

Migrate and Modernize Applications

Accelerate innovation and reduce costs with EAP

Rahman Oridedi

Aug 2019



Migrations and Modernization

Why do organizations migrate?



Cost



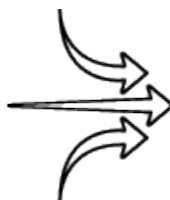
Avoid Vendor lock-in



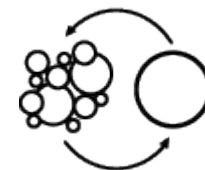
Rebalance



Increase productivity



Remove technical debt



Agile/devops/cloud

Average Benefits

IDC study: Benefits of moving from a proprietary platform to JBoss EAP

- **3-year return on investment** of 509%
- **Payback on investment** within 9.4 months
- 70% more applications developed per year
- **35.5% less development time** per application
- 89.3% less application development-related downtime
- **79.5% cost savings** over proprietary platforms

Study available: <https://engage.redhat.com/jboss-eap-idc-s-201508032204>

Why migrations don't happen

- Perceived risk with conducting a migration
- Lack of familiarity/SME's for the application
- Lack of resources
 - Time
 - People
 - Budget
- The application works as-is and everyone is comfortable with it

Red Hat Application Migration

Solution Delivery Framework



Discover - Explore



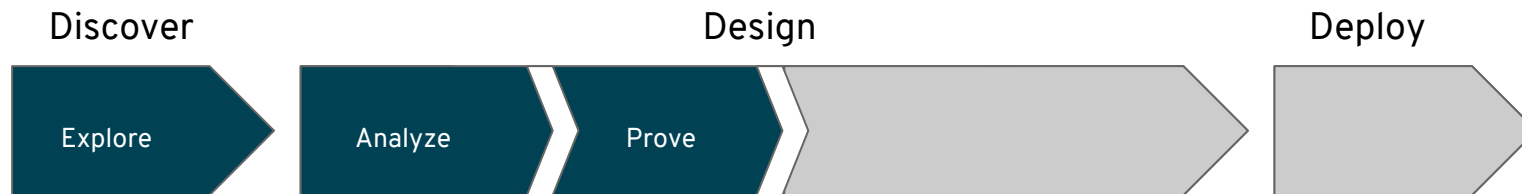
- Discuss:
 - Goals and solution approaches
- Identify:
 - Challenges and potential issues
 - Viable approaches and technologies
 - Desired outcomes
- Outline:
 - Current state
 - Target state
 - Opportunities for change

Design - Analyze



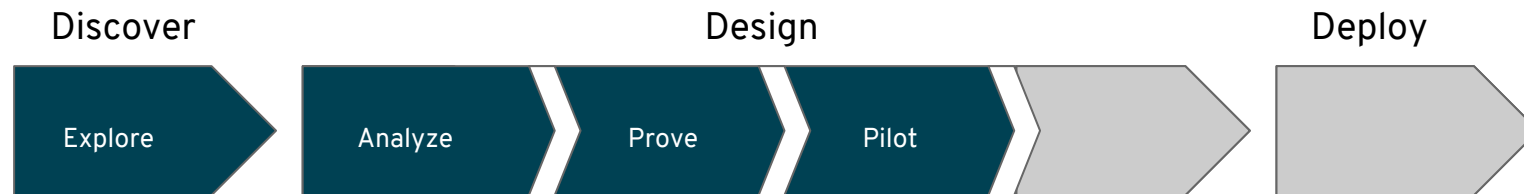
- Analyze
 - Architecture
 - Dependencies
 - Infrastructure
 - Processes
 - Governance
- Automated application code analysis

Design - Prove



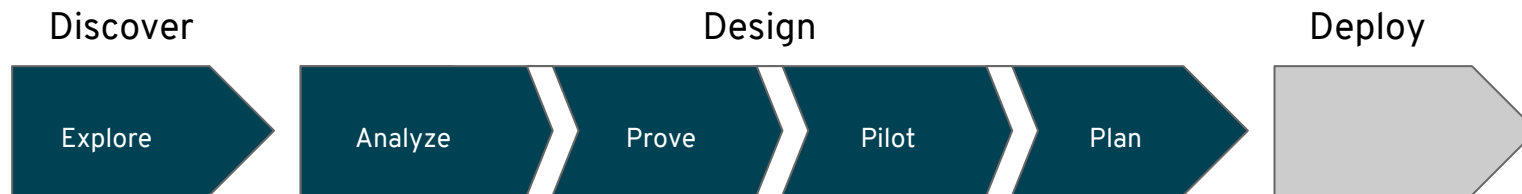
- Prove out if high-risk issues are solvable

