

Enhancements in Morningstar DirectSM Functionality & Usability

Mar 10 Release | Ver 3.8

- ▶ Aggregates and Position Accounts
 - ▶ 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

Sep 09 Release | Ver 3.7

- ▶ New Basic Search tool uses graphical criteria to quickly narrow investment universes and find investments, versus Advanced Search (formerly Search)
- ▶ More data points to conduct Advanced Search, including portfolio statistics and operations data, when searching within All Managed Investments
- ▶ Advanced Search capability for newly added classifications (NAICS, GICS Sector, SIC)
- ▶ Enhance former Custom Funds importing capability to launch new Position Accounts tool found under Workspace (*see Position Accounts*)
- ▶ Aggregates
 - ▶ New security identifier type field with auto-detect option when importing an Aggregate
 - ▶ Option to change portfolio date to Earliest Common if the Aggregate inception date is earlier than constituents' inception date for Buy/Hold strategies
 - ▶ Organize Aggregates into user-created subfolders
 - ▶ Improve calculation run-time
- ▶ More Set User Preferences options
 - ▶ Select platform Language in English, Chinese, or Italian
 - ▶ View Asset Class Type as Chinese, Italian, United Kingdom, or United States asset allocations
 - ▶ Default how portfolio performance is calculated when security returns are not available for user-defined Aggregates and imported Position Accounts
 - ▶ Set return type as Market or Total Returns for closed-end or exchange traded funds to calculate Aggregate performance
 - ▶ Add Import tab to set Use Morningstar Prices or Use Imported Prices as the default price source to calculate performance for imported securities used in Performance Attribution
 - ▶ Export Morningstar Style BoxTM and ratings as images or text
 - ▶ Access Set User Preferences under File across main toolbar in Morningstar Direct
- ▶ Launch Morningstar plug-in for Microsoft® Excel® from left navigational panel under Home in Morningstar Direct
 - ▶ Easy-to-use templates automatically pull historical time series data into spreadsheets for tasks such as developing and backtesting custom models, or for conducting peer and trend analyses
 - ▶ Gives users freedom to develop custom calculations and adjust frequency, time period, and currency in analyses
 - ▶ Links with Excel's features to transpose rows and columns and create charts, print ranges, and pivot tables
- ▶ Exit Morningstar Direct without having to confirm the end of current session
- ▶ Set default grid view for investment universe research under Local or Global Databases
- ▶ Right-click on column header to set freeze pane when scrolling to the right in grid view

Jun 09 Update

- ▶ Introduce an enhanced feedback and support exchange system
 - ▶ Click on Send us feedback to submit messages to Morningstar Direct support team
 - ▶ Track all the feedback submitted by user, ask follow-up questions to Morningstar Direct support team, close completed items, and rate user support satisfaction through new exchange system
 - ▶ Launch new Feedback interface under Home on left navigation panel

Mar 09 Release | Ver 3.6.1

- ▶ Defined Contribution tool
 - ▶ Perform due diligence for configuring diversified retirement plan lineups
 - ▶ Conduct detailed analysis to ensure consistency with investment policy statement
 - ▶ Compare fund- and plan-level fees
 - ▶ Profile a single plan or compare plans side-by-side
- ▶ Apply X-Ray for user-defined Aggregates and Custom Funds when saved as an Investment List
- ▶ Organize saved Investment List, Search Criteria, and Data Sets in subfolders under Workspace
- ▶ Import user-defined security name, grade, ID, category, and benchmarks
- ▶ View global investment databases or only user's local investment databases
- ▶ Quickly search investment universes for a single investment by ISIN, Name, and Legal Name
- ▶ New columns for Alert Rules and Triggered Alerts to display previous value, triggered value, new value, change direction, settings

Dec 08 Release | Ver 3.6

- ▶ Morningstar® Hypothetical IllustratorSM
 - ▶ Analyze past performance of global investments in relation to a benchmark, competing investment, or value-added to overall portfolio
 - ▶ Assess an individual investment or a portfolio of securities across multiple investment universes
 - ▶ Illustrate investment strategies based upon specified schedules, fees, cash flows, and rebalancing options
 - ▶ Incorporate underlying holdings to show performance with relevant asset allocation, sector weightings, and style diversification
 - ▶ Display results in different languages, currencies, and report configurations
- ▶ User-Defined Notes
 - ▶ Include most recent qualitative note written for stocks and funds in custom investment profiles created in Report Builder
 - ▶ Add data point for note effective date to track records
- ▶ Enable Search Criteria to find securities across all investment universes
- ▶ Display extended performance start date in data views
- ▶ Search for market indexes by Country Orientation
- ▶ Edit Data for Historical Valuation and Growth Measures within stock universe

Oct 08 Release | Ver 3.5

- ▶ Aggregates
 - ▶ New columns in Edit Holdings (inception date, price in base currency)
 - ▶ Change and save benchmark and currency settings at Portfolio Aggregation report generation
 - ▶ Append a PDF report for each constituent in Portfolio Aggregation report
- ▶ Introduce Notes capability to write and share user notes on investments for stocks and funds
- ▶ Intraday price monitor for stocks, ETFs, and market indexes
- ▶ Additional Alert options including changes to Morningstar Category, Stewardship Grades, Morningstar Style Box™, stock fair value estimates, credit quality/rating
- ▶ Access sample reports, searches, charts
- ▶ Favorites function to quickly launch investment universes, saved files, and charts
- ▶ Export historical holdings
- ▶ New Training Schedule interface to easily register and attend trainings

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- ▶ Add flexibility to build a customized Home page
 - ▶ Global Hedge Funds, Market Analysis, Economic Analysis, and Ownership Analysis now four separate major databases
 - ▶ Category/Sector Average appears as a database under Fund Analysis
 - ▶ Organize Investment Lists using new action buttons to move securities in list
 - ▶ Right-click on column headings to view Data Definitions and edit Data Settings

Oct 08 Release (cont'd)

- ▶ Double-click data points from Data Set view to edit data settings
- ▶ Find Data Points by Views or Name containing
- ▶ Enable Add To and Save As options in holdings view to include constituents in Investment Lists, Aggregates, or Performance Reports
- ▶ Oldest Share Class indicator in Find Securities dialog
- ▶ Leveraged Net Long (130/30, 120/20, etc.) products identified in open-end funds and separate account universes

May 08 Release | Ver 3.4

- ▶ Enhance performance for faster opening of fund universes, running searches, and generating Aggregates/Custom Fund reports – additional improvement will be included in future releases
- ▶ Customize the layout of your Home page by moving available components or hiding components
- ▶ Save column widths for Investment Lists or Search Criteria
- ▶ Search security name by “Does Not Contain”
- ▶ Save Benchmark and Average settings for saved searches
- ▶ Option to export to an existing Excel file