Simulation Configuration and UI modeling

This chapter discusses the components as follows

- Project options
  Setting options for a Simulation project, e.g., animation, simulation framework, and Simulation engines.

- SimulationConfig stereotype
  «SimulationConfig» and the SimulationConfig stereotypes as a model-based execution configuration through the *«stereotype» SimulationConfig*.

- Simulation log
  Recording all event occurrences during simulation of a Simulation Configuration.

- Simulation time and simulation clock
  Enabling Magic Model Analyst to obtain the amount of time spent on simulating a model from a simulation clock.

- Automatic start of active objects
  An active object whose Classifier is an active Class.

- UI modeling diagram simulation
  UI components supporting the UI modeling diagram simulation.

- ImageSwitcher and ActiveImage
  ImageSwitcher as a powerful animation tool and «ActiveImage» attributes.

- Time Series Chart
  Displaying plots of runtime values with respect to simulation time and its properties.

- Timeline chart
  Allowing you to see the active States of an object or a property during simulation or the Activities simulated in an object.

- Histogram
  Displaying the density of the underlying distribution of data and estimating the probability density function of underlying variables.

- Nested UI Configuration stereotype
  Creating complex UI mockup consisting of multiple UI Configs.

- Reusable UI Mockup
  Improving the flexibility in user interface modeling from typing the property using the UI component.

- CSV export
  Exporting simulation results to a CSV file.

- Nested property selection for configurations
  Supporting nested property selection for configurations, e.g., Time series charts, Timelines, Sequence diagram generator, and CSV export.

- Attached files supported
  Accessing files as «AttachedFile» by using only file names without paths in case of references to files by names.

- Web Server for Cameo Simulation Toolkit
  Exporting, opening and using UI mockups, and controlling a model simulation on a web browser on any remote devices.