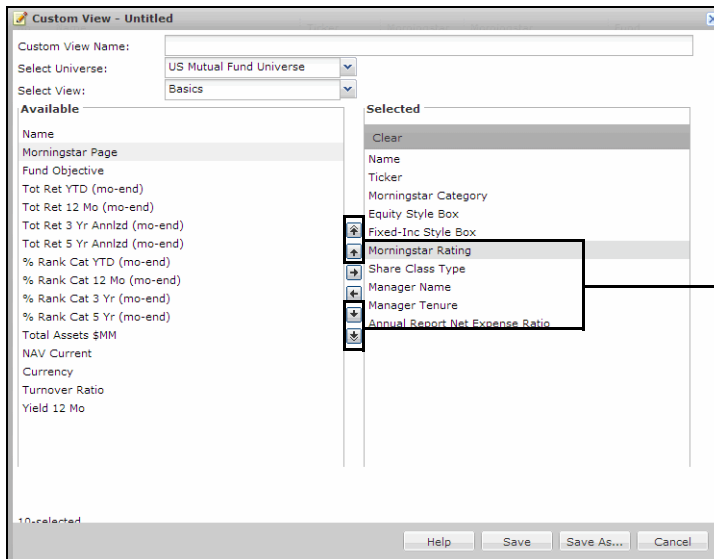
- From the **Select View** drop-down field, choose the **view** whose columns you want to see. To see all data points available for a universe, select **All Data Points** at the top.



Select the name of the view whose data points you want to see from this list

- From the Available area, double-click the **name** of a field you want to include in your custom view.
- Repeat steps 3-4 until all of the fields you want to include are present.
- To change the order in which the fields appear in the Selected area, click once on a **field** and use the **up** and **down arrows**.

☞ The order in which the fields appear from top-to-bottom are the order they will appear from left-to-right in the custom view.




After selecting a field, use these arrows to change a field's position in the custom view

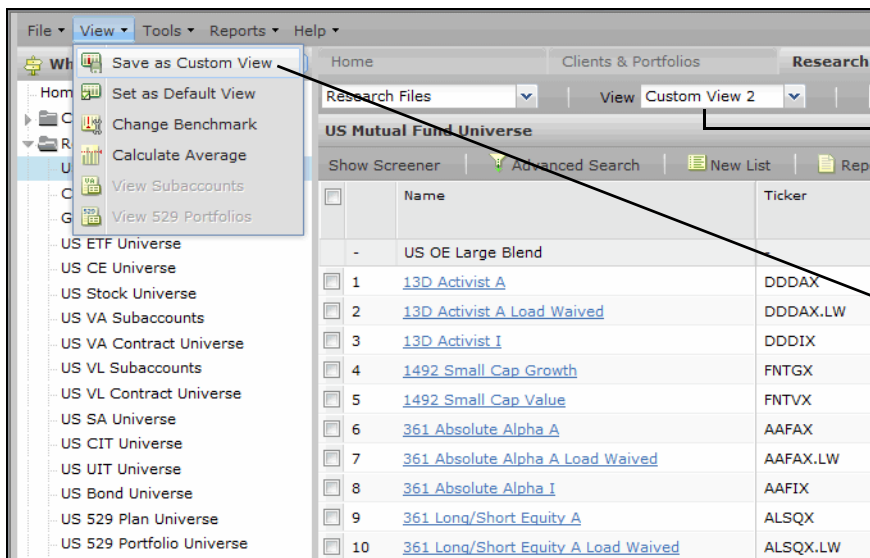
- Click **Save**.
- Click **Cancel** to close the dialog box. After resetting the universe, you will be able to retrieve this custom view from the View drop-down list above the spreadsheet area.

You can use a custom view as the default view for a universe. Once you set a new default view, that view will appear each time you visit the universe, rather than the system-defined default view, such as the Basics view in the US Mutual Fund universe.

Setting a custom view as the default view

 You can also use any other system-defined view as the default view for a universe, using the instructions below.

