RED HAT’S ROADMAP
PROCESS AND DECISION MANAGEMENT
Year in Review

- BPM and BRMS 6.4 Release
- Cloud enabled - Intelligent Process Server and Realtime Decision Server
- EE 7 Support
- Integrated Red Hat SSO
- Enhanced User experience
- Enriched APIs
- Improved stability and Several RFEs
Vision Refresh

- Comprehensive Productivity Tools: Appealing end to end BRMS and BPMS Core capabilities that support developer agility
- Low code / No code Platform: Empower citizen developers to build simple to moderately complex business applications faster and efficiently
- Dynamic Case Management: Comprehensive set of tools to build and manage dynamic case management solutions
- Appcelerators: Industry specific templates and solutions
- Simplify Planner solution development
- Expand decision management solution development tools
- Cloud based business application development and deployment
Roadmap in works
Agenda - Backend

- Execution Server
- jBPM
  - Case Management
- Drools
  - DMN, OOPath, Units, Parallel Scaling
- OptaPlanner
  - Performance
- Cloud Ready
Agenda - Frontend

- **AppFormer**
  - Workbench, Data Management, Data Modelling, Forms, Pages,
- **DashBuilder**
- **jBPM**
  - BPMN Designer, Case Modeller
- **Drools**
  - Decision Tables
Backend
Execution Server

● Unified Execution Server - Drools, jBPM and OptaPlanner
  ○ Previously Separate impl for Drools and jBPM
● Improved UI
  ○ CI/CD support
● Monitoring and Metrics
● Cloud First on OSE
Provisioning
Pipelines
jBPM

- Pluggable Task Assignment
- Smart Router
- Case Modeller
jBPM - Case Management
Drools - DMN

Decision Requirements Diagram
<table>
<thead>
<tr>
<th>U</th>
<th>Existing Customer</th>
<th>Application Risk Score</th>
<th>Credit Score</th>
<th>Post-Bureau Risk Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>&lt; 120</td>
<td>&lt; 590</td>
<td>HIGH</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>&lt; 120</td>
<td>[590..610]</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>3</td>
<td>false</td>
<td>&lt; 120</td>
<td>&gt; 610</td>
<td>LOW</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>&lt; 120</td>
<td>&lt; 600</td>
<td>HIGH</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>[120..130]</td>
<td>[600..625]</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>6</td>
<td>false</td>
<td>[120..130]</td>
<td>&gt; 625</td>
<td>LOW</td>
</tr>
<tr>
<td>7</td>
<td>false</td>
<td>&gt; 130</td>
<td>-</td>
<td>VERY LOW</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td>&lt; 580</td>
<td>HIGH</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>&lt;= 100</td>
<td>[580..600]</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>&lt;= 100</td>
<td>&gt; 600</td>
<td>LOW</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td>&lt; 590</td>
<td>HIGH</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td>[590..615]</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>13</td>
<td>true</td>
<td>&gt; 100</td>
<td>&gt; 615</td>
<td>LOW</td>
</tr>
</tbody>
</table>
Drools - Units

- Decouple Working Memory and Rules
- DataSources now standalone
- A unit can have 1..n DataSources, passed at Unit construction time
- OOPath Statements and Patterns are now ‘from’ DataSources

```java
DataSource<Person> typedDataSource;
DataSource<? extends Object> unypedDataSource;

rule MyRule when
    Person p : /typedDataSource[age > 30]
    var r : /unypedDataSource#Restaurant[location == p.location]
then
    System.out.println( p.name + " " r.name );
end
```
rule R when
  /men/wife/children[age > 10]/toys
then
  list.add( $child.getName() );
end
Drools - Scaling
Cloud First

- Horizontal Scaling Execution Servers
- Horizontal Scaling git/maven workspaces
OptaPlanner

- Multi Partition Search
- Smart Inbox (jBPM integration)
- Project Templates for domains
  - Scheduling, Routing
Frontend
AppFormer-Workbench
Welcome admin.

There are currently no projects available for you to view or edit.
To get started, create a new project or explore a demo project.
Let's get started.

There is currently nothing in this project.

What do you want to make?

- Business Process
- Guided Decision Table
- Data Object

view more types

Assets

Create New Asset

Description

test1-description

Messages

Build of project 'test1-name' requested by admin completed...
AppFormer - Workbench
AppFormer - Workspaces + Git Flow
AppFormer - Data Management
AppFormer - Data Modelling
AppFormer - Page/Form Building
AppFormer - Page/Form Building
AppFormer - Page Builder

Video
AppFormer - Form Building
AppFormer - Form Building
DashBuilder - BAM/Reporting

