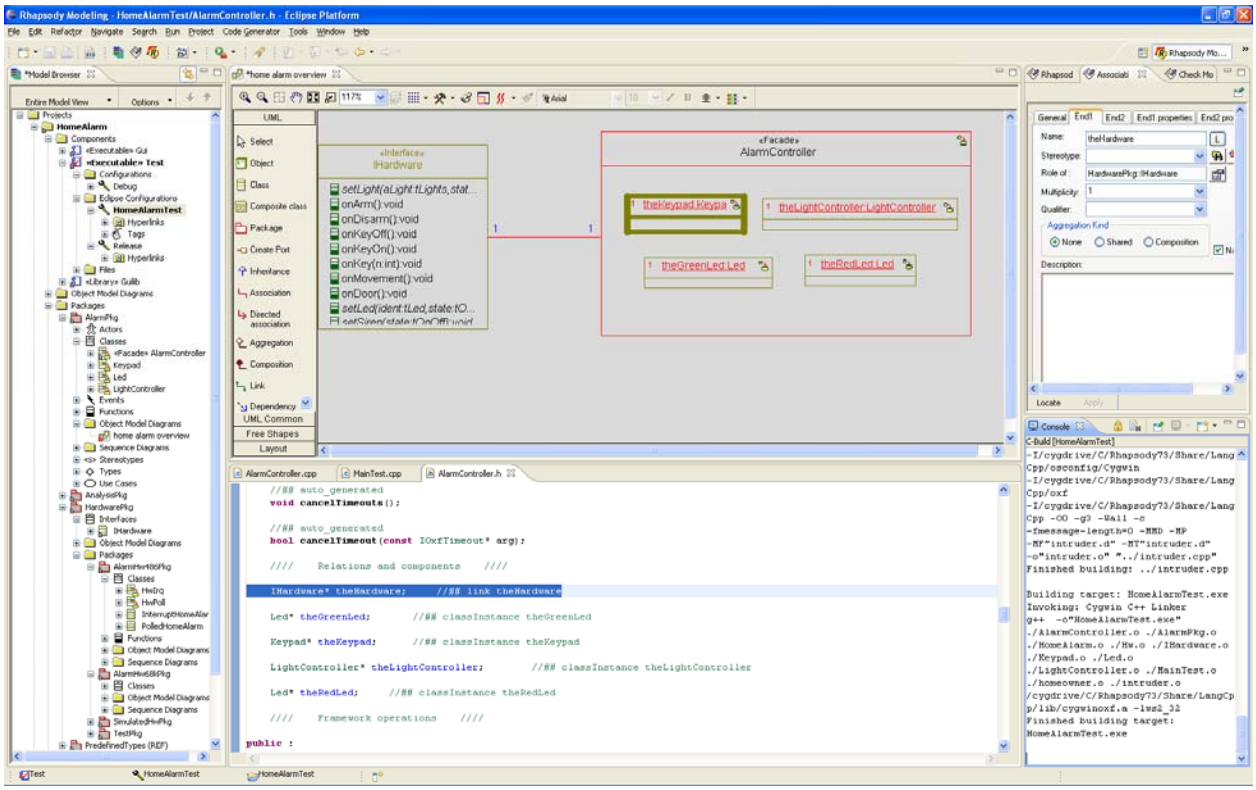
Telelogic Rhapsody 7.3 What's New

Rhapsody Eclipse Plug-in

The Telelogic Rhapsody® Eclipse™ Plug-in integrates a Rhapsody modeling and debug perspective into the Eclipse platform, enabling software developers to streamline their workflow with the benefit of working within the same development environment. Users can now work in the code or model in a single development environment. This enables users to employ Rhapsody's modeling capabilities or modify the code using the Eclipse editor, while maintaining synchronization between both and easily navigating from one to the other. In addition, developers can leverage debugging at the code or design level using the Eclipse debugger and Rhapsody's animation with breakpoints, which assures that activities are synchronized using Rhapsody's debug perspective. The Rhapsody Eclipse Plug-in is currently only available for Microsoft® Windows® as part of Telelogic Rhapsody Developer Multi-Language™ and works with the Eclipse CDT or JDT.

