
What's New for Arena 13.0

Periodic statistics

Improvements to the data collection functions now make it possible to collect periodic statistical data for a duration that is shorter than the actual simulation run. This option is available for time-persistent statistics (DStats) and frequency-based statistics (Frequencies). You can define a single period (for example, the first 100 hours of a replication) or a repeating period pattern (for example, the first 8 hours of every 24 hours). This feature is useful for tracking performance statistics by hour, shift, day, or week.

Reading variables directly

Arena 13.0 allows you to directly load data from a file into a specified variable. Previously, you were required to write control logic to obtain a variable's value from a recordset specified in the file definition. Now you can directly define a link in the variable definition to a file and recordset. You can specify whether to load the variable information before the model is checked and compiled, before the simulation has begun, or before each replication.

Reading expressions directly

You can now read data from recordsets into expressions prior to checking and compiling models. This allows you to easily incorporate Arena-supported expressions and distributions into your model without having to write code such as VBA. This can contribute to building more robust simulations, accounting for things like processing times, travel times, failure rates, arrival frequencies, and so on by changing an outside data source as opposed to manually changing the model itself.

Enhanced spreadsheet sorting

The spreadsheet view of the Arena modeling environment has been enhanced to include sorting capabilities that are similar to the sorting methods found in many spreadsheet applications. You can now sort a module grid by values in a specified column. For example, you can sort the variables defined in a model alphabetically by name by double-clicking the column header Name in the Variable module spreadsheet view.

Support for Microsoft Excel 2007 and Microsoft Access 2007

The File module and FILES element have been enhanced to include Microsoft Excel 2007 files (.xlsx) and Microsoft Access 2007 files (.accdb) in the Access Type list. This allows you to reference the file directly by specifying the recordset you want to use. You no longer need to specify an ADO connection type and manually enter a connection string.

Microsoft Windows Vista support

Rockwell is committed to supporting Arena customers in their transition to the Microsoft Windows Vista operating system. Arena 13.0 runs on the 32-bit version of Microsoft Windows Vista, with Service Pack 1.

New and updated Smarts

The Smart sample model files have been renamed to help you find the examples you want more easily. There are also new Smarts to show you some advanced modeling techniques as well as how to use the new features.

These are the new Smart models:

- Advanced Concept 3-Dimensional Expressions.doe
- Advanced Concept Change Attribute with A Variable.doe
- Advanced Concept Counter Sets.doe
- Advanced Concept Using AQUE.doe
- Advanced Concept Using VAR to Create 3-Dimensional Variable.doe
- Animation Multi-Capacity Resource.doe
- Basic Concept Routing Entities without Connections.doe
- External Data Files Read Expressions from Excel.doe
- External Data Files Read Variables from Excel at Run Begin.doe
- External Data Files Read Variables from Excel Basic Example.doe
- External Data Files Read Variables from Excel Prior to Replication.doe
- FlowProcess Controlling Flow Transfer Limit Flow to Specific Time of Day.doe
- FlowProcess Controlling Flow Transfer Tank Failure.doe
- Queues Balking Entity Removed from Queue.doe
- Queues Nested Search.doe
- Queues Placing Entities in Queue Sets.doe
- Queues Reordering Logic.doe
- Statistics Capturing Resource Utilization for a Time Period.doe
- Statistics Capturing Variable Metric over a Specified Time Period.doe
- Transporter Return to Home Logic.doe
- VBA Altering Resource Capacity.doe
- VBA Referencing Statistics.doe

New example models

With the assistance of international partners in Australia, Brazil, and the Netherlands, new example models are showcased to display some Arena capabilities. Try the Space Invaders model and see if you can beat your high score!

These are the new example models:

- 7-Tier Buffer Conveyor.doe
- Arena Space Invader.doe
- Assembly Line.doe
- Container Harbour Logistics.doe
- Flexible Manufacturing Cell.doe (replaces the old Flexible Manufacturing example)
- Flow Manufacturing System.doe
- Military Strength Forecast.doe
- Military Submarine Mission.doe
- Military Training Scenario.doe
- Mission to Mars.doe
- Naval Ship Cycle.doe
- Port Modelling Concepts.doe
- Public Transportation.doe
- Steel Manufacturing.doe (updated)
- Truck Assembly.doe (updated)

New compiler technology

Arena 13.0 has been developed on new compiler technology, keeping pace with industry standards for software development.

Items No Longer Part of Arena

Calendar Schedules no longer available

Calendar Schedules are no longer available in Arena 13.0. If you have Calendar Schedules in your model, please revise these schedules in Arena 12.0 (using the Schedule module) before uninstalling Arena 12.0 and installing Arena 13.0.

Automatic Model Conversion from VBA 5 to VBA 6

Arena will no longer automatically convert older Arena models containing VBA 5 code. Contact technical support if you need to load a model containing VBA 5 code.

PrimeTime Data Import

The Blue Pumpkin integration is no longer available.

Microsoft Windows 2000 Support

The Microsoft Windows 2000 operating system is no longer a supported operating system as of Arena 13.0.