The IBM Rational Rhapsody solution is a model-driven development (MDD) environment for real-time or embedded systems engineering, software development, and testing.

It provides real-time agile software engineering environment with full application generation for C++, C, etc, rapid prototyping and simulation for design level debugging, automated build generation for continuous integration and support for safety-critical software lifecycle.

**Kovair Support for IBM Rational Rhapsody Developer:**

Kovair integration with IBM Rhapsody allows Software Architects to view Requirements from any Requirement management tool like IBM DOORS NextGen, Jama, create design models according to the Requirements and then link them to the original Requirements. The linked diagram and element details along with their relationships can be synced to an ALM platform where an entire hierarchy of design artifacts along with Diagram as an image can be viewed.

There are two components from Kovair that facilitates this integration solution – Kovair Rhapsody Adapter and Kovair Omnibus plug-in for Rhapsody.

**BENEFITS**

- Allows users to publish Rhapsody Design Projects, Diagrams, Elements and their interrelationships to Kovair Omnibus platform and thus linking them to other ALM tools.
- Allows users to view Requirements in Rhapsody from other tools that are connected to Kovair Omnibus.
- Establishes complete traceability between design artifacts, requirements and development codes.
- Enables developers to verify development codes and design implementation status against approved design models.

**Fig:** Sample Rhapsody Integration Scenario Using Kovair Omnibus
The adapter along with plug-in enables users to add new Requirements to Rhapsody as well as expose Rhapsody Projects, Diagrams, Elements, their interrelationships, along with the linked Requirements to Kovair. This enables Rhapsody artifacts to be synchronized with any other tools connected to Omnibus through respective tool adapters.

Omnibus plug-in also extends the functionality of IBM Rhapsody to the extent where Architects can modify the Requirements there in the tool itself which syncs back to the original Requirements Management tool via Omnibus Engine.

With this integration in place, a Rhapsody users can directly add an entire Design Project; Diagram models of various types such as ‘Object Model diagram’, ‘Sequence Diagram, ‘Use Case Diagram’; Elements of type ‘Use Case’, ‘Actor’, ‘Package’ or even a complete package with all its elements and diagrams as attachments (zip file) to Kovair and subsequently to other ALM tools in the ecosystem.

Kovair Rhapsody Adapter currently supports 8.x version of IBM Rhapsody Developer.

**Rhapsody Integration Adapter offers the following:**

**Seamless Tool and Team Collaboration**

By integrating Rhapsody with Requirements Management tools such as Jama, DOORS NextGen and IDEs like Eclipse and Visual Studio, Kovair enables other team members to gain access to UML diagrams from within their own tools. Developers can also view and consult design models for coding from within their preferred IDEs. The integration provides a convenient way of accessing design artifacts in a multi-tool environment and developing applications using them collaboratively.

**Adding New Requirements to Rhapsody from Other tools**

The integration facilitates a uni-directional flow of artifacts from Rhapsody to Kovair and other ALM tools in the process. However, using Kovair, one can also add new Requirements to Rhapsody from Requirements Management tools like Jama and DOORS NextGen. This helps software architects work on the new set of requirements from other tools without leaving Rhapsody and then create a relationship between Requirements and existing design elements as per need.

Similarly, users in other tools don’t need to log into Rhapsody to post a new set of requirements.

**Consolidated Project View and Change History for Manager**

Kovair has the capability to import entire design artifacts from Rhapsody through near real-time synchronization. This enables Project Managers to view a complete History of a Design Project from Kovair ALM platform. In Kovair, the change history of a design project appears in a tabular structure in chronological order. This provides greater insights into the evolution of a particular design project and the subsequent changes made by different stakeholders during the entire design phase.
Project Managers can also trace any diagram back to the original Requirements to understand which design artifacts have been created against what requirements, what the impacts of newly added/modified requirements are on design models; and how efficiently the design team responds to ever-changing requirements.

One can also track series of changes in any individual model diagram at granular level and understand what, when and how of any iteration.

Out-of-the-box Entities Supported

- Project
- Diagrams
- Elements
- Requirements

Out-of-the-box Relations Supported

All mutual relationships are supported among all the exposed entities.

On Demand Scenario

Let us view a sample integration scenario between IBM Rhapsody, Kovair, and Requirements Management tool like IBM DOORS NextGen, Jama. As Business Analysts add Requirements in DOORS NextGen, they automatically flow to IBM Rhapsody through Kovair Omnibus adapter and plug-ins for Rhapsody. The team of software architects working on different systems, having different OS (Windows, Linux) can view the added Requirements at their Rhapsody IDEs and then create design models accordingly. Once diagrams and elements are created in Rhapsody they can be linked to original Requirements.

Since Rhapsody is already connected to Kovair Omnibus Engine, the design artifacts, their relationships, and the linked Requirements can be pushed to Kovair Application in chronological order for complete analysis. A Project Manager, by simply accessing web-based Kovair ALM platform can view the entire hierarchy of design artifacts, their interrelationships as well as traceability link between design diagrams and source Requirements. This gives a better visibility and control of design artifacts being created, changed, reviewed and traced to the original Requirements.

**Note:** The adapter as developed and offered by Kovair follows the subject tool's standard specifications. Any deviations from the tool's typical use pattern may not have been anticipated in our off-the-shelf product. For any customization or special configuration needs, please contact Kovair Sales - sales@kovair.com

**Kovair Software, Inc.** - Kovair is a California based software product company specializing in the domain of Application Lifecycle Management (ALM). Kovair’s focus on integrating third party best-of-breed ALM tools enables creation of applications in a synchronized tools environment.

**US Office**

2410 Camino Ramon, STE 230
San Ramon, CA 94583
Support: 1.408.262.0200 Extn. 2100
Sales: 1.408.262.0200 Extn. 1
Email: sales@kovair.com

**India Office**

PTI Building - 6th Floor, DP-9, Sector - V
Salt Lake City, Kolkata - 700091, India
Support: 1.408.262.0200 Extn. 2100
Sales & Marketing: 91-33-4065 7016/17 Extn. 107
Email: sales@kovair.com

www.kovair.com