

# Arena® Professional Edition

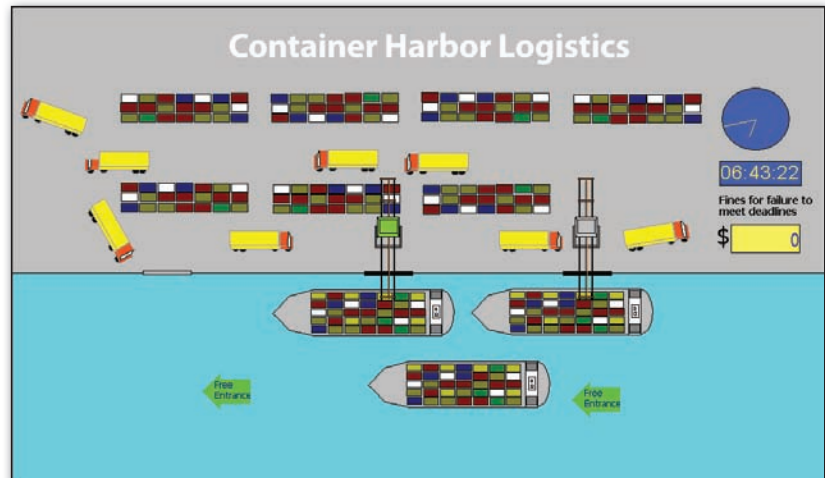
Premier Simulation Software Delivers Results

# Arena®

## Advantages

- Designed for use throughout an enterprise for system analysis, optimization and planning
- Excellent flexible and scalable tool for improving business or manufacturing productivity
- Easier-to-use flowchart modeling environment is the ideal way to bring the power of modeling and simulation to business process improvement
- Convenient spreadsheet interface to define data such as business variables, resources and schedules
- Helps you predict system performance based on key metrics such as costs, throughput, cycle times and utilizations
- Assists in identifying process bottlenecks
- Useful in planning staff, equipment or material requirements

*Organizations worldwide have realized a return of more than 15 times their investment in Arena® and achieved these returns within a few weeks to a few months.*



## Overview

The design and implementation of supplier, manufacturer, customer, and internal organizational processes all have a critical impact on the bottom line – and your ability to stay competitive.

Poorly planned implementations can have disastrous effects, resulting in frustrated customers, lost business, and sinking profits. Arena® simulation software helps protect your business by predicting the impact of new business ideas, rules, and strategies before implementation – offline, without causing disruptions in service.

When the life of your business is at stake, Arena helps in selecting the most beneficial strategies, empowering you with the confidence to “go live,” while avoiding unnecessary expenditures, optimizing investments, and strengthening customer relationships.

Leading organizations have come to rely on Arena to help them improve customer service, capitalize on new business opportunities, and maximize profits.

Arena has helped organizations around the world to:

- Avoid costly mistakes caused by implementing decisions based solely on intuition
- Design processes to withstand the rigors and uncertainty of system randomness and variability
- Reveal hidden value and eliminate wasteful bottlenecks in existing implementations and internal processes
- Maximize customer relationships through exceptional service and delivery

LISTEN.  
THINK.  
SOLVE.™

## Features

Arena® Professional Edition is designed for use throughout an enterprise, supporting both in-depth analyses of a particular functional area (e.g., manufacturing, logistics, customer service, health care) and analysis of processes that span several functional areas.

Arena offers the unparalleled ease-of-use, flexibility, scalability, and domain experience required for modeling any aspect of a business enterprise. Based upon the concepts of the SIMAN simulation language and the Cinema animation package, Arena uses a flowchart-style modeling methodology that does not require you to program in another environment like C++ or Java. Its hierarchical modeling and an extensive graphical library help make Arena the world's leading simulation system.

Features of Arena Professional Edition include:

### Creating simulation models

- Powerful template development environment to create and distribute custom libraries of modeling constructs unique to your organization
- Completely scalable, enterprise-wide modeling to model any aspect of your business – from simple to highly complex processes
- Intuitive flowchart editor to describe processes
- Optional convenient spreadsheet data entry
- Powerful modeling of expensive and critical constraints and resources such as staff, equipment, and other investments
- No “brick walls” – robust modeling for detailed studies of complex systems
- Model virtually any material-handling scenario
- Hierarchical aggregation and decomposition to aggregate or expand system components
- Adaptability of the system allows you to exploit the easy, high-level modeling constructs when possible, then drill down to lower, more detailed levels when greater flexibility is needed
- Merge models built collaboratively through a simple copy and paste
- Free library of nearly 300 tutorial models (SMARTS) to help you learn

### Data integration and model customization

- Read in data directly from outside sources, including Arena supported distributions
- Graphical editor to describe schedules associated with staff and equipment, as well as arrivals of customers, parts, or other system entities
- Input data analyzer that automatically fits raw data to the best statistical distributions