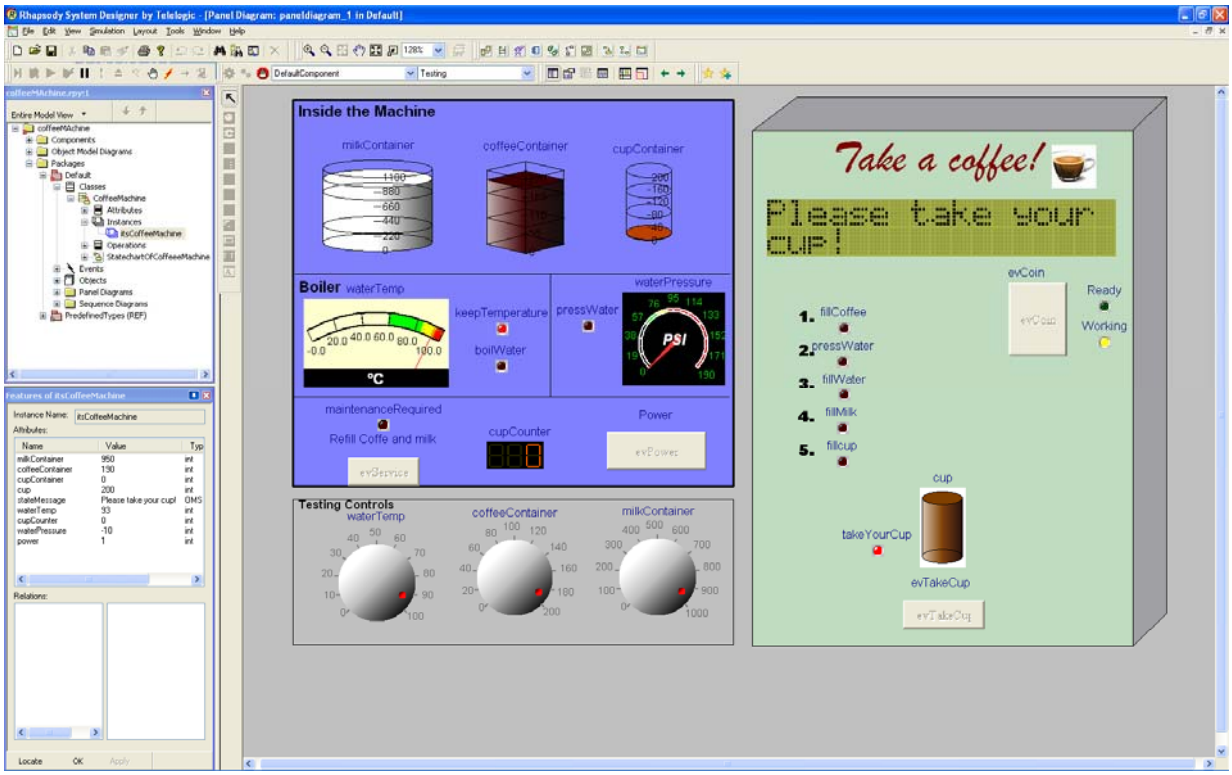


Watch the Viewlet >>

Telelogic Rhapsody 7.3 What's New

System Simulation with Graphical Panels

New for Telelogic Rhapsody 7.3, the graphical panel feature enables users to easily simulate models by creating a mock-up or prototype of the design to validate the behavior. This feature is an excellent way to communicate design behavior to customers or management, ensuring that the desired behavior is delivered. Users are able to create a diagram with knobs, buttons, meters, text boxes, sliders, etc., and bind these items to model elements to control or monitor the design. This provides a great way to demonstrate the design as well as an easy way to create a debug interface for it. Graphical panels are available as part of the Telelogic Rhapsody® Tools and Utilities Pack™, in conjunction with Telelogic Rhapsody in C Developer™, Telelogic Rhapsody in C++ Developer™ or Telelogic Rhapsody Systems Designer™. graphical panels are not currently supported with the Rhapsody Eclipse platform integration.



