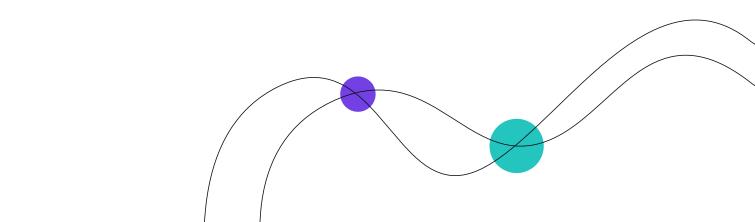


## RHAPSODY INTEGRATION ENGINE

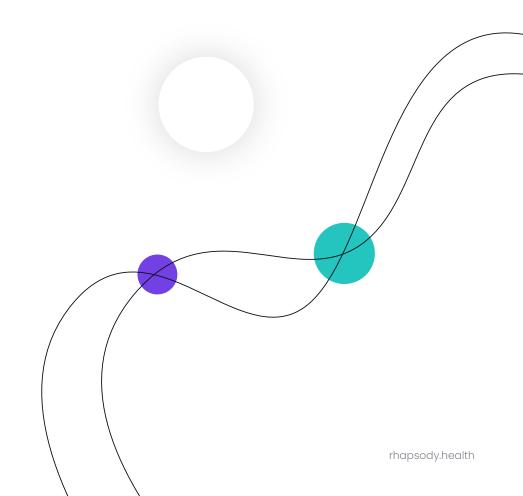


# Intelligent Integration for Healthcare Systems

Rhapsody® achieves rapid and scalable interoperability within complex healthcare environments by connecting systems seamlessly, in less time, and at a lower cost.

Rhapsody Integration Engine is the enabler that brings systems together through seamless data integration. The proven, high-performing engine has built-in FHIR® capabilities and is for designed for robust and reliable acquisition and exchange of health data. Rhapsody's comprehensive set of tools help to simplify interoperability in complex healthcare environments.

Intelligent mapping ensures data quality and cuts the time of traditional migration and conversion by up to half, reducing cost and risk while increasing continuity of performance. Rhapsody allows healthcare organizations to seamlessly share and exchange information and future-proofs organizations for emerging integration patterns.



# **Benefits of Rhapsody**



### FHIR® capabilities

Rhapsody was the first integration engine to support for FHIR®, with built-in conversion between FHIR XML and JSON representations. The platform can be configured to map between FHIR and other integration standards. Keep an eye on latest releases of Rhapsody for new ways to work with FHIR.



#### **Built for healthcare**

Rhapsody is a healthcare-focused integration engine utilized by public and private hospitals, health systems, Health Information Exchanges, vendors, public health departments and federal government organizations. The interoperability engine is represented globally with customers in 36 countries. It has support for all healthcare message formats and standards, including HL7 (v2 and v3), HL7 FHIR, CCDA, NCPDP, X12, IHE, DICOM, XML, JSON, and custom formats.



### Support data acquisition

Rhapsody is not only used to exchange health data, but is also very effective at processing large amounts of data from multiple sources including databases and directories, and interacting with big data platforms.



### $^{ m ar{S}}$ Reliable and robust engine

Rhapsody is a multi-platform integration engine supporting Windows®, Linux, and AIX® operating systems. It is a reliable and robust engine that can be configured for availability. Security is of primary concern, and is built into every part of the product, with a view to safeguarding any protected health information (PHI) that passes through the engine.



### **Accelerated migrations**

Rhapsody has a number of tools and features to make migrating from a legacy integration engine easier. Rhapsody's Intelligent Mapper reduces the time and cost of migration by performing analysis of legacy engines and reverse engineering of rules, documentation and code generation. Intelligent mapping ensures data quality and cuts the time of traditional migration and conversion, reducing cost and risk while increasing continuity of performance.



#### Future-Proof

Rhapsody provides the platform to deliver integration needs of today, and also future-proofs organizations for emerging integration patterns. Rhapsody development focuses on new integration capabilities with resilience, stability, horizontal scalability and high availability as the core drivers.



### **Engineered for high performance**

Rhapsody is a scalable interoperability platform that has been designed to help users get results quickly as well as grow with an organization's interoperability needs. Rhapsody can be stood up in just a few minutes and be processing messages soon after thanks to it's dragand-drop capabilities. Some of the larger Rhapsody installations process 30,000 messages per minute during peak periods and, globally, Rhapsody processes more than a billion messages per day.



