

JBoss ESB 4.6

SOA Software Integration

JBESB-GS-7/17/09



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Software Version

JBoss ESB 4.6

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Configuration

In order to communicate with the SOA Software registry, you will have to configure JBoss ESB to communicate with the SOA Software registry. In order to do this, the first thing you need to do is to point the JBoss ESB towards the SOA Software registry.

This text assumes you have a running JBoss Application/ESB Server, version 4.6.GA.

jbossesb-properties.xml

Edit `server/<profile>/deploy/jbossesb.sar/jbossesb-properties.xml` and change the following lines – if you are deploying to JBoss AS 5.1.0 or higher, this file is located in `server/<profile>/deployers/esb.deployer/jbossesb-properties.xml` :

```
<property name="org.jboss.soa.esb.registry.queryManagerURI" value="org.apache.juddi.registry.local.InquiryService#inquire"/>
<property name="org.jboss.soa.esb.registry.lifeCycleManagerURI" value="org.apache.juddi.registry.local.PublishService#publish"/>
```

To the following (and make sure to edit the `queryManagerURI` and the `lifeCycleManagerURI` to match the URLs from your installation of SOA Workbench) :

```
<property name="org.jboss.soa.esb.registry.uddi.maxRows" value="100"/>
<property name="org.jboss.soa.esb.registry.queryManagerURI" value="http://stacks2:9901/uddi/inquiry_v2"/>
<property name="org.jboss.soa.esb.registry.lifeCycleManagerURI" value="http://stacks2:9901/uddi/publish_v2"/>
```

Change `jbossesb-properties.xml`:

```
<property name="org.jboss.soa.esb.scout.proxy.transportClass" value="org.apache.ws.scout.transport.LocalTransport"/>
```

To

```
<property name="org.jboss.soa.esb.scout.proxy.transportClass" value="org.apache.ws.scout.transport.AxisTransport"/>
```

Also, within `jbossesb-properties.xml`, change :

```
<property name="org.jboss.soa.esb.registry.user" value="administrator"/>
<property name="org.jboss.soa.esb.registry.password" value="password"/>
```

to match the SOA Workbench user and password you'll be using.

Add Axis and commons-discovery JARs

Copy a recent version of Apache Axis and Apache Commons Discovery into `server/<profile>/lib`. The integration was tested using `axis-1.4.jar` and `commons-discovery-0.2.jar`. Download `axis-bin-1_4.tar.gz` from the Apache Axis site (<http://ws.apache.org/axis/>) to find these JARs.

