Lab 2

Design-Time Governance

Lab Steps

- Step I : Review default workflow in JBDS
- Step 2 : Deploy default workflow
- Step 3 : Review DTGov UI
- Step 4: View DTGov configuration
- Step 5 : Distribution management for application
- Step 6 : Create link for production
- Step 7 : Deploy application to S-RAMP
- Step 8 : Walk through workflow

Step 0

Start the FSW Server

Goals

• Start an instance of Fuse Service Works

FSW Server

TODO

- 1. Open a Terminal window
- 2. Navigate to the Server directory and start the server:

cd Servers/jboss-eap-6.1
bin/standalone.sh



Step I

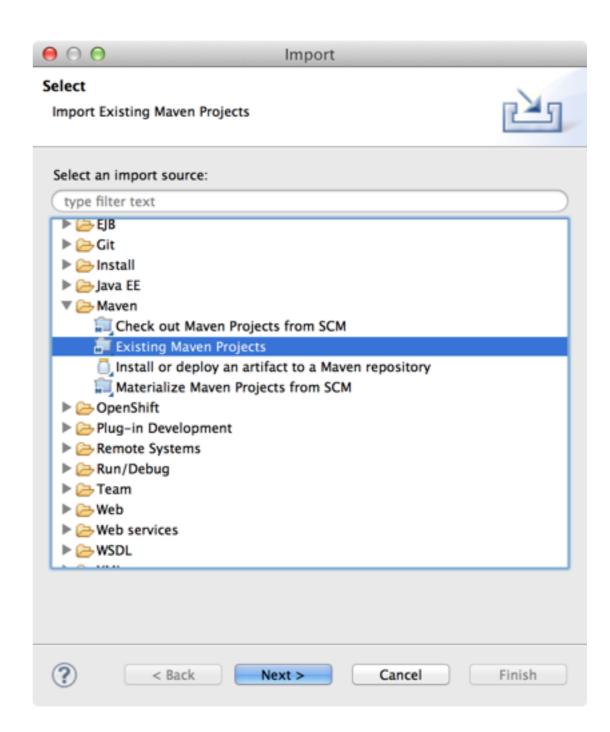
Review DTGov Workflow

Goals

- Import the default workflow project
- Review the SimpleReleaseProcess Workflow
- Review the Roles for the Process Task

Importing the Workflow

- 1. File -> Import ... from the JBDS menu.
- Select Maven -> Existing Maven Projects
- Click Next



Importing the Workflow

TODO

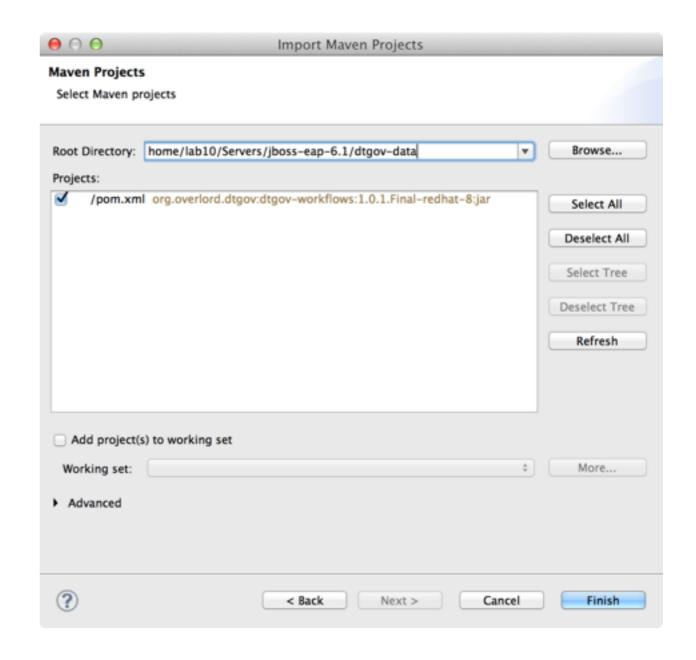
1. Click Browse ... and navigate to the location of lab1. For example:

/home/lab10/Servers/jboss-eap-6.1/dtgov-data

2. Make sure the pom.xml is checked for:

org.overlord.dtgov:dtgov-workflows

Click Finish



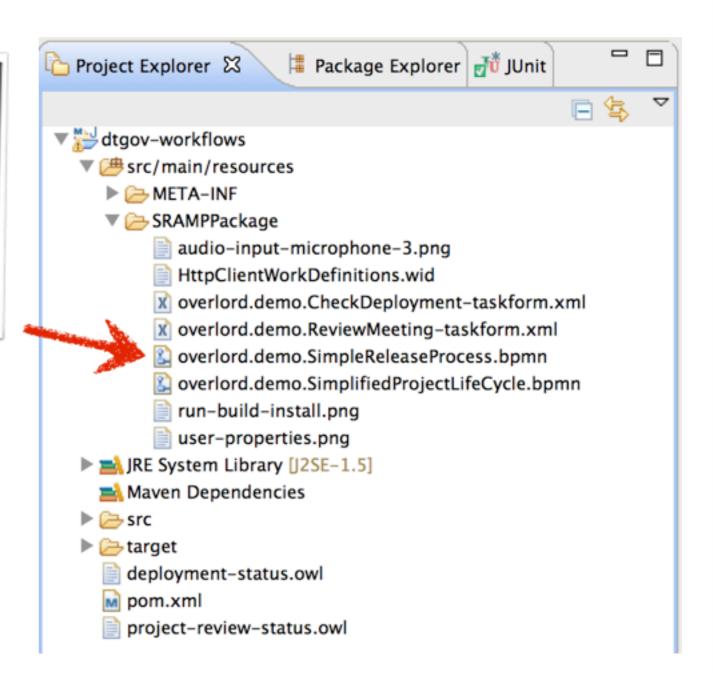
Default Release Workflow

FYI

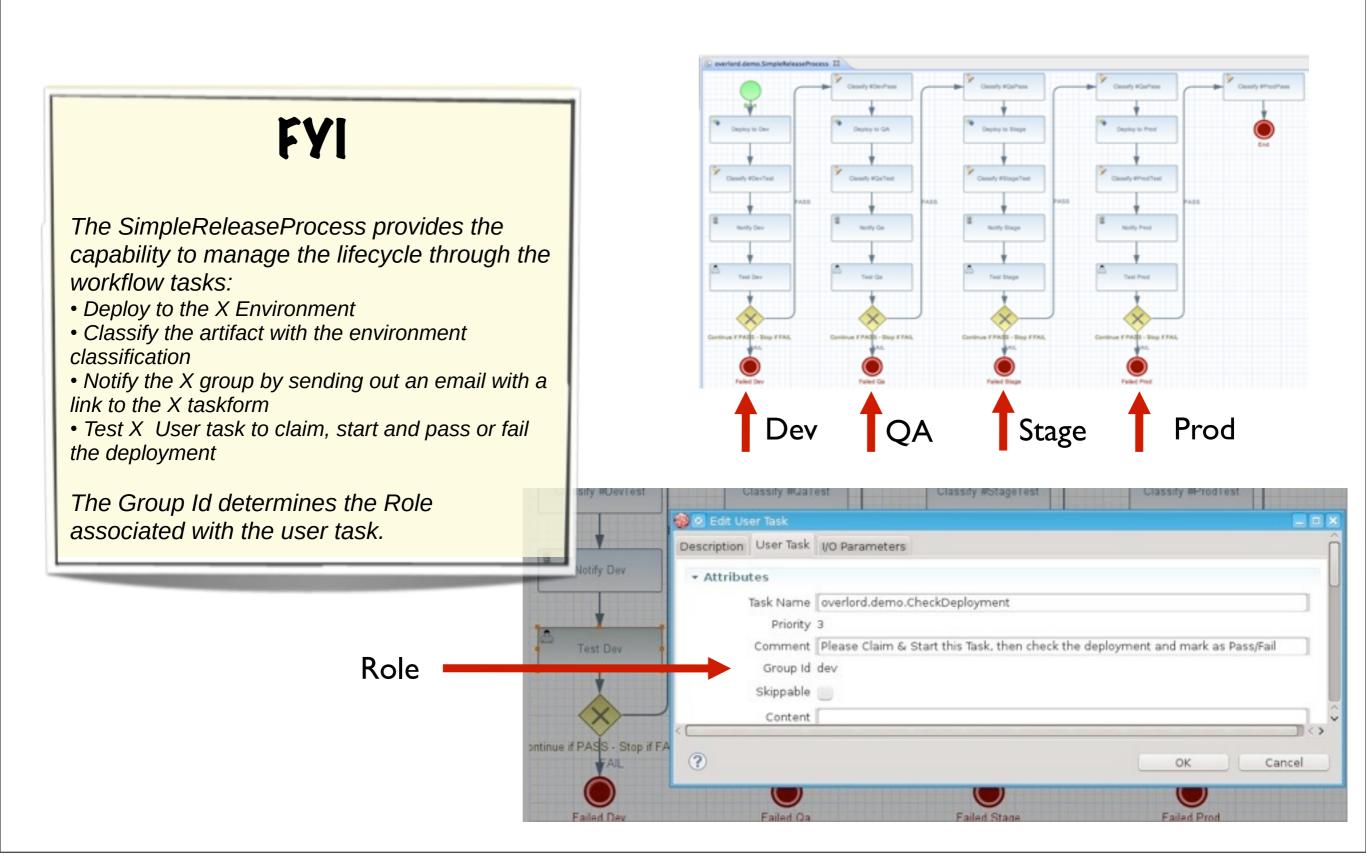
- Workflow can be customized or new ones created
- BPMN2 based governance workflows
- Out of the box integration with jBPM-6