1. Make sure you are in the data universe where you will set the default view.
2. From the **View** drop-down menu above the spreadsheet area, select the **name** of the view you want to use as the default view.
3. From the **View** menu at the top of the screen, select **Set as Default View**. The current view will now be used as the default view each time you visit the data universe.



The screenshot shows the Morningstar Research Module interface. The 'View' menu is open, displaying options: 'Save as Custom View', 'Set as Default View', 'Change Benchmark', 'Calculate Average', 'View Subaccounts', and 'View 529 Portfolios'. The 'Set as Default View' option is highlighted. The main window displays the 'US Mutual Fund Universe' with a table of securities. The table has columns for 'Name' and 'Ticker'. The current view is 'Custom View 2'. Annotations with arrows point to the 'Set as Default View' option and the 'View' dropdown menu.

| | Name | Ticker |
|----|---|----------|
| - | US OE Large Blend | |
| 1 | 13D Activist A | DDDAX |
| 2 | 13D Activist A Load Waived | DDDAX.LW |
| 3 | 13D Activist I | DDDIX |
| 4 | 1492 Small Cap Growth | FNTGX |
| 5 | 1492 Small Cap Value | FNTVX |
| 6 | 361 Absolute Alpha A | AAFAX |
| 7 | 361 Absolute Alpha A Load Waived | AAFAX.LW |
| 8 | 361 Absolute Alpha I | AAFIX |
| 9 | 361 Long/Short Equity A | ALSQX |
| 10 | 361 Long/Short Equity A Load Waived | ALSQX.LW |

Be sure to select the name of the view you want to use as the default view

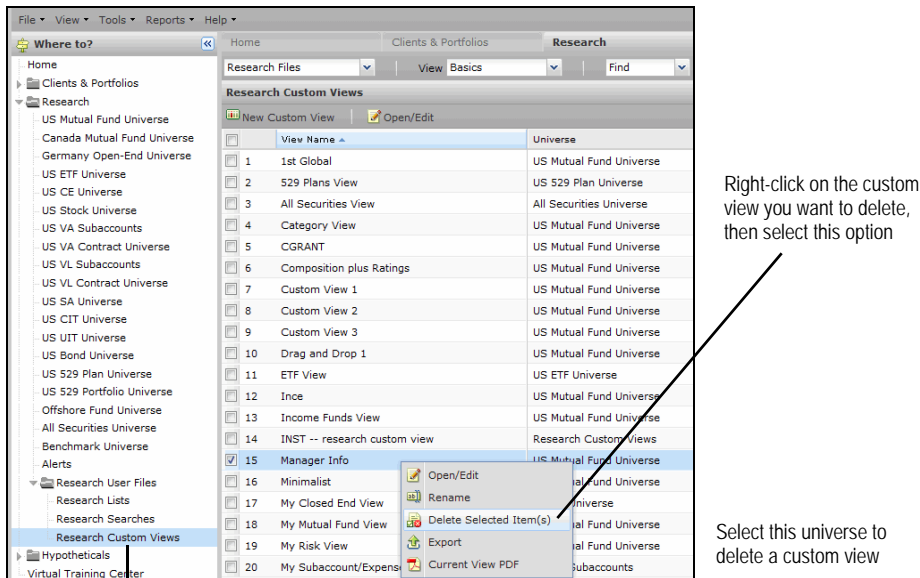
Select this option from the View menu

Because you are limited to saving 100 custom views, you might occasionally need to delete one or more custom views you no longer use or need.

Deleting a custom view

To delete a custom view, do the following:

1. Go to the **Research Custom Views** universe (via the left-hand navigation pane).
2. Right-click on the **name** of the custom view 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 Custom Views view.

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 following graphs are available in Advisor Workstation:

- Rolling Return
- Correlation Matrix
- Risk/Reward Scatterplot
- Investment Growth
- Total Annual Return
- Premium Discount (used only with ETFs and Closed-End Funds)
- Return vs. Category Quartiles

To generate a graph, 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. From the menu bar, select **Tools**, then **Graphs**. The Graphs window appears.
3. Select the **tab** for the graph you want to see.

