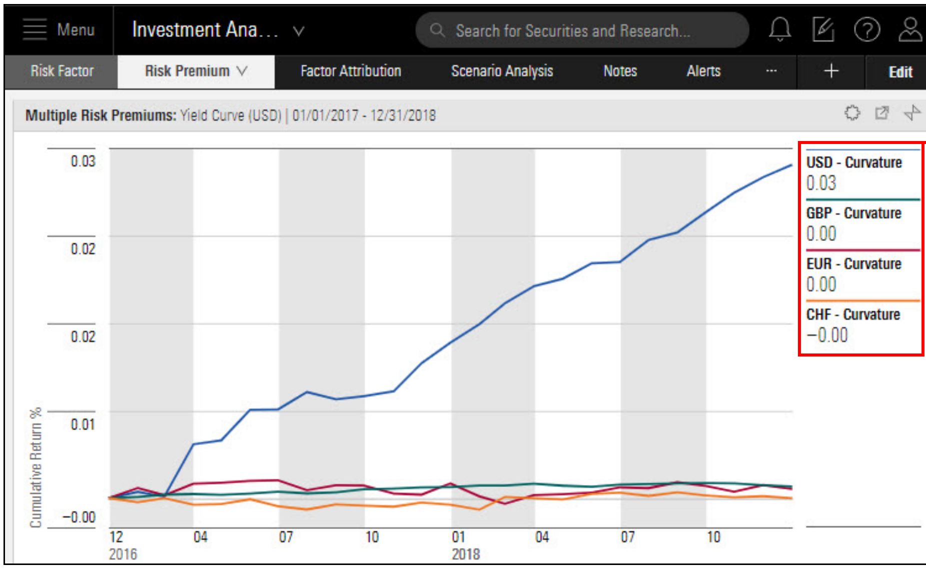
Morningstar Direct^{SM} Cloud Editions Release Notes March 3, 2019

Overview

This document describes the new features and enhancements in the Morningstar Direct^{SM} Cloud Editions, as follows:

How can I assess risk in a multi-asset fund or portfolio?

The Morningstar Global Risk Model allows you to assess the risk associated with 36 factors for individual securities, or the equity portion of funds or portfolios. The new Global Multi-Asset Risk Model allows you to assess interest rate risk in multi-asset funds and portfolios with the 12 new yield-curve factors. Multi-asset coverage is available for individual bonds in corporate, municipal, and government bonds (excluding callable, puttable bonds; ABS/MBS; and so on).



You can display Shift, Twist, and Curvature in these currencies.

Note that this is the first phase of the multi-asset risk model. Additional coverage will be provided on an ongoing basis.

To learn more, please read the following:

- Using the Morningstar Global Risk Model Components
- Working with the Scenario Analysis Worksheet, and
- Morningstar Risk Model Methodology.

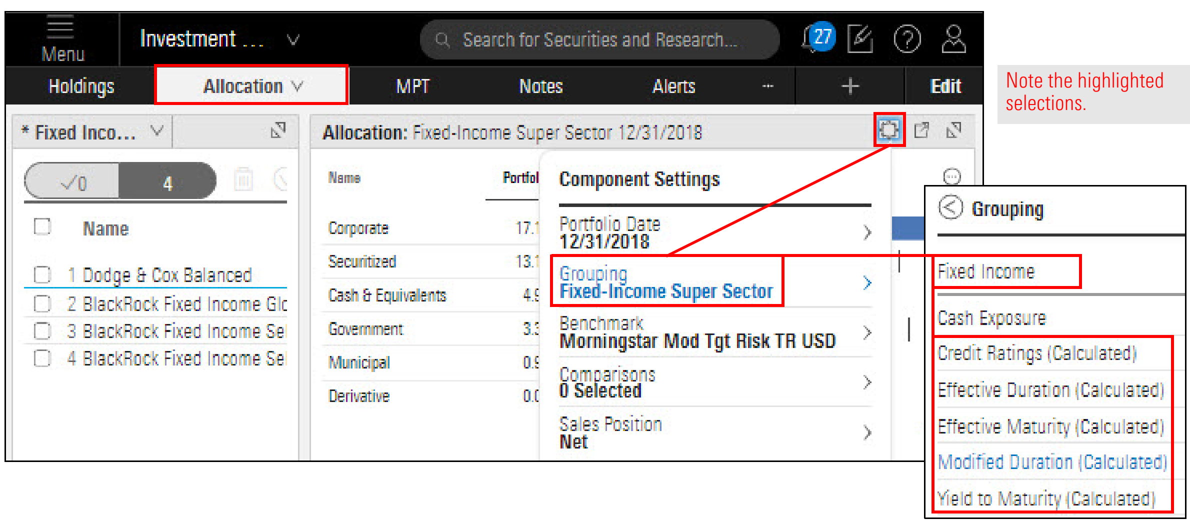
How can I access fixed-income calculated data?