#### View all environments

Rhapsody Dashboard provides an at-a-glance view of all your Rhapsody environments. With status indicators for each engine, it is easy for users to get quick and timely insights.



## Create connected solutions

Every day, our customers are using Rhapsody's flexibility and extensibility to connect systems together. Rhapsody supports a large number of protocols such as SOAP, REST, SFTP, FTP and TCP. The Rhapsody Development Kit (RDK) enables Rhapsody to connect to almost any type of system or device.



### Effortlessly maintain engine health

At Rhapsody's core is an intelligent monitoring and maintenance capability for simple and proactive maintenance of your engine. Smart alerts and notifications give users advanced warning of potential issues, ensuring the engine remains healthy. The REST API can be used by third-party applications to track engine health remotely, keeping you informed of the system status 24/7.

## As-A-Service

#### Flexibility to add instances as you need them

Due to its cloud infrastructure, Rhapsody as a Service can be scaled out (or up) when and if needed. RaaS can scale Rhapsody at very short notice without any noticeable service interruption.

#### **Global service coverage**

Rhapsody is a global healthcare software company, and is capable of providing the solution in any region of the globe. The Rhapsody organization has the capacity and infrastructure to provide a RaaS solution in varied locations around the planet. There is ability to provision a localized Rhapsody platform if required for performance or legal reasons.

#### Keep up to date with the latest version

There are numerous advantages to keeping up to date with the latest version of Rhapsody. These include benefiting from new and improved functionalities, as well as any bug fixes and security updates. The Rhapsody platform adapts to customer needs and new features are added with each new version release.

By using Rhapsody as a Service, users can gain all the advantages of the latest Rhapsody platform without having to execute the upgrades themselves.

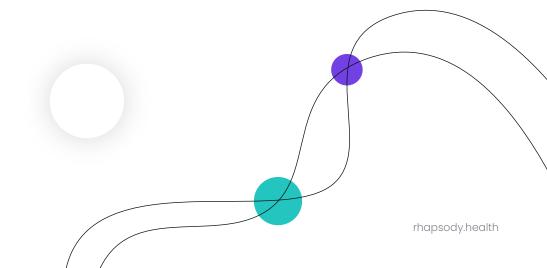
### 24/7 Monitoring and support

Having your Rhapsody platform processing messages in and out is critical to any operation. However, having enough trained personnel to maintain a 24/7 monitoring and on-call system is not always feasible. RaaS provides a best in class monitoring system, run by a team of SaaS specialists. The monitoring system has proactive alerting, backed up by our specialist team 24/7. The team will make sure the committed Service Level Agreements are met, and any unexpected issue is resolved in a timely manner, to minimize the mean time to recover.

#### **Utilizing AWS as a cloud provider**

Rhapsody is using Amazon Web Services (AWS) around the world to deliver solutions for the health industry. AWS reduces the time and effort required to run existing workloads and speeds up development of new solutions, while meeting the local security and privacy requirements. Rhapsody utilizes AWS services to help end users save resource and infrastructure space, by putting data and backup in the cloud.

In addition to removing the burden of infrastructure maintenance and upkeep, RaaS also offers security in the way of HIPAA and GDPR compliance, as well as other certifications related to our commitment to protecting PHI (ISO-27001 / SOC2, Type 1 / Cyber Essentials Plus).



# **Key Features**

# A mighty, high-performance messaging engine

The Rhapsody Engine Integration accepts messages from external systems, processes the messages, and sends them to external systems. Security is of primary concern and is built into every part of the product, with a view to safeguarding any protected health information (PHI) that passes through the engine. The engine provides guaranteed message delivery and has a high message throughput. Message archiving, filtering, routing, mapping, translations and queuing all occur according to the engine's configuration.

The engine takes care of managing standards required for health data integration, from healthcare protocols — HL7, EDIFACT, NCPDP, X12 — to emerging standards such as FHIR®, and custom formats such as CSV, fixed width and XML. Rhapsody supports HIPAA and is also certified to meet relevant Meaningful Use criteria.

## Graphical configuration for effortless interoperability

The Rhapsody Integrated Development Environment (Rhapsody IDE) is a Windows®-based application that provides a graphical user interface for rapidly creating and editing Rhapsody configurations. Rhapsody IDE enables the interface designer to create, view and modify configurations in a graphical drag-and-drop environment. Components are dragged into place from the toolbox of available processing actions (called filters) and connection interfaces (communication points). Rhapsody IDE automatically generates formatted PDF documentation describing the configuration.

