

## IBM Rational Rhapsody Architect for Systems Engineers

### Highlights

- ***Integrated SysML and UML quickly and easily specify requirements and system design***
- ***Enables browser-based access to multiple projects simultaneously***
- ***Facilitates communication and collaboration across differing environments***
- ***Helps track requirements changes and conduct design impact analyses***
- ***Aids easy documentation creation***

Today's embedded systems development teams are challenged to deliver complex functionality in less time, and with fewer resources. IBM can help. IBM® Rational® Rhapsody® Architect for Systems Engineers helps teams to communicate more effectively and get designs functionally correct.

The Rhapsody Architect for Systems Engineers solution is an integrated visual modeling environment for complex system engineering projects. It uses the Object Modeling Group's System Modeling Language (SysML) version and Unified Modeling Language (UML) version to allow you to quickly specify requirements and design.

In addition, the solution can be used to show full requirements traceability from the system model back to the requirements. If a requirement is changed, you can quickly see what impact that requirement has had on the system design.

### **Quickly sort, organize, and edit models**

The solution uses an advanced model browser and data dictionary that allows teams of engineers to quickly sort, organize and edit their models. Opening multiple Rhapsody Architect for Systems Engineers projects within a single browser is possible. You can use model elements available in the browser in one diagram or view of the system, and also in multiple diagrams or views. The browser keeps track of all references of model elements, ensuring that if a change is made in one view, it is propagated across all views.

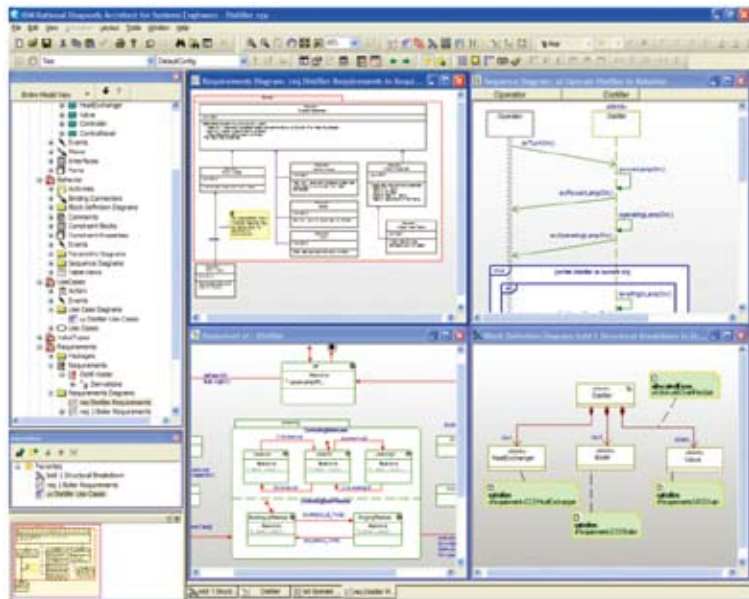
Both SysML and UML provide a rich set of modeling notations and syntax for systems engineering, and they can be further enriched using the advanced graphics presentation capabilities embedded in the solution. Any SysML or UML diagram created within the software can be supplemented with domain-specific graphics to maximize the readability of the system design to the largest possible audience. Through customizable check model capabilities systems engineers can ensure that the model is correct and consistent across all views.

### Free of ambiguity

IBM Rational Rhapsody Architect for Systems Engineers models can easily be handed off and opened in IBM Rational Rhapsody Developer for C++, C, and Java™ or IBM Rational Rhapsody Designer for Systems Engineers. Now, not only can you and your teams hand off paper-based documentation using Rhapsody Architect for Systems Engineers software's documentation generation capabilities, you can also hand off the precise system models directly to your software engineering counterparts, thus helping to prevent ambiguities in the systems specification.

### Features and benefits

Feature	Benefit
<ul style="list-style-type: none"> <li>OMG SysML and UML integrated requirements and design modeling environment with Domain Specific Language (DSL) support including optional DoDAF, MODAF, and UPDM, and support for user-defined graphics.</li> </ul>	<ul style="list-style-type: none"> <li>Easily communicate systems architecture to a wide audience.</li> <li>Provide clear, formal and non-ambiguous communication of the system to all stakeholders in the project.</li> </ul>
<ul style="list-style-type: none"> <li>XMI and IBM Rational Rose® import</li> </ul>	<ul style="list-style-type: none"> <li>Potentially increase savings and boost productivity by enabling reuse of legacy systems, code, and models.</li> </ul>
<ul style="list-style-type: none"> <li>Full lifecycle requirements traceability and analysis.</li> </ul>	<ul style="list-style-type: none"> <li>Quickly manage and organize changing requirements and their impact on the design and architecture.</li> </ul>
<ul style="list-style-type: none"> <li>Automatic documentation output</li> </ul>	<ul style="list-style-type: none"> <li>Produce consistent system documentation quickly and efficiently.</li> </ul>
<ul style="list-style-type: none"> <li>Customizable static model checking analysis.</li> </ul>	<ul style="list-style-type: none"> <li>Verify systems designs are statically correct and consistent across all views.</li> </ul>



*IBM Rational Rhapsody Architect for Systems Engineers is a state of the art, integrated visual modeling environment for complex system engineering projects.*

### Specification highlights

- SysML and UML visual modeling support
- Advanced graphics support with domain specific modeling through profiles
- Full integrated requirements capture and traceability
- Advanced browser with model organizer
- Floating and dockable window support
- DoDAF, MODAF, UPDM modeling support (with additional add on)
- Automatic documentation generation
- Customizable static model checking for completeness and consistency
- Base aware visual differencing and merging
- XML import/export and Rational Rose Import (with additional add-on)
- Configuration management interface capabilities (with additional add-on)
- Intelliviser helper for trouble-free modeling help
- Support for user defined macros and helpers with specific systems helpers included
- Design exchange between IBM Rational Rhapsody Designer for Systems Engineers and IBM Rational Rhapsody Developer for C++, C, and Java with common repository

### IBM Rational Rhapsody Architect for Systems Engineers system requirements

#### Minimum hardware requirements

##### Processor

- Host minimum CPU:  
Intel® Pentium® 4 3.00 Ghz

##### Memory

- Host memory: minimum 512 MB RAM, recommended 1 GB

##### Disk Space

- Host disk space: approximately 1.3 GB (full installation)

#### Minimum software requirements

##### Operating System

- Microsoft® Windows® XP(SP1/SP2/SP3)
- Microsoft Windows Vista SP1

For the most up-to-date systems requirements, please refer to the release notes for the specific IBM Rational Rhapsody Architect for Systems Engineers version you are using.

### For more information

For more information about IBM Rational Rhapsody Architect for Systems Engineers, contact your IBM representative or IBM Business Partner, or visit:

[ibm.com/software/rational](http://ibm.com/software/rational)



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