To better evaluate the portfolios of fixed-income funds, you can now view calculated data in addition to surveyed data. The Morningstar Global Multi-Asset Risk Model is available in all risk model-related components in both Investment and Portfolio workbooks. The following new data points are available as Groupings in the Allocation and Historical Allocation components:

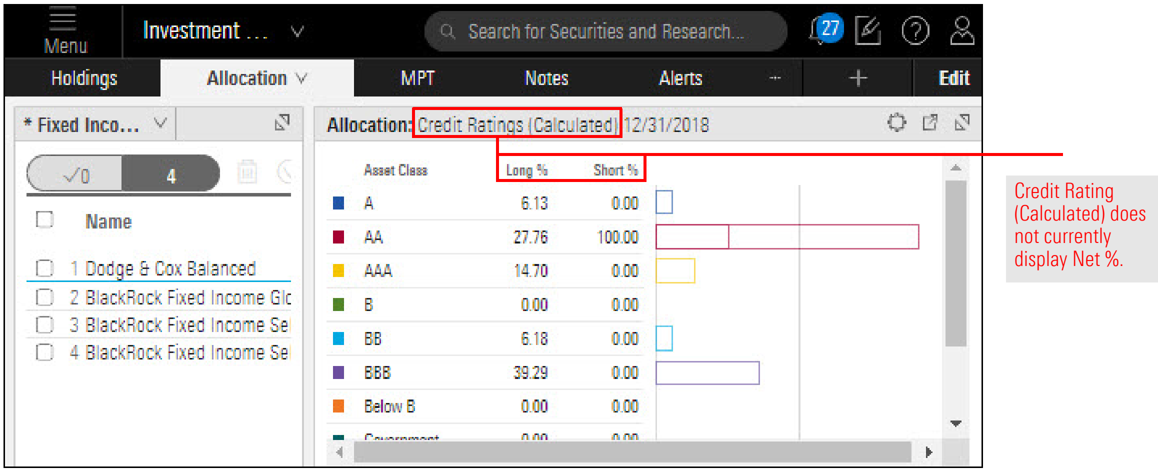
- Credit Rating (Calculated)
- Effective Duration (Calculated)
- Effective Maturity (Calculated)
- Modified Duration (Calculated), and
- Yield to Maturity (Calculated).

Do the following:

1. In an Investment workbook, open a **model portfolio or client account** containing a **fixed-income fund**.
2. Select the **Allocation** worksheet.
3. In the Grid, select a **fixed-income fund**.
4. Click the C**omponent Settings** icon. From the menu, select **Grouping**.
5. In the Grouping menu, **scroll down** to the **Fixed Income** section and select one of the **Calculated** groupings.



