Simio Comparison

We are not experts in most other products and are not qualified to evaluate them, just as our competitors are not qualified to evaluate Simio. We invite you to evaluate your software against the following list and draw your own conclusions on another product's relative strength or weakness.

One caution – any product that has a programming interface can "claim" to do absolutely anything. You could do anything with enough programming – but at what cost and time, and how buggy will that custom code be? Ask how many of these capabilities are available out of the box, without relying on custom programming.

Simio Out of the box capabilities, without relying on any custom programming	**Other Product** Out of the box capabilities, without relying on any custom programming
Company/Processes	
Pedigree – The principals of Simio each have >25 years of experience in simulation and are responsible for developing the market-leading products of their generation – SLAM, SIMAN, Cinema, Arena, Tempo/ Preactor 400.	
Leadership – Although the newest product on the market, Simio is already a market leader, and the product the others are increasingly compared to.	
Excellent Worldwide Support – Through phone, email, and user forums, Simio and our worldwide network of partners regularly receives accolades for excellent and timely support.	
Agile Development, High Velocity - Means high velocity progress. Even though 2 years after our initial release we had a complete product that was competitive with every major product, we have continued aggressive development with rich annual major releases each requiring about 40 pages of summary release notes.	
Agile Development, High Responsiveness - Sometimes providing truly excellent support requires being responsive to customer needs and requests by software changes. Important requests are often realized in only a few weeks, in a fully tested, documented, formal release.	

Learning Simio	
Used in Over 700 Universities – When you are looking to hire simulation talent, increasingly they will arrive with Simio experience from the increasing number of leading US and international universities.	
Many Books Available – Six books in seven languages are available (and more are on the way). Many are available in both e-book and economical print formats to keep prices low.	
Training Courses – Over 50 public course are offered world-wide each year. Certified instructors around the world are available to teach custom on-site courses.	
On-line Learning – A 13 module ***Learning Simio*** lab series, an 11 module ***Flexible Manufacturing*** Video series, and an 8 hour ***Introduction to Simio*** class video, supplement the dozens of short single topic videos that are available. All of these are free via the Simio software or the Simio web site.	

Software – High Level	
Object-oriented – OO software provides rapid modeling capability. OO provides rapid modeling. Simio's unique OO tool also provides unprecedented flexibility previously only possible by using tedious and error-prone programming languages.	
Agent-based Modeling - ABM allows objects to be "intelligent" and to interact intelligently with any other objects. In Simio every object is an intelligent "agent" allowing extensive capability.	
Advanced Architecture – The Microsoft .NET standard of the future allows Simio to be on the cutting edge of technology. It also allows easy integration with other hardware software and (in those rare cases when it's needed) you can extend Simio with supplemental code written in your choice of over 60 .NET languages.	
Economical Product Family – Simio provides a family of compatible products for economically supporting a wide range of users within your organization. Provide casual users with a capable 3D modeling tool for as low as $5K and upgrade later to more advanced versions without a price penalty.	
Extensible Product Family – The entire Simio product suite is based on a single model format and a single toolkit. All users use the same UI and can move easily between products. There is no learning curve or loss of models between the entry-level Express Edition and our most comprehensive Enterprise Edition.	

Ease of Use	
Ribbons – Modern Microsoft-style Ribbons are easier to learn and use than traditional menus.	
Extended tool tips – While most products have tool tips that are a few words or a phrase, Simio has tool tips that can be a few sentences or even paragraphs. This aids learning and use by avoiding distracting trips to help or documentation.	
UI Design – The use of automatic, but customizable property windows is both easy to use and makes it easy to build custom objects.	
Tightly Integrated 3D – Compelling 3D animation is never in your way, but never more than a keystroke away. Included free with every version.	
Trimble 3D Warehouse Direct Link – Google provides this repository of over a million 3D symbols that are available at no charge. When you are building an animation you can browse, select, and apply a 3D Warehouse symbol, without ever leaving Simio.	

Power & Flexibility	
Patented Processes - Allows access to 100% of object building capability, graphically, without any written code such as C#, Java, or C++. This lowers the entry barrier by requiring much less training and skill to build custom objects.	
Patented Add-on Processes - Allows easy graphical (no programming) customization of objects. This dramatically increases the flexibility of the library while maintaining the rapid modeling and ease of use.	
Simio library objects are completely open - You can open any Simio-supplied object to see how it was designed. You can even copy it or subclass it to customize it to your own needs. All customization can be done graphically, with no programming.	
Rich Process Capability – Provides extensive flexibility to represent logic, including internal delay times which cannot be represented within a programming method. Processes provide an easy way to build, extend, or customize objects graphically, without code. An example of the power is that our conveyors, that have many advanced features, were implemented entirely with processes in only 60 steps.	