The user experience is streamlined to provide effortless drag-and-drop configuration tools to connect systems. Rhapsody IDE provides a number of transformational components: a filter for common HL7 message modifications, an auto-mapping and drag-and-drop field mapper, and a flexible JavaScript filter. These tools enable the user to transform data between systems rapidly, regardless of the complexity of the task. Built-in testing allows the user to test transformations with multiple scenarios. Custom extensions can also be built using the Rhapsody Development Kit (RDK).

## Monitoring and management made simple

The Rhapsody Management Console is a web-based application, designed to reduce time spent on day-to-day monitoring and management, and provide troubleshooting. It displays information on the system status and state of message processing in the engine. The Management Console highlights problems such as system connections that are not operating and interfaces that are not keeping up with the required throughput. It also allows access to administration tasks and processing logs. The Management Console provides access to copies of all recent messages processed by the engine. Messages are stored in the Rhapsody archive for a configurable period of time and during that time, they can be edited, resent and reprocessed as required. Messages can be viewed at all stages of processing and the complete path of a message is displayed graphically.

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#### **Proactive notifications** for the time poor

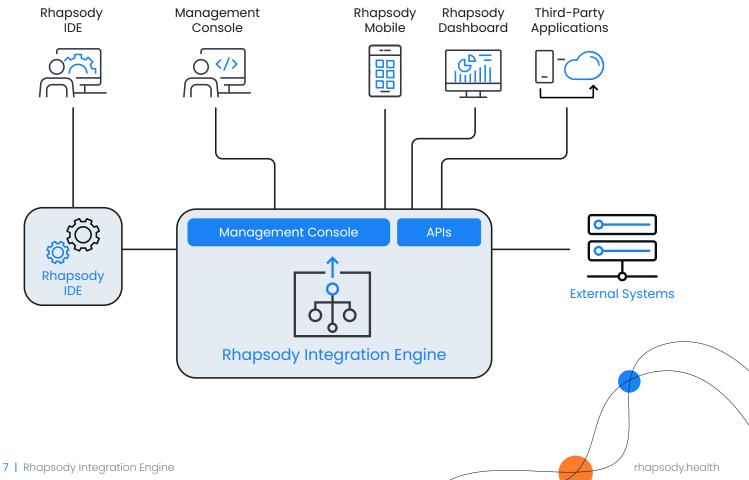
The Management Console highlights issues as they arise, enabling the user to resolve issues in a timely manner. Rhapsody can alert the user to issues before they become critical, helping to maintain a healthy engine with minimal downtime. The alert notification system can be configured to the user's requirements, allowing users to configure thresholds at a component level. Watchlists allow the grouping of components so that they can be monitored as a group. The delivery time and method of notifications can also be configured.

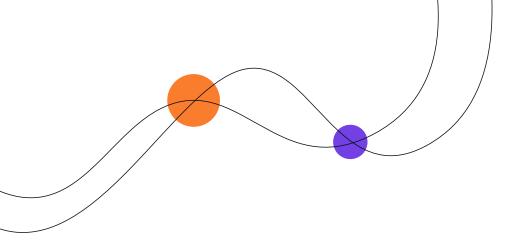
Rhapsody provides APIs for remote monitoring. These APIs provide the ability to monitor and perform management actions (such as starting a communication point) in Rhapsody's dashboard and mobile components as well as external applications.

#### **Data-driven decisions**

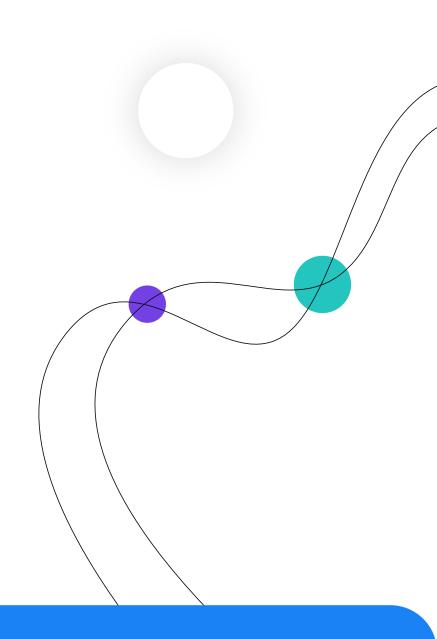
Rhapsody utilizes user data to drive decision making and enhance both the engine itself and the user experience. By gathering this usage data, the Rhapsody development team can better understand customer behavior which, in turn, influences development decisions such as product prioritization, improvements, documentation and training.

# **Functionality**





## RHAPSODY INTEGRATION ENGINE



Find out more at: rhapsody.health