Overview

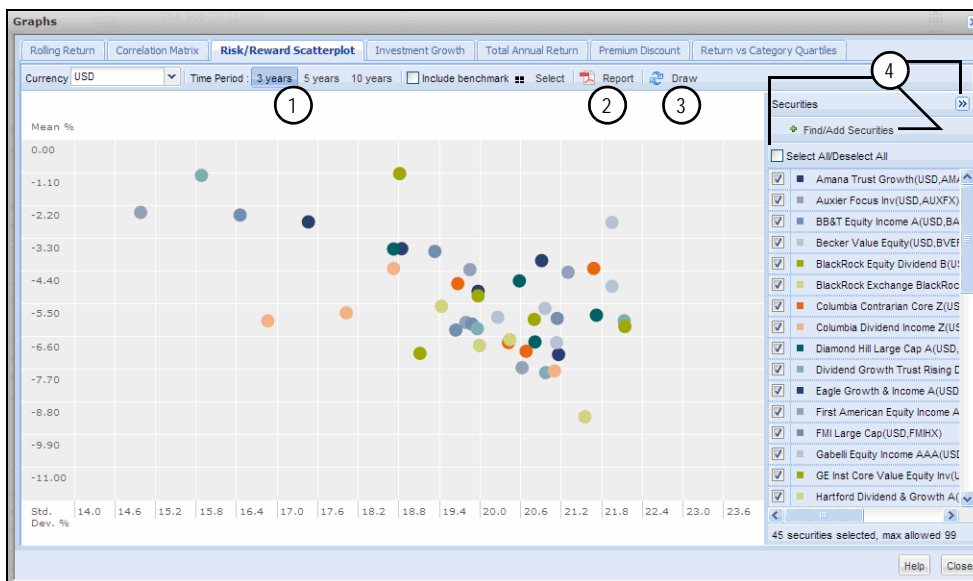
What graphs are available?

How to generate a graph

Certain elements are common to all graphs. 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?

| 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.

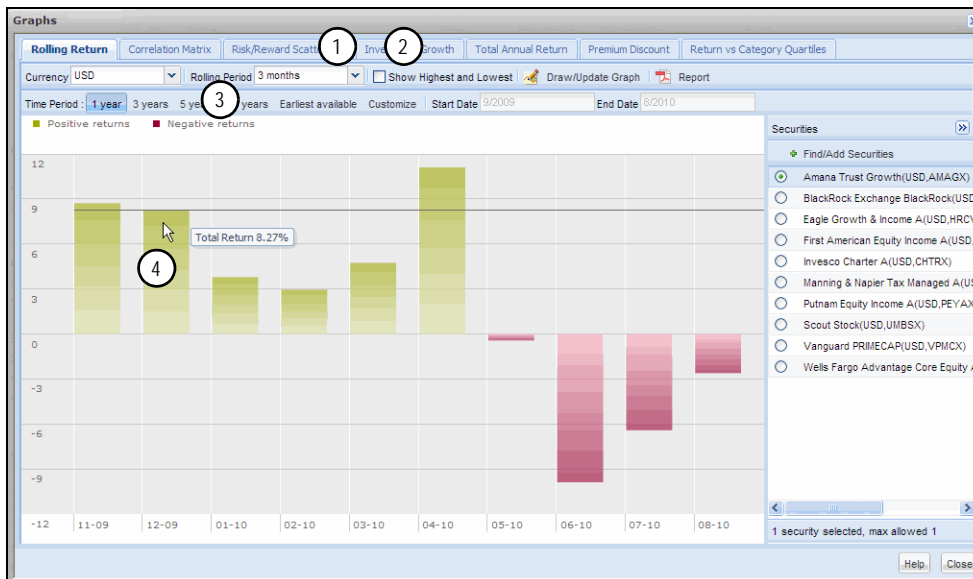
What does the Rolling Return graph show?

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 .



