

Morningstar Direct Training Guide Creating Searches in Morningstar Direct



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Creating Searches in Morningstar DirectSM

What do you do in Morningstar DirectSM when you need to create a set of securities with certain characteristics, such as funds belonging to a specific Morningstar category, or those with an expense ratio below a particular threshold, or stocks in an industry that also have a P/E ratio below a certain number?

The Search function in Morningstar Direct is the solution to this problem. The Search by Criteria window returns a set of investments currently matching whatever criteria you define.

Mote: Prior to using this training guide, you should be familiar with the content in the Quick Start Guide for Morningstar Direct. Also, this guide builds on the exercises offered in Working with Investment Lists in Morningstar Direct.

Overview

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						0.07		2.4	8 39.2	23.96
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If a search returns a set of investments, and a list is also a set of investments in Morningstar Direct, then what is the difference between the two approaches?

A search offers dynamic results each time it is run. For example, if you search for five-star, open-end funds in the Large Value category, you might find 145 funds today, but the specific funds you see could (and likely will) change from month to month (because the Morningstar Rating is updated monthly).

An investment list, however, is static and the items on a list do not change unless you manually add or remove members to/from the list. In other words, you could save the 145 five-star Large Value funds from your search results to a list, and that list will not change unless you add items to it, or remove items from it. To learn more about creating lists, see Working with Investment Lists in Morningstar Direct.

What is the difference between a Search Criteria and an Investment List?

You can create searches (or retrieve saved searches) from the following modules in Morningstar Direct:

How do searches differ in various parts of Morningstar Direct?

- ► Local Databases
- Global Databases
- ► Performance Reporting
- ► Portfolio Management
- ► Portfolio Analysis, and
- ► Workspace.



Which part of Morningstar Direct you create a search from depends, in part, on what you need to search for in order to complete a task. For example, if you need to search among only one type of investment, such as open-end funds for sale in your country, you can create that search from the Local Databases module.

However, if you need to create a search that considers both open-end funds and exchange-traded funds, you could go to the Workspace or Performance Reporting module to complete that search.

Finally, if your ultimate goal is not simply to generate a set of results from a search, but to analyse the results, you would create the search from the Performance Reporting module.

In the exercises that follow, you will see examples of the advantages and possible limitations of a search created in each area of Morningstar Direct.

Working with Simple Searches

In a sense, all searches are created equal. No matter how many criteria you select or how they are ordered in the Search by Criteria window, each search requires you to do the following:

Overview

- ► Select a **field name** (i.e., a data point) to evaluate
- ► Choose an **operator** (=, <, >, etc.) for the field's value, and
- Assign a **value** to the field; this could be a number or a text label.

For example, a very basic search to find funds in the Europe Large-Cap Value Equity funds would use the following criteria (with the Europe/Africa/Asia market classification):

Field Name	Operator	Value
Morningstar Category	=	Europe Large-Cap Value Equity

A search to find funds whose ongoing charge is less than or equal to 1.25% would look use the following criteria:

Field Name	Operator	Value
KIID Ongoing Charge	<=	1.25

In this section, you will practice creating some relatively simple searches, and learn how to save and retrieve the searches you create as well.

In a word, no. While you can use the Search by Criteria window to look for items by name or ISIN code when you know those values, this action takes an extraordinarily long time to complete. The number of clicks involved is not worth the effort.

Instead, create a list of known investments from the Workspace module. For details on how to create lists, please see the Working with Investment Lists in Morningstar Direct document.

Should I create a search to look for investments by name or ISIN code?

When you create a search from the Local Databases module, you are effectively building on a search that already exists. For example, for users in the United Kingdom, when the Open-End Funds page is selected in the Local Databases module and you click the United Kingdom Open-End Funds (AFS) link (see screen shot after step 2 below), you are viewing a search result screening for open-end share classes for sale in the United Kingdom.

In this first exercise, you will look for Europe Large-Cap Value Equity funds. Do the following:

- 1. From the left-hand navigation pane, select the Local Databases module.
- 2. Click the **Open-End Funds** page.
- 3. Click the link for United Kingdom Open-End Funds (AFS). The database opens.
- Mote: the database depends on the Local Country you selected under File > Set User Preferences > Local Country.



4. From the toolbar above the spreadsheet view, click the **Search** icon. The Search by Criteria window opens.

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Category/Sector Avg		2 1	167 Act Fds I	CAV Glb H IncBd	A2 USD	Acc	US Dollar		No	IE00B0	D57ZF67	Altern	ative	1
Closed End Funds		3 1	167 Act Fds I	CAV Glb H IncBd	A3 USD	Inc	US Dollar		No	IE00B0	DHF6445	Altern	ative	1
College Saving Plans		4 1	167 Act Fds I	CAV Glb H IncBd	B1 EUR I	nc	Euro		No	IE00B	D6FLX97	Altern	ative	-
College Saving Portfolios		5 1	167 Act Eds I	CAV Glb H IncBd	B2 EUR /	Acc.	Euro		No	IE00B	D6FLY05	Altern	ative	1
Exchange-Traded Funds		6 1	167 Act Eds I	CAV Glb H IncBd	C1 GBP	Inc	United Kir	nadom.	No	TEOOBI	D6FL 712	Altern	ative	- 1
Hedge Funds	-	7 1	167 Act Edg I	CAV GIB H IncBd	C2 GBP	Acc	United Kir	adom	No	TEOOBI	D6FM039	Altern	ative	
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Exercise 1: Create a search from the Local Databases module

Click this icon to open the Search by Criteria window

5. Click in the **Field Name** cell for the row 1 and select **Morningstar Category**. The Operator cell in the row 1 defaults to =.

		Save As Mar	ееораск			
Rel (Field Name	Operator	Value)	
1	Name				^	
2 3 3 3 4 3 5 3 6 3 7 3 8 3 9 3	Name Base Currency Virtual Class ISIN Global Broad Category Group Global Category Morningstar Category IA Sector Global Investment Fund Sector (GIFS) Investment Area Morningstar Rating Overall					Click to select a fiel
View Field Name: By Category Alphabetically	-Morningstar Analyst Rating -Morningstar Analyst Rating - Process Pillar -Morningstar Analyst Rating - Performance Pill -Morningstar Analyst Rating - People Pillar -Morningstar Analyst Rating - Parent Pillar	ns Searched:	Items Found: -	Run Search		

- 6. Click the **Value** cell in the first row. Note that the categories are listed alphabetically.
- 7. Scroll down and click Europe Large-Cap Value Equity.
- 8. To preview how many investments meet the criterion, click the **Run Search** button.

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9. To view the results of the search in the grid view, click **OK**. In each row, take note of what is shown under the Morningstar Category column, and note the Total: number of investments showing in the bottom-left corner of the grid view.