TODO

1. Double-click on the SimpleReleaseProcess BPMN 2 definition to open up the default workflow.



SimpleReleaseProcess



Step 2

Deploy Default Workflow

Goals

- Configure JBDS to deploy workflow
- Sign onto S-RAMP
- Check for deployment of workflow

Configure Maven Deploy

FYI

The run configuration will do a maven clean and deploy the KieJarArchive jar to the FSW server. The deployment can also be done at the command line.

TODO

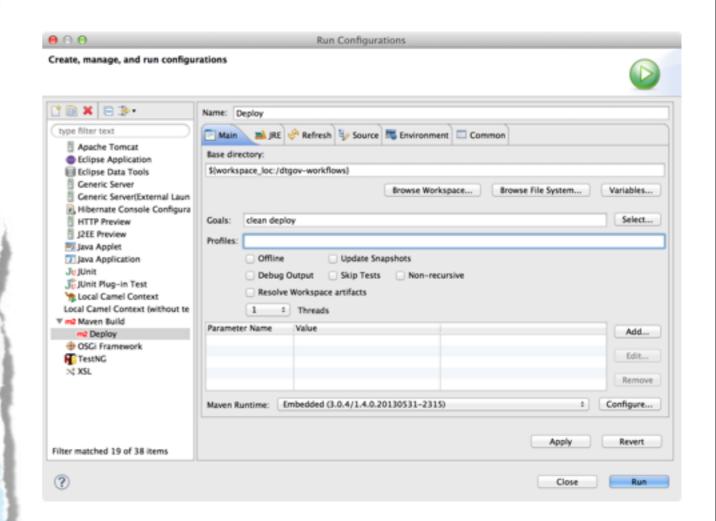
- 1. Right-click on the dtgov-workflows project in the Project Explorer
- 2. Select Run As -> Run Configurations
- 3. Right-click on Maven Build and select New
- 4. Enter the following values for the build:

Name : Deploy

Base directory : \${workspace loc:/dtgov-workflows}

Goals : clean deploy

5. Click Run



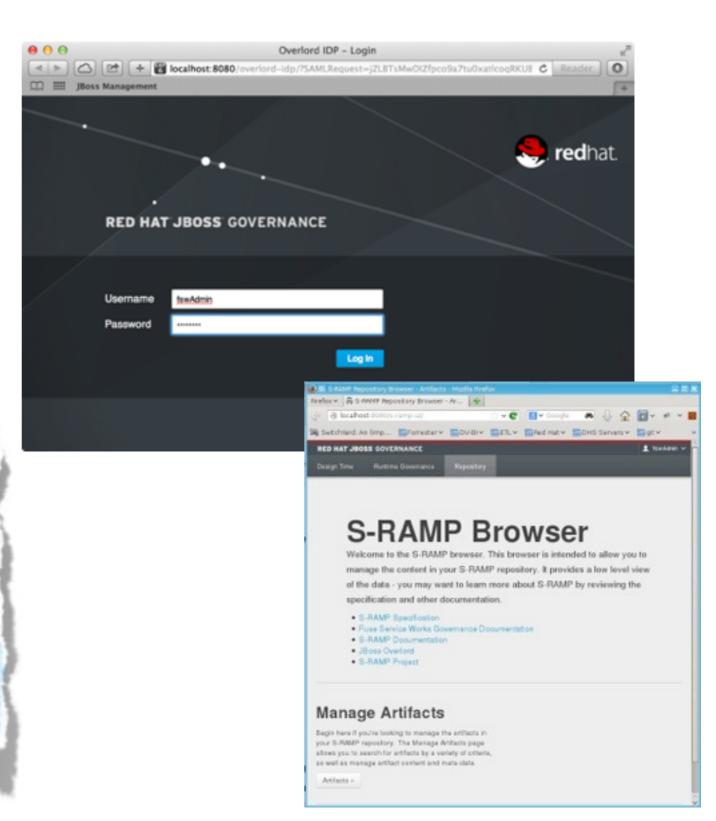
S-RAMP Console

FYI

The Governance Console contains DTGov, RTGov and S-RAMP:

- •http://localhost:8080/s-ramp-ui
- •http://localhost:8080/dtgov-ui
- http://localhost:8080/gadget-web

- 1. Browse to http://localhost:8080/s-ramp-ui
- 2. Enter the username and password for Governance that was entered on installation
- 3. Click on the Manage Artifacts button



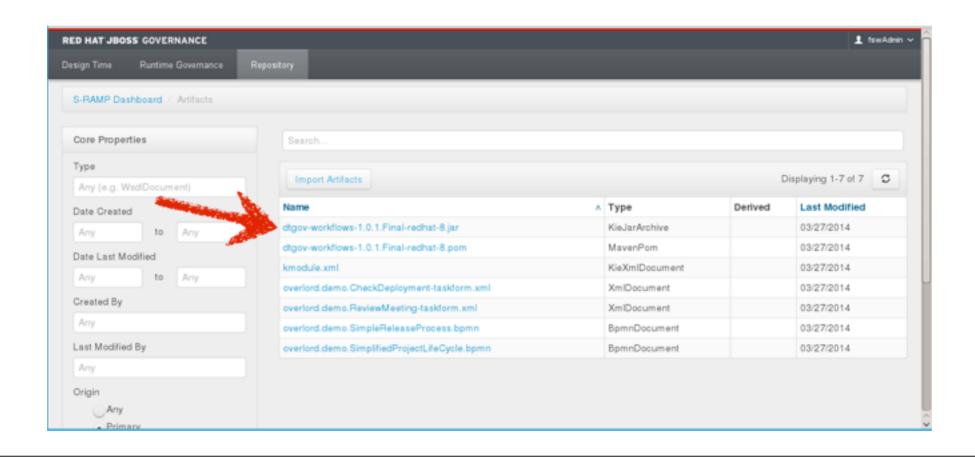
S-RAMP Console

FYI

The dtgov-workflows-1.0.1.Final-redhat-8.jar will contain the KieJarArchive derived type. Multiple workflows can be deployed and referenced by DTGov.