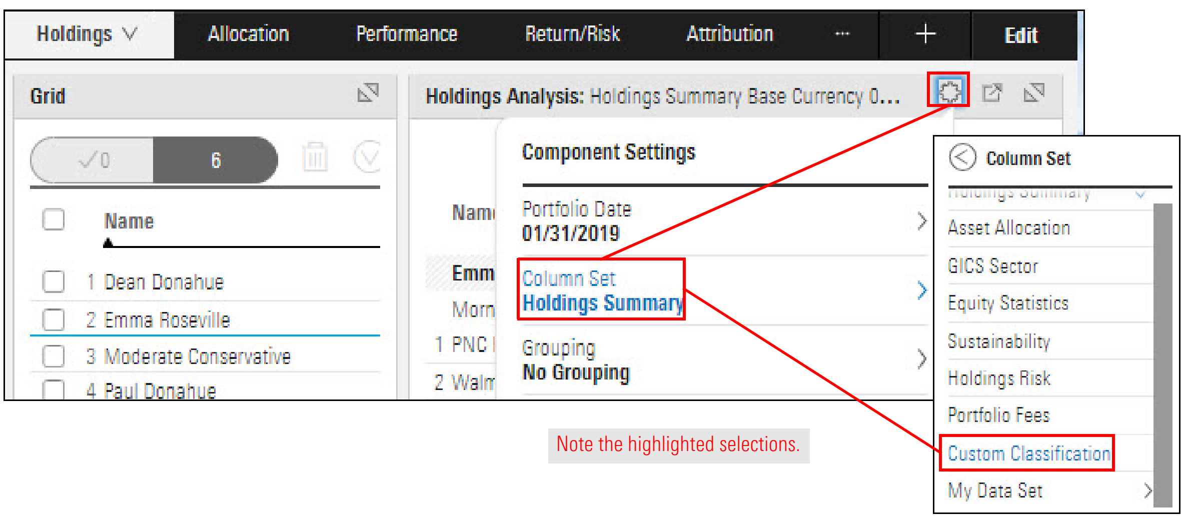
6. Click the **Component Settings** icon to close the menu. The Grouping you selected is displayed in the component. In the illustration below, Credit Ratings (Calculated) is shown.



How can I view a column set of custom data points in a Model Portfolios or Client Accounts workbook?

The new Custom Classification column set is available in both Model Portfolios and Client Accounts workbooks. When the column set is used in the Holdings Analysis component, all your custom data points are displayed.

