

Enhancements in Morningstar® EnCorr® 9.5

Data	<ul style="list-style-type: none"> ▶ Addition of South Africa fund database ▶ New summary statistics data points: <ul style="list-style-type: none"> ▷ Efficiency ratio ▷ R-squared ▷ Returns-since-inception ▶ Addition of index data points for query or display: <ul style="list-style-type: none"> ▷ Asset class ▷ Stock sector orientation ▷ Bond sector orientation ▷ Muni-bond sector orientation ▷ Market cap orientation ▷ Style orientation ▷ Region development orientation ▷ Country orientation ▷ Inception date 	<ul style="list-style-type: none"> ▷ Return type ▷ Sec Id ▷ Exchange rate ▷ Weighting scheme ▷ Currency hedged ▷ Sector orientation (alternative) ▷ Exclude region orientation ▷ Exclude country orientation ▷ Rebalance frequency ▷ Reconstitution frequency ▷ Average credit quality ▷ Index website ▷ Portfolio date ▷ Equity regional breakdown
Cross-Application Update	<ul style="list-style-type: none"> ▶ Addition of AND/OR search functionality in standard query ▶ Save frequently used queries for each database ▶ Search by list of ISINs for global funds ▶ Order search criteria using parentheses ▶ Feedback button added to menu bar ▶ Training schedule link added to menu bar 	<ul style="list-style-type: none"> ▶ Data update schedule link added to menu bar ▶ Replace constituents within a portfolio without altering portfolio weights ▶ Ibbotson ID populates for select series to support portfolio import process
Data Center	<ul style="list-style-type: none"> ▶ Append most recent performance to existing user-defined data 	<ul style="list-style-type: none"> ▶ Enter returns in percentage format in series editor
Optimizer	<ul style="list-style-type: none"> ▶ Display standard deviation instead of position number as the x-axis on the frontier area graph ▶ Addition of marginal contribution columns to risk decomposition table ▶ Lock constraints of asset class weightings within optimized portfolios 	<ul style="list-style-type: none"> ▶ Lock capital market assumptions for internal deployment ▶ Select and control available asset classes of portfolios for internal users ▶ Addition of an over or underfunded graph from Monte Carlo simulation results
Inputs Generator	<ul style="list-style-type: none"> ▶ Addition of 12,000 equity market capitalization values for Black-Litterman input construction 	
Allocator	<ul style="list-style-type: none"> ▶ Revised methodology to replace estimated measures of tracking error and alpha with actual portfolio measures 	<ul style="list-style-type: none"> ▶ Addition of link to quickly transfer target benchmark weights from an optimized portfolio
Attribution	<ul style="list-style-type: none"> ▶ Choose from pre-selected, commonly used index sets for returns-based style analysis 	
Technical Improvements	<ul style="list-style-type: none"> ▶ Better compatibility between resampling and liabilities ▶ Updated information ratio calculation ▶ Improved compatibility with Vista ▶ Fixed technical crashes in rolling dialog box of peer groups ▶ Improved blended series component integration 	<ul style="list-style-type: none"> ▶ Added ability to graph wealth target return when the first period is not included ▶ Revised the last data update date to post correctly ▶ Made menu items visible on rolling standard deviation graph ▶ Improved template report construction in Optimizer