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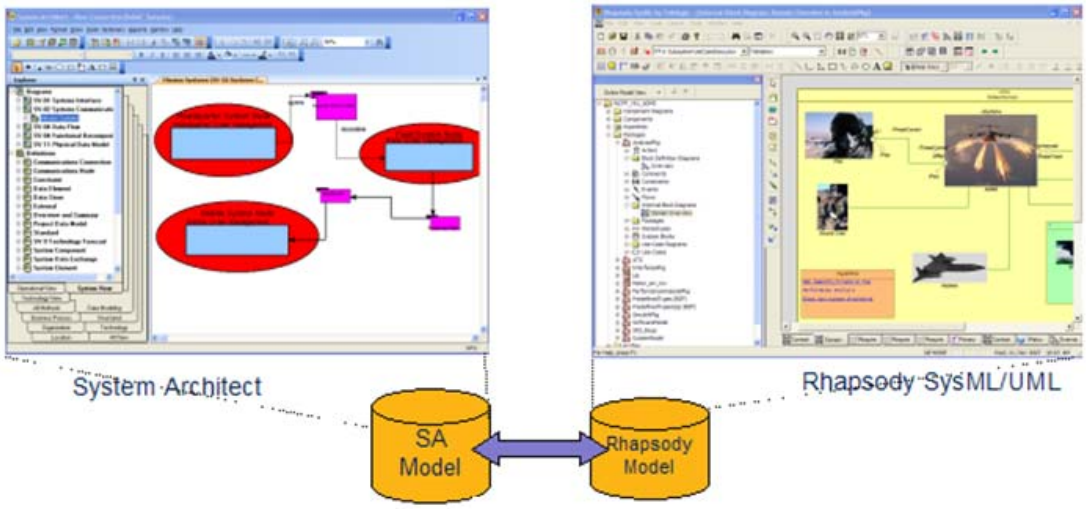
Rhapsody for Net-centric Systems

Leading defense institutions are moving toward net-centric systems, which is a highly distributed, flexible method for delivering required technology in a shared, reusable way to support operations. Rhapsody 7.3 provides a pre-release of the Telelogic Rhapsody Net Centric Systems Pack™ for Microsoft® Windows that provides an SOA approach to developing typically embedded net-centric systems for users (aircraft) or providers (UAVs) of these systems. The Rhapsody Net Centric Systems Pack supports domain-specific profiles and allows for intuitive specification and use of services in a platform-independent way. Users can generate WSDL files out of the platform-independent model so that the files can be used downstream of detailed implementation without needing to know the details of writing WSDL. In addition, the ability to import WSDL files is provided as part of the design model, so engineers can reuse existing Web services.

