# Red Hat Process Automation Manager

**Red Hat Process Automation Manager**
Intelligent business process management for the enterprise

## Features

- Rich, standards-based APIs

- Pluggable repository

- Native BPMN 2.0 modeling and execution of business processes

- Dynamic case management

- Advanced business activity monitoring dashboards and reports

- Embeddable, scalable business process and rules server

- Kubernetes Operators for installation on Red Hat® OpenShift Container Platform

## Benefits

- Automated business operations

- Continuous optimization of business processes

- Accelerated development

- Business process and decision logic separated from application code

- Greater business agility, shorter development cycles, and faster time to market

facebook.com/redhatinc
@redhat
linkedin.com/company/red-hat

**redhat.com**

## Product overview

Red Hat® Process Automation Manager is a platform for developing containerized microservices and applications that automate business decisions and processes. It includes business process management (BPM), business rules management (BRM), and complex event processing (CEP) technologies and is compliant with popular industry standards like Business Process Model and Notation 2.0 (BPMN 2.0) and Decision Model and Notation 1.2 (DMN 1.2) for process and decision management. Process Automation Manager lets users capture business policies and procedures, create applications that automate business operations, and measure the results of business activities. It includes easy-to-use graphical tools that foster collaboration between IT and business users in addition to providing better visibility into the rules and procedures that govern business applications.

Red Hat Process Automation Manager is produced using Red Hat's open source development model and by the members of the Drools and jBPM communities. It includes a rich set of application programming interfaces (APIs) that enable straightforward integration with a wide range of complementary solutions. In particular, Process Automation Manager interoperates with Red Hat's portfolio of middleware products, including Red Hat Integration for integration with external applications and Red Hat Runtimes for access to supporting services such as single sign-on and in-memory databases.

## Features

Red Hat Process Automation Manager lets project stakeholders collaborate to build cloud-native business automation applications and microservices with a choice of modeling tools, including a web-based authoring environment for business experts and an Eclipse plugin for developers. A rich set of easy-to-use tools for process and decision management covers the full process life cycle—from modeling, simulation, and testing to deployment, monitoring, and optimization. Process and decision logic can be modeled and automated together, without the need to learn multiple tools or develop custom integrations between disparate environments.

Red Hat Process Automation Manager comprises powerful process and rules engines, easy-to-use authoring tools, and a standards-based repository for business logic definitions.
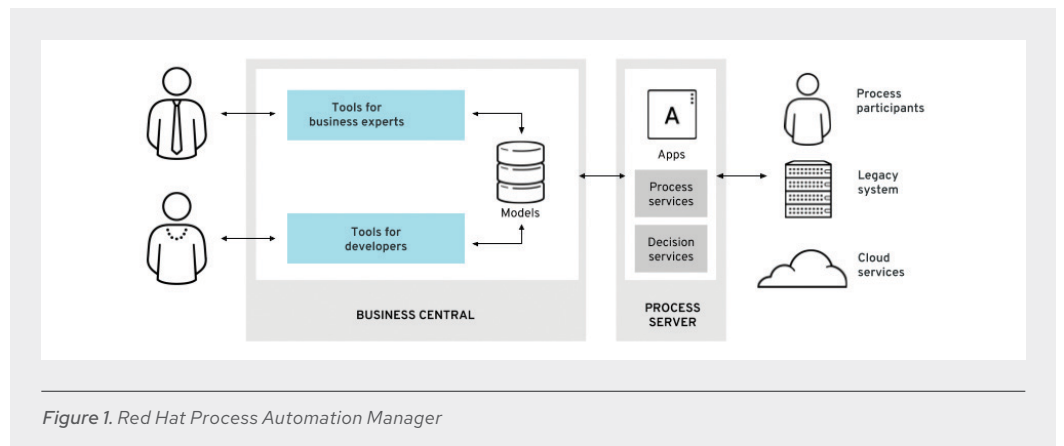


*Figure 1.* Red Hat Process Automation Manager

## Business modeling

Red Hat Process Automation Manager includes easy-to-use, web-based tools for business users to manage the complete project life cycle, including:

- Business process modeling with drag-and-drop BPMN 2.0 diagramming and a powerful forms designer.

- Business decision modeling with drag-and-drop DMN 1.3 diagramming, decision tables and a guided rule editor that supports business-friendly domain-specific languages (DSL).