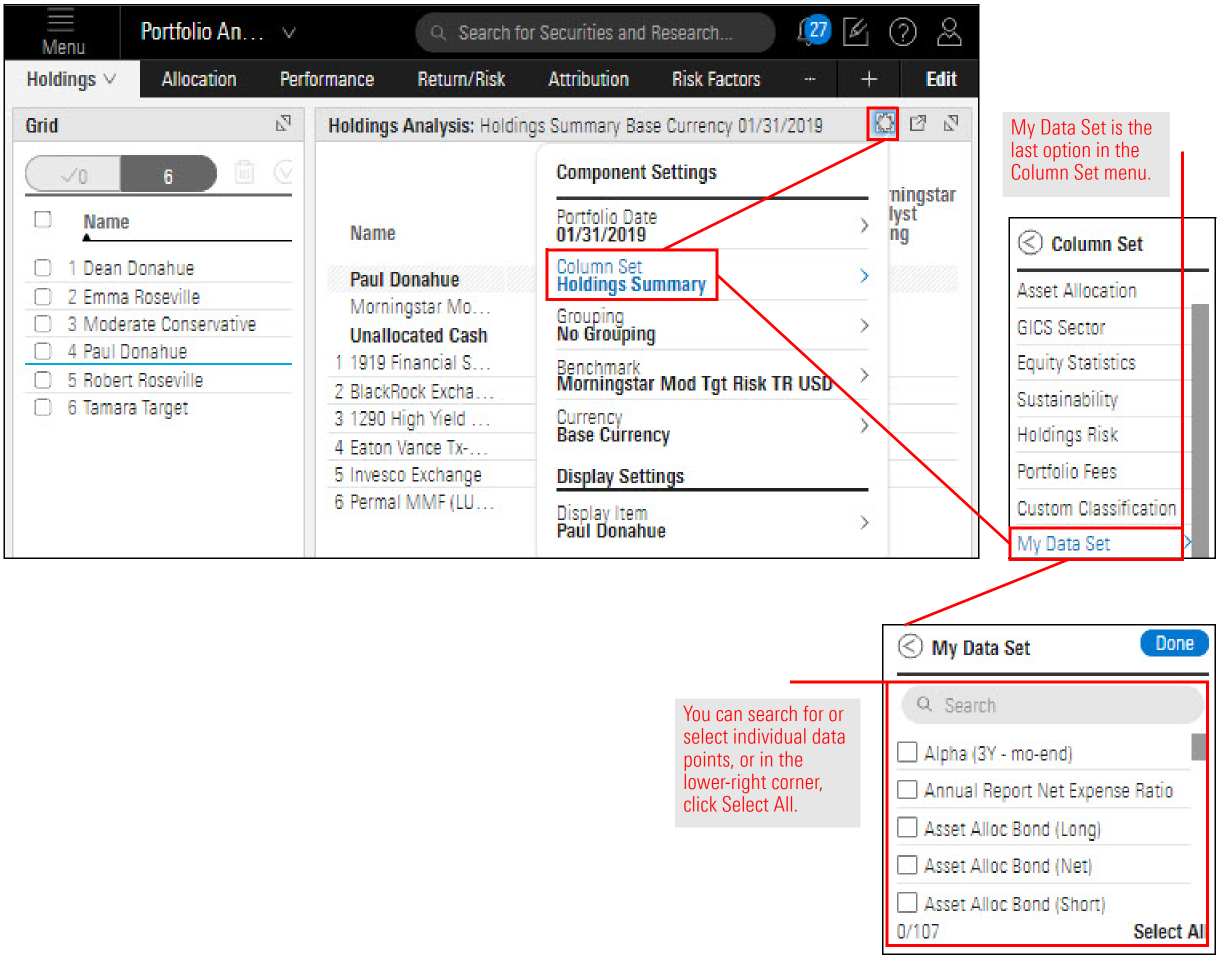
To learn more about this feature, please read Using Custom Groupings.



How can I view data points from different column sets in the Holdings Analysis component?

In the Holdings Analysis component, you can select data points from all current column sets and add them to the new My Data Set option. The new My Data Set option is available in both Model Portfolios and Client Accounts workbooks.

☞ Note: The My Data Set column set can display only data points from current column sets. Data points outside of column sets are not included.