Interface with Telelogic System Architect for DoDAF

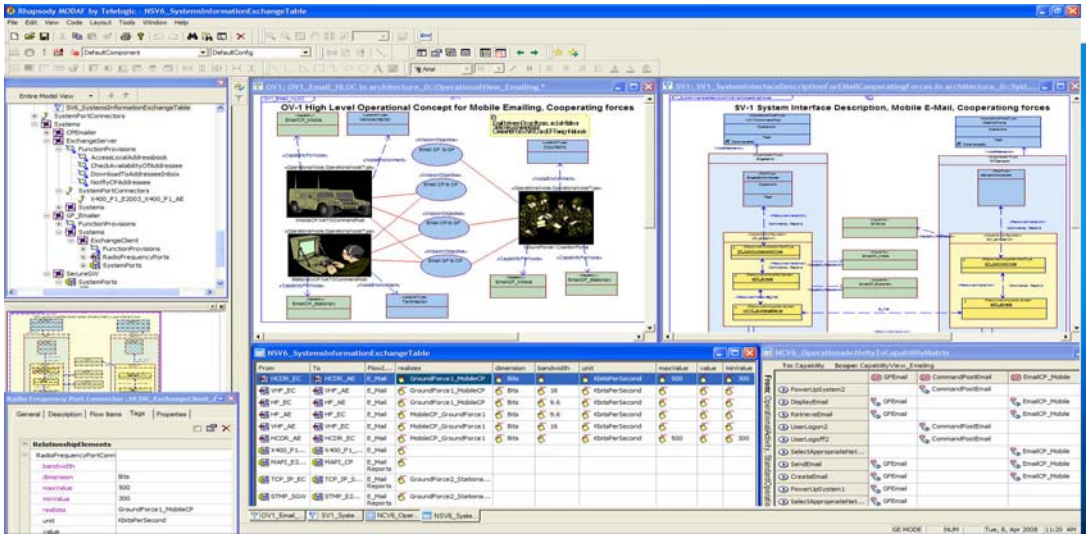
Telelogic Rhapsody 7.3 MR1 introduces a new interface that allows users to share and synchronize DoDAF information from Telelogic System Architect® to Rhapsody, benefiting their process by maintaining information from high-level enterprise architecture and reducing development time and cost. Information from System Architect is translated to SysML in Rhapsody for further system engineering development. Modifications performed in Rhapsody are passed back to System Architect via a detailed report. Further changes made in System Architect are compared and synchronized to the equivalent model in Rhapsody. The mapping rules for elements from System Architect to Rhapsody are customizable, enabling users to tailor the interface to their design needs. The System Architect/Rhapsody interface is available on Microsoft® Windows as part of the Telelogic Rhapsody Interfaces Pack™.



Rhapsody for MODAF

New for Rhapsody 7.3, the Telelogic Rhapsody for MODAF Add On™ adds Ministry of Defence Architecture Framework (MODAF) support to Rhapsody. Using the latest version of MODAF, version 1.1, engineers can capture their architecture and provide architecture deliverables using MODAF terminology. The Rhapsody for MODAF Add On provides all the MODAF core views, including All Views, Operational Views, System Views, Strategic Views and Technical Views. The MODAF Add On includes a rich set of images that can be used inside diagrams to increase readability and a tabular or matrix representation of certain views that provides an efficient mechanism to review relationships across different MODAF views. The MODAF Add On also includes a reporting capability, along with custom checks, to ensure that the architecture captured is consistent across the different views. Finally, the MODAF profile is compatible with the Rhapsody interface to Telelogic DOORS®.