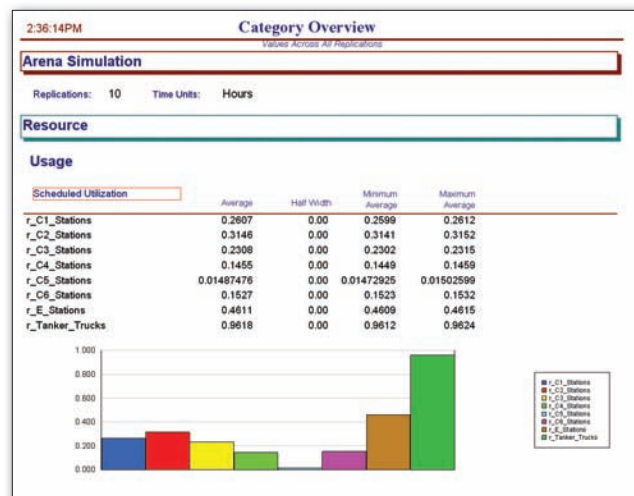
- Reuse existing knowledge and data through built-in spreadsheet and interface to standard databases such as Microsoft® Excel and Access
- Generate custom user and data interfaces with Microsoft Visual Basic® for Applications (VBA) and ActiveX® controls
- Customizable toolbars, context-sensitive menus, and online help
- Ability to create virtually any customizable metric to aid in evaluating system performance

### Running simulations

- Automatic flowchart animation for dynamic visualization of process flows
- Compelling system animation for presentations and system validation with a vast collection of customizable icons and dynamic business graphs
- Run-control features, including powerful debugging tools like graphical object browsers, watch windows, breakpoints, and more
- Easier distribution of models to others for viewing and experimenting

### Viewing results and making decisions

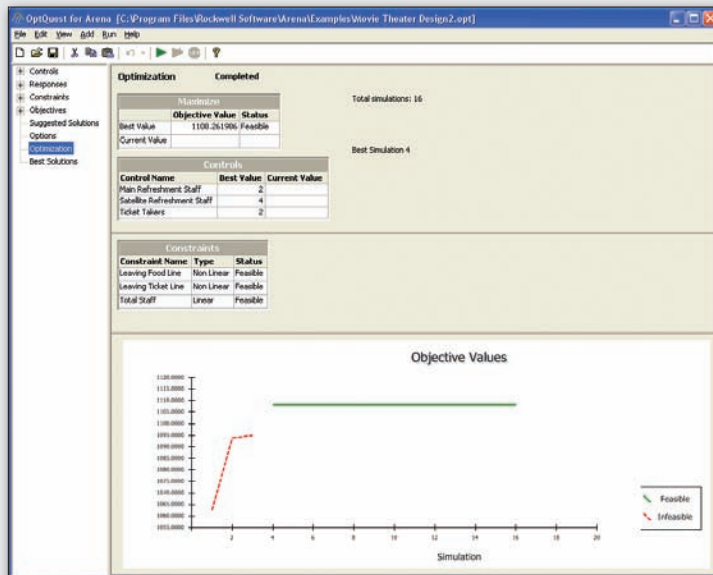
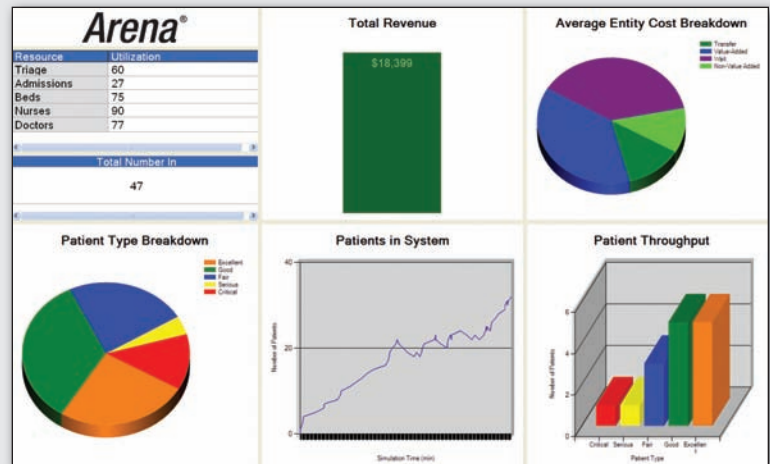
- Comprehensive reporting capability through Crystal Reports®, including graphs publishable as HTML, Microsoft® Word, Excel, and more
- Automatic roll-up of statistics through process hierarchy so that you can view costs, times, and other information at the lowest level ... and also see their accumulation in departments, workcenters, or entire facilities
- Detailed activity-based costing, custom statistics, and automatic confidence intervals
- Powerful output analysis tools to compare results from different scenarios



## Arena Visual Designer

Arena Visual Designer is the new visualization application inside Arena. This new tool lets you design advanced business graphic reporting quickly and easily. Dashboards allow you to have the animation and the business graphics visible simultaneously for more professional presentations. In Visual Designer, Dashboards offer:

- Intuitive drag-and-drop environment to build dashboards quickly and easily
- Greater flexibility and visual control of your models
- Use of common charting controls to communicate your simulation results
- The ability to take advantage of charting with Microsoft .NET 4.0 framework
- Unlimited dashboard functionality



## OptQuest for Arena

OptQuest for Arena lets you define various system inputs (controls and constraints) and desired system outputs (objective functions) and guides the selection of sets of input values (scenarios). OptQuest then thoroughly evaluates each scenario and dynamically selects and evaluates new scenarios in search of the optimum. The separation of the model that represents the system and the procedure that solves optimization problems provide maximum efficiency in identifying new scenarios. The combination of efficiency in search methods and the power of Arena provides the best solution in the least time.

