

Morningstar DirectSM Cloud Editions Release Notes December 18, 2018

This document describes the new features and enhancements in the Morningstar DirectSM Cloud Editions, as follows:

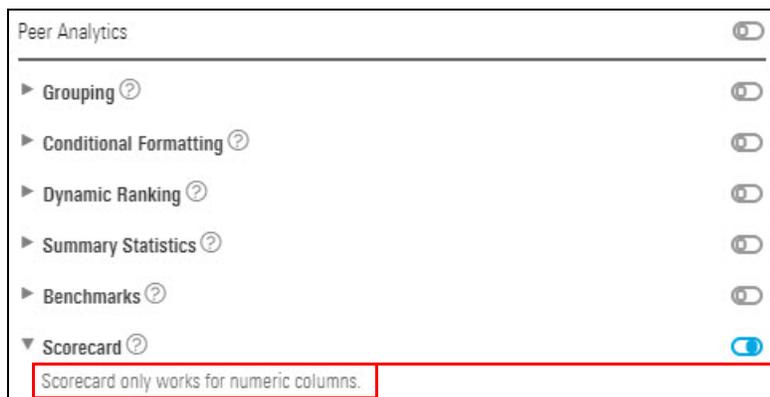
Overview

- ▶ [What 's new when creating a Scorecard? \(page 2\)](#)
- ▶ [How can I save the order of sorted and dynamically ranked columns when exporting data? \(page 3\)](#)
- ▶ [What new data points are available in the Holdings Analysis component? \(page 4\)](#)
- ▶ [How can I view a fund's historical ESG scores in a component? \(page 5\)](#)
- ▶ [What has changed in revenue exposure components? \(page 5\)](#)
- ▶ [What's new in Portfolio Analysis workbooks? \(page 6\)](#)
- ▶ [How can I add portfolio fees to the Total Portfolio Attribution component? \(page 7\)](#)
- ▶ [How can I view a fund's Morningstar Historical Sustainability Score in a Morningstar Report? \(page 7\)](#)
- ▶ [In the Morningstar Excel Add-In, what historical data points are new in the UK and US CEF Peer Groups? \(page 9\)](#)
- ▶ [In the Morningstar Excel Add-In, how can I identify which funds disclose their intention to include or exclude ESG impacts in their investment process? \(page 10\)](#)
- ▶ [Please complete the T3/Inside Information Annual Software Survey \(page 10\)](#)

In Peer Analytics, enhanced messaging helps you understand your options when setting up a Scorecard. The Scorecard is available in all Investment Analysis workbooks.

What 's new when creating a Scorecard?

If...	Then...
The Grid has no numeric data points	In the Peer Analytics panel, the Create Scorecard button is not displayed and the message "Scorecard only works for numeric columns" is shown. If you leave the Peer Analytics panel open and the Scorecard toggle on, and add numeric data points to the Grid, the Peer Analytics panel refreshes and displays the Create Scorecard button. When creating a Scorecard, the Scoring Type defaults to Standard Scorecard.
The Grid has numeric data points, but none are rankable	When creating a Scorecard, the Scoring Type defaults to Custom Scorecard, which you can set up using the numeric data points in the Grid. The data points % Asset in Top 10 Holdings and # of Holdings are examples of numeric, non-rankable data points. If you select Standard Scorecard, this message is displayed: "Only numeric data points that can be ranked are eligible for Standard Scoring. You may choose the Custom Scoring option above to create a Scorecard for your existing data points."
The Grid has numeric, rankable data points	When creating a Scorecard, the Scoring Type defaults to Standard Scorecard.



This message is displayed if the Grid has no numeric data points.