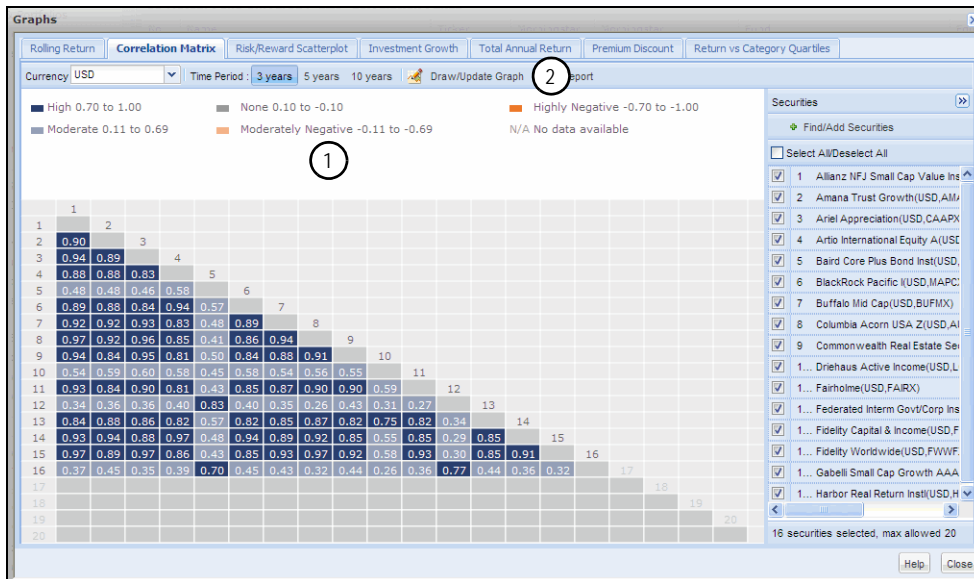
- 1 - Select the rolling return interval from this drop-down field
- 2 - Click the check box to see the highest and lowest returns during the period being graphed
- 3 - Choose the time period to display
- 4 - If you move your mouse over a bar, a tooltip appears to show you the return for that month

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

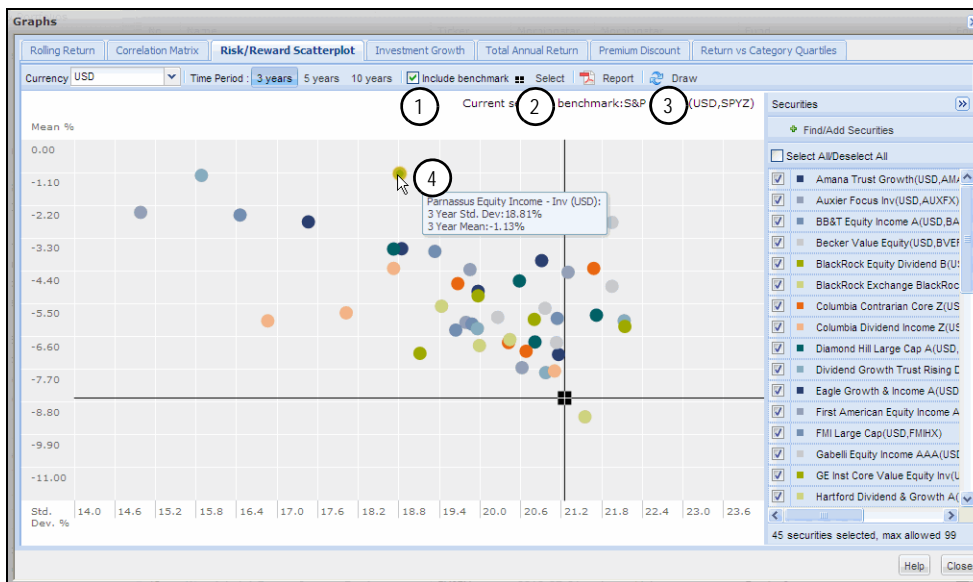
The Risk/Reward Scatterplot allows you to select up to 99 securities at once, to compare performance and risk (standard deviation) over a certain time period. The default time period is the trailing three-year period, but you can change this to either the trailing five-year or 10-year period.