TODO

1. Find the default workflow in the artifact list



Step 3 Review DTGov UI

Goals

• Explore the DTGov console

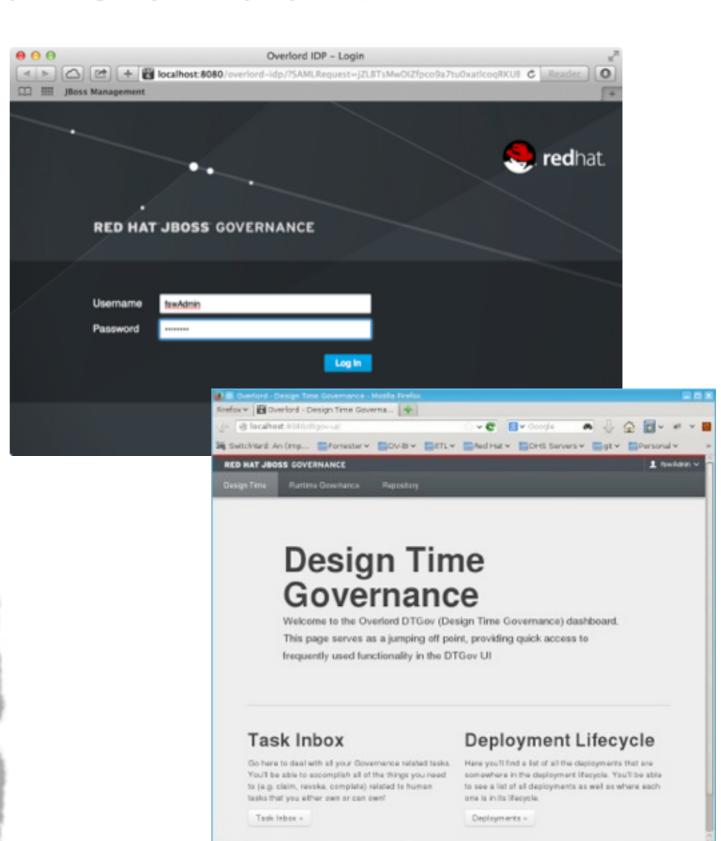
DTGov Console

FYI

The Governance Console contains DTGov, RTGov and S-RAMP:

- •http://localhost:8080/s-ramp-ui
- •http://localhost:8080/dtgov-ui
- http://localhost:8080/gadget-web

- 1. Browse to http://localhost:8080/dtgov-ui
- 2. Enter the username and password for Governance that was entered on installation

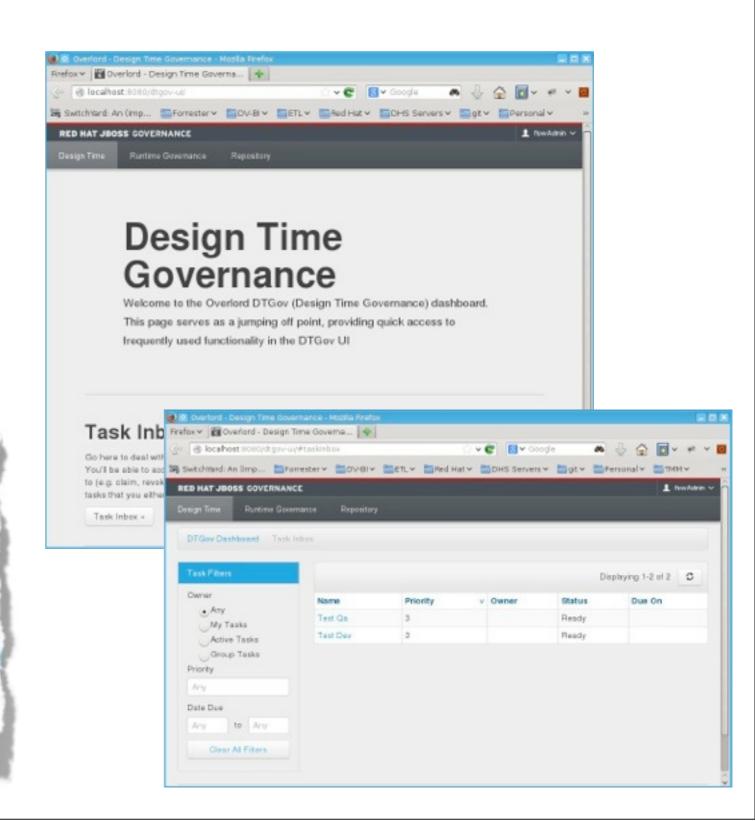


DTGov Task Inbox

FYI

The Task inbox gives the user their Governance related tasks. This allows the user to claim, revoke, complete, etc related to human tasks they own or can own.

- 1. Click on the Task inbox button
- 2. Your task list will be empty until a later step but this screen shot shows what the list will look like

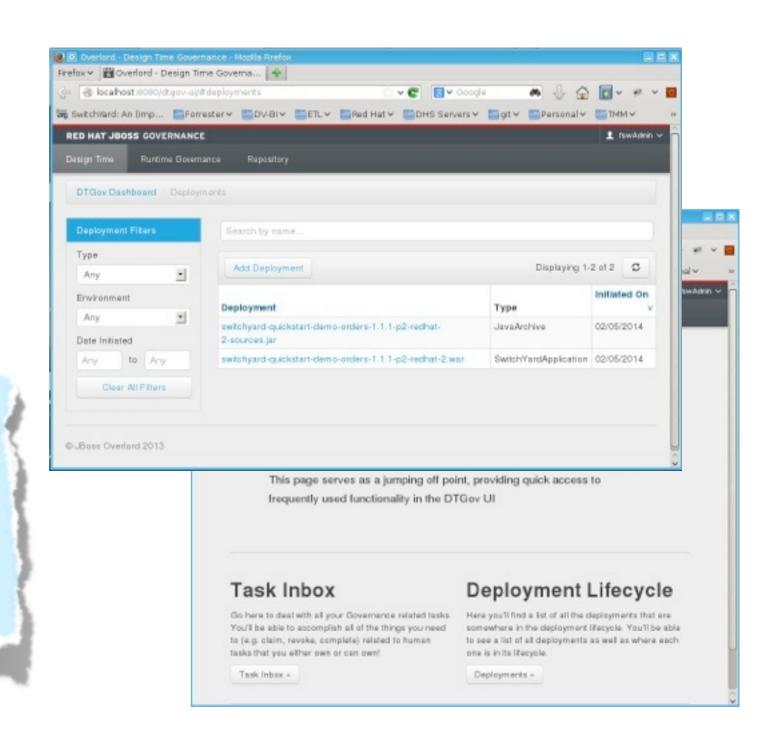


DTGov Deployment Lifecycle

FYI

The Deployment Lifecycle list all the deployments and their status in the deployment lifecycle.

- 1. Click on the DTGov Dashboard link
- 2. Click on the Deployment Lifecycle button
- 3. Your deployment list will be empty until a later step but this screen shot shows what the list will look like



Step 4

View DTGov Configuration

Goals

- View the Application Roles
- View the DTGov Configuration

Governance Roles

FYI

Roles file contains the appropriate role for each user that correspond to the groupid in the workflow. Notice the fswAdmin contains the dev,qa,stage,prod roles

TODO

- 1. Open Terminal
- 2. Change to the directory

/home/lab10/Servers/jboss-eap-6.1/standalone/configuration

3. Display the application-roles.properties using the concatenate File (cat) command

```
application-roles.properties x

# The following illustrates how an admin user could be defined.
# # # admin=PowerUser, BillingAdmin,
# # # # guest=guest
# # stage, prod, manager, arch, ba # dtgovworkflows=overlorduser, admin.sramp
```

Governance Configuration

FYI

Shows the Governance queries to kick off the workflow. Notice the SimpleReleaseprocess for the SwitchYard Application. Also notice the deployment targets and the location of the deployment. In our case we are deploying to the server on the prod target.

