DECISION MANAGEMENT ON RED HAT OPENSHIFT

using Red Hat Decision Manager v7

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Cloud-native application development has become the preferred model for crafting the innovative applications required of digital transformation strategy. Modern programming techniques now exploit shared-distributed cloud architectures, portable container technology and discrete microservices designed to quickly assemble logic, automate processes and adapt when needed.

— 451 Research, 2018
Red Hat automation products

- Business Process Management
- Business Optimizer
- Business Rules Management
- Complex Event Processing

ON-PREMISE
PRIVATE
PUBLIC
CONTAINER
Architecture example

Decision Central

- Tools for business experts
- Tools for developers

RULES

Decision Server(s)

- Decision Services

Client app

Author / Test  Deploy  Expose
Demo: Decision Service scenario
Description of the assets in the scenario
Demo: simple Decision Service with DMN
Description of the DMN model

Exemptions

<table>
<thead>
<tr>
<th></th>
<th>Account holder age</th>
<th>Account holder employed</th>
<th>Exemptions</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-</td>
<td>false</td>
<td>-</td>
<td>Exempted</td>
</tr>
<tr>
<td>2</td>
<td>[18, 25]</td>
<td>false</td>
<td>-</td>
<td>Exempted</td>
</tr>
<tr>
<td>3</td>
<td>&gt; 65</td>
<td>true</td>
<td>-</td>
<td>Exempted</td>
</tr>
<tr>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Standard</td>
</tr>
</tbody>
</table>

Account Profile

<table>
<thead>
<tr>
<th></th>
<th>Account balance</th>
<th>Account Profile</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt; 0</td>
<td>&quot;Defaulting&quot;</td>
<td>&quot;Standard&quot;</td>
</tr>
<tr>
<td>2</td>
<td>[0, 100000]</td>
<td>&quot;Standard&quot;</td>
<td>&quot;Standard&quot;</td>
</tr>
<tr>
<td>3</td>
<td>&gt; 100000</td>
<td>&quot;Premium&quot;</td>
<td>&quot;Premium&quot;</td>
</tr>
</tbody>
</table>

Monthly fee

```
if Exemptions = "Exempted"
then
0
else
Fees calculator function(Account balance, Account Profile)
```
References
Red Hat Decision Manager v7

https://developers.redhat.com/products/red-hat-decision-manager/overview/

Demos:
https://github.com/jbossdemocentral/rhdm7-install-demo
https://github.com/jbossdemocentral/rhdm7-qlb-loan-demo-repo
Want to know more about DMN?
A more detailed introduction to Drools and DMN, and other materials

- DMN specification: http://www.omg.org/spec/DMN
- Drools Website: http://drools.org
  Specific Chapter for Drools DMN support in the documentation
- Videos:
  https://youtu.be/fXYD_HE7ufc
  https://youtu.be/C0u3ZDiH3ek

https://youtu.be/fXYD_HE7ufc
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