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:

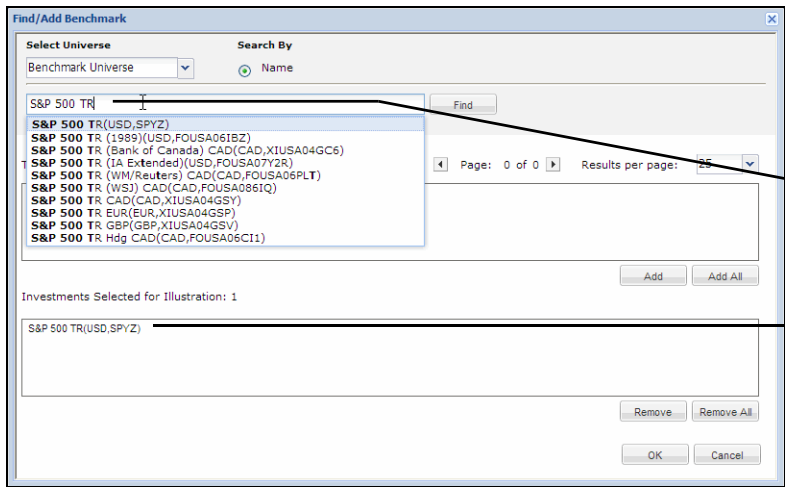
- the name of the investment
- the standard deviation, and
- the return.



- 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**.



As you type a name, the system suggests matching benchmarks

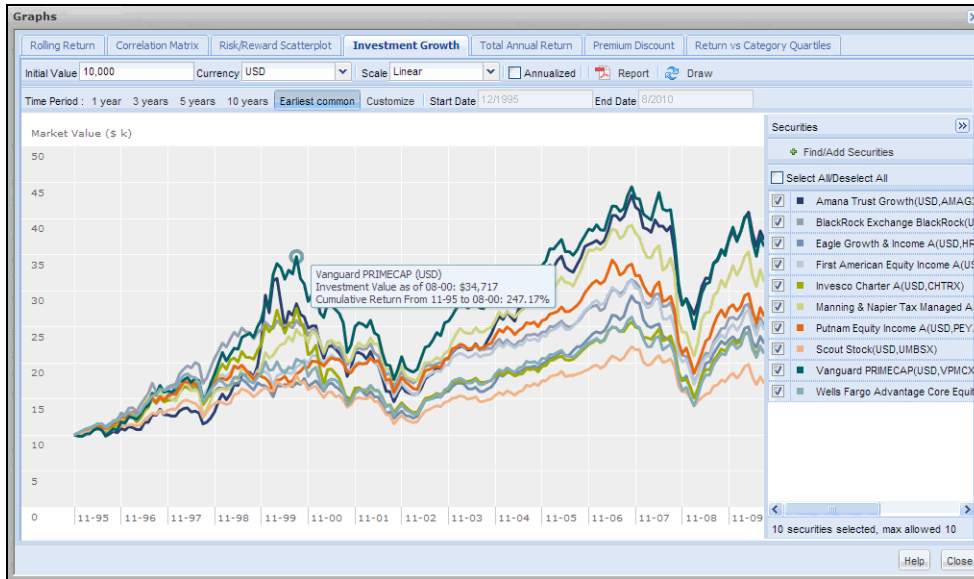
Be sure the benchmark you want to use appears here

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).

What does the Investment Growth graph show?