Design - Pilot



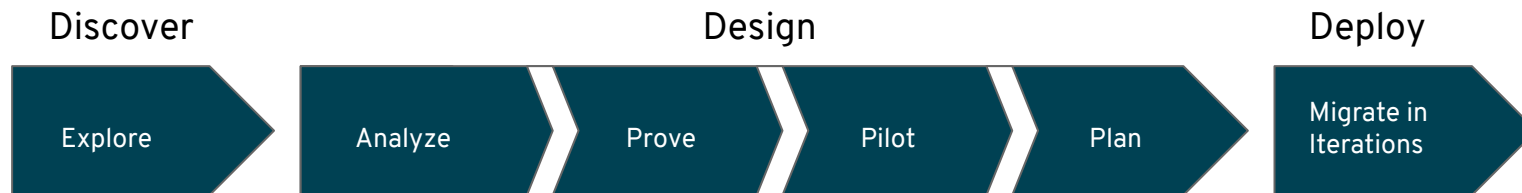
- Pilot the target infrastructure and adjust estimates
 - Based on outcomes from previous phase

Design - Plan



- Establishing work backlog
 - Phases
 - Order
 - Teams
 - Documents
 - Processes

Deploy - Migrate in Iterations



- Typically 2 week sprints
- Continuously validating implementation against plan
- Building skills with ongoing coaching and mentoring

What is Windup?

It's now called Red Hat Application Migration Toolkit

- Open Source
- Built on lessons learned and experiences from consulting
- Inspects
- Generates
- Eases path to migration
- Customizable



How does it work?

- Specify Input application, code, package
- Specify Output
- Set source technology
- Set target technology
- Execute
- Integrate reports into migration strategy

Supported Migrations

Source Platform	Migration to JBoss EAP 6	Migration to JBoss EAP 7
Oracle® WebLogic Server	✓	✓
IBM® WebSphere® Application Server	✓	✓
JBoss EAP 4	✓	✗ ^[a]
JBoss EAP 5	✓	✓
JBoss EAP 6	N/A	✓
<p>^[a] Although RHAMT does not currently provide rules for this migration path, Red Hat Consulting can assist with migration from any source platform.</p>		

What does Windup Generate

Several reports that display:

- Lists of tasks
- Severity of tasks
- LOE of tasks
- Effort based on Story Points
- Offending files and lines of code w/suggested changes.

How to Incorporate Windup

- Assess and Plan
 - Identify Critical issues
 - Create estimates
 - Select Pilots
- Migrate
 - Exhausting migration support
- Extend
 - With new and custom rules