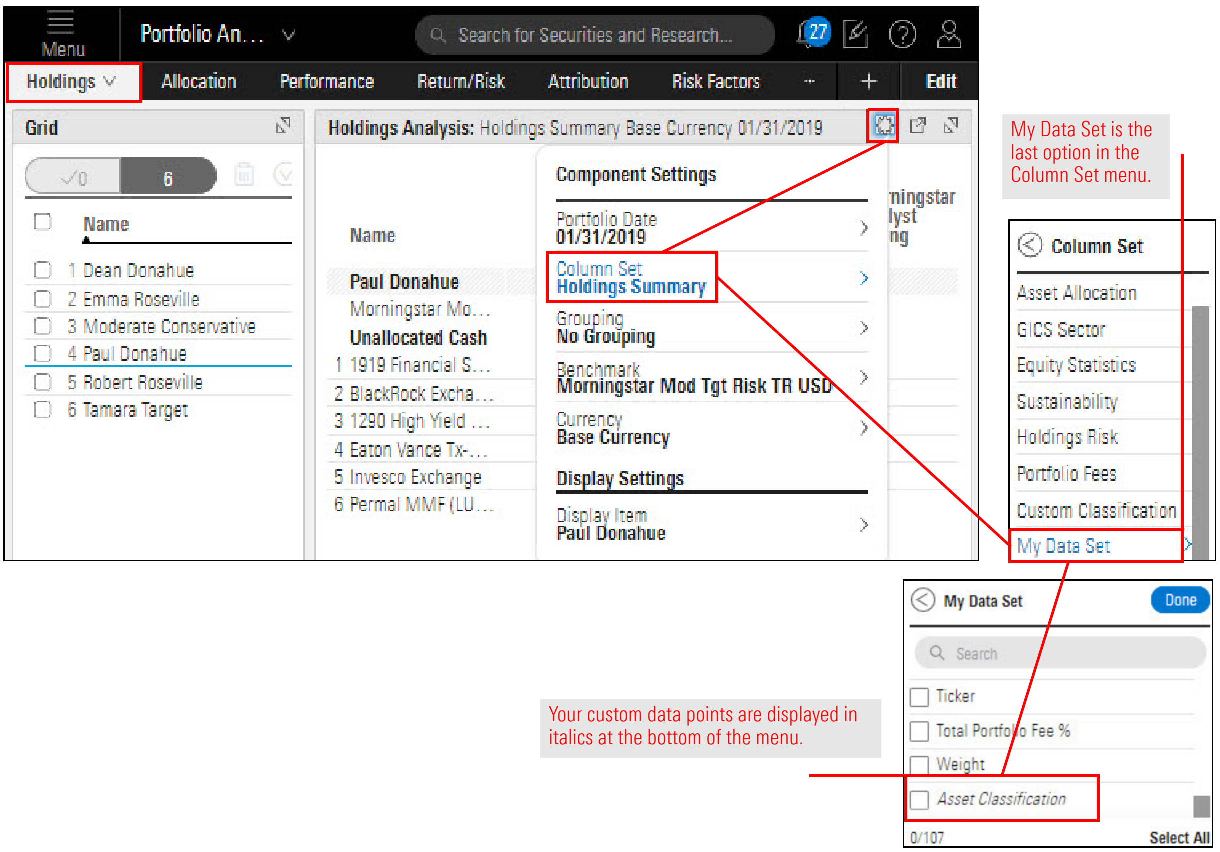


Do the following:

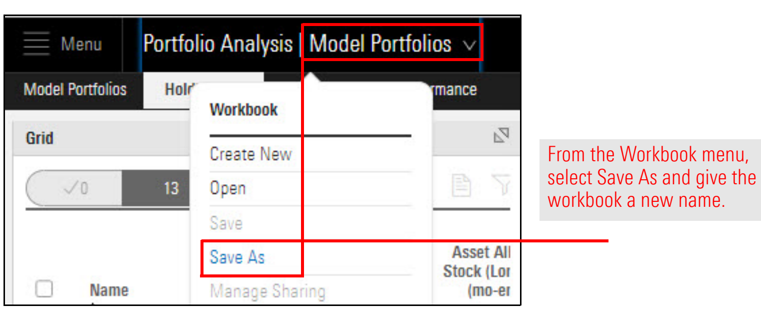
1. In a **Model Portfolios** or **Client Accounts workbook**, in the Grid, select a **model portfolio** or **client account**.
2. Select the **Holdings** worksheet. The Holdings Analysis component is displayed by default.
3. From the **Component Settings** menu, select **Column Set** > **My Data Set**.

4. In the My Data Set menu, **click** the **checkbox for each data point** you want to view. **Scroll down** to access additional data points. Note that your custom data points are available at the bottom of the menu.

   You also have the following options:
   - In the **Search** field, type the **name of the data point** you want. When it's displayed, **click its checkbox**.
   - Click **Select All**. Note that more than 100 data points are available.



5. When you've finished selecting data points, click **Done**.
6. (Optional) If you want to save your My Data Set selections, do one of the following:
   - Recreate your My Data Set selections as a **custom column set** (see Working with Custom Column Sets), or
   - From the **Workbook** menu, select **Save As** to create a custom workbook.



