Red Hat JBoss BPM Suite

Generic Loan Demo

(Use case: rules, tasks, guided rules, and forms integration with BPM)

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Introduction

Interested in fully automating your loan application process but you don't know where to start? Have no fear, with the Red Hat JBoss Business Process Mangement Suite (BPM Suite) you can leverage the power of rules, events, and processes in a single integrated suite.

This document will guide you through a generic loan application project using the JBoss BPM Suite, demonstrating a BPM process with rules, guided rules, a data model, human task, and task forms. It will help you demonstrate the various product components and help you to evaluate an application like a generic loan process.

Setup and Configuration

Installation

You first need to get the project by cloning it from the central location:

git clone git://github.com/eschabell/bpms-generic-loan-demo.git

Once downloaded, you will have the following folder structure:

- \bpms-generic-loan-demo
  - \installs – Initially empty, but will contain the BRMS platform downloads.
  - \projects – The project that comprise the demo.
  - \support – Additional supporting files used by the demo.
  - \target – Will be created by running init.sh. Contains the fully configured BPM Suite runtime server.
  - \docs – Contains quickstart guide you are reading and architectural overview slides.
  - init.{sh|bat} – Script to install and configure the run time server environment.

Next, download JBoss BPM Suite from the Red Hat Customer Portal (https://access.redhat.com).

Download JBoss BPM Suite:
1. Under *JBoss Enterprise Platforms*, select the *BPM Suite* product.
2. Select version *6.0.0.GA* in the *Version* field.
3. Download *Red Hat JBoss BPM Suite 6.0.0.GA Deployable for EAP 6*
   *(*Please note that this is the deployable distribution, not the standalone one.)

Now copy `jboss-bpms-6.0.0.GA-redhat-2-deployable-eap6.x.zip`, to the projects *installs* folder. Ensure that this file is executable by running:

```
$ chmod +x <path-to-project>/installs/jboss-bpms-6.0.0.GA-redhat-2-deployable-eap6.x.zip
```

Download EAP 6 Platform:
4. Under *JBoss Enterprise Platforms*, select the Application *Platform* product.
5. Select version 6.*1.1* in the *Version* field.
6. Download *JBoss Application Platform 6.1.1*.

Now copy `jboss-eap-6.1.1.zip`, to the projects *installs* folder. Ensure that this file is executable by running:

```
$ chmod +x <path-to-project>/installs/jboss-eap-6.1.1.zip
```

Lastly, from the project folder, run the *init.sh* (or *init.bat)* script:

```
$ ./init.sh
```

When the script completes you will have a new folder named *jboss-eap-6.1*, in the projects *target* folder. The folder is a ready to run EAP 6 server with BPM Suite with the following modifications made:
- The *alan, erics* accounts enabled (passwords are all the same, *bpmsuite*) in the *application-roles.properties* and *application-users.properties* file in *bpms-generic-loan-demo/target/jboss-eap-6.1/standalone/configuration*
- Adjusted system properties*,* copied new *standalone.xml* to *bpms-generic-loan-demo/target/jboss-eap-6.1/standalone/configuration*
- The mortgage demo repository setup in the product, copied *bpm-suite-demo-niogit* to the *bpms-generic-loan-demo/target/jboss-eap-6.1/bin*

JBoss Developer Studio Configuration

Future work (TODO).

Running the Demo

The demo is focusing on the JBoss BPM Suite business central console which is web based.

