

Enhancements in Morningstar DirectSM

March 2010 Release | Version 3.8

Presentation Studio

- ▶ New components:
 - ▶ Holdings-based attribution components
 - ▶ Multi-manager attribution comparison (4 components)
 - ▶ Single manager attribution (6 components)
 - ▶ Portfolio holdings table
 - ▶ Correlation matrix
 - ▶ Separate account narratives
 - ▶ Notes and dynamic text
 - ▶ Rich text format text components
 - ▶ Investment Strategy and Manager Biography text
- ▶ Select portrait or landscape page layout
- ▶ New workflow for fact sheet creation
- ▶ Export to PDF, PPT or XPS
- ▶ Enhance portfolio date selection options
- ▶ Select custom colors using RGB codes
- ▶ Improve font sizing in tables
- ▶ Organize saved files and templates into folders
- ▶ Share templates with other Authorize Users

Performance Attribution

- ▶ Include attribution results in reports created in Presentation Studio
- ▶ Presentation Studio single manager components:
 - ▶ Attribution effect horizontal bar
 - ▶ Attribution effect scatter plot
 - ▶ Attribution effect cumulative line graph
 - ▶ Total active return
 - ▶ Highest/Lowest
 - ▶ Contribution
- ▶ Presentation Studio multi-manager comparison components:
 - ▶ Attribution summary horizontal bar
 - ▶ Attribution summary scatter plot
 - ▶ Attribution detail bar chart
 - ▶ Attribution summary
- ▶ Total Portfolio Attribution enhancements
 - ▶ Select imported returns series for Aggregate(s) to calculation total portfolio attribution report
 - ▶ Use Aggregate as custom benchmark/policy
 - ▶ Enable market returns for closed-end funds and ETFs
 - ▶ Display Ending, Beginning, or Average Weights for Overall Period
 - ▶ Include multiple fees and customize fee labels in report
 - ▶ Show Intra-Month allocation changes in Weights view
 - ▶ Assign Manager Fee source (i.e. Annual Net Expense Ratio, Custom)
- ▶ View all available equity data points for calculation of portfolio statistics
- ▶ Additional security classifications (i.e. All Equity Data Points plus, Currency)
- ▶ Enhance Batch Management
 - ▶ More flexible scheduling options (i.e. n-th day of month)
 - ▶ Email report to Recipients
 - ▶ Export showing only holdings in portfolio

Performance Attribution (cont'd)	<ul style="list-style-type: none"> ▶ Add display options for attribution effects scatter plot (i.e. All, Best & Worst, Portfolio Only) ▶ Suppress Bond, Cash, Equity Missing Performance, Other and Unidentified groups under Attribution Total when both selected portfolio and benchmark are zero for the period ▶ Enhance output format when exporting to Microsoft® Excel® ▶ Segment Numeric Rule-Based Buckets into Percentiles
Performance Reporting	<ul style="list-style-type: none"> ▶ Email calculated performance reports to Recipients using batch management ▶ Schedule reports to run on the n-th day of the month using batch management ▶ Include user-defined Notes for investments ▶ More menu options when right-click on column headers ▶ Additional time period selection options ▶ Use "Relative to" option to calculate Investment Scorecard, filter, and apply conditional formatting
Importing	<ul style="list-style-type: none"> ▶ Fully automated importing of position accounts from any source <ul style="list-style-type: none"> ▶ Morningstar staff sets-up multiple jobs to pull Position Account data from one or more FTP locations ▶ User schedules the job(s) to run on machine on a daily basis (without having to be logged into Direct) ▶ If file is in one or more of the FTP locations, process will retrieve, import, and post the files automatically ▶ If there are any securities mapping issues, the unidentified securities will post to the user's local blotter for mapping ▶ User receives daily notification email on status of the job(s) ▶ Share posted Positions Accounts with other users within company ▶ New exchange and currency filter preferences for improved security matching
Fund Flows	<ul style="list-style-type: none"> ▶ New Active/Passive filter to conduct top-down analysis of flow trends between and the impact on the strategies <ul style="list-style-type: none"> ▶ Segment by category, asset class, and other variables ▶ Currently available for U.S. open-end funds and ETF markets ▶ Include for other markets in future releases ▶ Enable Additional Criteria tab under Advanced Search capability for U.S. markets to further narrow data views using: <ul style="list-style-type: none"> ▶ Operational data points including sales charges (loads), fees, inception date, and purchasing requirements ▶ Total net asset and estimated flow sizes ▶ Link saved Investment Lists to view in aggregate the assets under management and flows for the list ▶ Improve usability of toolbar and easier access to Custom Reports capability
Plug-in for Excel	<ul style="list-style-type: none"> ▶ New templates: <ul style="list-style-type: none"> ▶ High/Low/Closing Prices ▶ Daily Yield ▶ Historical Active Share
Portfolio Management	<ul style="list-style-type: none"> ▶ Introduce Portfolio Management to organize and implement strategies/policies with models and portfolios ▶ Move Aggregates and Position Accounts out of Workspace to Portfolio Management on the left navigation panel
Reports & Charts	<ul style="list-style-type: none"> ▶ Include disclosures for Fund vs. Fund report ▶ Added Yearly Estimated Net Flow to Historical Cash Flow Data
Functionality & Usability	<ul style="list-style-type: none"> ▶ Aggregates and Position Accounts <ul style="list-style-type: none"> ▶ Move Aggregates and Position Accounts out of Workspace to Portfolio Management on the left navigation panel ▶ Submit request to add new separate account product to database or update data for available product in database by clicking on "Request Update" button in the separate accounts universe grid view ▶ Enhance Training page to easily register for live training or listen to pre-recorded sessions, register for regional in-person trainings, and participate in certification program ▶ Select platform Language in French through Set User Preferences