TODO

- 1. Open Terminal
- 2. Change to the directory

/home/lab10/Servers/jboss-eap-6.1/standalone/configuration

3. Display the dtgov.properties using the concatenate File (cat) command

```
dtgov.properties
  WARNING this file allows Property Arrays. Property Arrays which are represented
#governance.url=http://localhost:8080/dtgov
#dtgov.ui.url=http://localhost:8080/dtgov-ui
governance.query.interval=20000
governance.queries=/s-ramp/ext/SwitchYardApplication|overlord.demo.SimpleReleaseProcess|DeploymentU
      rnance.queries=/s-ramp/ext/JavaArchive|overlord.demo.SimpleReleaseProcess|DeploymentUrl={govern
    rernance.queries=/s-ramp/ext/JavaWebApplication|overlord.demo.SimpleReleaseProcess|DeploymentUrl=
         nce.queries=/s-ramp/ext/JavaEnterpriseApplication|overlord.demo.SimpleReleaseProcess|Deploym
  overnance.queries=/s-ramp/ext/ArtifactGrouping[xp2:matches(@name\, 'Project.*')]|overlord.demo.Sim
# Deployment targets
 jovernance.targets= dev|http://www.jboss.org/overlord/deployment-status.owl#InDev|copy|/tmp/dev/jb
jovernance.targets= qa|http://www.jboss.org/overlord/deployment-status.owl#InQa|copy|/tmp/qa/jbos
jovernance.targets=stage|http://www.jboss.org/overlord/deployment-status.owl#InStage|copy|/tmp/stag
jovernance.targets= prod|http://www.jboss.org/overlord/deployment-status.owl#InProd|copy|/tmp/prod/
          orkflows.group=org.overlord.dtgov
                     name=dtgov-workflows
                 ws.version=1.0.1.Final-redhat-8
          po.user=dtgovworkflows
               assword=${vault:VAULT::dtgov::dtgov-workflows.password::1}
                   user=dtgovworkflows
                  n.password=${vault:VAULT::dtgov::dtgov-workflows.password::1}
               iser=dtgovworkflows
                       d=${vault:VAULT::dtgov::dtgov-workflows.password::1}
```

Step 5

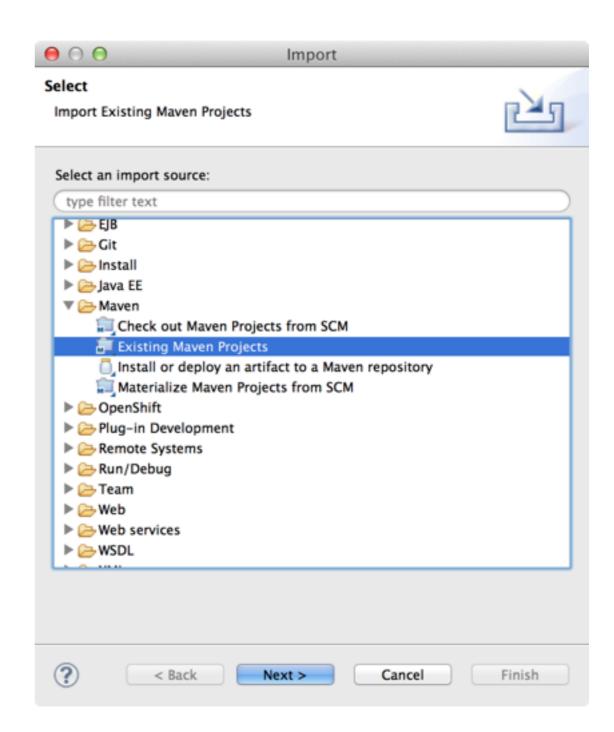
Distribution Management

Goals

- Import the Home Loan Application
- Review the POM for the Distribution Management settings

Importing the Application

- 1. File -> Import ... from the JBDS menu.
- Select Maven -> Existing Maven Projects
- Click Next



Importing the Application

TODO

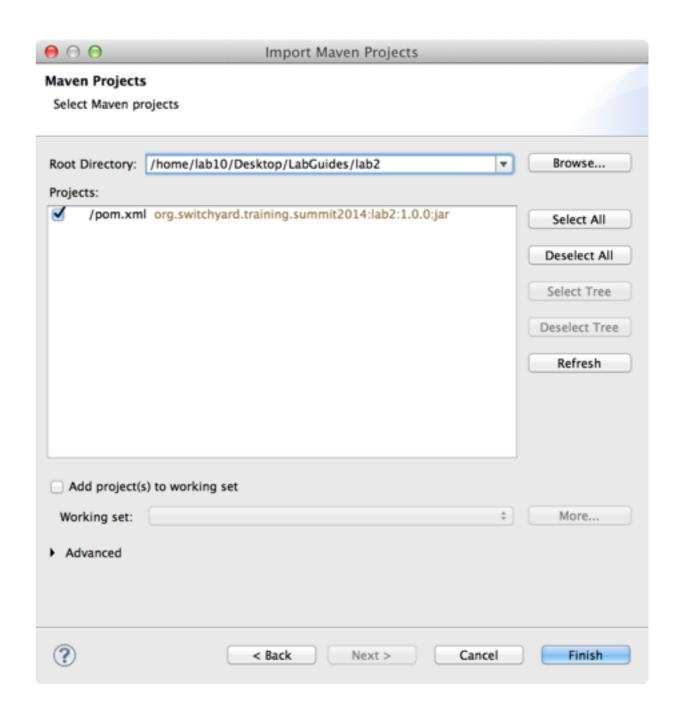
1. Click Browse ... and navigate to the location of lab1. For example:

/home/lab10/Desktop/LabGuides/lab2

2. Make sure the pom.xml is checked for:

org.switchyard.training.summit2014:lab2

Click Finish



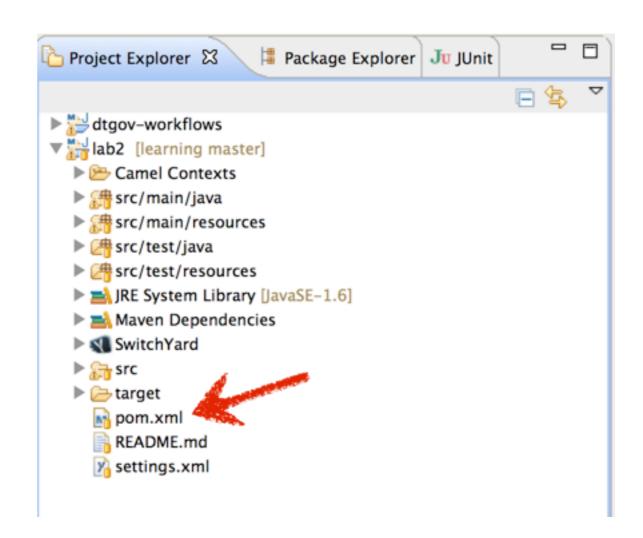
Configuring Distribution Management

FYI

The POM will contain the distribution management settings to connect to S-RAMP

TODO

1. Double-click on pom.xml in the Project Explorer to open it in the editor.



Configuring Distribution Management

TODO

1. Click on the 'pom.xml' tab to see the XML content of the file.

FYI

The distribution management element will contain the url element for the S-RAMP server and define the artifact type which will correspond to the workflow definition in the dtgov.properties file.

```
📓 lab2/pom.xml 🔀
              </plugin>
            </plugins>
          </build>
          <distributionManagement>
            <repository>
              <id>local-sramp-repo</id>
              <name>S-RAMP Releases Repository</name>
              <url>sramp://localhost:8080/s-ramp-server/?artifactType=SwitchYardApplication</url>
            </repository>
            <snapshotRepository>
              <id>local-sramp-repo-snapshots</id>
              <name>S-RAMP Snapshots Repository</name>
              <url>sramp://localhost:8080/s-ramp-server/?artifactType=SwitchYardApplication</url>
            </snapshotRepository>
          </distributionManagement>
        </profile>
      </profiles>
    </project>
Overview | Dependencies | Dependency Hierarchy | Effective POM | pom.xml
```

Step 6

Create Production Link

Goals

• Create the link for production to the server deployment directory

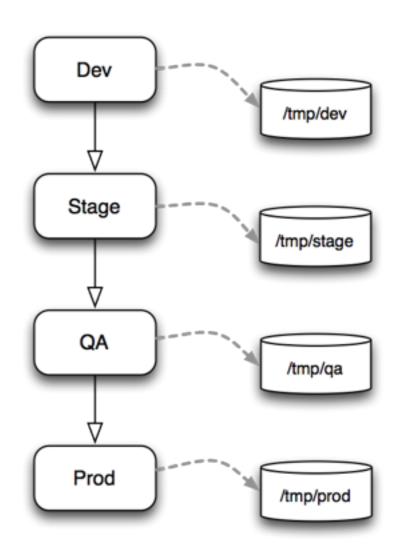
Create Production Link

FYI

The governance targets for our default workflow is using the file copy deployment type. Linking the production target /tmp/prod to the server deployment directory will deploy the application to the server when the stage task is passed. In addition to file copy, applications can be deployed with JON, JBoss AS CLI and Maven deployment types.