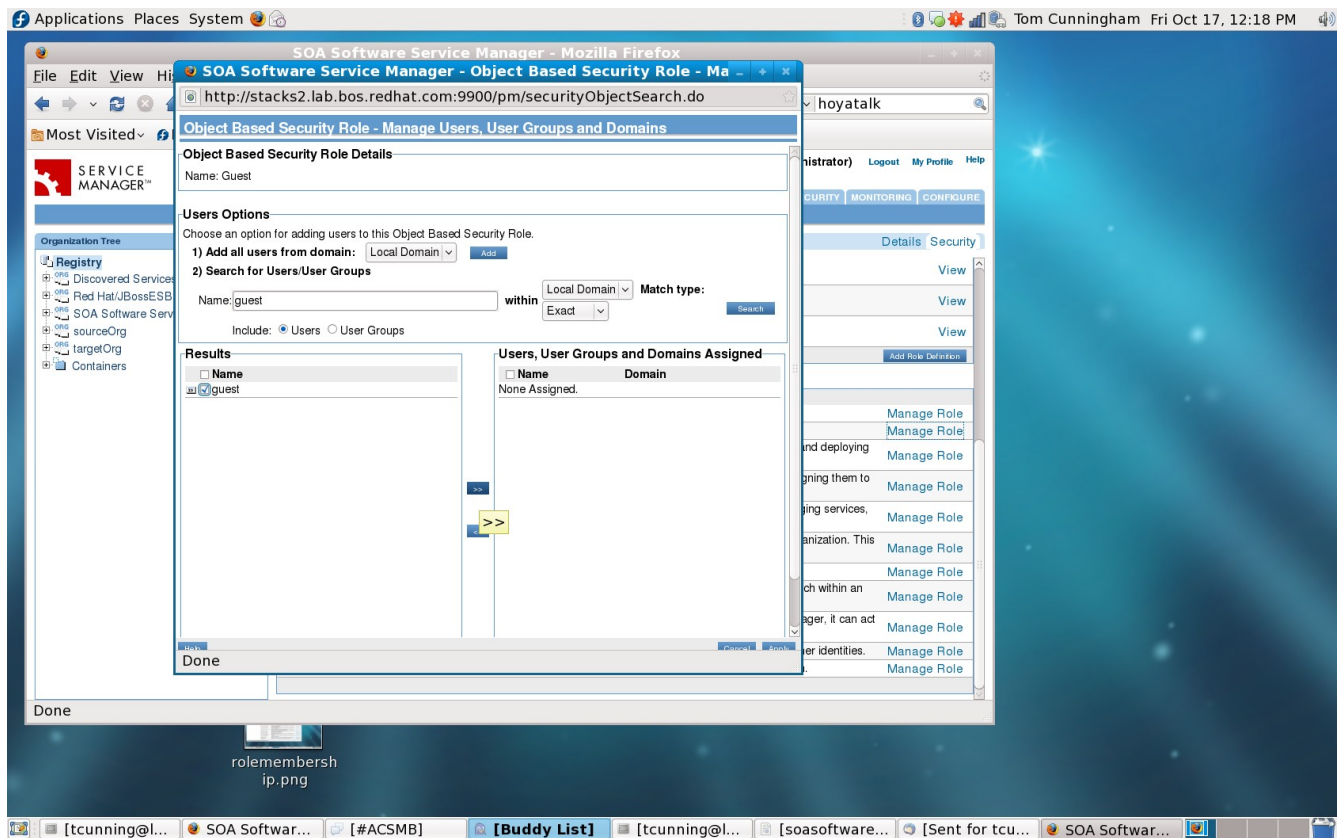
SOA Workbench Configurations

Configure the guest user in Workbench to the guest role. Click on the top level registry node in Workbench (in the Organization Tree) and click on the second-level “Security” tab (within the Workbench hierarchy). Click “Manage Role” for “Guest” under “Role Memberships” :

The screenshot shows the SOA Software Service Manager interface in Mozilla Firefox. The browser address bar displays `http://stacks2.lab.bos.redhat.com:9900/pm/index.do?redirectpage=up`. The user is logged in as `Local Domain/administrator`. The interface includes a navigation menu with tabs: DASHBOARD, WORKBENCH, POLICIES, ALERTS, SECURITY, MONITORING, and CONFIGURE. The left sidebar shows the Organization Tree with nodes like Registry, Discovered Services Business Entity, Red Hat/JBossESB, SOA Software Service Manager, sourceOrg, targetOrg, and Containers. The main content area is divided into two sections: Registry and Role Memberships. The Registry section lists roles: System Administrator, System Agent, and System User. The Role Memberships section lists roles: Developer, Guest, Infrastructure Manager, Operation Manager, Organization Administrator, Policy Administrator, Provision Manager, Security Administrator, System Administrator, System Agent, and System User. The Guest role is selected, and the Manage Role button is visible. The bottom status bar shows the user's name [tcunning@l...] and the application name [SOA Softwar...].

Name	Description	Manage Role
Developer	Responsible for registering and building web services.	Manage Role
Guest	Responsible for allowing runtime anonymous access.	Manage Role
Infrastructure Manager	Responsible for installing Management Points, virtualizing services, and deploying services to Management Points.	Manage Role
Operation Manager	Responsible for developing security and monitoring policies and assigning them to services and organizations.	Manage Role
Organization Administrator	Responsible for adding, modifying and deleting organizations, managing services, policies, and Management Points within an organization.	Manage Role
Policy Administrator	Responsible for adding, modifying and deleting policies within an organization. This role applies at the root organization only.	Manage Role
Provision Manager	Responsible for approving contracts.	Manage Role
Security Administrator	Responsible for granting Users and User Groups access to Workbench within an organization.	Manage Role
System Administrator	Reserved role responsible for configuring all aspects of Service Manager, it can act on behalf of any other role	Manage Role
System Agent	Reserved role for policy enforcement, usually assigned to the container identities.	Manage Role
System User	Reserved role for read-only access to Service Manager configuration.	Manage Role

Search for the user “guest”, and add them to the Guest Role by selecting the checkbox next to “guest” clicking “Apply” :



Workflow Configurations

Change the Workflow so that ESB services are published upon creation. Click on the “Configure” tab and then select “Workflow”. View the Workflow Definition, save it to your local disk, and then change the function type line under @create to `<function type="publish" />` and the step attribute to “100”. After saving, Update the Workflow to the local copy you have saved.