Scorecard [Cancel] [Done]

Scoring Type **Scoring Settings**

Standard Scoring Custom Scoring

Handle missing values by: Standardize based on:

Performance Factors

[Equal Weight] [Reset Weight] **Total Weight** 0%

Performance Factor	Scoring	% Weight
<input type="radio"/> Data Point		
<input type="radio"/> Total Return (3Y - mo-end) Annlzd	Higher is Better	0%
<input type="radio"/> Alpha Total (excess return) (3Y - mo-end) Annlzd Cat Curr	Higher is Better	0%
<input type="radio"/> Beta Total (excess return) (3Y - mo-end) Cat Curr	Higher is Better	0%
<input type="radio"/> Standard Deviation Total (3Y - mo-end) Annlzd Cat Curr	Lower is Better	0%
<input type="radio"/> Sharpe Ratio Total Morningstar (3Y - mo-end) Annlzd Cat Curr	Higher is Better	0%

Score Settings **Weighted Score Ranks** (Weight total must equal 100% to use these options)

Weighted Score Display Group Rank Display Group Quintile List Quartile

Display Group Percentile List Rank List Quintile

Display Group Quartile List Percentile

This option is selected when the Grid has numeric, rankable data points.

Investment Analysis | *Grid View

Grid View +

MidCapEquityFunds

Name	% Asset in Top 10 Holdings (mo-end) [0%]	# of Holdings Total (Long) (mo-end)	# of Holdings Stock (Long) (mo-end)	# of Holdings Other (Long) (mo-end)	Scorecard Total Score
1 First Trust Dorsey Wright Momt & Div ETF	35.21	51	50	1	3.00
2 First Trust Multi Cap Val AlphaDEX® ETF	5.02	675	674	1	0.00
3 Global X SuperDividend™ US ETF	26.31	51	50	1	2.00
4 Guggenheim Mid Cap Value A	17.07	128	127	1	1.00
5 Guggenheim RBP® Dividend A	17.66	102	99	3	1.00
6 Guggenheim RBP® Dividend C	17.66	102	99	3	1.00
7 Guggenheim RBP® Dividend I	17.66	102	99	3	1.00
8 Guggenheim RBP® Dividend P	17.66	102	99	3	1.00

In the custom Scorecard column, the values are based on the % Asset in Top 10 Holdings.

In the Grid, when you sort on scorecard and dynamic ranking data points and then export the data, the sort orders are preserved in the .xls or .csv file.

How can I save the order of sorted and dynamically ranked columns when exporting data?

In the Investment Analysis workbooks (Equity Fund, Fixed Income Fund, Markets - Equity Research, and Multi-Asset Fund), the Holdings Analysis component can now display the following data points via the My Data Set option:

What new data points are available in the Holdings Analysis component?

- ▶ Detail Holding Type
- ▶ EPS Growth % 3 Yr (FY 1)
- ▶ Free Cash Flow (mil) TTM
- ▶ ISIN
- ▶ Moat Source - Efficient Scale
- ▶ Moat Source - Intangible Assets
- ▶ Moat Source - Network Effect
- ▶ Moat Source - Switch Cost
- ▶ Moat Source - Cost Advantage
- ▶ Morningstar Fair Value per Share
- ▶ Net Income (mil) TTM
- ▶ P/E Ratio Forward
- ▶ Revenue Growth % 3 Yr

The screenshot shows the Holdings Analysis component in Morningstar Direct. The 'Holdings Analysis' tab is selected, and the 'My Data Set' option is highlighted in the 'Data Set' menu. The 'My Data Set' menu is open, showing a list of data points that can be selected. The 'Portfolio Weight %' option is checked, and it is highlighted with a red box. A red line connects the 'My Data Set' option in the 'Data Set' menu to the 'My Data Set' menu. Another red line connects the 'Holdings Analysis' tab to the 'My Data Set' menu. A red box highlights the 'Data Set Equity Holdings Details' option in the 'Data Set' menu. A red box highlights the 'My Data Set' option in the 'Data Set' menu. A red box highlights the 'Portfolio Weight %' option in the 'My Data Set' menu. A red box highlights the 'Detail Holding Type' option in the 'My Data Set' menu. A red box highlights the 'Business Country' option in the 'My Data Set' menu. A red box highlights the 'Shares' option in the 'My Data Set' menu. A red box highlights the 'Position Market Value (mil)' option in the 'My Data Set' menu. A red box highlights the 'Benchmark Weight %' option in the 'My Data Set' menu. A red box highlights the 'ISIN' option in the 'My Data Set' menu. A red box highlights the 'Ticker' option in the 'My Data Set' menu. A red box highlights the 'Done' button in the 'My Data Set' menu. A red box highlights the 'Search' field in the 'My Data Set' menu. A red box highlights the '1/147' indicator in the 'My Data Set' menu. A red box highlights the 'Select All' button in the 'My Data Set' menu. A red box highlights the 'Data Set Equity Holdings Details' option in the 'Data Set' menu. A red box highlights the 'My Data Set' option in the 'Data Set' menu. A red box highlights the 'Portfolio Weight %' option in the 'My Data Set' menu. A red box highlights the 'Detail Holding Type' option in the 'My Data Set' menu. A red box highlights the 'Business Country' option in the 'My Data Set' menu. A red box highlights the 'Shares' option in the 'My Data Set' menu. A red box highlights the 'Position Market Value (mil)' option in the 'My Data Set' menu. A red box highlights the 'Benchmark Weight %' option in the 'My Data Set' menu. A red box highlights the 'ISIN' option in the 'My Data Set' menu. A red box highlights the 'Ticker' option in the 'My Data Set' menu. A red box highlights the 'Done' button in the 'My Data Set' menu. A red box highlights the 'Search' field in the 'My Data Set' menu. A red box highlights the '1/147' indicator in the 'My Data Set' menu. A red box highlights the 'Select All' button in the 'My Data Set' menu.