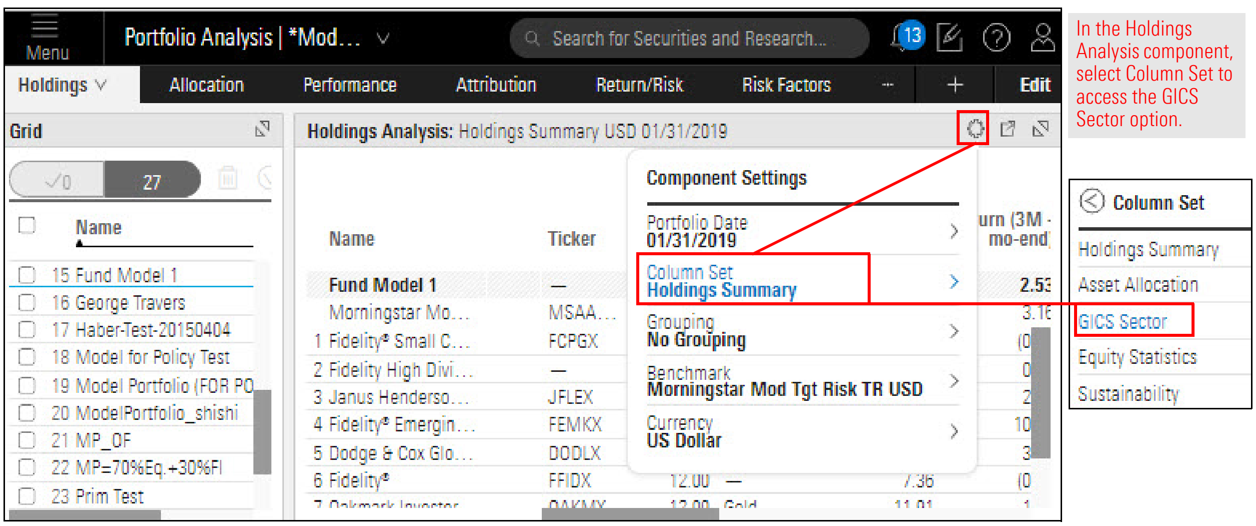
How can I see the GICS sector exposure of a portfolio object?

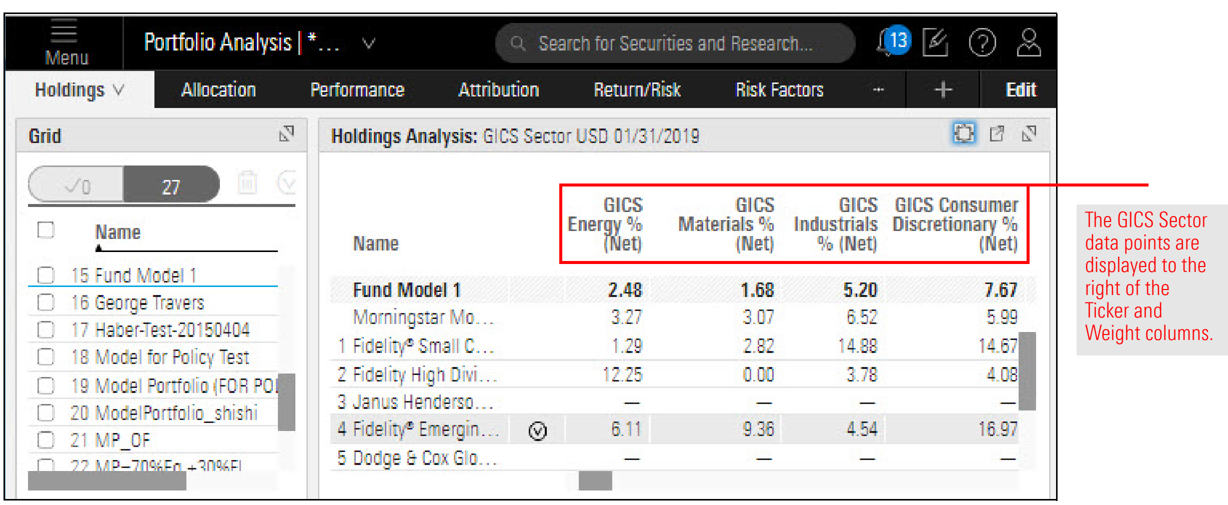
GICS sector is a comprehensive stock sector classification defined by S&P and MSCI. Similar to the Morningstar Equity Sector, it is used by global investment professionals.