Video
### Decision Table for Pricing Loans

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>amount min</th>
<th>amount max</th>
<th>period</th>
<th>deposit max</th>
<th>income</th>
<th>Loan approved</th>
<th>LMI</th>
<th>rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>131000</td>
<td>200000</td>
<td>30</td>
<td></td>
<td>20000</td>
<td>Asset</td>
<td>true</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>10000</td>
<td>100000</td>
<td>20</td>
<td></td>
<td>2000</td>
<td>Job</td>
<td>true</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>100001</td>
<td>130000</td>
<td>20</td>
<td></td>
<td>3000</td>
<td>Job</td>
<td>false</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>100001</td>
<td>130000</td>
<td>20</td>
<td></td>
<td>3000</td>
<td>Job</td>
<td>false</td>
<td>10</td>
<td>6</td>
</tr>
</tbody>
</table>

**Subsumptant rows**

Affected rows: 3, 4

Subsumption exists when one row does the same thing as another, with a sub set of the values/facts of another rule.

These rules might insert duplicate facts into the working memory or execute functions twice. If this is not expected behavior please remove the subsumptant row or make it more strict.
jBPM - BPMN Modeller

Video
jBPM - Case Modeller
MODERN APPLICATION DEVELOPMENT & UX CONVERGENCE

Robb Harvey, Entando
entando
A Digital Experience Platform (DXP) for Modern Application Development.

Robb Harvey
COO
MARKET CONDITIONS

Radical Transformation of the Modern Enterprise

New Architectures, Processes, Platforms
  E.g., Hybrid Cloud Computing, DevOps

Enterprise Experience

Proliferation of UX, Apps, Devices & Content
ENTERPRISE SILOS

Threatening Customer Experience

Fragmentation

Disincentivized BU’s

Organizational Culture - Centralized IT has lost control
APP MODERNIZATION
Not just a modernization of your infrastructure

- Application Composition (Forms, Navigation, Roles, etc)
- Low-Code Tooling
- Process-Driven Design & Modelling
- Collaboration
- Real-Time Analytics & Behavioral
- Agnostic UI Integration
- Application MarketPlace
- Founded on Principles of Continuous Integration
THE UX CONVERGENCE SOLUTION
BRIDGING THE SILOS

UX Convergence Delivers Omnichannel Experiences Across Silos
UX CONVERGENCE MODEL

- PATTERNS
- ORCHESTRATION
- ABSTRACTION
Month View
Standard View for Appointment Dates & Times

Today View
Appointment Details

Filter Calendar View
From available/integrated calendars

Create New Appointment
From available/integrated calendars
Interested in learning more? Head over to the Modern Application Dev area to learn more.

Partner Pavilion
Exhibit Hall A

Lightning Talk Theatre @ Dev Zone
UX Convergence - Harmonizing User Experience Across the Enterprise

Date/Time:
Wednesday, May 3rd - 10:40am
Company Profile

- Automobile parts supplier mainly for TOYOTA group
- Annual sales : 140M US$
- Number of employees: 480
More order from TOYOTA but…
Factory space was short by 3,200 yard

Not enough…
Build new factory?

Maximize productivity

IoT Solution
To increase the number of production

Number of Production = Operating Time [s] \times Operating Ratio [%]

Reduce Downtime

Shorten Cycle Time

IoT Solution to visualize downtime and cycle time
To increase number of production

- Reduce Downtime
- Shorten Cycle Time

Operating Ratio [%]

Number of Production/hour [pcs/h]

Cycle Time (Sec)

Good!

Bad!
What is Cycle Time?

The period required to complete one piece of production.
Cycle Time Monitor

Alert Threshold: 4.0 for Equip.A

HTTP

Sensor

N
N+1
N+2

Equip.A

BRMS / CEP

"KAIZEN"

12:34:50.000
12:34:53.500
12:35:03.000

#N

#N+1

< 4.0sec

12:34:53.500

> 4.0sec

> 8.0sec

#N+2

12:35:03.000

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### ストラット工場

<table>
<thead>
<tr>
<th>品番</th>
<th>生産数</th>
<th>積算時間</th>
<th>積算時間</th>
</tr>
</thead>
<tbody>
<tr>
<td>47P</td>
<td>355/419</td>
<td>5.0h</td>
<td></td>
</tr>
<tr>
<td>47P</td>
<td>432/511</td>
<td>5.0h</td>
<td></td>
</tr>
<tr>
<td>47P</td>
<td>334/409</td>
<td>4.9h</td>
<td></td>
</tr>
<tr>
<td>5HW</td>
<td>389/445</td>
<td>4.5h</td>
<td></td>
</tr>
<tr>
<td>5HW</td>
<td>352/405</td>
<td>4.4h</td>
<td></td>
</tr>
<tr>
<td>175</td>
<td>124/124</td>
<td>4.2h</td>
<td></td>
</tr>
<tr>
<td>755</td>
<td>235/252</td>
<td>4.2h</td>
<td></td>
</tr>
<tr>
<td>30R</td>
<td>343/395</td>
<td>4.4h</td>
<td></td>
</tr>
<tr>
<td>20W</td>
<td>40/40</td>
<td>3.9h</td>
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</table>

