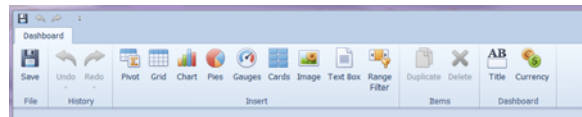


Making a Splash with Dashboards

Dashboard overview

- ▶ Dashboard reports allow you to display a dashboard based report of generated model data
- ▶ It includes many graphical forms such as grids, charts, and gauges



Purpose of dashboards

- ▶ Telling the story to a decision maker
 - Quickly sift through data generated by the model to focus on key insights
 - Visualization
 - Provides alternative to pivot grid summary (e.g., time series)
- ▶ Often overlooked aspect of modeling
 - Getting the right answer is half the battle
 - Communicating the answer and getting buy-in is the other half

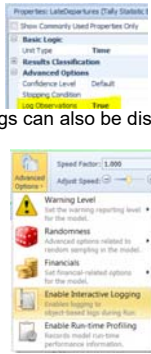
Steps to creating a dashboard

- ▶ Choose an objective (output) and relevant KPIs
- ▶ Define Tally and State statistics to track the KPIs
 - Category labels assigned now will provide easy filtering in the dashboard later
 - Enterprise users can track resources, constraints, and materials as well
- ▶ Run the simulation
- ▶ In results, create new dashboard
 - Structure the dashboard layout to appropriately communicate the output (e.g., time series)
 - Structure the data to populate the dashboard
 - Filter desired outputs

How to track KPIs



- ▶ Post-run interactive dashboard
- ▶ For all users, statistical data logs can be displayed:
 - Tally Observations
 - State Observations
- ▶ For Enterprise users, object based logs can also be displayed in the dashboard such as
 - Resource Usage Log
 - Resource State Log
 - Resource Capacity Log
 - Constraint Log
 - Transporter Usage Log
 - Material Usage log
 - Tasks Log
 - Output tables

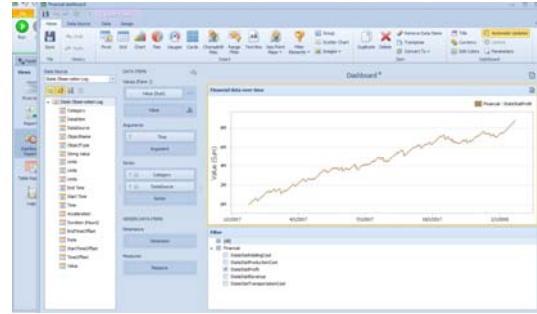


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Structuring the data



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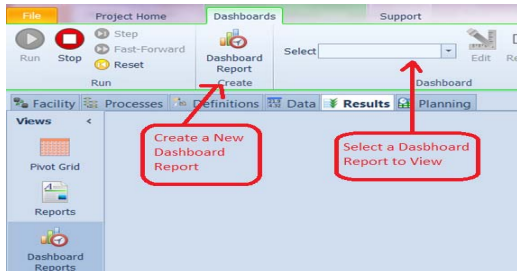
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Creating a new dashboard



- ▶ Dashboards are created and accessed from the main Results window by selecting the Dashboard Reports icon on the left.
- ▶ There you can either create a new report or access an existing one.



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Example storyboard



- ▶ Example problem
 - Supply chain with 3 key stakeholders – manufacturing, distribution, sales
 - 1 plant, 1 DC, 3 retail stores
 - Team believes they have an effective strategy in place for next year
- ▶ Modeler asked to test the strategy using simulation
 - Will it be profitable?
 - Will the distribution policy minimize lost sales?
 - Will it be sustainable?

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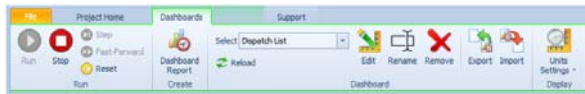
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Dashboard Components



Results > Dashboard Reports

- ▶ Create a dashboard report
- ▶ Select a report to view, edit, rename or remove
- ▶ Export and import report (xml)
- ▶ Option for display settings such as time, length and distance, volume and mass and weight.



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Example – Multiple Tallies



- ▶ Load example
 - HospitalEmergencyDepartment
- ▶ Generate Log
 - Verify TallyStatistic *Log Observations* are all 'True'
 - Run and review Results > Log > Tally Observation Log
- ▶ View Dashboards

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Example – Single Tally



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Example – Scheduling



- ▶ Load example
 - SchedulingDiscretePartProduction
- ▶ Generate Log
 - Run and review Results > Log > *
- ▶ View Dashboards

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Example - States



- ▶ Maybe use that OvenTemp example
 - Add StateStatistic
 - Run and review log
 - Show basics of dashboards
 - Create a plot
 - Maybe create a plot by entity?

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Creating a Basic Dashboard Report



▶ Make sure Object Properties are set accordingly

- Tally and State statistics need to have their *Log Observations* property set to 'True'
- For Enterprise users who want to use the Interactive logs, they must set Enable Interactive Logging under the Advanced Options on the Run ribbon

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Workshop



- ▶ Determine warmup time for a Tally?
 - Maybe start with our photo-printing variability problem?
- ▶ Can they even do this in Personal or does it require Team? Maybe if they start with internal model?

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- ▶ Excerpt from help to describe more



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Example – Scheduling?



- ▶ Maybe demonstrate some more interesting reports using scheduling models

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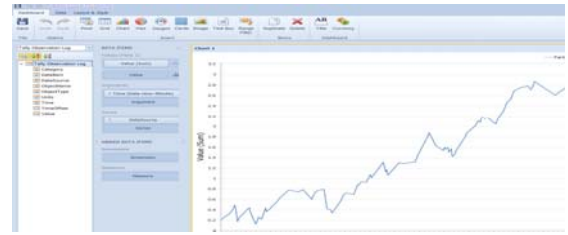
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Creating a Basic Dashboard Report



- ▶ Once the model has run to completion, select the Results window and click on Dashboard Report to create a new report.
- ▶ You will be prompted to add a name for the new Dashboard report, after which the Dashboard Edit window will appear.



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Workshop



- ▶ Create a more interesting report that can be done with Personal/Design?

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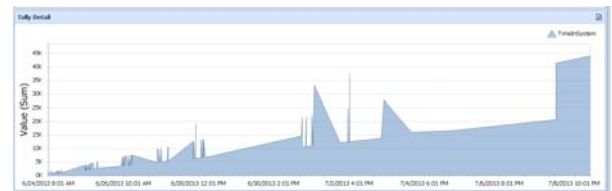
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Dashboard Report Example - Tally



- ▶ Example of a Dashboard Report using a Tally statistics and an Area chart
- ▶ Filters can also be used to select a subset of the tally data



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