Telelogic Rhapsody 7.3 What's New



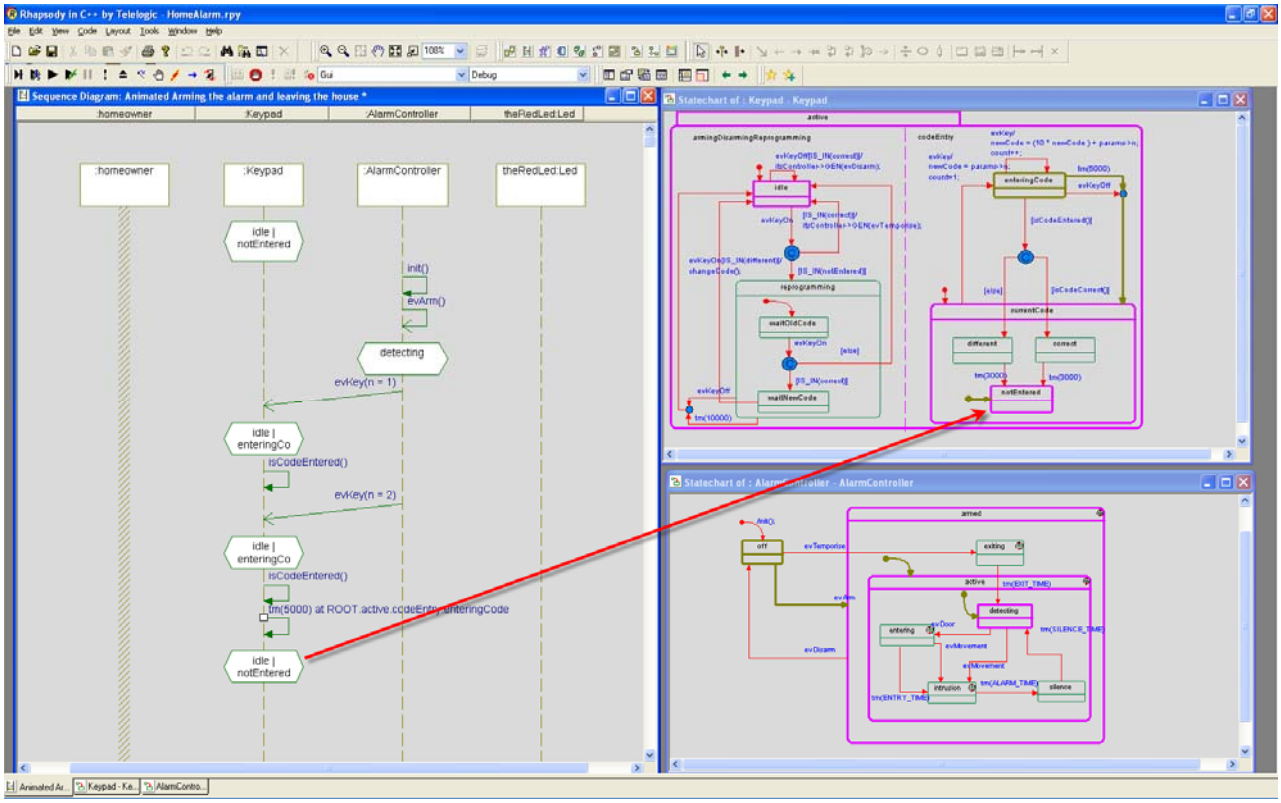
SysML Support with Teamcenter Interface
Users can now use SysML with the Teamcenter™ interface, enabling systems engineers to interactively exchange information between Rhapsody models using SysML and the Teamcenter systems engineering/requirements management environment. In addition, other stereotyped UML® elements can also be imported, enabling the exchange of more domain-specific data elements.

Improved Reverse Engineering and Roundtripping for C/C++
Rhapsody 7.3 increases its construct support, improving users' workflow for reverse engineering and roundtripping for C/C++. This enables users to leverage more of their source code and increase productivity working in the code or model. Benefits include:

- Reverse engineering and roundtripping is possible for the following:
  - Initializer section of a C++ constructor
  - Variable length argument lists
  - ifdef preprocessor directives in C and C++
- Reverse engineering automatically adds source code directories to the include paths, allowing hierarchies of include paths to be discovered.
- Rhapsody 7.3 improves users' ability to recreate the source code directory structure within the model by allowing users to specify the root project directory.

Display States in Animated Sequence Diagram

To aid design-level debugging, Rhapsody now automatically displays states entered during simulation or animation on a sequence diagram, enabling users to cross-reference object interactions with their respective change in state.



Hierarchy of Activity Diagrams

Rhapsody 7.3 provides SysML's ability to show the hierarchical breakdown of activities and their relations on a block-definition diagram, enabling users to communicate the functionality of their designs more effectively.

