Enhancements in Morningstar Direct[™]

2012 | Release Notes for Versions 3.9 - 3.12

IMPORTANT NOTICE: PLEASE READ BEFORE UPDATING

- New Fixed Income Sectors Once you upgrade to version 3.11 or 3.12, you will not be able to select the old Morningstar Fixed Income Sectors from Data Sets, Search Criteria, Presentation Studio components, or Performance Reporting. However, your existing saved Data Sets, Search Criteria, Presentation Studio reports, and Performance Reports that include the old Morningstar Sectors will continue to be supported until November 30st, 2012.
- ► **Report Builder retired from Direct 3.11 and 3.12** Once you upgrade you will not have access to Report Builder function that is currently available under the Tools menu or your previously saved report templates built from the tool.

New Global Fund Report and Morningstar Analyst Rating™ with Pillar Scores

- ► Morningstar Analyst Rating[™]:
 - A forward-looking, analyst-driven rating that uses a five-tiered scale—featuring three positive ratings of Gold, Silver, and Bronze, plus Neutral and Negative ratings—to indicate our analysts' view on a fund's ability to outperform its peers over the long term.
 - Our Analyst Rating is based on five key pillars our analysts weigh when evaluating and rating a fund: People, Process, Performance, Parent, and Price. Analysts assign Positive, Neutral, or Negative scores to each of these five pillars, to provide clearer insight into a fund's particular strengths and weaknesses.
- Global Fund Report: new comprehensive and sophisticated seven-page PDF report, designed specifically for advisors and
 institutional clients, including written analysis on each of the five pillars underlying the Analyst Rating, as well as a full array of
 current and historical data

TOOLS AND FUNCTIONALITY

Performance Reporting

- ► Batch Management
 - ► Export to Tabs in Batch and Vacation mode to turn batches on/off
 - New Morningstar template 'TTM Heat Map' to create color-coded Trailing 12 Months reports
- Share Templates with other users and Read Only Sharing of Performance Reports
- ► Historical Scorecards for Performance based Scorecards
- ► Conditional Formatting
- Add a weighted mean to the sector stats (Weighted by fund size/market cap)
- ► Addition of a mean that strips out the top/bottom 5% of funds
- Each column can have the currency set separately
- ► Add the return type Cum fair Nav
- ► Export the average rating as a decimal instead of an integer
- ► Set any day of the week as the week ending date
- Automatically save Scorecard results to Custom Database, enabling seamless use of this data in other applications such as Presentation Studio
- Display Benchmarks
 - Add more than two display benchmarks per grouping in a report
 - Benchmarks can be shown at the top of the funds rather than below

Presentation Studio

Add "Plan Review" workflow for creating and automating retirement plan review books and fact sheets

- > Streamline and automate the generation of quarterly plan monitoring reports
- ► Easily construct and edit custom "Plan review" templates
- ► Manage production runs through Report Portal on Morningstar servers
- Our solution brings together data, template construction and automation for a complete end-to-end solution for solving this reporting need
- ► Significant enhancements to system performance and speed
- ► Increased investment limit to 50 for charts and tables
- Since Inception and Common Inception Time Periods
- ► Add "Category Average" as a new separate linking item
- ► Allow user to restore link status for specific settings
- Add ability to restore all settings links for all components in the workbook
- ► Integration with Note Manager
- ► New Pie Chart Features:
 - New Data Set 'Asset Allocation (US)' that is more granular than current Stock/Bond/Cash breakdown by also breaking out Non-US Equity and Non-US Bond
 - ► Show Portfolio Holdings of a fund of funds or portfolio in the pie chart
 - Over 10 new additional display options (Regional exposure, Country Exposure, etc)
- New components:
 - ► Performance Reporting Component
 - Historical Data Point Table
 - ► Supplementary Bar Chart
 - ► RBSA Stacked Bar Chart
 - ► Histogram Chart
 - ► Multiple-Return Growth chart
 - ► Multiple-Return Rolling Return Chart
 - ► Multiple-Return Trailing Returns with rank (Single-Investment) table
 - ► Returns Based Style Analysis table and bar chart
- ► Enhancements for existing chart/table/text components
 - Allow users to customize column width and header row height in data tables
 - New Label Rule feature that allows more control of the display of the time periods
 - Allow users to show/hide column/row header in data tables
 - Separate align setting on data table to data column
 - ► Combine dynamic and static contents in Text component
 - > Display rank under the investment as another row in a table
 - Ability to show/hide axis label in charts
 - ► Add Excess Return Geometric as a new calculation type in growth chart
 - Bring notes on benchmark 1, 2, and category average
 - ► Trailing mode and bar display option for Rolling Return chart
 - ► Improvement for x-axis display of bar chart and peer group chart
 - ► Keep consistent font size for x and y axis label in X/Y chart

