

## **Enhancements in Morningstar® EnCorr® 9.4**

Data Center	► Expanded portfolio data import capability	
Data, Software Update	date ► New user-interface to schedule automatic data updates	
Cross-Application Upgrades	<ul> <li>Greater compatibility with Windows Vista</li> <li>Additional report templates</li> <li>Availability of charts and graphs across software tools</li> <li>Enhanced options for customization of graphs when exported to Excel</li> </ul>	<ul> <li>Expanded operational data and calculated summary statistics</li> <li>Access to Morningstar Fund Reports</li> <li>Extended options to select frequency of value adjustment when creating combined series</li> </ul>
Optimizer	<ul> <li>New risk-budgeting functionality to quantify percent contribution of risk from each asset to the total risk of the portfolio</li> <li>Option to calculate wealth and return forecasts using a log-stable returns distribution assumption</li> </ul>	<ul> <li>▶ Resampling Enhancements:</li> <li>▶ Randomize initial seed value</li> <li>▶ Save calculated resampling cases</li> </ul>
Inputs Generator	<ul> <li>Flexible date ranges and data frequencies to calculate asset class correlations</li> <li>Improved usability of the Correlation Test (formerly Singularity Test) to examine the condition of the correlation matrix</li> </ul>	► Automatic monthly updates of the risk-free rate
Analyzer	<ul> <li>▶ Graphing Enhancements:</li> <li>▶ Option to assume log-stable distribution to generate the returns histogram graph</li> </ul>	<ul> <li>▶ Use non-logarithmic scale to draw the Index Line Graph for short time periods</li> <li>▶ Addition of a Compounded Return Graph to show compounded returns over time</li> </ul>
Attribution	<ul> <li>New benchmark sets and style maps for international equity funds</li> <li>Option to set the estimation begin and end date to the common date range for selected managers and benchmark</li> <li>Option to annualize returns for periods less than one year and cumulative returns for periods greater than one year for Peer Group Analysis and Peer Group N-Tiles</li> </ul>	<ul> <li>▶ Graphing Enhancements:</li> <li>▶ Style scatter plot expanded to include six or nine quadrants</li> <li>▶ Option to assume log-stable distribution to generate the returns histogram graph</li> </ul>