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Local Databases			Currency			Category Group	Category	Hommigate category		
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College Saving Port	122	AAF-Pzena European Equities I € Acc	Euro	No	100949827314	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity	V-I	
Exchange-Traded Fu		AAF-Pzena European Equities R \$ Acc	US Dollar	No	LU1890/9/886	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity	vai	ue Equity in th
Hedge Funds		AAr-Pzena European Equities R C Acc	Euro	No	101670607495	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity	col	umn
Money Market Fund		AB European Eq Ptr I Acc	Euro US Dallas	No	100128316840	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity	CON	anni
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UK Life and Pension		Allianz Europe Equity Value D ELID	Euro	No	001111120391	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity		
Variable Annuities	1 12	Allianz Europe Equity Value P EUR	Euro	No	1111031026270	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity		
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E Unit Investment Tru	1 18	AXA Recentere Rep-Erup En Alpha & EURAcc	Euro	No	150008365730	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity		
E Private Fund	1 19	AXA Recenters Pan-Erup Eq Alpha A USDAcc	US Dollar	No	1E00B070VS54	Equity	Europe Equity Large Cap	EAA Fund Europe Large Cap Value Equity		
Restricted Investors	20	AXA Rosenberg Pan-Erup Eq Alpha B EURAcc	Furp	No	IE0004346098	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity		
Stocks	L 21	B & G Long Term Value I EUR	Euro	No	LU1266864989	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity		
E Bonds	L 22	B & G Long Term Value B FUB	Euro	No	LU1266865796	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity		
🕨 🖿 Ownership Analysis	L 23	B & G Long Term Value S GBP	United Kingdom.	No	111266866257	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity		
Economics	L 24	B & G Long Term Valuel S EUR	Euro	No	LU1266866091	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity		
Market Indexes	L 25	BGE European Value A2 EUR	United Kingdom.	Yes	100171282212	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity		
	L 26	BGF European Value A2 EUR	US Dollar	Yes	LU0171281750	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity		
	L 27	BGF European Value A2 EUR	Euro	No	LU0072462186	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity		
	L 28	BGF European Value A4 EUR	Euro	No	LU0162690340	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity		
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د >	□ 32	BGF European Value D2	Euro	No	LU0329592454	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity		
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Portfolio Analysis	38	BNP Paribas Europe Value CI D	US Dollar	Yes	LU0177332490	Equity	Europe Equity Large Cap	EAA Fund Europe Large-Cap Value Equity	the	e search
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Workspace	Total: 12	3 Selected: 0								
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				_						

Exercise 2: Save a search

Saving a search precludes you from having to re-enter the criteria again and again for those searches you use frequently. Once saved, a search is found under the Search Criteria folder from the Workspace tab, or you can open it from the Search window itself in other modules. To save a search, do the following:

 You should still be in the Open-End Funds universe, with United Kingdom Open-End Funds (AFS) showing. From the toolbar above the grid view, click the Search icon. The Search by Criteria window opens, and the criteria you entered earlier should still be showing.

Morningstar Direct				
<u>F</u> ile <u>N</u> ew Favorites <u>T</u> oo	ls <u>H</u> elp	Search for In T	his View	▼ Go
Home	Open E	nd Funds United Kingdom O	pen-End Funds	(AFS)
Equity/Credit Research	Action	• View Snapshot	🔹 🔚 Save 🍟	Search 🐺 E
Local Databases		Name	*	Base Currency
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Fund Analysis/News	□ 1	AAF-Pzena European Equities A €	Acc	Euro
Category/Sector Av	2	AAF-Pzena European Equities I \$ A	Acc	US Dollar
Closed End Funds	3	AAF-Pzena European Equities I £ A	Acc	United Kingd
College Saving Plar	□ 4	AAF-Pzena European Equities I € A	Acc	Euro
College Saving Port	5	AAF-Pzena European Equities R \$	Acc	US Dollar
Exchange-Traded FL	□ 6	AAF-Pzena European Equities R € .	Acc	Euro
Money Market Fund	7	AB European Eq Ptf I Acc		Euro
Open End Funds	8	AB European Eq Ptf I Acc		US Dollar
European Pension/L	9	AB European Eq Ptf I Acc		Singapore D
Insurance and Pens	☐ 10	Allianz Europe Equity Value IT EUR	ι	Euro
UK Life and Pension	□ 11	Allianz Europe Equity Value P EUR		Euro
Variable Annuities	□ 12	Allianz Europe Equity Value R EUR		Euro

Click this icon to re-open the Search by Criteria window

2. From the top of the Search by Criteria window, click the **Save As**icon. The **Save As** dialogue box opens.

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He	lp										οκ	Cancel]	

Mote: You could also have clicked Save from the toolbar whilst still in the grid, but the Save As option is only available via the Search by Criteria window displayed above.

3. In the Name field, type Europe Large-Cap Value Equity.

Mave As	×	
Save As		
Name	Europe Large-Cap Value Equity	Enter a name for
Existing Searches		the search here
	OK Cancel Help	

- 4. Click **OK** to close the dialogue box.
- 5. Click **OK** to close the Search by Criteria window. The search you saved can be opened from the Search by Criteria window, or by going to the **Workspace** module and selecting the **My Search Criteria** page.

Creating the search in Exercise 1 changed the data universe (Open-End Funds) you selected when you began the exercise. Now, instead of seeing all Open-End funds, you see only Open-End funds in the Europe Large-Cap Value Equity category. You can reset the universe and return to seeing all Open-End funds with one click.

Exercise 3: Reset a universe after conducting a search

From the toolbar above the spreadsheet view, click the name of the universe, in this case: **United Kingdom Open-End Funds (AFS)**.

[Morningstar Direct				
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Click here to see all investments again in a universe Once saved, a search is found under the My Search Criteria folder in the Workspace module. Alternatively, you can also open a saved search from the Search by Criteria window itself anywhere you can access it in another module, such as the Local Databases module.

Exercise 4: Open a saved search

To open a saved search from the Local Databases module, do the following:

- You should still be in the United Kingdom Open-End Funds (AFS) universe. From the toolbar above the spreadsheet area, click the Search icon. The Search by Criteria window opens.
- 2. Click the **Open** icon. The **Open From** dialogue box opens.

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3. Click Europe Large-Cap Value EQ, then click OK to close the Open From dialogue box.



4. Click **OK** on the Search by Criteria window to execute the search.

To open a saved search from the Workspace module, do the following:

- 1. From the left-hand navigation pane, select the Workspace module.
- 2. Under the Search Criteria folder, select My Search Criteria. If you completed the exercises in the Working with Investment Lists in Morningstar Direct guide, you will see the Europe Large-Cap Value Equity search you created and saved as part of that work. The Europe Large-Cap Value Equity search did not appear in the previous set of steps (where you opened a saved search from the Local Databases module) because the Europe Large-Cap Value Equity search considered both Open-End Funds and Exchange-Traded Funds, and the search in the Local Databases module was looking only for Open-End Funds. Therefore, searches including other investment types cannot be seen when opening a search from the Search by Criteria window in the Local Databases (or Global Databases) module.
- Double-click the Europe Large-Cap Value Equity item to open it (the second one in the screenshot below, with Funds (Open-End and Exchange Traded Funds as universe). Note that the spreadsheet view opens with the results, without first showing the Search window.