- ► Support Post-tax Return for IMA Sector
- Support Offer-bid Return and Cumulative Fair NAV Return in calculation
- ► Add ISIN as option in header/footer
- Display custom holding name in pie chart and top holding table
- Incorporate historical custom database data points
- ► Provide raw data and breakpoint value for peer group investment for "since inception"

Portfolio Management

- Ability to create a Combined Series. Options will include combining two different investments, and adding or subtracting a constant value.
- Implement TNA Accounts: automatically weight a portfolio by Net Assets Share Class
- From User Preferences, select to use Net returns for CITs that are included in an Account or Model
- ► Import and Display of Net Return for Accounts
- New checkbox of 'Use Gross Return' at account profile to enable Gross Returns to represent Total Return
- ► Support pre- or post- Fee performance calculation
 - Add Management Fee % and frequency (Per) input capability to Accounts/Model Portfolios/Custom Benchmarks so that performance for Net of Fee for the default return (total return) can be calculated for Accounts/Model Portfolios/Custom Benchmarks

Portfolio Analysis

- ▶ Introduce Portfolio Analysis to help portfolio managers monitor and adjust portfolios as well as communicate performance results
- Use investments in the Morningstar global database (Separate Accounts, Market Indexes, ETF's, Open-End Funds, Closed-End Funds, etc.) and Model Portfolios, Accounts, and Custom Benchmarks from Portfolio Management
- > Added real-time pricing data from all global exchanges covered by Morningstar Quotes
- ► Holdings Based Style Box Chart
- View relative exposure against benchmark for any valuation or fundamental data point in terms of standard deviations
- Add a list of portfolios to the dashboard for summary analysis with links to real-time analytics
- ► Export all components to Excel including data in chart components

Asset Allocation

- Introduce Asset Allocation to model asset class behavior, optimize on various risk and return metrics to find optimal asset allocation policies and forecast their future performance
- Asset Class Modeling Use a traditional log-normal model or incorporate fat-tailed and non-normal distribution assumptions
- Optimization Use traditional mean variance optimization, or optimize using other risk and return measures, including CVaR, to find the set of optimal asset allocation policies
- ► Forecasting View probabilities of wealth and return outcomes
- ► Provide reporting capabilities through Presentation Studio

Equity Attribution

- ► Historical Grouping Use historical values for numeric data points (ex. P/E, PB, etc.)
- Added right clicks in Attribution grid view to Include and Exclude holdings
- ► Update Long/Short to group to use below first level

- Equity Multiple Portfolio will connect with the Custom Database for calculating custom aggregated portfolio level statistics
- Ability to display group level attribution effects in Equity Multiple Portfolio (ex. Sector level Allocation, Selection, and Interaction effects)
- ► In addition to MSCI Country, users can now run Performance Attribution using MSCI Region as a grouping option

Total Portfolio Attribution

- ► Add the ability to combine the Misfit Effects into Manager Selection or Allocation Effects
- ► Moved the Time Period to first decision in workflow to improve performance
- ► Ability to reuse asset class benchmarks from previously saved reports
- ► Custom reporting for Total Portfolio Attribution within Presentation Studio
 - ► Includes pie chart components for asset class and holdings level exposures
- ► Multiple Portfolio analysis in Total Portfolio Attribution
 - ► Run Total Portfolio Attribution on multiple models, fund-of-funds, and target date strategies to review results and highlight key statistics with conditional formatting within one report. Identify outlier and drill-down within the report to the underlying strategy for further analysis.

Morningstar API for Microsoft® Excel® (download separately to get latest updates listed below)

- > Take full advantage of Microsoft Excel capabilities and automate data retrieval from Morningstar Direct
- ► Incorporate new dash codes to Morningstar API for Excel to help define calculation time periods
- > Data dictionary which includes short name, full name and definition of data points supported
- ► Enabled annualized day to day return calculation

Asset Flows (formerly Fund Flows)

- Users can track institutional assets, insurance products, and ETFs, as well as open-end funds. The name change also sets the stage for additional content beyond product flows including allocations, which will combine assets and flows data to present high-level views of changes in active manager sentiment worldwide.
- Added historical comprehensive fund-level flows for fund (portfolio) level analysis. This new series is available throughout Morningstar Direct including Workspace, Performance Reporting, and Presentation Studio.
- ▶ Weekly flows for US open-end funds