Pre-load generic loan demo

The project comes with a client jar that will inject a set of pre-configured process instances, you can run this jar from the *support/* directory as follows once the project has been installed and the JBoss BPM Suite server started:

> *java -jar jboss-generic-loan-demo-client.jar erics bpmsuite*

After execution you should see it has populated the *Process and Task* dashboards with the process instances and this carries over into the *Business Activity Monitoring (BAM)* dashboards.
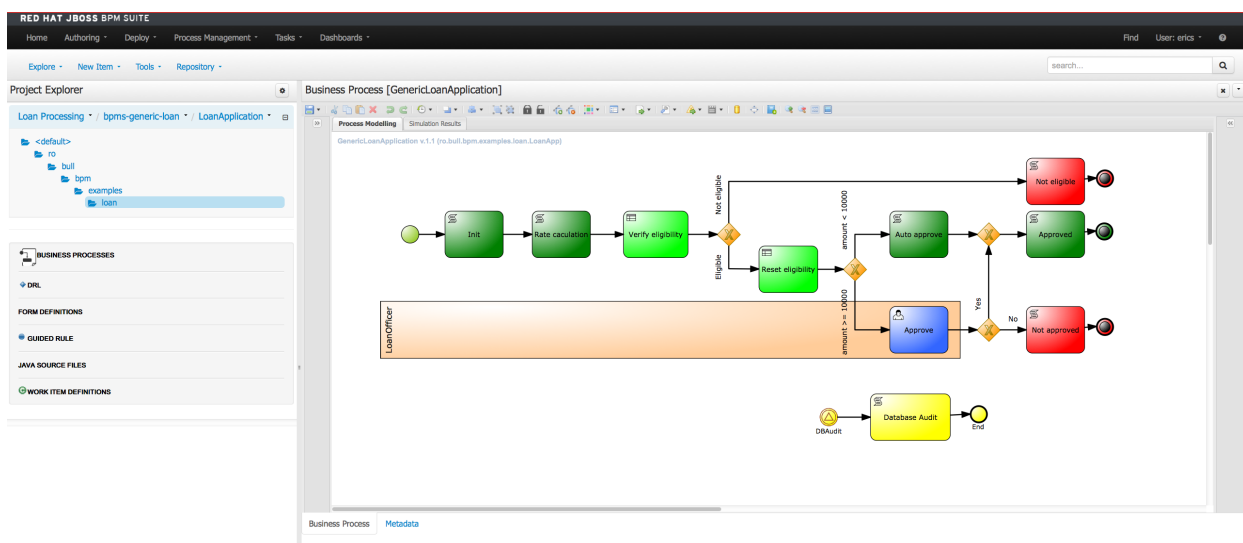
JBoss BPM Suite mortgage demo

The package was already imported so now we can look closer at web designers viewing, rules asset viewing, package building and deploying, web business central admin console viewing.

Web Designer

The business central integrated suite is available on http://localhost:8080/business-central once the BPM Suite server has been fully started.
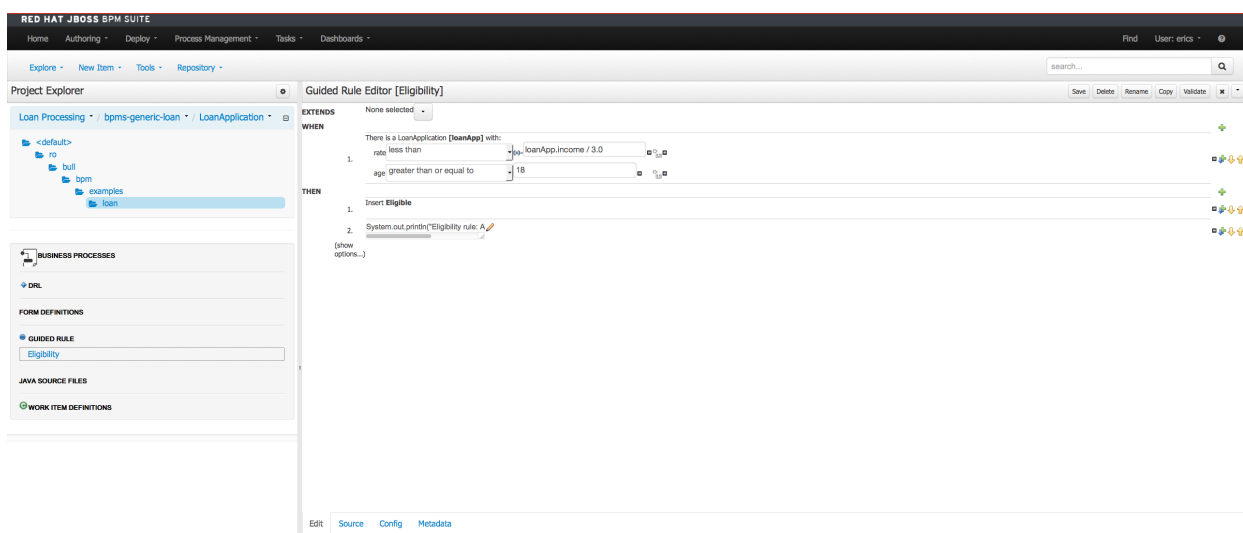
1. Login with a user (erics, alan). To start fresh you can at any time remove the *target* directory and re-run the install.