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Asset Allocation	□ 2	Europe Large-Cap Value	Equity	Advanced Searc	Julie Petitjean-Freyt	Read/Write	07/01/2020	Funds (Open End and Exchange Traded Funds
Portfolio Management								
Portfolio Analysis								
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Presentation Studio								
Risk Model Analysis								
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My Lists								
My Search Criteria								

Note the location where you can find saved searches in Direct So far, the exercises you have completed have dealt with a search that looked for one criterion only: Europe Large-Cap Value Equity funds. In practice, your searches will almost always contain multiple criteria, so let's explore adding criteria to a search.

When you ran the search for Europe Large-Cap Value Equity funds in Exercise 1, you may have noticed that multiple instances of funds appeared in the results, rather than just a single instance of each fund. To see only one instance of a fund, you have a few options. For instance, you could ask to see only a certain share class of a fund, such as the oldest share class.

For this, we can use a criterion called **Oldest Share Class**. This finds only the original share class for each fund included in a search. You will open the search you saved in Exercise 2 and build on it.

Do the following:

- Select the Local Databases module and open the United Kingdom Open-End Funds universe. From the toolbar above the spreadsheet area, click the Search icon. The Search window opens.
- 2. Click the **Open** icon. The **Open From** dialogue box opens.

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Exercise 5: Create a simple search with multiple criteria

3. Click Europe Large-Cap Value Equity, then click OK to close the Open From dialogue box.



- 4. In the Search by Criteria window, click RunSearch, and take note of the number of items found.
- 5. Click in the Field Name cell for the second row, and scroll down until you can select Oldest Share Class. The Operator cell in the row 2 defaults to =.
- Ŧ Note: As soon as you clicked in the Field Name cell for row 2, the word "And" appeared in the Rel(ationship) column. This means both of these criteria (in rows 1 and 2) must be true in order for a fund to be returned by the search. Also, rather than scrolling down to find a criterion, you could also have typed the word **Old**, and the cursor would jump to find Oldest Share Class.
- 6. Click in the Value cell for row 2 and select Yes.

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values fields

7. Click **Run Search** again and note the number of funds that are now found.

- You now have two criteria in your search for Europe Large-Cap Value Equity funds. You can re-save the search to reflect this change. Click the Save As icon. The Save As dialogue box opens.
- 9. Under the Existing Searches area, **double-click Europe Large-Cap Value Equity**; this populates its value in the **Name** field.

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Save As			
Name	Europe Large-Cap Value EQ		
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		Double-click t name of an ex search to over that item with current conter in the Search by Criteria wit	he disting rride i the nt ndow
	OK Cancel Help	>	

- 10. Click **OK**.
- 11. When the overwrite confirmation message opens, click **OK**. Keep the Search by Criteria window open for the next exercise.

By default, the Search by Criteria window shows you available search criteria by grouping fields into categories. These categories are identical to the pre-built views available in the Local Databases grid view. If you know which category (or view) a field appears in, it is easy to find that field when you want to include it in a search. Some fields, such as ISIN or Morningstar Rating, appear in more than one search category (and pre-built view).

So far, the two criteria (Morningstar Category and Oldest Share Class) you have used in creating searches have appeared in the default Snapshot category, which is expanded by default when you open the Search by Criteria window. In fact, you might not have even realised the fields were grouped by category in the Search by Criteria window. Seeing fields by category is the default setting when working with the Search by Criteria window.

Exercise 6: Expand your search to another category



While seeing the Snapshot category expanded by default is convenient for selecting the most popular fields you may be looking for (which is the intent of the Snapshot view/category), this category does not allow you to access all of the criteria you might need for every search. For example, what if you want to eliminate any funds from your search where the ongoing charges are too high?

To find funds with a lower ongoing charge, do the following:

- You should have the Search by Criteria window open, with the criteria from the Europe Large-Cap Value Equity search still displayed. (If not, open the saved search now, or open the Search from Workspace > My Search Criteria > double-click on Europe Large-Cap Value EQ (the Open-End Universe) > click Search.)
- 2. In row 3, click in the Field Name cell.
- Mote: Again, the word "And" appears in the Rel column for row 3.
- 3. Scroll up to the top of the Field Name list and collapse the Snapshot category by clicking once on the icon to the left of its name.

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4. Click the icon to the left of the **Operations** category to expand it.

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4			Operations									
5			Name									
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7			-Firm Street Address									
8			-Firm City									
9Firm State or Province												
10			Firm Country									

Click the icon to the left of Operations to expand the category

ory

5. Scroll down in the Operations category and click Management Fee.



- 6. In the **Operator** cell for row 3, select =<.
- 7. In the **Value** cell for row 3, type **1.25**.

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- 8. Click **Run Search**. The number of items found now reflects the inclusion of this additional criterion. Because the Rel(ationship) column for all three rows is "And," all three criteria must be true for a fund in order for it to be found by thesearch.
- 9. Re-save the search again to include this latest change. Click the **Save As** icon. The **Save As** dialogue box opens.
- 10. Under the **Existing Searches** area, **double-click Europe Large-Cap Value EQ**; this populates its value in the **Name** field.
- 11. Click **OK** to close the **Save As** dialogue box.
- 12. When the overwrite confirmation message opens, click **OK**. Keep the Search by Criteria window open for the next exercise.

By default, the Search by Criteria window allows you to select criteria based on the category each one is assigned to. This works out fine as long as you know under which category each criterion can be found. What happens when you aren't sure which category to look in for a criterion? Rather than waste a lot of time expanding, scrolling, and collapsing categories as you look for a field, you can instead see all criteria listed alphabetically, regardless of category.

Exercise 7: Look for a field by name

To look for a field by name, do the following:

- 1. The Search by Criteria window should still be open, with the criteria from the Europe Large-Cap Value Equity search still displayed. (If not, open the saved search now.)
- 2. In the bottom-left corner of the Search by Criteria window, select the option for Alphabetically.

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	Rel	(Field Name	Operator	Value)
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3	And		Management Fee	<=	1.25		
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3. In row 4, click in the Field Name cell. All criteria are now listed alphabetically.

Note: Again, the word "And" appears in the Rel column for row 4. P

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3 And	Management Fee	<=
4 And	Management Fee	The fields all ap
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this to see all Type Up. You are moved down in the list of criteria and land on Upside Capture Ratio 1 Yr (Mo-End). Click Upside Capture Ratio 1 Yr (Mo-End).

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3	And		Management Fe	ee			<=	1.25			
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- 5. In the **Operator** cell for row 4, select >=.
- 6. In the **Value** field for row 4, enter **100**. This line now looks for only those funds achieving at least 100% of the upside of the market over the past year.