DEMO



Redhat Process Automation Manager

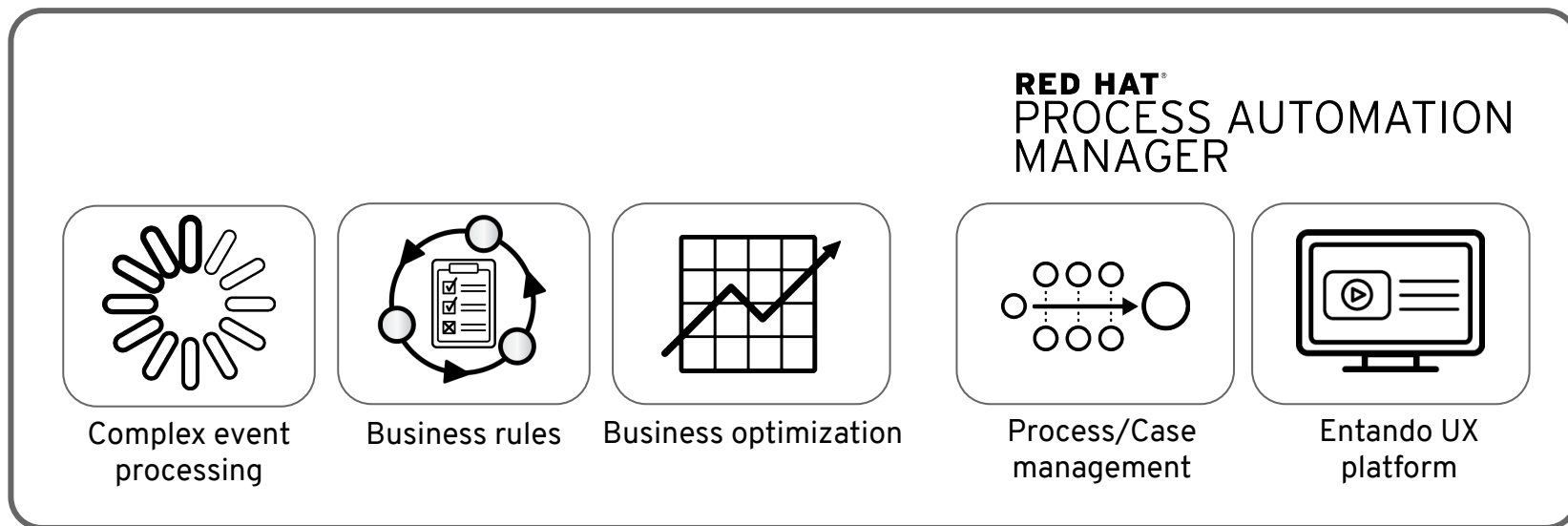
Automate Your Business

Rahman Oridedi

Aug 2019

Business Automation Offering

Key features



PHYSICAL

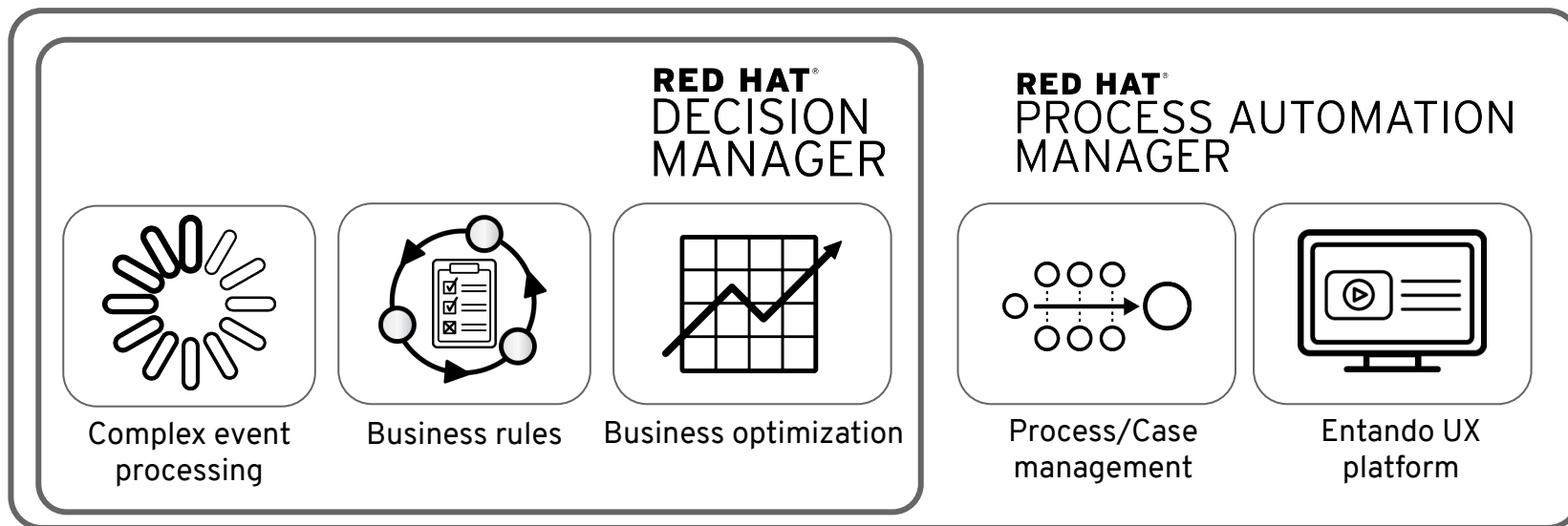
VIRTUAL

PUBLIC CLOUD

PRIVATE CLOUD

Business Automation Offering

Key features



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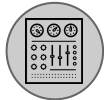
PUBLIC CLOUD

PRIVATE CLOUD

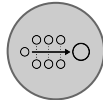
Modelling & Authoring



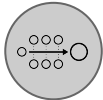
Data Modeling



Asset Management



Process Modeling



Case Modeling



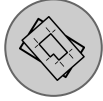
Rules Authoring



Decision Tables



Deployment



Form Builder

Business Central

Assets Repo.



Git based source repo.



Maven artefact repo.

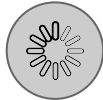
Runtime



Process Execution



Rule Execution



Event Processor



Solver



Case Execution



DMN Execution

CM/BPM

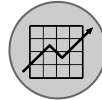
DM

CEP

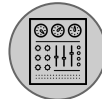
Optim.