Representing Your Data	
Rich data types – Simio has may data types including many numeric types, as well as strings, logical types, lists, and much more. This provides high flexibility in modeling and data representation.	
Strong data types – Many software bugs are caused by misusing data. Like most modern software, Simio uses strongly typed data which makes it harder to make common data errors and hence fewer bugs in your model.	
Interactive Read/Write – Simio interactively reads and writes from/to CSV, Excel, and most common databases. If a particular DB is not directly supported, it can still be used with custom programming.	
Customizable data tables – Simio supports built-in tables which can be easily configured to match the schema of any external table. These tables allow fast, flexible data access during model run. This far surpasses the ability to simple Read and Write during a run (which Simio also fully supports).	
Table import/export – Simio's built-in tables can be created manually or can be imported/exported from any external source. Tables can be associated with an external file and can be imported on-demand, or set to import automatically as the start of each run (for frequently changing data).	
Relational tables – Built-in tables can be relational for efficiency and flexibility in data representation. The relations can be one to one or one to many and there is no limit to the levels of hierarchy or number of linked tables.	
Table association – Objects can be associate with a particular table row for easier and less error-prone data referencing. These associations automatically propagate through table relations.	

Planning and Scheduling	
Interactive Gantt charts - Show resource and entity history over time. They also show other user-selectable information and provide the ability to change selected information such as schedules and priority.	
Schedule Risk Analysis – Simio's patented risk analysis combines traditional deterministic schedule generation with stochastic analysis to assess risk and adjust options to reduce risk and improve schedule robustness.	

Major Capabilities	
Comprehensive Modeling – Discussion of specific feature details is beyond the scope of this document, but among other things Simio includes: flexible resources of all types, conveyors of all types, workers, combiners, separators, AGVs, vehicles, robots, trains, discrete, continuous, 1st & 2nd order flow, mass flow, weight, and volume-based flows, fillers, stockpiles, docks, tankers, pipes, activity based costing in any world currency, and much more… And all of these features are in open library objects that can be customized as needed without programming.	
Conveyors – Simple, but highly flexible conveyors can be used for accumulating, non-accumulating, overhead, power & free, bulk material handling, and lots more. They support merging and diverge, even with different conveyor speeds, and support different entity sizes	
Bridge Cranes - An unlimited number of cranes can share a common runway. The lift, cab, and bridge all have independent but coordinated movement. Movement between components and between independent cranes can be customized graphically with processes. Acceleration and deceleration are fully supported.	
Underhung cranes – These have all the features of bridge cranes (above) PLUS the ability for the cabs to move from bridge to bridge and across bays/buildings (essentially a transportation network on the ceiling). Logic is customizable by users because it is implemented in processes that are open to users.	Not available.
Analysis and Reporting Features – Batch execute user-defined scenarios, generate both standard and custom reports, export data to Excel and other 3rd party products, interactively manipulate output using the built-in pivot grid, automatically compare alternatives, run the optional OptQuest add-in to optimize one or more objectives, compare the risk and error of multiple scenarios using the innovative SMORE plots, view the sensitivity of model outputs to the input distributions in the model, and build custom dashboards for sharing your simulation results on websites and mobile devices across the enterprise.	

Getting The Most From Your Hardware	
64 bit support – If you are using a 64 bit OS, you have the choice of running in 32 or 64 bit mode (included free). 64 bit provides essentially unlimited model and data size making 100% of your machine's memory available for use.	
Multi-processor support – When running replications Simio will use all of the processors and threads available on your hardware. For example, on a dual-threaded quad core processor, Simio will run replications up to 8 times faster.	
Distributed processing – Team edition and above also allows using other computers in your work group to run replications up to 16 times as fast. There is no charge for using Simio on the remote machines.	
Portal – The Simio portal (to be released in 2014) will allow distributing model results across the web and on mobile devices using custom dashboards. The portal also will allow multiple users to run model experiments with the processes distributed across an unlimited number of corporate computing resources (e.g. a server farm).	
Flexible licensing – Simio can be licensed to a specific machine (node-locked) or can be licensed to allow sharing a limited number of seats across an unlimited number of users (server license).	