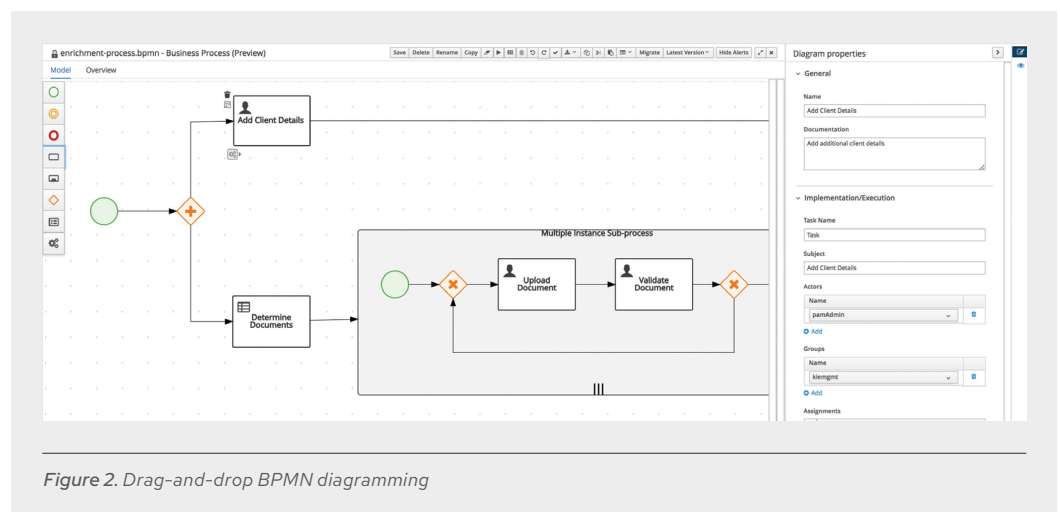- Dynamic case management for unstructured processes and better collaboration.



*Figure 2. Drag-and-drop BPMN diagramming*

## Cloud-native development

Red Hat Process Automation Manager runs in the cloud and generates cloud-native applications in conjunction with Red Hat OpenShift Container Platform. All components of the product are available as container images, ready for deployment on OpenShift Container Platform. Decision and process models can be built into containers and deployed via OpenShift Container Platform's source-to-image pipeline.

Applications also can be deployed to standalone or clustered servers within more traditional IT environments—accessed via representational state transfer (REST), Java™, and Java Message Service (JMS) APIs.

## Runtime engines

Red Hat Process Automation Manager includes Drools 7, a highly scalable forward- and backward-chaining inference engine capable of efficiently processing large rule and data sets.

New with Drools 7 is support for native execution of DMN decision models. This highly efficient approach to automating business decisions allows Drools 7 to directly execute DMN models without the need to convert to an intermediate rules format. Drools 7 includes full runtime support for DMN 1.2 models at conformance level 3, as defined by the Object Management Group (OMG) DMN specification, ensuring that any valid DMN 1.2 model can be properly automated. In addition, Process

# Red Hat
## Process Automation
## Manager

Automation Manager enables users to combine machine-learned predictive models with DMN models to automate more complex business decisions. Machine-learned models can be imported via the industry-standard Predictive Model Markup Language (PMML), and executed as part of a DMN decision.

For efficient execution of process models, Process Automation Manager includes the jBPM 7 business process management engine. Lightweight and flexible, jBPM 7 automates process and case models and can efficiently support thousands of process and case instances.
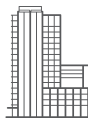
### Resource optimization

Red Hat Process Automation Manager includes OptaPlanner, a tool for constructing metaheuristic solvers for complex optimization problems. It can be used to build applications that optimize common business resource planning use cases, such as vehicle routing, employee rostering, cloud optimization, task assignment, job scheduling, bin packing, and many more. Every organization faces such scheduling puzzles and must assign a set of constrained resources—employees, assets, time, and money—to provide products or services. OptaPlanner helps users build real-time constraint optimization apps with minimal knowledge of metaheuristic techniques and algorithms and deliver more efficient plans to improve service quality and reduce costs.

### Modern user experience

Red Hat Process Automation Manager includes a rich, open source user experience (UX) platform for building modern, process-driven applications in the cloud. Business experts can quickly compose applications by dragging and dropping reusable user interface (UI) components to pages, while developers are free to work in the front-end frameworks of their choice. A library of prebuilt, micro front-end widgets are available, enabling task lists, forms, process graphs, and more. The UX platform streamlines development and allows business users to create compelling experiences for customers across a wide range of devices and channels.

### Supported platforms

For a list of supported platforms on which Red Hat Process Automation Manager will run, visit https://red.ht/pam.

### About Red Hat

Red Hat is the world's leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers integrate new and existing IT applications, develop cloud-native applications, standardize on our industry-leading operating system, and automate, secure, and manage complex environments. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500. As a strategic partner to cloud providers, system integrators, application vendors, customers, and open source communities, Red Hat can help organizations prepare for the digital future.

facebook.com/redhatinc
@redhat
linkedin.com/company/red-hat

**North America**
1 888 REDHAT1
www.redhat.com

**Europe, Middle East, and Africa**
00800 7334 2835
europe@redhat.com

**Asia Pacific**
+65 6490 4200
apac@redhat.com

**Latin America**
+54 11 4329 7300
info-latam@redhat.com

redhat.com
#F19620_1019