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	Rel	(Field Name				Operator	Value)		
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2	And			Oldest Share Cl	lass			=	Yes					
3	And			Management Fe	e			<=	1.25				- 1	
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- 7. Click Run Search.
- 8. Click the **Save As** icon. The **Save As** dialogue box opens.
- 9. Under the **Existing Searches** area, **double-click Europe Large-Cap Value EQ**; this populates its value in the **Name** field.
- 10. Click **OK** to close the **Save As** dialogue box.
- 11. When the overwrite confirmation message opens, click **OK**.
- 12. Click **OK** again to exit the Search by Criteria window.

When creating a search to look for only one instance of a fund, you have the following options:

- ▶ You can look for the oldest share class of a fund
- You can look for a specific share class for a fund, such as Institutional or Retail, or
- You can look for the share class for a fund with the lowest management fee.

The first example has already been explored. The second example is achieved simply by selecting the **Institutional** field and choosing the appropriate value (Yes/No). When conducting a search to look for the share class for a fund with the lowest management fee, however, you need to first set the proper user preference from the **File** menu because no field exists to search on called "Lowest Management Fee." Once you set the correct user preference, you can check a special box on the Search by Criteria window to activate it and make it part of a search.

To create a user preference prioritising the cheapest share class of a fund (over other share classes), do the following:

 On the menu bar at the top of the Morningstar Direct window, from the File menu, select Set User Preferences. The Set User Preferences dialogue box opens.

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Exercise 8: Update your user preferences to find the share class with the lowest management fee

- 2. Select the User Defined Primary tab.
- 3. Select the row for **Max Management Fee**, then click the **move to top** button. (The move to top button displays two up arrows.) This ensures this element takes precedence when conducting a search.
- 4. Be sure the word **Lowest** appears in the **Choose** column.
- 5. Select **Institutional** and move it to be in 2nd position.
- 6. Be sure the word **Institutional Preferred** appears in the **Choose** column.

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ser D	efined Primary Criteria					
ftor th	e rules set in the search dialog have been	applied, the criteria below will be	implemented in	ha		
rder ch	osen, to select only one share class per f	fund provided the 'User Defined P	rimary' option is	u ie		
hecked f more	 than one share class shares the selected 	preference for the criteria (e.g. r	more than one sha	re		
lass sh	ares the highest management fee and/or	the oldest inception date) then a	I those share clas	ses		
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Order 1 2 3 4 5 6 7 8	Criteria in order of preference Max Management Fee Institutional Performance Start Date Annual Report Net Expense Ratio Minimum Investment Currency Distribution Status Hedging Policy	Choose Lowest Institutional Preferred Oldest Lowest				Use the arr switch ord

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

In this exercise, you will search for those large growth funds (both open-end funds and ETFs) meeting the following criteria:

- An expense ratio below the category average
- ► Still open to new investors
- An above-average Sharpe Ratio for the trailing five-year period, when compared to their category peers
- ► A Downside Capture Ratio below 100 for the five-year period, and
- ► Have been around for at least five years.

Because you are looking for both open end funds and exchange-traded funds at once, this search should be created from the Workspace module, where you can look across both universes simultaneously. Additionally, you will see the following exercise use a checkbox on the Search by Criteria window that heretofore has not been used.

To create this search in the Workspace module, do the following:

- 1. In Morningstar Direct, select the **Workspace** tab.
- 2. Under the Search Criteria folder, select My Search Criteria.
- 3. From the toolbar above the grid view, select **New > Advanced Search > Funds** (**Open-End and Exchange-Traded Funds**). The Search by Criteria window opens.



Exercise 9: Create a search by criteria in the Workspace module 4. Set your criteria as shown in the following table. At the bottom of the Search by Criteria window, be sure to check the checkbox for **User Defined Primary Class Only**.

Rel	(Field Name	Operator	Value)
		Morningstar Category	=	EAA > Europe Large-Cap Growth Equity	
And		Annual Report Net Expense Ratio	<	CAT AVG	
And		Closed to New Inv	Not=	Yes	
closedA nd		Sharpe Ratio 5 Yr (Mo-End)	>	CAT AVG	
And		Downside Capture Ratio 5 Yr (Mo-End)	<	100	

- Mote: Change this date value to the previous month-end period from five years ago. When using date fields, note that "less than" means "earlier than," while "greater than" means "later than."
- Mote: Since we are using the Share Ratio and Downside Ratio pre-calculated statistics for 5 years, our selection will already reflect funds with a 5-year history; therefore, it is not necessary to add the Inception Date data point backdated to 5 years ago.

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	Rel	(Field Name	Operator	Value)		inputs shown here
1			Morningstar Category	=	Europe Large-Cap Growth Equity		^	
2	And		Annual Report Net Expense Ratio	<	CAT AVG			
3	And		Closed to New Inv	Not=	Yes			
4	And		Sharpe Ratio 5 Yr (Mo-End)	>	CAT AVG			
5	And		Downside Capture Ratio 5 Yr (Mo-End)	<	100			
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- 5. Click **OK**. As you look at the results in the grid view, note that only one instance for each fund is shown, but a variety of share classes are represented.
- 6. You may save the search as Europe Large-Cap Growth Equity OE & ETFs.

A simple search uses the same relationship (namely, "And") between all rows, no matter how many criteria are included in the search. The following are some additional notes to reflect on when creating simple searches:

- Searches can be created in Morningstar Direct from the Local Databases, Global Databases, Workspace, Performance Reporting, and other modules, depending on your needs.
- You can select search criteria fields within a pre-built category, or by seeing them listed alphabetically.
- When looking for a field alphabetically, you can type the beginning of its name to jump to that spot in the list.
- For fields that take a numeric value, such as Annual Report Net Expense Ratio, you can often enter either a number or opt to compare results to the category average.
- ► Each time you add a criterion to a search, click the Run Search button to ensure you do not end up with 0 results found. If this happens, it indicates a parameter of the search needs to be changed.
- Searches can be saved, to keep you from having to re-enter the same criteria over and over again, but remember that the results you see each time you run a saved search could change.
- Saved searches are found under the Workspace module (on the My Search Criteria page), and these saved search files can be shared with or sent to other Morningstar Direct users, just as you can with lists.
- Use the User Defined Primary preference (available from the File menu) to include in your searches an additional layer to eliminate all but one type of share class.

Final lessons on creating simple searches

Creating Complex Searches

Thus far, the searches you have created have been fairly simple. Although you have looked for multiple criteria, all of the rows are linked by the "And" relationship. At times, you may need to create a more sophisticated search where the relationship between rows is more complicated and you need to leverage additional capabilities of the Search by Criteria window.

This section covers the following topics:

- Using parentheses within the Search by Criteria window to create complex searches
- ▶ Inserting additional rows into an existing search, and
- Monitoring the relationship between rows as you build a complex search.