Note the highlighted selections.

Name	Ticker	Portfol Weight	Component Settings	business puntry
Total	-	100.1	Portfolio Date 12/14/2018	
1 New Residential Inves	NRZ	5.1		
2 Targa Resources Corp	TRGP	3.6		
3 Extra Space Storage In	EXR	3.81	11,979.00	1.17
4 ONEOK Inc	OKE	3.70	18,820.00	1.13

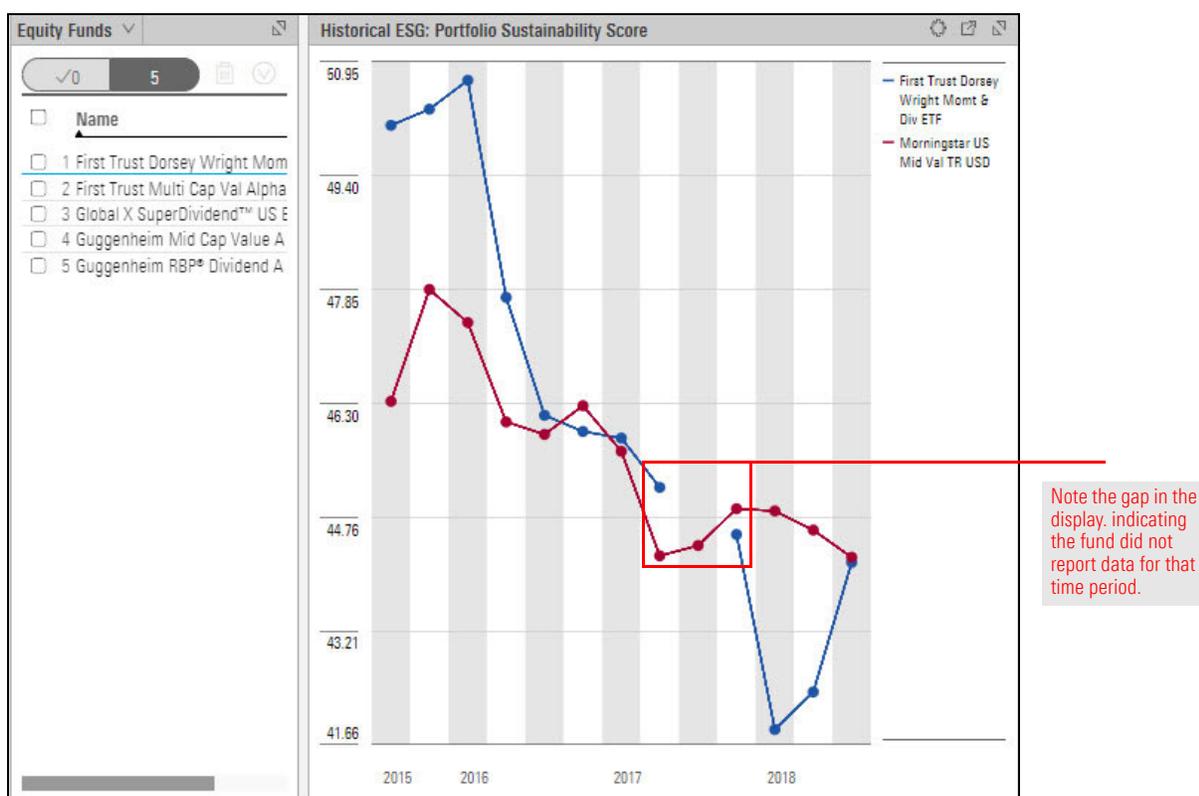
Investment Analysis workbooks now include the new Historical ESG component, which can display a fund's Portfolio ESG score on a monthly, quarterly, or annual basis. This data can help you understand trends and changes in companies who address risks and opportunities with environmental, social, and governance factors. This component is not part of a pre-built worksheet.