TODO

- 1. Open up a terminal session
- 2. Create a symbolic link for the production directory using the commands below (copy and paste recommended):



mkdir -p /tmp/prod/jbossas7/standalone/deployments
ln -sv /tmp/prod/jbossas7/standalone/deployments /home/lab10/Servers/jboss-eap-6.1/standalone/deployments

Step 7

Deploy to S-RAMP

Goals

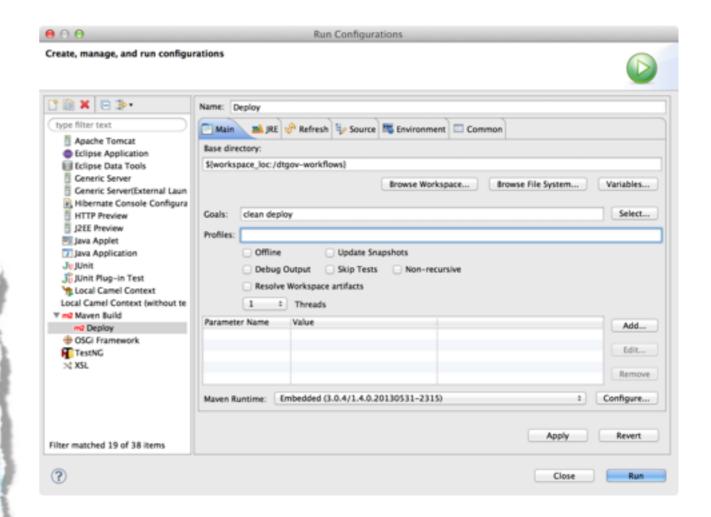
Deploy to S-RAMP

Deploy App to S-RAMP

FYI

When the application is deployed to S-RAMP the workflow for the defined type is started.

- 1. Right-click on the lab2 project in the Project Explorer
- 2. Select Run As -> Run Configurations
- 3. Select Maven Build -> Deploy
- 4. Click Run



Configuring Distribution Management

TODO

1. Confirm that the deployment was successful in the build output.

```
··· maven-jar-plugin:2.3.2:jar (default-jar) @ lab2 ···
 [INFO] Building jar: /home/kpeeples/mystuff/Summit2014/lab2/target/lab2-1.0.0.jar
(INFO) --- maven-install-plugin:2.3.1:install (default-install) @ lab2 ---
(INFO) Installing /home/kpeeples/mystuff/Summit2014/lab2/target/lab2-1.0.0.jar to /home/kpeeples/.m2/repository/org/switchyard/training/summit2014/lab2/1.0.0/lab2-1.0.0.jar
[INFO] Installing /home/kpeeples/mystuff/Summit2014/lab2/pom.xml to /home/kpeeples/.m2/repository/org/switchyard/training/summit2014/lab2/1.0.0/lab2-1.0.0.pom
            --- maven-deploy-plugin:2.7:deploy (default-deploy) @ lab2 --
Uploading: sramp://localhost:8080/s-ramp-server/?artifactType=SwitchYardApplication/org/switchyard/training/summit2014/lab2/1.0.0/lab2-1.0.0.jar [INFO] Uploading s-ramp artifact: org/switchyard/training/summit2014/lab2/1.0.0/lab2-1.0.0.jar [INFO] Uploading s-ramp artifact: org/switchyard/training/summit2014/lab2/1.0.0/lab2-1.0.0.jar.sha1
(INFO) Storing hash value as s-ramp property: lab2-1.0.0.jar.sha1
(INFO) Uploading s-ramp artifact: org/switchyard/training/summit2014/lab2/1.0.0/lab2-1.0.0.jar.md5
[INFO] Storing hash value as s-ramp property: lab2-1.0.0.jar.md5
 Uploaded: sramp://localhost:8080/s-ramp-server/?artifactType=SwitchYardApplication/org/switchyard/training/summit2014/lab2/1.0.0/lab2-1.0.0.jar (0 B at 0.0 KB/sec)
Uploading: sramp://localhost:8080/s-ramp-server/?artifactType=SwitchYardApplication/org/switchyard/training/summit2014/lab2/1.0.0/lab2-1.0.0.pom [INFO] Uploading s-ramp artifact: org/switchyard/training/summit2014/lab2/1.0.0/lab2-1.0.0.pom [INFO] Uploading s-ramp artifact: org/switchyard/training/summit2014/lab2/1.0.0/lab2-1.0.0.pom.sha1
 (INFO) Storing hash value as s-ramp property: lab2-1.0.0.pom.shal
[INFO] Uploading s-ramp artifact: org/switchyard/training/summit2014/lab2/1.0.0/lab2-1.0.0.pom.md5
[INFO] Storing hash value as s-ramp property: lab2-1.0.0.pom.md5
 Uploaded: sramp://localhost:8080/s-ramp-server/?artifactType=SwitchYardApplication/org/switchyard/training/summit2014/lab2/1.0.0/lab2-1.0.0.pom (0 B at 0.0 KB/sec)
Downloading: sramp://localhost:8080/s-ramp-server/?artifactType=SwitchYardApplication/org/switchyard/training/summit2014/lab2/maven-metadata.xml
Downloaded: sramp://localhost:8080/s-ramp-server/?artifactType=SwitchYardApplication/org/switchyard/training/summit2014/lab2/maven-metadata.xml (344 B at 0.8 KB/sec)
Uploading: sramp://localhost:8080/s-ramp-server/?artifactType=SwitchYardApplication/org/switchyard/training/summit2014/lab2/maven-metadata.xml
 [INFO] Uploading s-ramp artifact: org/switchyard/training/summit2014/lab2/maven-metadata.xml
(INFO) Skipping unsupported artifact: org/switchyard/training/summit2014/lab2/maven-metadata.xml
[INFO] Uploading s-ramp artifact: org/switchyard/training/summit2014/lab2/maven-metadata.xml.shal
 [INFO] Skipping unsupported artifact: org/switchyard/training/summit2014/lab2/maven-metadata.xml.shal
[INFO] Uploading s-ramp artifact: org/switchyard/training/summit2014/lab2/maven-metadata.xml.md5
[INFO] Skipping unsupported artifact: org/switchyard/training/summit2014/lab2/maven-metadata.xml.md5
Uploaded: sramp://localhost:8080/s-ramp-server/?artifactType=SwitchYardApplication/org/switchyard/training/summit2014/lab2/maven-metadata.xml (345 B at 336.9 KB/sec)
 (INFO) BUILD SUCCESS
 [INFO] Finished at: Thu Mar 27 04:00:12 EDT 2014
 [INFO] Final Memory: 99M/594M
```