Note Manager

- Added Note in Quicktake window user can quickly access all notes for the investment in the Notes Section of Quicktake
- ▶ Bulk Note Import Import Security Notes in bulk via Microsoft Excel
- ► Link note categories to custom data points stored in firm level custom data point
- ► Add "All Firm Users" and Customized user group in access list
- Add new "Related Notes" data point which can be added to any grid view. If there are any notes for the specific security a new pop-out note interface will be displayed which will allow users to review/edit notes for securities while still working in Direct.
- Customize categories to add custom content as a template, and update Right Click menu to include all categories
- > Enhance link with Firm-level Custom Database to display and allow for editing of custom database fields within note window
- ► Display related Fund Level notes when filter by Security
- ► Ability to create notes for Retirement Plans
- New Note Alert will be added to allow users to be notified when notes are created or modified for securities which they follow

Group Manager - NEW

Ability to create and manage user groups; users will be able to organize firm users into groups and share custom notes directly to groups. As users are added and removed from groups they will dynamically gain/lose access to content shared to the group.

Custom Database Workspace

- Enabled custom data point creation for user-defined securities in addition to Morningstar-tracked securities
- ► Enabled daily automated FTP custom database batch import functionality

Reports and Charts

New ETF, Closed-End, Institutional, Separate Account, Money Markey Quicktake and '529 Plan Report'

Import

- ► Import Prices / Dividends / Splits / Returns for User-Defined Securities for DRI Calculation in Direct Portfolio Management
- New Retirement 'Plan / Platform' Import for Plan Manager

Functionality Improvements

- Export to CSV format
- ► Added the ability to use your saved Search Criteria from the Find Investments window
- Add user defined securities to investment list in multiple selection
- ► For advanced search criteria, add ability to set up a series of rules to choose one share class per fund for each search. This will be controlled under a new tab in User Preferences called User Defined Primary.
- ▶ Pop up screen allowing client to access/search RNS/News stories for UK CEFs
- > New report showing the top ten holdings for closed end funds

Bond Data from Interactive Data Corporation (IDC)

- ► Covers over 2 Million bonds, including Munis, Gov't bonds, CMO, ABS, and Corporate bonds globally.
- <u>Access available upon request only</u>. Inquire electronically with Morningstar via Home / Content Catalog / Database / IDC
 Bond Database. (Note: Users who *already* import bond portfolios or create user-defined bonds will not need to request access to IDC's data; they will automatically have access.)
- ▶ IDC Bonds inside Custom Accounts and Models will not have performance available.
- Variety of data points, including Trailing Returns for periods of one month or more (no daily returns). Prices will not be displayed. Point to point and daily returns will be available at a later date.

DATA ENHANCEMENTS

New Fixed Income Sectors

- The new Morningstar Fixed Income Sector classification methodology is based on a three-tier system in which the fixed-income securities and derivatives in a fund's portfolio are mapped into Secondary Sectors that represent the most granular level of classification.
- ► The sectors will roll up into one of several more broadly defined Primary Sectors and then to one of six Super Sectors.

• The sectors will be calculated for all applicable portfolios, including dedicated bond funds and those with significant bond exposure such as allocation funds.

New Investment Universes

- Unlisted Closed-End Funds, Chile Insurance Funds, Brazil Open-End Funds, Australian Listed Investment Companies, India Insurance Funds, Malaysian Popular Indexes, and Malaysia Exchange Traded Funds (AFS)
- Category Average: GIFS Hong Kong SFC Authorized, GIFS Hong Kong MPF, GIFS Singapore Insurance Linked, GIFS Singapore Registered Funds, GIFS Malaysian Unit Trusts, GIFS Taiwan Registered Funds, GIFS Japan, South Korea Open-End Categories, 529 Portfolio Categories

Data Enhancements

- ► Separate Account firm, asset, accounts and strategy data
 - Introducing over 100 new firm and strategy level data points to enhance consultants' and analysts' ability to identify and evaluate potential managers for their platforms.
 - ► For a full list of attributes click <u>here</u>
- ► ETF data points added:
 - ► Average Spread and Average Spread Observation count
 - ▶ Offer Price, Bid Price and Trading Volume into Returns (Daily)
 - ► Daily Offer Price and Daily Bid Price into Historical Price and Return Data
- Equity Statistics added at Portfolio level
 - ► Free Cash Flow Yield, ROCI, Financial Health Grade, Profitability Grade, Growth Grade, Cash Return, and Morningstar Economic Moat breakdown