The search you have created so far searches the Europe Large-Cap Value Equity category for the oldest share class of open-end funds with a management fee below 1.25% and have a 1-year upside capture ratio of at least 100%. What if you want to see funds matching these criteria, not just in the Europe Large-Cap Value Equity category, but also in the Large Blend and Large Growth categories? You can do this by building on the search you have saved, rather than creating three separate searches.

Exercise 10: Create a search across multiple Morningstar categories

Do the following:

- 1. From the left-hand navigation pane, select the Workspace module.
- 2. Go to My Search Criteria and open the Europe Large-Cap Value EQ search (the Open-End universe) you created.
- 3. From the toolbar above the spreadsheet view, click the **Search** icon. The Search by Criteria window opens.

M M	orningst	tar Direc	t United Kingdo	om Open-End Fur	nds (AFS)			_	\Box \times	
ø	pen]+= Ins	ert 🗙 Delete	Clear All	🟦 Export + 🚦	PDF 🔤 Save As	s 🔤 Feedback			
	Rel	(Field Name			Operator	Value)	
1			Morningstar Ca	tegory		=	Europe Large-C	Cap Value Equity		^
2	And		Oldest Share C	lass		=	Yes			
3	And		Management Fe	e		<=	1.25			
4	And		Upside Capture	Ratio 1 Yr (Mo-	End)	>=	100			
5										
6										
7										
8										
9										
10										~
View	Field Na	me:	Include:			Items Searched	l: Items Found:	Run Searc	h	
🔘 Ву	Categor	ry	Only Su	rviving Investm	ents	0	-			
	habetica	ally	User De	efined Primary C	lass Only					
L.	le.							OK	Cancel	
ne ne	mμ							UK	Cancel	

Overview

4. You are going to insert a new row. An insertion always goes above the row you select. To insert a row between rows 1 and 2, select the **checkbox** to the left of row 2.

M	lornings	star l	Direc	t United Kingdo	m Open-End Fur	nds (AFS)					-		×	(1
i 🎓 o	pen	}=	Inse	ert 🗙 Delete	🚅 Clear All	🟦 Export -	PDF	Save As	🖾 Feedback						
	Rel		(Field Name				Operator	Value)		
1				Morningstar Cat	tegory			=	Europe I	Large-Cap Va	lue Equity			^	
✓ 2	And			Oldest Share Cl	ass			=	Yes						Check the hox
3	And			Management Fe	e			<=	1.25						below the row
4	And			Upside Capture	Ratio 1 Yr (Mo-	End)		>=	100						where you want
5															to insert a row
6															
7															
8															
9															
10														\mathbf{v}	
View	Field N	ame		Include:			Ite	ms Searched:	Items F	Found:	Run Sea	irch			
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5. From the toolbar, click the **Insert** icon. A blank row is inserted between rows 1 and 2.

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6	pen	}=Inse	ert 🗙 Delete 🛛 🚽 Clear All 🛛 🟦 Export 🕶 🔼 PDF	Save As	🖬 Feedback			Click this icon to
	Rel	(Field Name	Operator	Value)	insert a new row
\square 1			Morningstar Category	=	Europe Large-Cap Value Eq	uity	^	highlighted row
3	And		Oldest Share Class	=	Yes			
4	And		Management Fee	<=	1.25			
5	And		Upside Capture Ratio 1 Yr (Mo-End)	> =	100			
6								
7								
8								
9								
10							~	
View	Field Na	ame:	Include: It	ems Searched:	Items Found:	Run Search		
By	Catego	ry	Only Surviving Investments 0		-			
	phabetic	ally	User Defined Primary Class Only					
H	elp					ОКС	ancel	

6. In new row (2), click the **Rel** column, then select **Repeat**. The data from the row above is copied into row 2.

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i 🍙	pen _	+= Ins	ert 🗙 Delete 👖	Clear All	🟦 Export 🔹 📐	PDF	Save As	🖾 Feedback					
	Rel	(Field Name				Operator	Value)	
1			Morningstar Categ	gory			=	Europe Large	e-Cap Val	ue Equity		^	
2	And												
<mark>∠</mark> 3	And	1	Oldest Share Clas	s			=	Yes					
4	Or		Management Fee				<=	1.25					01
5	кереат		Upside Capture Ra	atio 1 Yr (Mo-	End)		>=	100					Choosing
6													Repeat copies
7													the content from
8													the row above
9													
10												~	
View	Field Nar	ne:	Include:			Iten	ns Searched:	Items Foun	id:	Run Sear	ch		
🔘 Ву	Category	,	Only Survi	iving Investm	ents	0		-					
	habetica	lly	User Defin	ned Primary C	lass Only								
He	alo									ок	Car	ncel	
										UN			
													1

 The Field Name and Operator cells for row 2 should stay the same. Click the Value cell for row 2 and select Europe Large-Cap Blend Equity (expand the Europe/Africa/ Asia section first).

M	lorningsta	r Dire	t United Kingdom Open-End Funds (AFS)		– 🗆 X
B	pen]	= Ins	ert 🗙 Delete 🖙 Clear All 🟦 Export 🕶 🖪 PE	DF 🔤 Save As 🔤	Eedback
	Rel	(Field Name	Operator	Value)
1			Morningstar Category	=	Europe Large-Cap Value Equity
2	Or		Morningstar Category	=	Europe Large-Cap Blend Equity
√ 3	And		Oldest Share Class	=	-Europe Large-Cap Blend Equity
4	And		Management Fee	<=	Europe Large-Cap Growth Equity
5	And		Upside Capture Ratio 1 Yr (Mo-End)	>=	Europe Large-Cap Value Equity When a row
					Europe Mid-Cap Equity
					Eurozone Elex-Can Equity
					Eurozone Large-Cap Equity
					Eurozone Mid-Cap Equity
					-Eurozone Small-Cap Equity
					Finland Equity
View	Field Nam	ie:	Include:	Items Searched:	Fixed Term Bond
🖲 Ву	Category		Only Surviving Investments	0	France Equity
	phabetical	ly	User Defined Primary Class Only		French PEA Eonia SWAP
					GBP Adventurous Allocation
					GBP Cautious Allocation
He	elp				GBP Corporate Bond
					GBP Diversified Bond
L					

- 8. Repeat steps 6–10 to insert another new row for Europe Large-Cap Growth Equity funds.
- 9. Click **Run Search**. The number of funds returned seems unexpectedly high. This indicates that you need to encapsulate the first three lines of the search in parentheses, to tell the system to consider them as one object. Otherwise, the system thinks you are looking for any Europe Large-Cap Value Equity fund, or any Europe Large-Cap Blend Equity fund, or the oldest share class of Europe Large-Cap Growth Equity funds with an ongoing charge below 2% with an upside capture ratio of at least 100%.