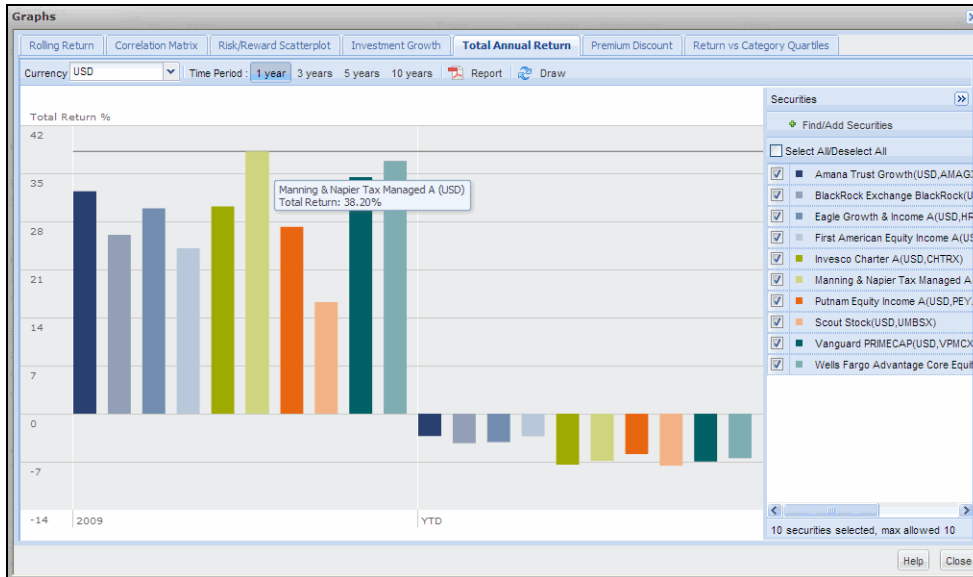
If you move your mouse over a line in the graph, a pop-up message appears showing you the investment value as of the date at that point in the graph's timeline, and the cumulative return percentage as well. You can also elect to show annualized returns on the graph by using the checkbox on the toolbar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



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.

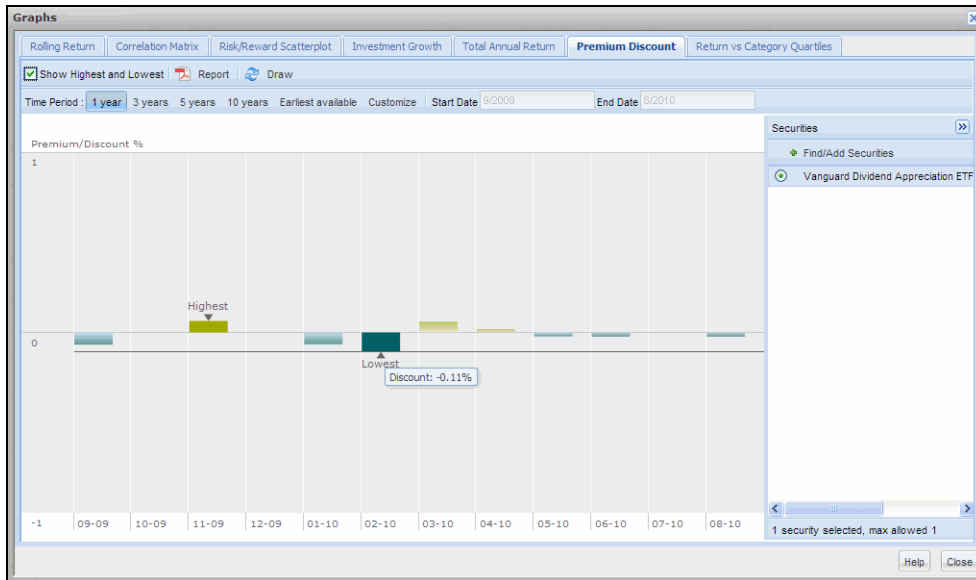
What does the Total Annual Return graph show?

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 the time period you are displaying.

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.)

What does the Return vs. Category Quartiles graph show?