> Note: You must be entitled to GICS data to access the GICS Sector grouping or column set. To request access, please contact your Customer Success Representative.

To help you understand the GICS sector exposure of a client account, model portfolio, proposal, or custom benchmark, you can now view a breakdown of a GICS sector as described in the following table:

To access GICS Sector here…	From the Component Settings menu, select…
Allocation component Historical Allocation component	**Grouping** > **GICS Sector**
Holdings Analysis component	**Column Set** > **GICS Sector**
Portfolio Editor	**Column Set** > **GICS Sector**





How can I learn about a portfolio's holdings' impact on the Portfolio Sustainability Score?

If you are entitled to view company-level ESG data, you can now better understand how a portfolio's equity holdings contribute to the Portfolio Sustainability Score for a given date.

> Note: To request access to company-level ESG data, please contact your Customer Success Representative.

In the Holdings Plot component, you can view the following new data points:

- Company Normalized ESG Score, and
- Company Highest Controversy Level.

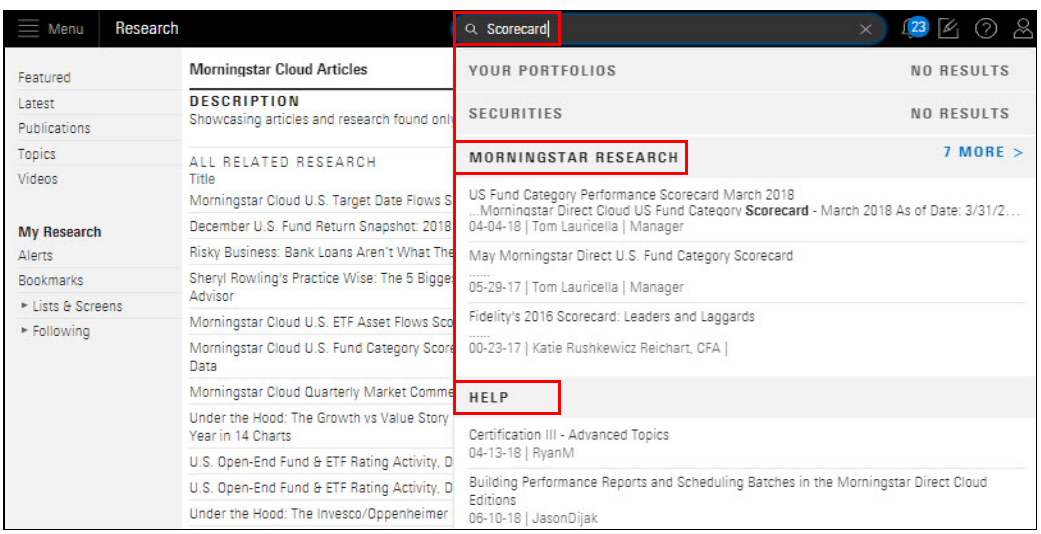
To learn more, please read Leveraging Morningstar Sustainability Data.

What has changed when searching for content in Morningstar Research?

The Search functionality you're used to in the Morningstar Direct Cloud Editions is now available in the Morningstar Research pages. Prior to this release, search results were limited to the displayed Research page, such as Topics.

Now, when viewing a Research page, you use the Search field in the header, the search results are consistent with other areas in the Morningstar Direct Cloud Editions, as follows:

- The results open in a panel on the right side of the window.
- The results are displayed in sections, such as Your Portfolios, Securities, Morningstar Research, and so on, and
- The search extends beyond Morningstar Research to include Help, authors, and so on.



Searching for the word Scorecard returns results in Morningstar Research and Help.