2. View mortgage process: *Project Authoring → Package → Business Processes → GenericLoanApplication* and wait for web designer to appear.

Rule asset viewing

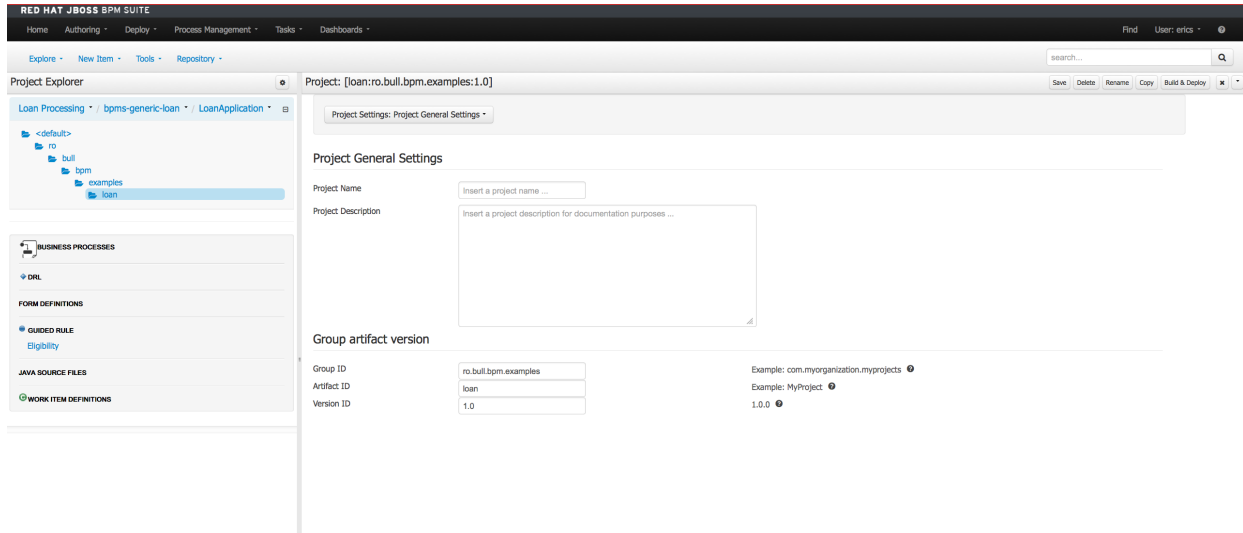To view some of the assets in your project:

1. *Project Authoring → Package → view Guided Rule, Java Source Files, Form Definitions, or Work Item Definitions.*

Build package for deployment

To build your project for deployment:

1. Build & Deploy: *Project Authoring → Package → Tools → Project Editor → Build & Deploy button*. Now the process has been deployed if you see a pop-up Build successful.

View deployment

To view your deployed project and start an instance:

1. *Process Management → Process Definitions → select GenericLoanApplicaiton → New Instance button*

2. Fill in form details and submit.

Submit form

- Name: erics

- Age: 30

- Income: 3000

- Amount: 10010 (auto approval if under 10k)

- Period (in months): 24

The process can be completed by viewing the task list, selecting the task for your process, claim it, complete it.