- ▶ Separate accounts universe
 - ▶ Submit request to add new product to database or update data for available product in database by clicking on "Request Update" button in the separate accounts universe grid view
 - ▶ Generate collective PDF report of separate account manager narratives for selected strategy
 - ▶ Manager narratives available as components for reports in Presentation Studio
 - ▶ Morningstar Institutional Category gross return ranks
 - ▶ Right click on separate account and select Document Library to access ADV Parts I and II
 - ▶ Enhance output format when exporting manager narratives to Microsoft® Excel®
 - ▶ Wrap/TAMP Availability data point in Operations view of U.S. separate accounts universe
 - ▶ Enable all manager available phone and web address data points
 - ▶ Search by new Separate Account Morningstar Institutional Categories – Core Plus Bond, Enhanced Cash Management, Infrastructure and Tactical Asset Allocation Balance
 - ▶ New sub-universe for Australia Managed Accounts
- ▶ New Global Funds Manager universe located in People database under Global Databases to research by manager information
 - ▶ Career start date
 - ▶ Current company, company history
 - ▶ Education including School, Year, Degree and Major
 - ▶ Country, City, Province, Postal code, Phone, Fax, Email, Homepage and Address
 - ▶ Ownership level
 - ▶ Separate account asset managers and committee members
 - ▶ Right-click on manager name to view history of all funds managed
- ▶ New measures to custom calculation library
 - ▶ Efficiency Ratio (geometric)
 - ▶ M-Squared
 - ▶ Gain Deviation
 - ▶ Loss Deviation
 - ▶ Upside Standard Deviation
 - ▶ Downside Standard Deviation
- ▶ Measures revised in custom calculation library
 - ▶ Downside Deviation
 - ▶ Upside Deviation
 - ▶ Gain Standard Deviation
 - ▶ Loss Standard Deviation
- ▶ Morningstar Direct Home
 - ▶ Launch Filings (formerly Document Library) under Home on the left navigation panel to access global filings for funds and stocks and ADV Part II
 - ▶ Enable Filings from Morningstar Document LibrarySM specific to local markets
 - ▶ Launch Help/Definitions under Home on the left navigation panel to access help information for data points, methodology, training information, and FAQs
- ▶ Morningstar Institutional Categories
 - ▶ New Commodities categories including Agriculture, Energy, Industrial Metals and Precious Metals
 - ▶ New Separate Account categories – Core Plus Bond, Enhanced Cash Management, Infrastructure and Tactical Asset Allocation Balance
 - ▶ Institutional Category gross return ranks
 - ▶ Select Morningstar Institutional Categories as a peer group

- ▶ ETF data points
 - ▶ Institutional ETF data points including Tracking Error, Daily Alpha before Expenses, Market Impact and Concentration Risk
 - ▶ ETF tags including Single Country, Dividend Yielding, Real Estate Tracking, Currency and Commodity
 - ▶ Historical NAV
- ▶ Additional data points
 - ▶ Annual report Expense Waiver, Prospectus Expense Waiver, Type and Expiration Date
 - ▶ Total Market short and net values
 - ▶ Mutual fund suspension tag
 - ▶ Hedge Fund historical price
 - ▶ Primary common share for stocks and primary share class for funds
- ▶ # of Funds in Category displayed in Returns grid view for use with Category rank
- ▶ New Japanese and Chinese data points including Local Japanese Firm name, as well as DC, LOF and Financial Plan Fund Flag
- ▶ Enhancement to New Zealand universe to include a mixed view which shows PIE fund Pre-Tax returns alongside non-PIE funds Post-Tax returns
- ▶ New Zealand Surveyed Asset Allocation and PIE Conversion Date
- ▶ Norwegian and Finnish Pension universe
- ▶ Singapore Restricted Fund database
- ▶ Australian Managed Accounts sub-universe in Separate Accounts universe
- ▶ New Taiwanese SITCA Categories
- ▶ German 'Large Investor' funds data point
- ▶ Numerous Chile data points including AAFM and SVS Local Categories
- ▶ New 'Suspension Flag' which denotes funds whom are currently suspended from trading
- ▶ Israel data points including ISA Code & Category, as well as Maximum Exposure
- ▶ Australian local data points including Minimum Platform Initial and Fund Fee
- ▶ Ability to search for Oldest Shareclass across all Investments
- ▶ South African ASISA Local Category averages