Configuring Distribution Management

TODO

1. Confirm in the server console output that the governance workflow has been initiated.

```
04:00:05,197 INFO [org.overlord.sramp.governance.QueryExecutor] (EJB default - 9) Starting workflow overlord.demo.SimpleReleaseProcess for artifact 6e2b5d16-fb76-46ab-aa03-d442bc940f77
04:00:05,276 INFO [org.overlord.dtgov.jbpm.util.HttpClientWorkItemHandler] (EJB default - 9) Calling POST TO: http://localhost:8080/dtgov/rest/deploy/dev/6e2b6d16-fb76-46ab-aa03-d442bc940f77
04:00:05,968 INFO [org.overlord.sramp.governance.services.DeploymentResource] (http://ocalhost.localdomain/127.0.0.1:8089-28) Creating deploy directory /tmp/dev/jbossas7/standalone/deployments
04:00:05,968 INFO [org.overlord.dtgov.jbpm.util.HttpClientWorkItemHandler] (EJB default - 9) reply=[status=success, target=CCPY:/tmp/dev/jbossas7/standalone/deployments/lab2-1.0.0.jar)
04:00:05,985 INFO [org.overlord.dtgov.jbpm.util.HttpClientWorkItemHandler] (EJB default - 9) Calling PUT TO: http://localhost:8080/dtgov/rest/update/classification/httpN3A*2F*2Fwww.jboss.org*2Foverlord*2Fdeployment-status.owl%23DevTest/
04:00:07,972 INFO [org.overlord.dtgov.jbpm.util.HttpClientWorkItemHandler] (EJB default - 9) reply=[status=success]
04:00:08,760 INFO [org.overlord.dtgov.jbpm.util.HttpClientWorkItemHandler] (EJB default - 9) reply=[status=success]
04:00:08,873 INFO [org.overlord.dtgov.jbpm.util.HttpClientWorkItemHandler] (EJB default - 9) Process started ...: processInstanceId = 1
```

Step 8

Execute Release Workflow

Goals

- Pass the deployment in Dev
- Pass the deployment in QA
- Pass the deployment in Stage
- Verify the application is deployed
- Pass the deployment in Prod
- Review Deployment History and Contents

DTGov Deployments

FYI

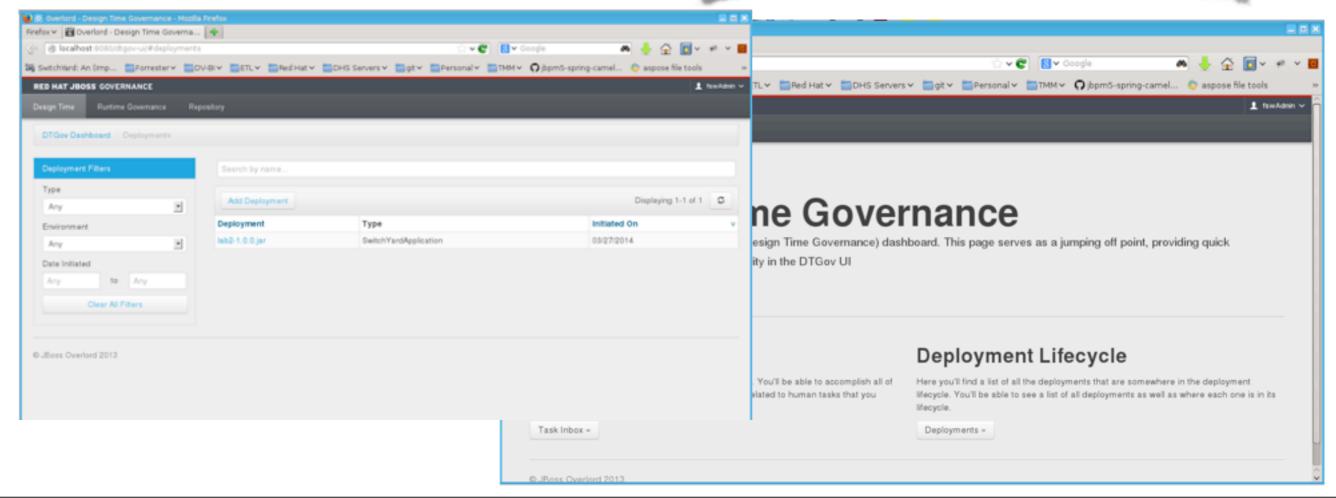
The lab2 Switchyard Application will show in the deployment list. This allows the user to view deployment in go further into history and the individual artifacts by clicking on the deployment.

TODO

1. Open your Browser and go to

http://localhost:8080/dtgov-ui

2. View the lab2 deployment by clicking on the Deployments button.

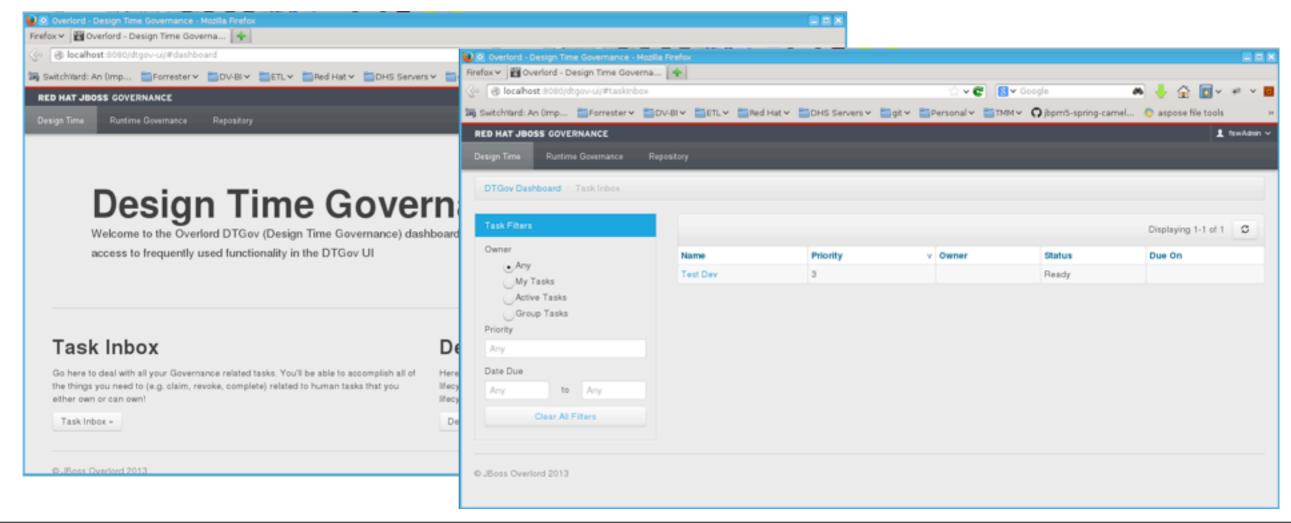


DTGov Tasks

FYI

The available tasks for the user is displayed in the task inbox. In our example we should have a Test Dev task which is the first human task that is defined for a Switchyard Application.

- 1. Return to the Design Time dashboard
- 2. Click on the Task Inbox Button



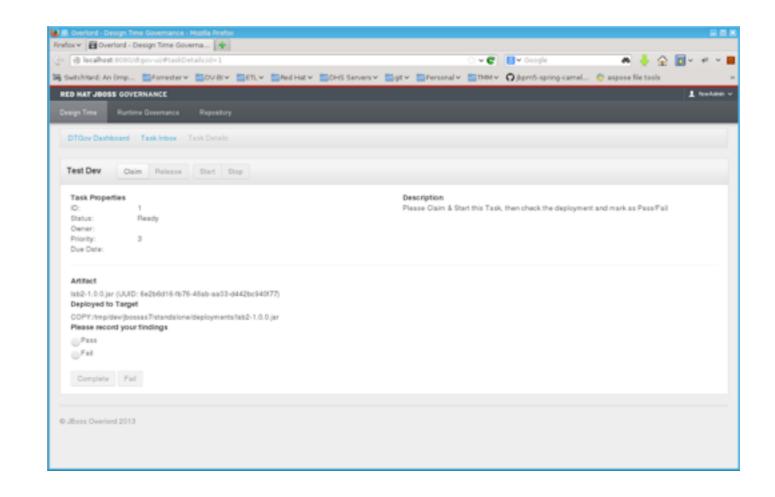
Claiming a Task

FYI

Remember our workflow for the human task for each environment – Claim, Start, Pass/Fail and Complete.