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	Rel	(Field Name	Operator	Value)	
1			Morningstar Category	=	Europe Large-Cap Value Equity	^	
2	Or		Morningstar Category	=	Europe Large-Cap Blend Equity		
3	Or		Morningstar Category	=	Europe Large-Cap Growth Equity		
✓ 4	And		Oldest Share Class	=	Yes		This number is
5	And		Management Fee	<=	1.25		far higher than
6	And		Upside Capture Ratio 1 Yr (Mo-End)	>=	100		what you should
7							expect to see
8							for what you
9							are looking for
10						~	
View I	Field Nam	e:	Include: Iten	ns Searched:	Items Found: Run Search		
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() Alp	habetical	у	User Defined Primary Class Only				
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10. In the (cell of row 1, type (.

11. In the) cell of row 3, type).

Morningstar Direct United Kingdom Open-End Funds (AFS) X														
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	Rel	(Field Name				Operator	Value)		
1		(Morningstar Cat	egory			=	Europe	Large-Cap V	Value Equity			^	Note the
2	Or		Morningstar Cat	egory			=	Europe	Large-Cap B	Blend Equity			-	inclusion of
3	Or		Morningstar Cat	egory			=	Europe	Large-Cap G	Frowth Equity)		parentheses
✓ 4	And		Oldest Share Cla	ass			=	Yes						
5	And		Management Fe	e			<=	1.25						
6	And		Upside Capture	Ratio 1 Yr (Mo-	-End)		>=	100						
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View	Field Nar	ne:	Include:			Ite	ems Searched:	Items	Found:	Run	Search			
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He	łp									O	K C	ancel	1	

- 12. Click **Run Search**. Note the much lower number of funds returned.
- 13. Save this search as a new item. Click the **Save As** icon.
- 14. In the Name field, type Open-End Large Cap Funds.

M Save As	×	
Save As		
Name	Open-End Large Cap Funds	Note the name for the new search
Existing Searches	Europe Large-Cap Value EQ	
	OK Cancel Help	

15. Click **OK** to close the **Save As** dialogue box.

16. Click **OK** to close the Search by Criteria window.

In the last exercise, you saw how to use a set of parentheses to encapsulate a single set of criteria. What if you need to look for two separate sets of data at once? For example, imagine you have been asked to find value-oriented funds with a P/E ratio of no more than 17, and growth-oriented funds that have a P/E ratio of at least 17? This type of search requires multiple instances of parentheses. To create two searches at once, do the following:

1. From the left-hand navigation pane, click the **Workspace** module.

- 2. Under the Search Criteria folder, select My Search Criteria.
- 3. From the toolbar above the grid view, select New > Advanced Search > Funds (Open-End and Exchange Traded Funds). The Search by Criteria window opens.

Exercise 11: Create two searches at once



- 4. Create a search with the following criteria:
- Mote: Remember to use the Repeat option from the Rel column to avoid having to select the same field name multiple times. Selecting the Alphabetically button in the lower-left corner of the dialogue box can help find the criteria more quickly.

Rel	(Field Name	Operator	Value)
	(Morningstar Category	=	EAA > Eurozone Large-Cap Equity	
Or		Morningstar Category	=	EAA > Eurozone Mid-Cap Equity	
Or		Morningstar Category	=	EAA > Eurozone Small-Cap Equity	
And		P/E Ratio TTM (Long)	<=	17	
Or	(Morningstar Category	=	EAA > Eurozone Large-Cap Equity	
Or		Morningstar Category	=	EAA > Eurozone Mid-Cap Equity	
Or		Morningstar Category	=	EAA > Eurozone Small-Cap Equity)
And		P/E Ratio (TTM) (Long)	>	17	
And		Oldest Share Class	=	Yes	

₿°0	pen .	+= Ins	ert 🗙 Delete 🔤 Clear All 🔢 Export 🗸 🔤 PDF	Save As	I reedback	
	Rel	(Field Name	Operator	Value)
1		(Morningstar Category	=	Eurozone Large-Cap Equity	^
2	Or		Morningstar Category	=	Eurozone Mid-Cap Equity	
3	Or		Morningstar Category	=	Eurozone Small-Cap Equity)
4	And		P/E Ratio (TTM) (Long)	<=	17	
5	Or	(Morningstar Category	=	Eurozone Large-Cap Equity	
6	Or		Morningstar Category	=	Eurozone Mid-Cap Equity	
7	Or		Morningstar Category	=	Eurozone Small-Cap Equity)
8	And		P/E Ratio (TTM) (Long)	>	17	
9						
10						~
View By Alp	Field Nai Categor habetica	me: y illy	Include: I ✓ Only Surviving Investments 3 ✓ User Defined Primary Class Only	tems Searched: 104623	Items Found: 2145	

Your Search by Criteria window should reflect this image

- 5. Click the **Run Search** button, to see how many funds match your search.
- 6. Activate the User Defined Primary Class Only option.
- 7. Click the Save As icon. The Save As dialogue box opens.
- 8. In the Name field, type Multiple Searches.
- 9. Click OK to close the Save As dialogue box.
- 10. Click **OK** to close the Search by Criteria window.
- Mote: The User Defined Primary Class Only option is not taken into account by the Run Search function. To know the true number of resulting investments, check the bottom left corner of the grid window to see the Total number of investments.
- Mote: In the search results (seen in the grid view), you can check your work by sorting on the Morningstar Category column (click once on a column's header to sort by that column), and also by examining the P/E Ratio (TTM) (Long) statistic, which is available from the Equity Port Stats (Long) view.

An advanced search uses relationships (And, Or) between rows, and can also include the use of parentheses. When creating advanced searches, keep in mind the following additional notes:

- When you have the same Field Name for multiple consecutive rows, but a different Value, encapsulate the rows with parentheses, and use "Or" as the Rel(ationship) among them. In the row for the next criterion, remember to change the Rel column to "And."
- Selecting "Repeat" from the Rel column is an easy way to copy data from the row above and saves you a few clicks from making a selection for every cell in a row.
- ► You can nest criteria in multiple levels through the proper use of both parentheses and the relationship between rows.
- ► You can insert rows in the Search by Criteria window; remember that the inserted row appears above the row you have selected.

Final lessons on creating advanced searches

Additional Practice Exercises

The following exercises provide challenges for you to see how well you can build searches within Morningstar Direct. Answers to each exercise are provided on the following pages.

How many passively managed Open-End funds and ETFs in the Europe Mid-Cap Equity category are for sale in the United Kingdom? Only one instance of each fund needs to be shown. What should the Search by Criteria window look like for this search? The following hints will help you with this exercise:

Exercise 12: Find passively managed funds in a Morningstar Category

Overview

- 1. Create the search from the Workspace module.
- 2. Search within the Funds (Open End and Exchange-Traded Funds) universe.
- 3. Use the Europe/Africa/Asia category classification.
- 4. Opt to see the criteria listed alphabetically and look for a field called "Index Fund."

Now check your work: Solution to Exercise 12.