Telelogic Tau Diagram Import

The transfer of data between Telelogic Tau® and Rhapsody is improved in Rhapsody 7.3 to include support for importing diagram information from Tau into Rhapsody. This includes all static diagrams (class, package, component and use case diagrams), as well as the full set of behavioral diagrams (statecharts, activity diagrams and sequence diagrams), which enables a seamless exchange of model and graphic data from Tau to Rhapsody. The Tau information is included with the Telelogic Rhapsody Interfaces Pack, Telelogic Rhapsody® Value Pack™ and Telelogic Rhapsody® Gateway Value Pack™. The Telelogic Tau for XMI Add-On™ is required.

Enhanced Ada 95 Framework Support
Telelogic Rhapsody® In Ada™ adds a new Ada 95 behavioral framework consistent with the behavioral frameworks in the other Rhapsody-generated languages. The new framework supports triggered operations, events and timeouts, as well as minimizes the code generated in the user classes.

Automotive Focused Refinements
Rhapsody 7.3 adds new capabilities tailored for the needs of the automotive industry; these are available in the automotive profile and can benefit other industries as well, including the following:

- Animation with Extended C Framework – Rhapsody 7.3 provides Extended C Framework users the ability to simulate the behavior of an application on the host to validate its behavior, even if target hardware is not available. Users can follow the execution theme of the model with a call stack for each execution manager.
- External Library for Network Ports – This interface allows users to list input API's for in-network ports, list output APIs for out-network ports, or destroy the lists enabling access to an external library to browse for a signal API.
- Memory Partitioning Control – It is now possible to partition a part of a generated class in ROM, enabling users to meet memory requirements of their embedded designs.
- Architecture Diagram – This is a new diagram added to the automotive profile, enabling specification of architectures with drawing tools for flowports and network-ports.

TestConductor API
Telelogic Rhapsody® TestConductor™ now provides an API that enables users to execute test cases, obtain access to TestConductor data and easily integrate and exchange data to get metric data to determine test results.

TestConductor Welcome Screen
Rhapsody TestConductor users can quickly and easily access key documentation, tutorials and samples using the new TestConductor welcome screen.

Automated Target Testing Support
Testing on the target using Rhapsody TestConductor is improved by automating the testing process. Users can now execute a test case on the target by automatically connecting and downloading the application to the target when executing test cases, which increases the productivity of target testing. Full execution of all test cases is provided, enabling full regression testing on the target without user interaction. With Rhapsody 7.3, users get support for Wind River VxWorks® and Linux®, but it is also customizable for other operating systems.

Switching between Black Box and White Box Testing
Rhapsody TestConductor enables users to easily switch between black box and white box testing. This functionality enables users to quickly change the scope of testing to improve productivity. No design elements need to change.

Enhanced Test Review and Documentation
The Rhapsody TestConductor Testing Profile is extended to provide a test documentation package that provides test requirement coverage and test results. For easy review, tables show the outcome of all test cases with passed/failed results, enabling users to easily communicate this valuable information.

Table and Matrix Enhancements
The Telelogic Rhapsody® model-driven development environment's ability to represent information in a tabular or matrix format is enhanced to include or exclude descendants in a table or matrix in Rhapsody 7.3. These enhancements allow users to show relations between objects—even if ports are involved—and to display multiple relations between elements if they exist. This allows users to easily communicate design information in a tabular or matrix format.

MSI Installation
With the MSI installation, installing Rhapsody for large deployments is now an easier process. This new feature provides users with improved support for updating or repairing the installation and improved maintenance of the installation. Users can now set up a silent install for the components and any desired override property parameters. Some of the benefits of the MSI installation include the following:

- MSI allows adding, repairing and removing components.
- MSI keeps track of files and registry settings that are added, replaced or removed.
- If an unrecoverable error occurs at any time during installation, MSI lets users roll back the entire process to avoid disabling the system with half-installed components.
- With Microsoft® Active Directory®, MSI can be associated with a group policy to let end users install the application on their systems, even if they do not have rights to modify the file system or registry.