TODO

1. Claim the task by clicking on the Claim button.



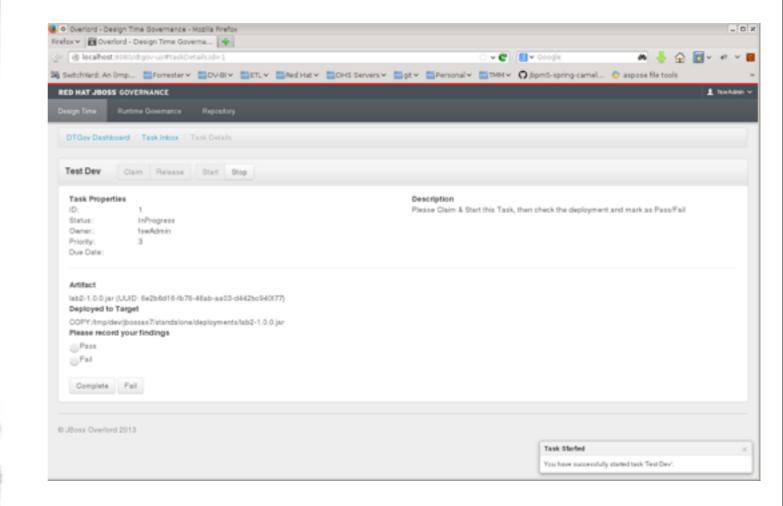
Starting a Task

FYI

We have to start our task before we can Pass or fail it.

TODO

1. Start the task by clicking on the Start button.

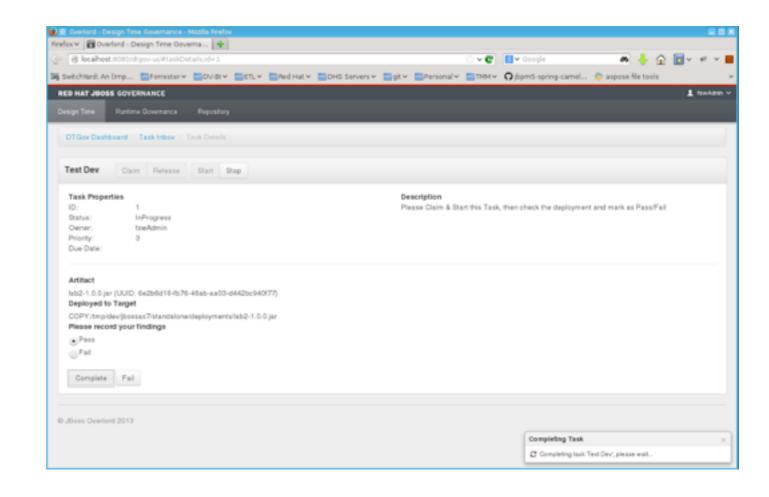


Completing a Task

FYI

We will pass the task so the deployment will go to the next environment for testing.

- 1. Click on the Pass radio button.
- 2. Complete the task by clicking on the Complete button.

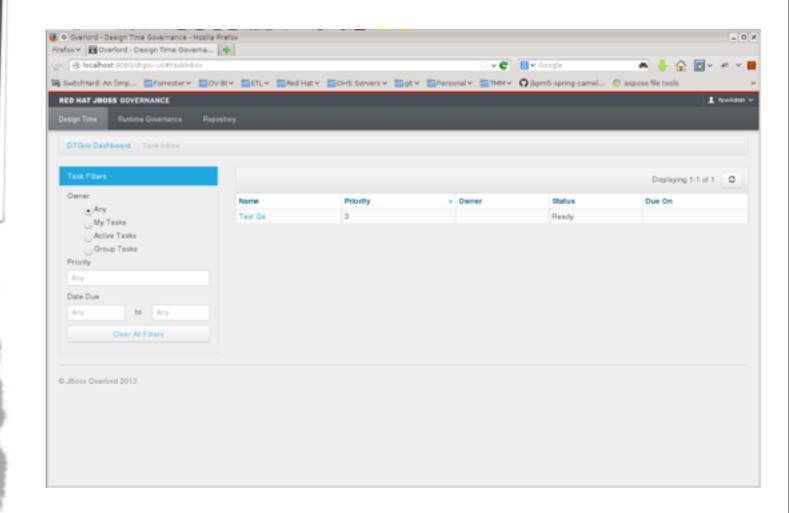


Complete QA Task

FYI

We want to move the deployment through QA – Claim, Start, Pass/Fail and Complete.

- 1. Return to the Task Inbox.
- 2. Repeat the steps you followed for Dev



Complete QA Task

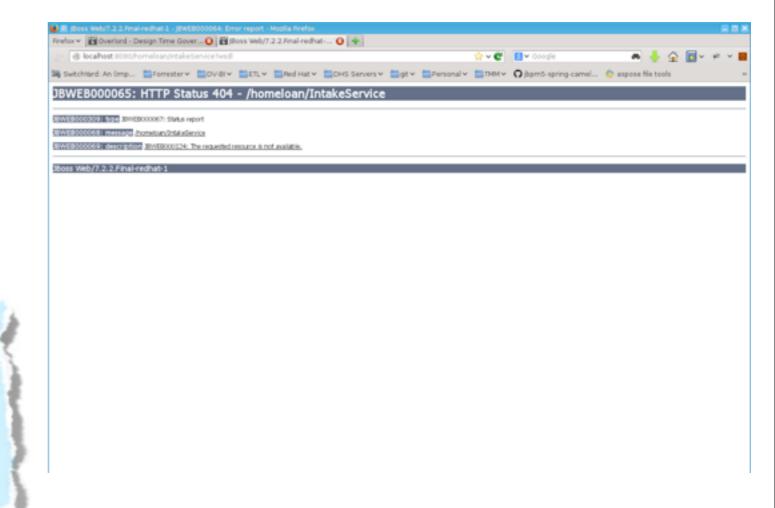
FYI

We only setup the link for the production environment so the deployment won't be available on our server until after it passes staging.

TODO

1. In a new browser tab visit the SOAP endpoint URL to confirm the endpoint has not been deployed yet:

http://localhost:8080/homeloan/IntakeService?wsdl

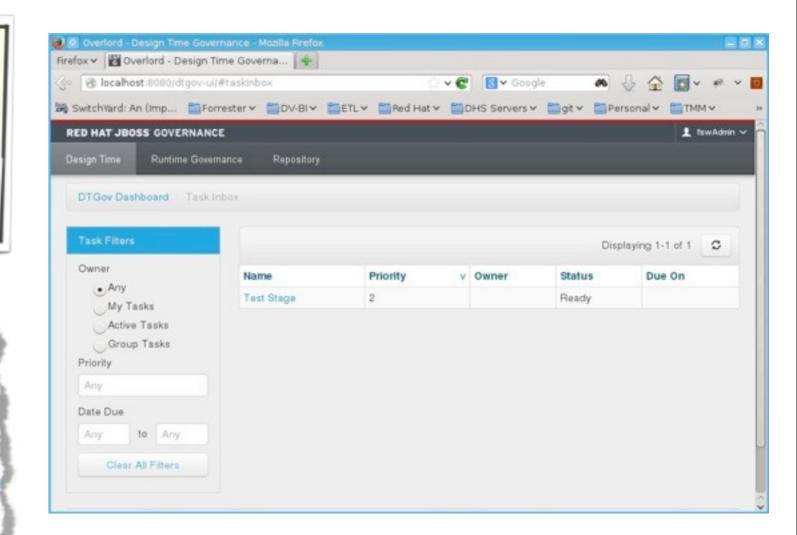


Complete Stage Task

FYI

We want to move the deployment through Staging – Claim, Start, Pass/Fail and Complete.

- 1. Return to the Task Inbox.
- 2. Repeat the steps you followed for QA



Complete Stage Task

FYI

We created our link for our production target to our FSW server deployment folder. Normally a Design Time Server will be different than the run time server but we have one server instance for our example.

TODO

1. Check the console log to verify the application was deployed.

```
| control | cont
```

Complete Stage Task

FYI

Our Home Loan Application is now available to test and complete our prod task.