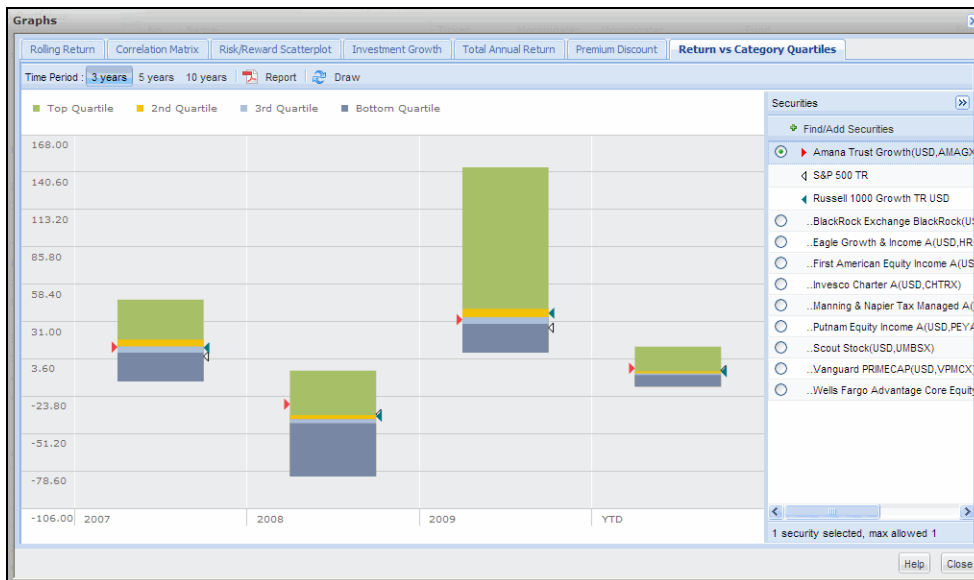
By default, returns for each of the trailing three years is shown (along with YTD information), but you can elect to see returns for the trailing 5- or 10-year periods as well.

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.



Creating Reports from the Research Module

This section explains how to create reports from the Research Module. Note that you do not need to be in the Research Module to create reports for securities. The following options are also available:

Overview

- You can generate a Morningstar Quicktake or an Investment Detail Report (IDR) from the Security Finder widget on the Home Page.
- You can activate the Security Report Builder from the Tools menu when you are in any screen or module in Advisor Workstation.
- When looking at the holdings for a portfolio in the Clients & Portfolios module, you can right-click on the holdings to create any security report.

You can produce the following reports for securities:

- a Current View report, which gives you a PDF output of what you have selected in the spreadsheet view at the time you run the report
- an Investment Detail Report which has been reviewed by FINRA and is available as a PDF
- an HTML Morningstar report (also known as the Quicktake report) with more subjective information about an investment, including an editorial analysis (if available). The Quicktake report has not been reviewed by FINRA for use with clients.
- an Underlying Holdings report (for managed investments), which shows you the securities owned by a fund.
- a Price and Distribution report which provides historical price and distribution data

What reports are available for securities?

See the table below for information about each report.

| Report | Comments |
|-------------------------|--|
| Current View | <p>PDF report that replicates the spreadsheet view. Note the following about this report:</p> <ul style="list-style-type: none"> • 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 appears on one page for an investment |
| Investment Detail | <p>PDF report that is usually NASD compliant. Check both the report's header, and with your compliance department before leaving this report with a client.</p> <p>This report contains the following main sections:</p> <ul style="list-style-type: none"> • Performance • Portfolio Analysis • Fees and Expenses • Risk and Return Profile, and • Operations |
| Morningstar (Quicktake) | <p>HTML report with multi-tab interface. This report is not NASD compliant. Note the following about this report:</p> <ul style="list-style-type: none"> • If you run this report for multiple investments, a drop-down 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. |
| Price and Distribution | <p>PDF report that is usually NASD compliant. Check both the report's header, and with your compliance department before leaving this report with a client.</p> <p>This report contains the following main sections:</p> <ul style="list-style-type: none"> • Historical change in NAV • Historical income and capital gain data |

Tips and Tricks for the Research Module

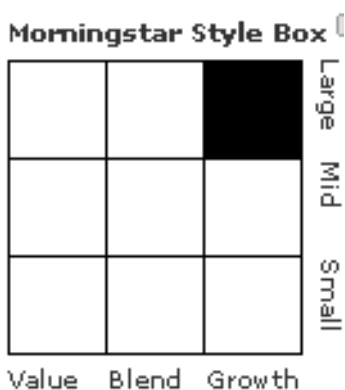
This section will review a number of other tools available to you in the Research module that have not been covered elsewhere. You will learn the following:

- How to interpret Morningstar’s Equity Style Box
- How the Morningstar Category is assigned, and
- What the Ownership Zone can tell you about a fund’s investments.