How can I view a fund's historical ESG scores in a component?

The Historical ESG component applies to the following:

- ▶ equity funds
- ▶ corporate bond funds, and
- ▶ fund of funds with 67% of assets invested in stocks and corporate bonds with company ESG scores.

Historical ESG data goes back to September 2015, which is also the default Start Date for the component.



To learn more about the Historical ESG component, please read [Leveraging Morningstar Sustainability Data](#).

Regional revenue exposure data now aligns with the 10 standard Morningstar regions. This data is found in the following components in an Equity Funds workbook:

What has changed in revenue exposure components?

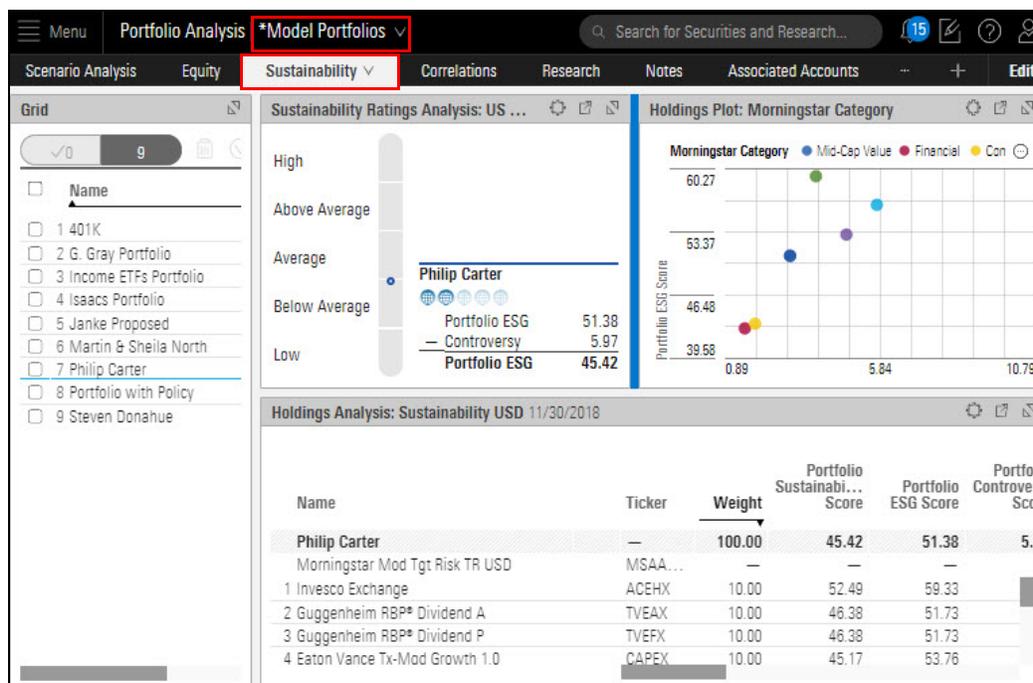
- ▶ Global Revenue Map, and
- ▶ Revenue Exposure.

Note: Both components are found in the Allocation section of the Component Library. A fund must have at least 20% of its assets in equities in order for the components to populate.

The Model Portfolios, Client Accounts, and Custom Benchmarks workbooks now include a Sustainability worksheet. Its default components support ESG analysis as described in the following table:

What's new in Portfolio Analysis workbooks?