KIE Server

Monitoring & Reporting



Business Activity Monitoring



Process and Task Management

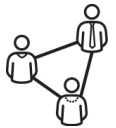
Business Central



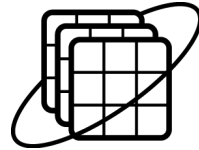
UX platform

Entando

RED HAT[®] PROCESS AUTOMATION MANAGER



μServices



Uls & Apps



REST / JMS / JAVA

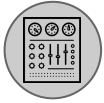


RED HAT® DECISION MANAGER

Modelling & Authoring



Data Modeling



Asset Management



Rules Authoring



Decision Tables



Deployment

Decision Central

Assets Repo.



Git based source
repo.

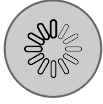


Maven artefact
repo.

Runtime



Rule Execution



Event Processor



Solver



DMN Execution

KIE Server

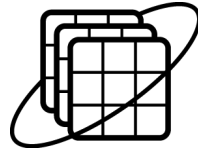
DM

CEP

Optim.

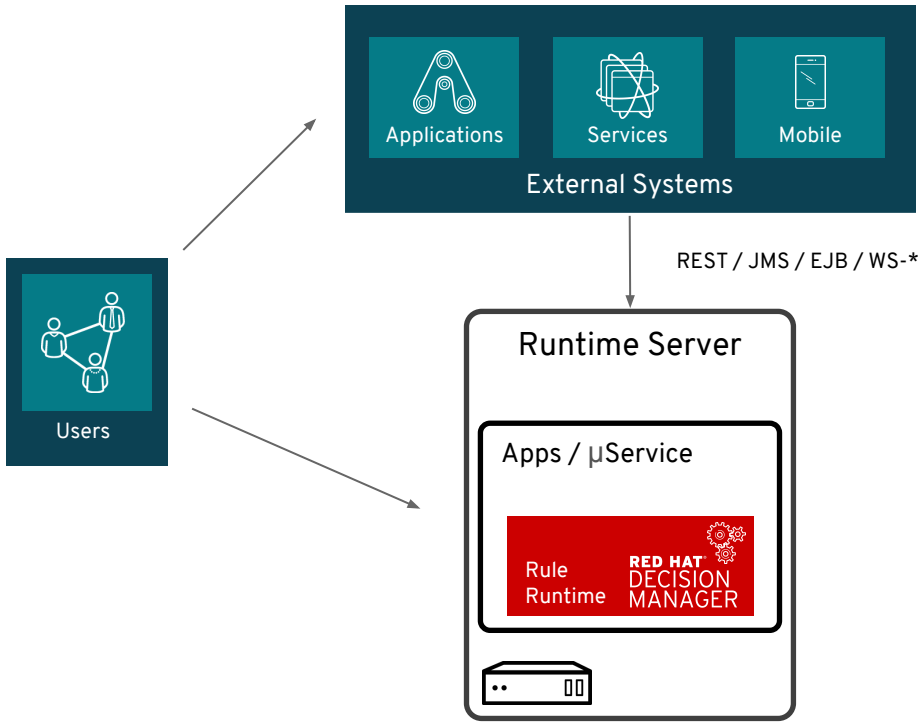
REST / JMS / JAVA

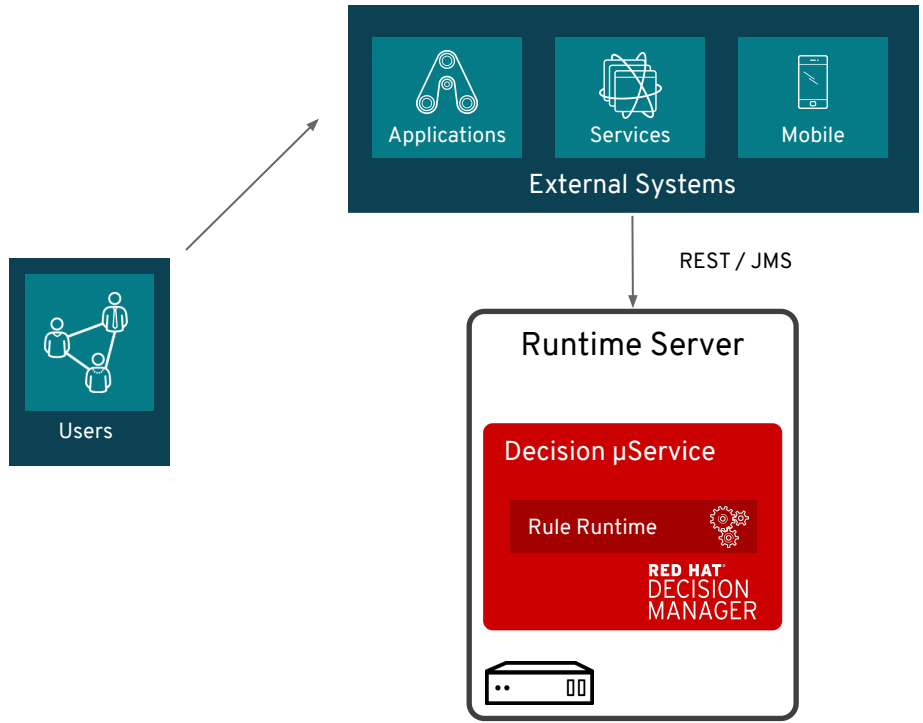