### パー工場

<table>
<thead>
<tr>
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<th>生産数</th>
<th>積算時間</th>
<th>積算時間</th>
</tr>
</thead>
<tbody>
<tr>
<td>47P</td>
<td>139/360</td>
<td>1.6h</td>
<td></td>
</tr>
<tr>
<td>47P</td>
<td>1064/1142</td>
<td>4.1h</td>
<td></td>
</tr>
<tr>
<td>30R</td>
<td>819/893</td>
<td>4.3h</td>
<td></td>
</tr>
<tr>
<td>30R</td>
<td>1222/1290</td>
<td>4.3h</td>
<td></td>
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</table>
### 停止要因情報

<table>
<thead>
<tr>
<th>ランク</th>
<th>発生時刻</th>
<th>復帰時刻</th>
<th>停止時間</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>09:32:09</td>
<td>10:23:35</td>
<td>51分26秒</td>
</tr>
<tr>
<td>2</td>
<td>07:51:37</td>
<td>07:54:20</td>
<td>02分42秒</td>
</tr>
<tr>
<td>3</td>
<td>05:40:35</td>
<td>05:41:55</td>
<td>01分20秒</td>
</tr>
<tr>
<td>4</td>
<td>09:06:26</td>
<td>09:07:36</td>
<td>01分09秒</td>
</tr>
<tr>
<td>5</td>
<td>05:31:47</td>
<td>05:32:44</td>
<td>00分57秒</td>
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</tbody>
</table>

### 信号詳細

<table>
<thead>
<tr>
<th>時刻</th>
<th>CT 平均値</th>
<th>LQI 平均値</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.7</td>
<td>73.3</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>時刻</th>
<th>CT</th>
<th>LQI</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:01:34</td>
<td>3.8</td>
<td>0</td>
</tr>
<tr>
<td>13:01:30</td>
<td>4.4</td>
<td>0</td>
</tr>
<tr>
<td>13:01:26</td>
<td>3.8</td>
<td>0</td>
</tr>
</tbody>
</table>

### Downtime

- 停止時間: 51分26秒

### Cycle Time

- 13:01:34: 3.8
- 13:01:30: 4.4
Tow Hook

107 Unit/H

181 Unit/H

69%↑
Labor cost

4% ↓
=20,000h

1M USD
Capital investment reduction

3.3M USD!

Improved Quality!!

further
Quality of production

Fraction defective of Tow Hook

1/20 !

Fraction defective of ALL

1/3 !
Lesson and Learned

- Improved QoS
- Improved Software Quality
- Reduced Failure
- Reduced miss operation

- Reduce Production Cost
- Effective use Resource
- Reduce Labor Cost
- Reduce unnecessary Operation

Same as DevOps

- Automated Operation
- Shorter interval
- “KAIZEN”
- Reduce stopping time
THANK YOU

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facebook.com/redhatinc
twitter.com/RedHatNews

#redhat #rhsummit
<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Room</th>
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</thead>
<tbody>
<tr>
<td>Tues 11:30am</td>
<td>Transforming a Process-Driven Enterprise to a Digitally Engaged Enterprise</td>
<td>157B</td>
</tr>
<tr>
<td>Tues 3:30pm</td>
<td>Decision Modeling &amp; Notation 101</td>
<td>154</td>
</tr>
<tr>
<td>Tues 3:30pm</td>
<td>Show me the money!!!: optimize your business with JBoss BRMS Business Resource Planner</td>
<td>153</td>
</tr>
<tr>
<td>Weds 10:15am</td>
<td>BoF - Preview BPM Suite 7 And meet the brains behind it</td>
<td>158</td>
</tr>
<tr>
<td>Weds 4:30pm</td>
<td>Deep dive on Case Management</td>
<td>151B</td>
</tr>
<tr>
<td>Thurs 10:15am</td>
<td>Case management applications with BPM</td>
<td>153C</td>
</tr>
<tr>
<td>Thurs 11:30am</td>
<td>Advanced Drools BoF</td>
<td>158</td>
</tr>
</tbody>
</table>
A DESIGN APPROACH TO BRIDGE DEVOPS AND BUSINESS AUTOMATION

Ron Murhammer, NA Business Automation Practice Lead
David Bush, Business Automation Consultant

Tuesday, May 2, 3:30 PM - 4:15 PM

Located at the Consulting Discovery Zone at the Services Showcase in the Partner Pavilion

To learn more, visit red.ht/discoverysession
Interested in this topic? Head over to the **User Experience Design** booth to learn more.

**Partner Pavilion**  
Exhibit Hall A

**Session Title**  
Red Hat JBoss BPM Suite Feedback

**Contact Name**  
Liz Blanchard
LEARN. NETWORK. EXPERIENCE OPEN SOURCE.