Component	ESG Analysis
Sustainability Ratings Analysis	Displays the following ESG data points in Table view: <ul style="list-style-type: none"> ▶ ESG Rating ▶ ESG Score, and ▶ ESG-Percent of AUM Covered %.
Holdings Plot	Displays the following ESG data points on a scatterplot: <ul style="list-style-type: none"> ▶ Portfolio Sustainability Score ▶ Portfolio ESG Score, and ▶ Portfolio Controversy Score.
Holdings Analysis	Displays numerous ESG data points, including the following: <ul style="list-style-type: none"> ▶ Portfolio ESG Score ▶ Percent of AUM Covered ESG, and ▶ Company Normalized ESG Score.



Note the highlighted selections.

To learn more about displaying holdings' ESG data, please read [Creating Model Portfolios, Custom Benchmarks, and Investment Policies](#).

To help you see how portfolio-level fees affect net return, you can now include and edit portfolio fees in the Total Portfolio Attribution component settings. When you add a fee to the component, rows for fees and net return are added to the table.

How can I add portfolio fees to the Total Portfolio Attribution component?

The Total Portfolio Attribution component is available only in Model Portfolios workbooks.

Total Portfolio Attribution: USD 06/01/2018 - 11/30/2018						
	Gross Return%			Net Return%		
▼ Name	Portfolio	Bench...	+/-	Portfolio	Benchmark	+/-
Total	0.43	-0.74	1.18	-0.11	-0.74	0.63
▼ Fee	—	—	—	-0.33	0.00	—
1 Annual Fee	—	—	—	-0.25	0.00	—
2 Special Assessment	—	—	—	-0.08	0.00	—
Net Return	—	—	—	-0.44	-0.74	—
▼ Alternative	-2.58	—	—	-4.04	—	—
3 Permal MMF (LUX) Nat...	-2.58	0.00	-2.58	-4.04	0.00	-4.04
Commodities	—	-9.70	—	—	-9.70	—
▼ Convertibles	-3.01	—	—	-3.76	—	—
4 1290 Convertible Secur...	-3.01	-1.84	-1.17	-3.76	-1.84	-1.92

Note the highlighted selections.

To learn how to add portfolio fees, please read [Creating Model Portfolios, Custom Benchmarks, and Investment Policies](#).

In a Morningstar Report, you can now view the fund’s Morningstar Historical Sustainability Score. The Morningstar Historical Sustainability Score is a weighted average of the trailing 12 months of Morningstar Portfolio Sustainability Scores.

How can I view a fund’s Morningstar Historical Sustainability Score in a Morningstar Report?

The Morningstar Historical Sustainability Score is a weighted average of the trailing 12 months of Morningstar Portfolio Sustainability Scores. However, the monthly scores are not equally weighted; more recent portfolios are weighted more heavily than older portfolios. This enables the Historical Sustainability Score to reflect portfolio managers’ more recent decisions.

The most recent month’s score is multiplied by 12, the score of the month before that by 11, two months ago 10, all the way to 12 months ago, which is multiplied by 1. An example of these calculations is shown in the following table:

Portfolio Date	Portfolio Sustainability Score	Weight	Weighted Sum
7/31/2018	48.84	12	586.08
6/30/2018	48.01	11	528.11
5/31/2018	48.66	10	486.60
4/30/2018	48.07	9	432.63
3/31/2018	47.65	8	381.20
2/28/2018	47.86	7	335.02

Portfolio Date	Portfolio Sustainability Score	Weight	Weighted Sum
1/31/2018	48.77	6	292.62
12/31/2017	48.29	5	241.45
11/30/2017	47.83	4	191.32
10/31/2017	47.20	3	141.60
9/30/2017	47.42	2	94.84
8/31/2017	47.62	1	47.62
Totals		78	3759.09

Using the figures in the table, the Historical Score is computed by dividing the Total Weighted Sum by the Total Weight, as follows:

$$\frac{3759.08}{78} = 48.19$$

To learn how to find a fund's Morningstar Historical Sustainability Score in the Morningstar Report, please read [Leveraging Morningstar Sustainability Data](#).

Morningstar Report

Sustainability

Average
 Percent Rank in Global Category: 60

Historical Sustainability Score	Most Recent Portfolio	Sustainability Score	Sustainability Mandate?
42.46	Portfolio ESG: 46.41 Controversy Deduction: 3.98 Based on 99% of AUM	42.43	No

This fund's Historical Sustainability Score is slightly higher than its most recent Portfolio Sustainability Score.

