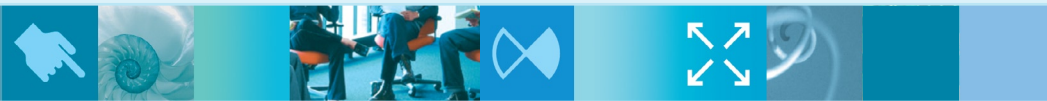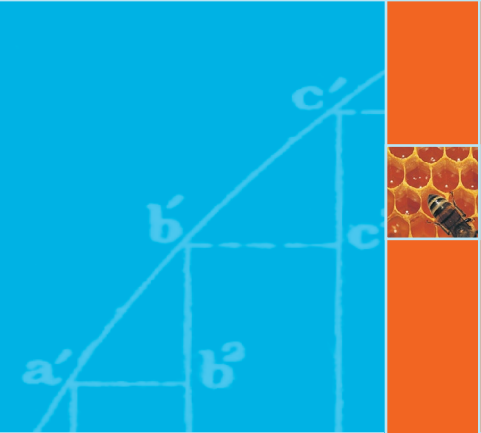Model-driven development solutions
To support your business objectives

Rational® software

IBM

IBM Rational Rhapsody edition comparison matrix

IBM Rational Rhapsody 7.5 edition: capabilities and comparisons

The enclosed table compares the capabilities of IBM Rational® Rhapsody® Developer, IBM Rational Rhapsody Designer for Systems Engineers, IBM Rational Rhapsody Architect for Software and IBM Rational Rhapsody Architect for Systems Engineers products. For complete details on feature capabilities, operating systems or third-party integration support please consult the read-me document included with the product installation.

CAPABILITY	Rational Rhapsody Architect for Systems Engineers	Rational Rhapsody Designer for Systems Engineers	Rational Rhapsody Developer	Rational Rhapsody Architect for Software
PLATFORMS				
Microsoft® Windows Vista/Microsoft Windows® XP (SP1 and SP2) platforms	●	●	●	●
Red Hat Enterprise Linux® 4.0/5.0 platforms			●	
Citrix 4.0 (hosted on Microsoft Windows Server 2003) platforms	●	●	●	●
MODELING				
Unified Modeling Language (UML) 2.1	●	●	●	●
Systems Modeling Language (SysML) 1.1	●	●	●	●
C file modeling [3]			●	●
Automotive Open System Architecture (AUTOSAR) [1, 3]			●	●
Domain-specific (profiles, stereotypes and tags)	●	●	●	●
Customizable model checking [2]	●	●	●	●
Modeling and Analysis of Real Time Embedded systems (MARTE) profile	●	●	●	●
IBM Rational Rhapsody for DoDAF, MODAF and UPDM Add On software [2]	Add-on	Add-on	Add-on	Add-on
Net-centric systems modeling with import/export of Web Services Description Language (WSDL) — see IBM Rational Rhapsody Tools and Utilities Add On software [2]		Add-on	Add-on	Add-on
The MathWorks Simulink integration — see IBM Rational Rhapsody Interfaces Add On software [1, 2, 6, 7]		Add-on	Add-on	
SYSTEMS ENGINEERING PROCESS ENHANCEMENTS				
Systems-engineering-friendly user interface (UI) with advanced model search and navigation [1, 2]	●	●		
Systems engineering toolkit for automating common systems engineering functions [1, 2]	●	●	●	●
Architecture mapping wizard [1, 2]	●	●	●	●
Hyperlinks wizard [1, 2]	●	●	●	●
Test creation wizard [1, 2]	●	●	●	●