Overview

Morningstar updated its style box methodology in 2002, to more accurately determine a mutual fund’s true investment style.

Interpreting Morningstar’s Equity Style Box



Note the following about the Equity Style Box:

1. It is an entirely holdings-based calculation derived from a fund’s reported holdings. Although the SEC requires funds to report their holdings annually, nearly 90% do so on a quarterly basis.
2. A fund’s location in the Equity Style Box is based on a uniform calculation across all stocks. Ten data fields are used: five for value, and five for growth.
3. Stocks are broken into three market-cap groups, as shown in the table below.

| Market Cap Size | Description |
|-----------------|---|
| Large Cap | Represent about 70% of US market capitalization; approximately the top 260 companies. |
| Mid Cap | Represent the next 20% of companies, around the next 800 companies. |
| Small Cap | Represent the remaining 10% of companies, approximately the bottom 5000 companies. |

4. Each stock is scored across all 10 factors and ranked on Value, Blend and Growth characteristics, versus their own market cap group.
5. Attributes for mutual funds are asset-weighted to determine its place in the Equity Style Box.
6. The international stocks tracked by Morningstar (approximately 800) are also included in this calculation.

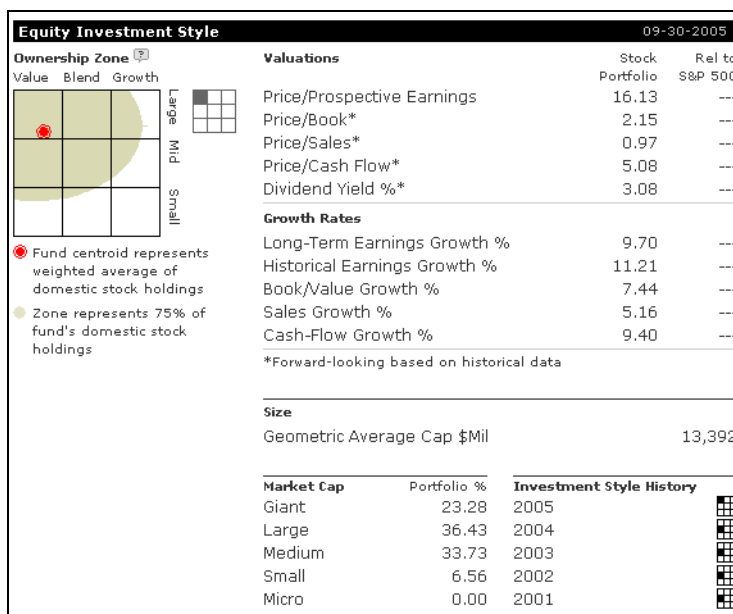
The Morningstar Category is the primary classification for a fund among its peers. It helps determine the risk-adjusted star rating a fund receives.

For domestic equity funds, the Morningstar Category is determined by averaging the trailing 36 months of Equity Style Box values. This could cause a fund to switch both Category and Style Box representation. For example, a fund could be in the Large Growth category, but have a style box of Mid Growth.

Understanding Morningstar's Mutual Fund Categories

The Equity Style Box can cause a mutual fund to appear more style specific than it really is. Due to this, Morningstar developed the Ownership Zone, which can also be used to identify style drift. The Ownership Zone is found in the Morningstar Report (also known as the Quick Take report), and illustrates the top 75% of a fund's underlying holdings, including the fund's centroid.

Interpreting Morningstar's Ownership Zone



Note the change to the fund's Investment Style History here.

In the example above, the fund selected has a Morningstar Category of Mid-Cap Value. However, the Ownership Zone shows that the centroid is actually in the Large-Cap Value zone, and that a great number of other holdings are also in the Large-Cap zone.

In addition, if you examine the Investment Style History in the lower right corner of the screen shot, you can see that this fund has gone from being classified as a Mid-Cap Value fund in 2001-2004 to a Large-Cap Value fund in 2005. So, if you bought this fund in 2002 as a Mid-Cap Value holding for a client, you might want to reconsider whether it is still playing the role you intended for that portfolio.