Sustainability Score as of Dec 16, 2018. Sustainability Rating as of Oct 31, 2018. Sustainability provides company-level analysis used in the calculation of Morningstar's Sustainability Score. Sustainability Mandate information is derived from the fund prospectus.

The new historical data points in the UK and US CEF Peer Groups are shown in the following table:

- | | |
|--|--|
| ▶ NAV Weighted DRI | ▶ Price Unweighted Daily Income Only Yield |
| ▶ NAV Unweighted DRI | ▶ Price Weighted Daily Income & Capital Gain Yield |
| ▶ Price Weighted DRI | ▶ Price Unweighted Daily Income & Capital Gain Yield |
| ▶ Price Unweighted DRI | ▶ Price Weighted Daily Total Distribution Yield |
| ▶ Weighted Daily Discount | ▶ Price Unweighted Daily Total Distribution Yield |
| ▶ Unweighted Daily Discount | ▶ Ex-Par NAV Weighted DRI |
| ▶ NAV Weighted Daily Income Only Yield | ▶ Ex-Par NAV Unweighted DRI |
| ▶ NAV Unweighted Daily Income Only Yield | ▶ Ex-Par Weighted Daily Discount |
| ▶ NAV Weighted Daily Income & Capital Gain Yield | ▶ Ex-Par Unweighted Daily Discount |
| ▶ NAV Unweighted Daily Income & Capital Gain Yield | ▶ Cum-Fair NAV Weighted DRI |
| ▶ NAV Weighted Daily Total Distribution Yield | ▶ Cum-Fair Weighted Daily Discount |
| ▶ NAV Unweighted Daily Total Distribution Yield | ▶ Cum-Fair Unweighted Daily Discount |
| ▶ Price Weighted Daily Income Only Yield | |

In the Morningstar Excel Add-In, what historical data points are new in the UK and US CEF Peer Groups?

New data points are available to reveal a fund’s intention to incorporate specific areas of ESG impact or exclude certain industries in their investment strategy. The data points are listed in the following table:

Note: Funds can disclose multiple attributes at once.

In the Morningstar Excel Add-In, how can I identify which funds disclose their intention to include or exclude ESG impacts in their investment process?

Data Point Group	Data Point Name	Data Point Short Name
Fund Product Involvement	Portfolio Category Average Product Involvement Percentage	Portfolio_Category_Average_Product_Involvement_Percentage
	Portfolio Product Involvement Percentage	Portfolio_Product_Involvement_Percentage
ESG Carbon	Benchmark Carbon Risk Score	Benchmark_Carbon_Risk_Score
	Carbon - Portfolio Coverage	Carbon_Portfolio_Coverage
	Carbon Risk Breakdown	Carbon_Risk_Breakdown
	Carbon Risk Classification	Carbon_Risk_Classification
	Carbon Risk Score	Carbon_Risk_Score
	Carbon Risk Score All Funds Rank	Carbon_Risk_Score_All_Funds_Rank
	Carbon Risk Score Category Average	Carbon_Risk_Score_Category_Average
	Carbon Risk Score Components	Carbon_Risk_Score_Components
	Carbon Risk Score Components Category Average	Carbon_Risk_Score_Components_Category_Average
	Carbon Risk Score Components Percent Rank in Category	Carbon_Risk_Score_Components_Percent_Rank_in_Category
	Carbon Risk Score Percent Rank in Category	Carbon_Risk_Score_Percent_Rank_in_Category
	Portfolio Carbon Involvement	Portfolio_Carbon_Involvement
	Portfolio Carbon Involvement Category Average	Portfolio_Carbon_Involvement_Category_Average
	Portfolio Fossil Fuel Involvement	Portfolio_Fossil_Fuel_Involvement
	Portfolio Fossil Fuel Involvement Category Average	Portfolio_Fossil_Fuel_Involvement_Category_Average
Low Carbon Designation	Low_Carbon_Designation	

Let your voice be heard by taking an [industry software survey](#) administered by T3 and Inside Information.

Please complete the T3/Inside Information Annual Software Survey