How many global emerging markets equity Open-End funds have at least 4 globes, a low carbon designation from Morningstar, and don't invest in tobacco companies? Please display only the oldest share class per fund.

The following hints will help you with this exercise:

- 1. The search can be created using the Open-End funds universe from Workspace > Search Criteria.
- 2. When looking for global emerging markets equity funds, be sure to select Morningstar Category as the Field Name and to use the Europe/Africa/Asia classification.
- 3. You can find all ESG-related data points under the Sustainability drop-down list.

Now check your work: Solution to Exercise 13.

Exercise 13: Find ESG funds

For Exercise 12, the Search by Criteria window should look like the following:

Solution to Exercise 12

М	orningstar	Direc	Funds (Open End and Exchange Traded Funds)		— [\times	Be sure to
b pro	pen 4	=Inse	rt 🗙 Delete 😭 Clear All 🟦 Export 🕶 🔼 PDF	Save As 🛛 Fe	edback			search within
	Rel	(Field Name	Operator	Value)		from the Workspace
1			Morningstar Category	=	Europe Mid-Cap Equity		^	module
2	And		Country Available for Sale	=	United Kingdom			
3	And		Oldest Share Class	=	Yes			
4	And		Index Fund	=	Yes			
5						_		
6								
7								
8								
9								
10							~	
View I By Alp	F ield Nam Category habeticall	е: У	Include: Ite ✓ Only Surviving Investments 304 □ User Defined Primary Class Only	ms Searched: 1565	Items Found: Run Search			
He	lp				ОК	Cance	ł	

To reproduce this search, do the following:

- 1. From the left-hand navigation pane, click the **Workspace** module.
- 2. Under the Search Criteria folder, select My Search Criteria.
- 3. From the toolbar above the grid view, select **New > Advanced Search > Funds** (**Open End and Exchange-Traded Funds**). The Search by Criteria window opens.

File New Pavorites Tools Help Search for In This View Go Search Home Equity/Credit Research Action New Export Ppr Refresh Local Databases Action New Export Epr All Managed Investments Performance Reporting 1 Europe Large-Cap Growth Equ Analysis/News/Report Analysis/News/Report Portfolio Management 2 Europe Large-Cap Value EQ Category Average Closed-End Fund Portfolio Analysis 5 Open-End Large Cap Funds College Savings Plans Persentation Studio Risk Model Analysis 5 Open-End Large Cap Funds Economic Series Verkspace Funds (Open End and Exchange Traded Funds) Hedge Fund Warksto Workshop Market Index Money Market Fund Open-End Fundles Economic Series Private Funds Persion/Life Fund Searches Other Workshop Private Funds Every Ends Persion/Life/Insurance Workshop Search Criteria Persion/Life/Insurance Private Funds Persion/Life/Insurance Private Funds Persion/Life/Insurance	Morningstar Direct								
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Equity/Credit Research Action • New • 1 Export • Export • Export • Export • Advanced Search • Bonds Asset Allocation E urope Large-Cap Growth Equ Gosed-End Fund College Savings Plans E Conomic Series Exchange Traded Fund E Morkshop S Open-End Large Cap Funds E Vestment Lists • My Search Criteria • Chart Templates • Cotom Database • Defined Contribution Plan • Retirement Plans • Group Manager • Group Manager • Adva Manager • Group Manager	Home	My Sea	arch Criteria						
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Global Databases Advanced Search → All Managed Investments Performance Reporting 1 Europe Large-Cap Growth Equination Bonds Asset Allocation 2 Europe Large-Cap Value EQ Bonds Portfolio Management 4 Multiple Searches Category Average > Portfolio Analysis 5 Open-End Large Cap Funds Category Average > Markets 5 Open-End Large Cap Funds College Savings Plans > Presentation Studio 5 Open-End Large Cap Funds Economic Series Exchange Traded Fund Workspace * Funds (Open End and Exchange Traded Funds) Hedge Fund * My Lists Workshop Hedge Funds eVestment Hedge Funds * My Search Criteria > Money Market Fund Ownership-Portfolio * My Search Criteria > Private Funds Global Restricted Funds * Extended Reports Private Funds Global Restricted Funds Separate Accounts * Database Defined Contribution Plan Separate Accounts Separate Accounts * Retirement Plans </td <td>Local Databases</td> <td>:</td> <td>N Basic Search</td> <td></td> <td>•</td> <td>Туре</td> <td>Owner</td>	Local Databases	:	N Basic Search		•	Туре	Owner		
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Hedge Fund Workspace Investment Lists Investment Lists My Lists Other Workshop Open-End Fund Ownership-Portfolio Wership Report Templates Custom Database Custom Database Collective Investment Trusts Note Manager Retirement Plans Group Manager Stock Hedge Fund Hedge Funds Hedge Funds Hedge Funds Hedge Funds Value Workshop Open-End Fund Ownership-Portfolio Ownership-Security Pension/Life/Insurance Private Funds Global Restricted Funds Separate Accounts Collective Investment Trusts	Rick Model Applysis				Funds (Open End	d and Exchange T	raded Funds)		
Workspace HFR Hedge Funds Investment Lists eVestment Hedge Funds Investment Lists Market Index Investment Lists Market Index Investment Lists Money Market Fund Investment Lists Money Market Fund Investment Lists Open-End Fund Investment Vest Open-End Fund Investment Panelaes Ownership-Portfolio Investment Plans Pension/Life/Insurance Investment Plans Evestment Trusts Investment Plans eVestment Separate Accounts Investment Plans eVestment Separate Accounts Investment Plans eVestment Separate Accounts	KISK MODEL ANALYSIS				Hedge Fund				
▼Investment Lists eVestment Hedge Funds ▼Investment Lists Market Index Image: Investment Pans Market Fund Image: Investment Pans Ownership-Security Image: Investment Pans Pension/Life/Insurance Image: Investment Pans Pension/Life/Insurance	Workspace				HFR Hedge Fund	s			
→ My Lists Market Index III Other Money Market Fund III Workshop Open-End Fund → Search Criteria Ownership-Portfolio → My Search Criteria Ownership-Security → Report Templates Pension/Life/Insurance □ Chart Templates Private Funds □ Data Sets Global Restricted Funds □ Defined Contribution Plai Separate Accounts □ Saved Reports Collective Investment Trusts □ Note Manager Models □ Retirement Plans eVestment Separate Accounts → Group Manager Stock	📲 Investment Lists				eVestment Hedg	e Funds			
Image: Cher Money Market Fund Image: Workshop Open-End Fund Image: Search Criteria Ownership-Portfolio Image: Search Criteria Ownership-Security Image: Search Criteria Search Criteria Image: Search Contribution Plan Separate Accounts Image: Search Contribution Plan Collective Investment Trusts Image: Search Criteria Models Image: Search Contribution Plan eVestment Separate Accounts Image: Search Criteria Stock	▼				Market Index				
Workshop Open-End Fund	Other				Money Market Fu	und			
▼ Search Criteria Ownership-Portfolio ▶ My Search Criteria Ownership-Security ▶ Report Templates Pension/Life/Insurance ■ Chart Templates Private Funds ■ Data Sets Global Restricted Funds ■ Defined Contribution Plai Separate Accounts ■ Note Manager Models ■ Retirement Plans eVestment Separate Accounts ▶ Group Manager Stock	Workshop				Open-End Fund				
Image: Second Criteria Ownership-Security Image: Second Criteria Pension/Life/Insurance Image: Second Criteria Private Funds Image: Second Contribution Plan Global Restricted Funds Image: Second Contribution Plan Separate Accounts Image: Second Contribution Plan Collective Investment Trusts Image: Retirement Plans eVestment Separate Accounts Image: Stock Stock	▼ Search Criteria				Ownership-Portfo	olio			
Pension/Life/Insurance Chart Templates Chart Templates Data Sets Custom Database Defined Contribution Play Saved Reports Note Manager Retirement Plans Group Manager Stock	My Search Criteria				Ownership-Secu	rity			
Image: Chart Tempiates Private Funds Image: Chart Tempiates Private Funds Image: Chart Tempiates Global Restricted Funds Image: Chart Tempiates Separate Accounts Image: Chart Tempiates Collective Investment Trusts Image: Chart Tempiates Models Image: Chart Tempiates eVestment Separate Accounts Image: Chart Tempiates Stock	Report Templates				Pension/Life/Insi	urance	•		
P = Data Sets Global Restricted Funds > = Custom Database Separate Accounts ID Defined Contribution Plai Separate Accounts ID Saved Reports Collective Investment Trusts ID Note Manager Models ID Retirement Plans eVestment Separate Accounts ID Group Manager Stock	Chart Templates				Private Funds				
Image: Control Control Delay Separate Accounts Image: Control Control Delay Collective Investment Trusts Image: Control Delay Models Image: Retirement Plans eVestment Separate Accounts Image: Control Delay Stock	E Custom Database				Global Restricted	d Funds			
Image: Saved Reports Collective Investment Trusts Image: Models Models Image: Retirement Plans eVestment Separate Accounts Image: Stock Stock	Defined Contribution Play				Separate Accour	nts			
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Group Manager Stock	Retirement Plans				eVestment Sepa	rate Accounts			
	🕨 🚞 Group Manager				Stock				