## Benefits

### Natural and consistent modeling methodology

Many simulation software packages require users to learn and apply different and confusing modeling methodologies, depending upon the complexity of the application. Arena utilizes a familiar, flowchart-style technique for model building – regardless of the detail of complexity of the application being modeled.

### Extendible and customizable

Arena's standard, flexible architecture allows the creation of custom interfaces and applications. As an enterprise matures in its use of simulation, Arena Professional provides the development platform for organizations to craft their own suites of custom simulation tools, including objects specific to your system or organization.

### Scalable architecture

Arena offers powerful simulation software in a natural, graphical interface. Designed to suit the needs of the beginner, yet powerful enough to satisfy the demands of the most advanced user, Arena adapts to both the application being modeled and the experience level of the user.

### Open architecture

To improve the value of simulation and its use of existing corporate information assets, Arena Professional Edition delivers built-in, flexible interfaces to leading desktop applications, as well as embedded VBA for creating custom interfaces. ActiveX controls can be inserted into a model to enhance its UI or logic. Model logic and data can be transferred from Microsoft® Visio drawings using Arena's Visio stencil. In addition, data can be incorporated directly from Microsoft Excel into models or it can be input using Arena's convenient spreadsheet data interface.

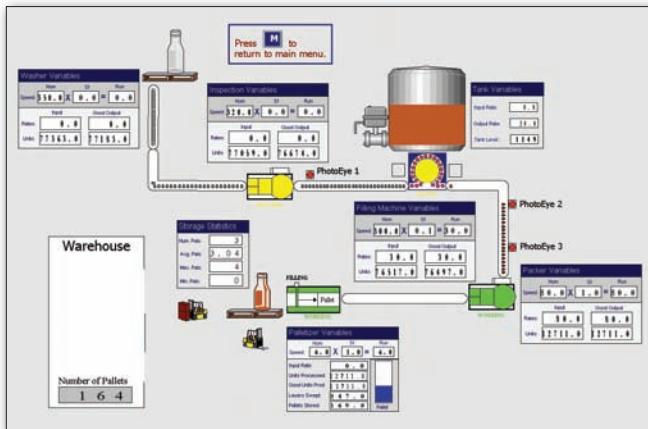
### Complete simulation project support

Arena Professional Edition provides a complete set of tools to support simulation project activities from start to finish, including statistical analysis of input data, an exhaustive collection of model-building templates and constructs, animation to visualize how your process works and communicate system behavior to others, powerful debugging tools, output analysis tools that help you statistically compare simulation run results to make decisions, and run-time capabilities to distribute your models to others for viewing or experimentation.

## Add-on Options

### Arena Packaging Template

The Arena Packaging Template is effective when analyzing high-speed manufacturing packaging lines and conveyor systems that are fundamental to the manufacturing processes of industries such as food and beverage, pharmaceutical, tobacco, chemical, electronics, and health and beauty. It is helpful in predicting and validating overall line performance, operational and strategic line design issues (such as investing in new machines, designing sensor logic, and conveyor operations), and troubleshooting existing packaging lines.



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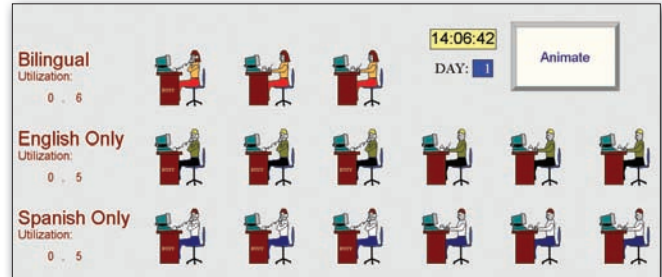
[www.rockwellautomation.com](http://www.rockwellautomation.com)

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### Arena Contact Center Template

The Arena Contact Center Template helps you develop and analyze the strategic impact of virtual call centers, multi-site routing, skill-based routing, and staffing models. Analysis can be performed prior to implementation of systems, call routing, and as an aid in determining staffing requirements.



### More Information

For more information and pricing of Arena software, please contact the U.S. Rockwell Automation office at [arena-info@ra.rockwell.com](mailto:arena-info@ra.rockwell.com) or contact your local Arena reseller. A listing of worldwide Arena resellers may be found at [www.ArenaSimulation.com](http://www.ArenaSimulation.com).

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