CAPABILITY	Rational Rhapsody Architect for Systems Engineers	Rational Rhapsody Designer for Systems Engineers	Rational Rhapsody Developer	Rational Rhapsody Architect for Software
SOFTWARE DEVELOPMENT				
Structural code generation (C, C++, Java™ code)[10]			•	•
Full behavioral code generation			•	
C[10]			•	
C++[10]			•	
Ada[1]			•	
Java code[10]			•	
Eclipse platform integration[9]			•	•
Microsoft Visual Studio 2008 workflow integration[1]			•	•
Micro C framework for small targets[3]			•	
MISRA (Motor Industry Software Reliability Association)–C code generation[3]			•	•
Rules-based code generation with IBM Rational Rhapsody Developer Rules Composer Add On software[1]			Add-on	
CORBA (Common Object Request Broker Architecture) IDL (interface description language) generation[4]			•	
Code-centric workflow synchronizing code and model			•	•
Import of existing code			•	•
Type library importer[1,4]			•	
Real-time operating system (RTOS) and integrated development environment (IDE) integration—refer to release notes for a complete list			•	
REQUIREMENTS MODELING AND TRACEABILITY				
Requirements modeling	•	•	•	•
Traceability from requirements to model	•	•	•	•
Generation requirements into code			•	•
IBM Rational Rhapsody Gateway Add On software	Add-on	Add-on	Add-on	Add-on
Import requirements from third-party sources such as IBM Rational DOORS®, IBM Rational RequisitePro®, Microsoft Word or Microsoft Excel software	•	•	•	•
Customizable requirements types enable interchange with other tools	•	•	•	•
Reports for coverage evaluation, impact analysis, traceability matrix and project data reports	•	•	•	•
Traceability workflows across multiple projects and requirements sources	•	•	•	•

CAPABILITY	Rational Rhapsody Architect for Systems Engineers	Rational Rhapsody Designer for Systems Engineers	Rational Rhapsody Developer	Rational Rhapsody Architect for Software
COLLABORATION				
Advanced model-based visual differencing and merging	•	•	•	•
Automated merge of trivial differences	•	•	•	•
Integration with IBM Rational Team Concert™ software[5]			•	•
Advanced document generation, including systems engineering documentation template	Add-on	Add-on	Add-on	Add-on
MODEL-DRIVEN TESTING				
Model simulation, execution and debug		•	•	
Host		•	•	
Target			•	
Design mock-ups with graphical panels		Add-on	Add-on	
IBM Rational Rhapsody TestConductor Add On software with UML 2.0 testing profile[4]		Add-on	Add-on	
IBM Rational Rhapsody Automatic Test Generation Add On software[1,4]		Add-on	Add-on	
Collaborative debugging through IBM Rational Rhapsody Webify Toolkit software		Add-on	Add-on	
PRODUCTIVITY ADD-ONS				
IBM Rational Rhapsody Interfaces Add On software	Add-on	Add-on	Add-on	Add-on
Model reuse with XML Metadata Interchange (XMI) 1.0, 1.1, 1.2 and 2.1 with SysML National Institute of Standards and Technology (NIST) certification	•	•	•	•
IBM Rational Rose® importer[1,8]	•	•	•	•
Configuration management interface (IBM Rational ClearCase® and IBM Rational Synergy interface)	•	•	•	•
The MathWorks Simulink interface[1,6,7]		•	•	
IBM Rational SDL Suite interface[4]			•	
IBM Rational Tau interface	•	•	•	•
IBM Rational Statemate® interface[1,3]			•	
IBM Rational System Architect® to Rational Rhapsody interface	•	•	•	•
IBM Rational Rhapsody Tools and Utilities Add On software		Add-on	Add-on	Add-on
Customizable documentation generation with ReporterPLUS technology		•	•	•
Graphical panels for rapid prototyping[6,7]		•	•	
Webify (rapid prototyping)[6]		•	•	
Net Centric Systems Add On software[1]			•	
Siemens Teamcenter interface[1]	•	•	•	•

For more information

To learn more about IBM Rational Rhapsody 7.5 edition comparisons, contact your IBM representative or IBM Business Partner, or visit:

ibm.com/software/awdtools/rhapsody

TABLE ENDNOTES

1 Not supported on the Linux platform

2 Not supported with Eclipse platform integration

3 C only

4 C++ only

5 Included with Eclipse platform integration

6 Not supported on Ada

7 Not supported for Java code

8 Not supported on C

9 Eclipse platform integration is included with IBM Rational Rhapsody Developer for C++, C and Java code

10 IBM Rational Rhapsody Architect for Software edition only generates code frames