Select this universe to search within

- 4. **Create** a search with the following criteria:
- Mote: Selecting the Alphabetically button in the lower-left corner of the dialogue box can help find the criteria more quickly.

Rel	Field Name	Operator	Value
	Morningstar Category	=	EAA > Europe Mid-Cap Equity
And	Index Fund	=	Yes
And	Oldest Share Class	=	Yes
And	Country Available for Sale	=	United Kingdom

- Mote: the order of the data criteria selected does not matter in this exercise.
- 5. Click **OK**.

The search you created for exercise 13 should look like the following:

Solution to Exercise 13

М м	Morningstar Direct Open End Funds — — >								Х			
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	Rel	(Field Name				Operator	Value)	
1			Morningstar Ca	ategory			=	Global Emerging Ma	arkets Equity		^	¢
2	And		Morningstar Su	istainability Ratir	ng		>=	Above Average				
3	And		Low Carbon De	esignation			=	Yes				
4	And		Product Involve	ement % - Toba	cco		=	0				
5	And		Oldest Share C	Class			=	Yes				
6												
7												
8												
9												
10											~	ŕ
View By Alp	View Field Name:		Include: ✓ Only St User De	urviving Investm efined Primary C	ents Class Only	Ite 287	ms Searched: 7260	Items Found: 38	Run Sear	rch		
He	łp								ОК	Ca	ncel	

To see these same results, do the following:

- 1. In the left-hand navigation pane, select the **Workspace** module.
- 2. Click New > Advanced Search > Open-End Funds.
- 3. Under the Morningstar-defined Universes list, click the **United States Separate Accounts/CITs** universe.

Morningstar Direct							
<u>F</u> ile <u>N</u> ew Favorites <u>T</u> oo	ols <u>H</u> elp	Search for	In	This View	• Go		Ser 🛛
Home	My Sear	ch Criteria					
Equity/Credit Research	Action	• New • 🟦 Export • 🔺	PDF	🕸 Refresh			
Local Databases	Γ	N Basic Search	۱,		Туре	Owner	
Global Databases		Advanced Search	₽	All Managed Inv	restments		
Performance Reporting		Europe Large-Cap Growth E	qu	Analysis/News/F	Report		•
Asset Allocation	2	Europe Large-Cap Value EQ		Bonds			
Portfolio Management	3	Europe Large-Cap Value Eq	uit	Category Avera	ge		•
Portfolio Analysis	4	Multiple Searches		Closed-End Fund			
Markota	1 5	Open-End Large Cap Funds	-	Economic Series	Plans		,
Markets				Exchange Trade	d Fund		
Asset Flows				European Pensio	on/Life Fund V	Vrappers	
Presentation Studio				Funds (Open En	d and Exchan	ge Traded Funds)	
Risk Model Analysis				Hedge Fund			
Workspace				HFR Hedge Fund	ls		
Investment Lists				eVestment Hedg	e Funds		
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I Other			L	Money Market F	und		
😐 Workshop				Open-End Fund			
Search Criteria				Ownership-Portf	folio		
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Saved Reports				Collective Inves	tment Trusts		
🗉 Note Manager				Models			
Retirement Plans				eVestment Sepa	arate Accounts		
🕨 🚞 Group Manager				Stock			

- 4. From the toolbar above the grid view, click the **Search** icon. The Search by Criteria window opens.
- 5. Create a search with the following criteria:

Rel	(Field Name	Operator	Value)
		Morningstar Category	=	EAA > Global Emerging Markets Equity	
And		Oldest Share Class	=	Yes	
And		Morningstar Sustainability Rating	>=	Above Average	
And		Low Carbon Designation	=	Yes	
And		Product Involvement % – Tobacco	=	0	

М	orningstar	Direc	t Open End Funds		—	×	<
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	Rel	(Field Name	Operator	Value)	
1			Morningstar Category	=	Global Emerging Markets Equity		^
2	And		Oldest Share Class	=	Yes		
3	And		Morningstar Sustainability Rating	>=	Above Average		
4	And		Low Carbon Designation	=	Yes		
5	And		Product Involvement % - Tobacco	=	0		
6							
7							
8							
9							
10							¥
View I	Field Nam	e:	Include: It	ems Searched:	Items Found: Bun Search		
• Ву	Category		Only Surviving Investments 0		-		
Alphabetically Use		у	User Defined Primary Class Only				
He	lp				ОКСа	ancel]

6. Click **Run Search** to preview the number of investments that met the search criteria.

7. Click **OK** to view the investments that meet the search criteria.