μServices

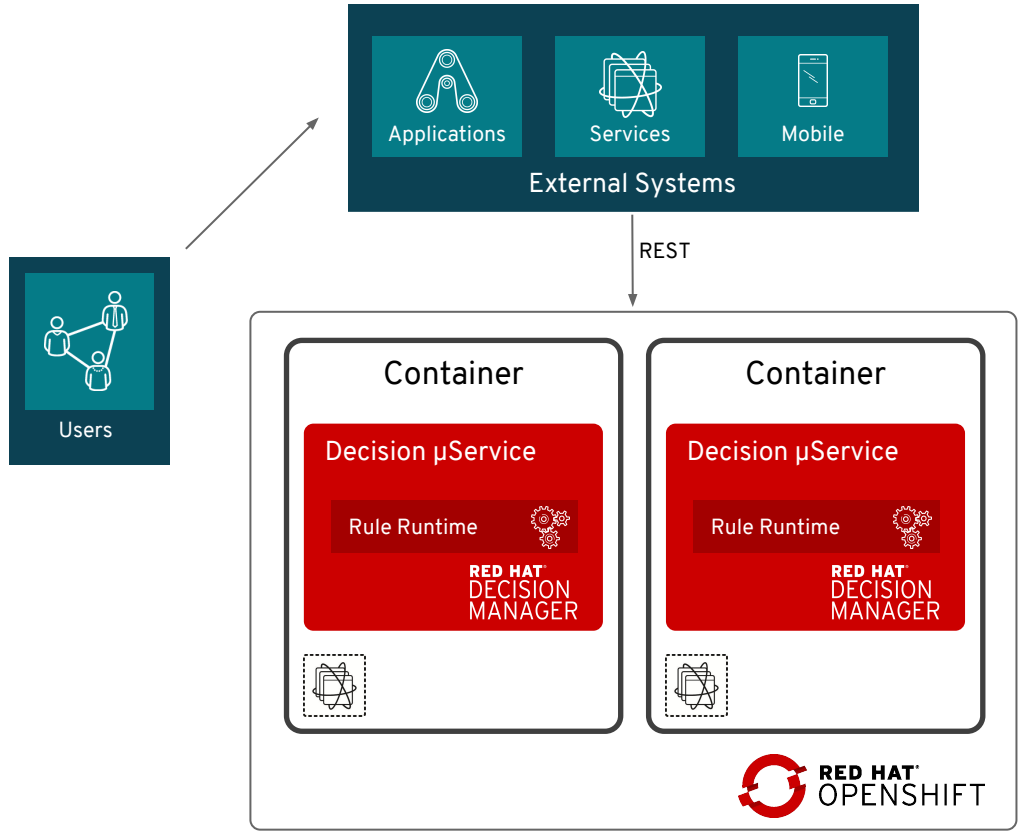


“Runtime modes”

Embedded Runtime mode







The screenshot displays the Red Hat HR Management dashboard. At the top, there are navigation tabs for 'DASHBOARD', 'POLICES', 'CASE LIST', 'TASK LIST', and 'EXHIBITS'. The dashboard is divided into several sections:

- Summary Metrics:** Four cards at the top show key statistics: 22 Open cases, 97 Closed cases, 17 Rejected cases, and 4 SLA Overdue cases.
- Task Distribution:** Two cards show 'Tasks with HR Department' (13) and 'Tasks with Associate' (9).
- Performance Analysis:** Two bar charts labeled 'Open Metrics' and 'Close Analytics' show data trends over time.
- Process Flow:** A 'Process Case Volume' pie chart shows the distribution of cases across different stages: Open (green), Closed (orange), and SLA Overdue (red).