TODO

1. In a new browser tab visit the SOAP endpoint URL to confirm the endpoint is available:

http://localhost:8080/homeloan/IntakeService?wsdl

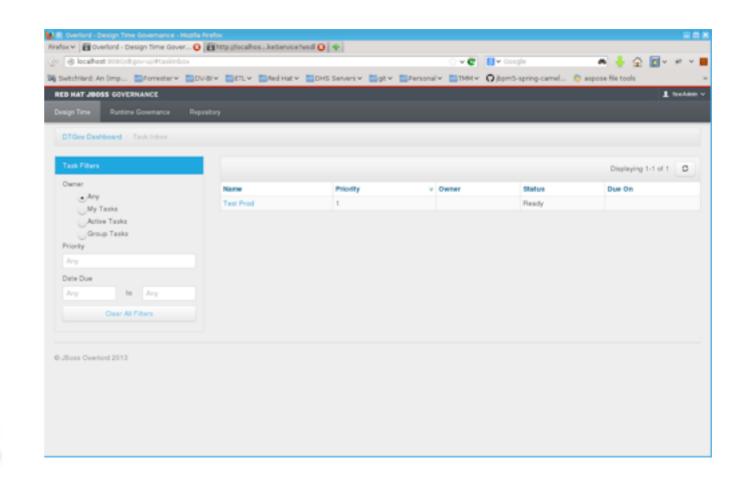
```
Firefox 🕶 🗃 Overland - Design Time Gover... 🔾 🗃 http://localhos...keSen/ce?wsdi 🔾 💠
   (b) localhost 9090/homeloan/inta
👼 Switchfard: An Omp.... 📅 Forrester 🕆 🛗 DV-81 🗸 🛗 ETL 🗸 🛗 Red. Halt 🗸 🛗 DHS. Servers 🗸 🛗 Et 🛗 Personal 🗸 🛗 Personal 🗸 🛗 TMM 🔻 🗘 (bymr5-spring-carnel ... 🔞 aspose file tools
This XML file does not appear to have any style information associated with it. The document tree is shown below.
-<wsdl:definitions.name="IntakeService" targetNamespace="urn:homeloan:1.0">
 -<wsdl:types>
      <import namespace="http://jboss.com/demo/products/soa-p/5.2/Application.xsd" schemal.ocation="http://jocalhost:8080/hom</p>
    </schema>
  </wsdl:types>
  -<wsdl:message name="intake">
    <wsdl:part element="app:Application" name="arg0"> </wsdl:part>
  </wsdl:message>
  -<wsdl:portType name="IntakeServicePortType">
   -«wsdl:operation name="intake">
      <wsdl:input message="tns:intake" name="intake"> </wsdl:input>
    </wsdl:operation>
  </wsdl:portType>
  <wsdl:binding name="IntakeServiceSoapBinding" type="tns:IntakeServicePortType">
    <soap:binding style="document" transport="http://schemas.xm/scap.org/soap/http"/>
    <wsdl:operation name="intake">
      <soap:operation soapAction="intake" style="document"/>
     <wsdl:input name="intake">
        <soap:body use="literal"/>
      </wsdl:input>
    </wsdl:operation>
  </wsdl:binding>
  -cwsdl:service name="IntakeService">
   -<wsdl:port binding="tns:IntakeServiceSoapBinding" name="IntakeServicePort">
      <soap:address location="http://localhost:8080/homeloan/intakeService"/>
  </wsdl:service>
 </wsdl:definitions>
```

Complete Prod Task

FYI

We want to move the deployment through Production – Claim, Start, Pass/Fail and Complete.

- 1. Return to the Task Inbox.
- 2. Repeat the steps you followed for Stage

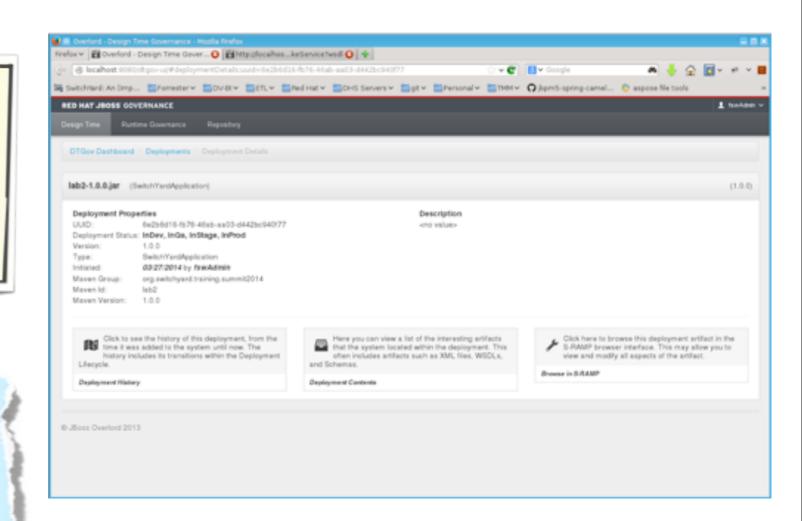


DTGov Deployment

FYI

You can view the deployment details, the deployment history and the deployment contents as well as browse S-RAMP.

- 1. Return to the DTGov Dashboard
- 2. Click on the Deployments button
- 3.Click on the lab2 deployment



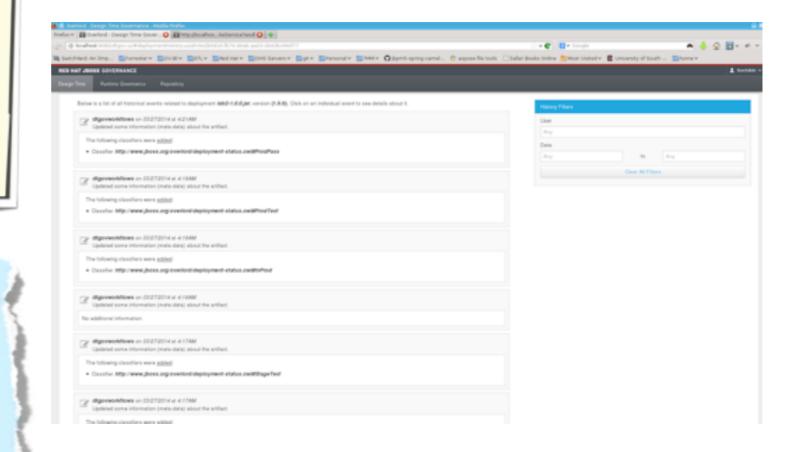
DTGov Deployment History

FYI

You can see the history of the deployment from the initial add until the current time. It includes the transitions within the deployment lifecycle.

TODO

1. Click on the Deployment History button

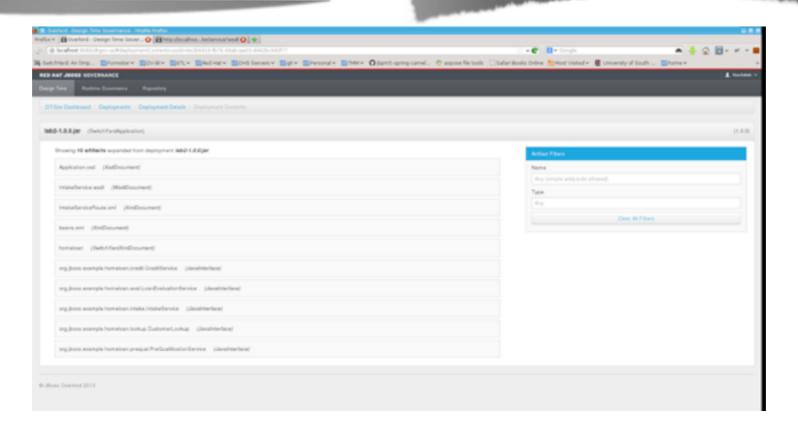


DTGov Deployment Contents

FYI

You can view the contents of the deployment and the artifact types. When clicking on an artifact the detail in S-RAMP will be shown.

- 1. Click on the deployment details link
- 2.Click on the deployment contents button



Lab 2 Complete!