Before:

```
<action id="1" name="@create">
  <results>
    <unconditional-result old-status="Created" status="Draft" step="100" owner="${caller}"/>
  </results>
  <post-functions>
    <function type="setLifecycleStage">
      <arg name="stage">Design</arg>
    </function>
  </post-functions>
</action>
```

After:

```
<action id="1" name="@create">
  <results>
    <unconditional-result old-status="Created" status="Draft" step="100" owner="${caller}"/>
  </results>
  <post-functions>
    <function type="publish" />
  </post-functions>
</action>
```

Running

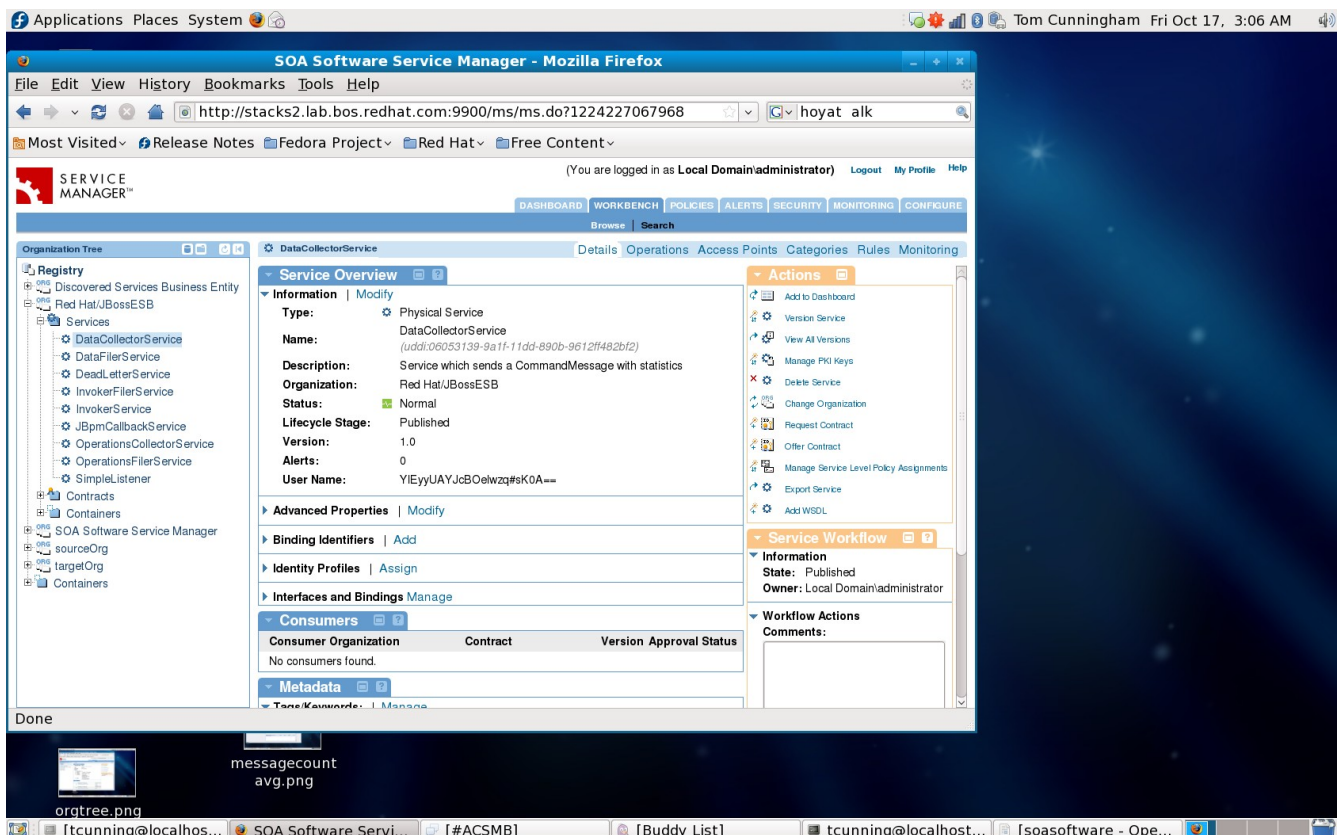
Start JBossESB :

```
cd bin
run.bat (if on Windows) or run.sh (on Unix)
```

Read product/docs/GettingStarted.pdf and follow the directions for running the Helloworld QS.

Managing Your Services

You can manage your services through Workbench – as you notice in the left frame of the screenshot below, services register with the SOA Software Workbench.



Search:

The “Search” option within Workbench allows the user to manage their services and shows the state, version, description, and number of alerts produced from those services.

The screenshot shows the SOA Software Service Manager interface in a Mozilla Firefox browser window. The address bar displays the URL `http://stacks2.lab.bos.redhat.com:9900/ms/ms.do?1224227067968`. The user is logged in as `Local Domain/administrator`. The interface includes a navigation bar with tabs: `DASHBOARD`, `WORKBENCH`, `POLICIES`, `ALERTS`, `SECURITY`, `MONITORING`, and `CONFIGURE`. Below the navigation bar, there is a search section with a "Search Criteria" dropdown and a "Load Saved Search" dropdown. The search results are displayed in a table with the following columns: `Status`, `Name`, `Version`, `Stage`, `Description`, `Alerts`, and `Actions`.

Status	Name	Version	Stage	Description	Alerts	Actions
✓	Alert Manager	-	-	Alert Manager Subsystem Service	0	- select action -
✓	Authorization Decision Service	-	-	Authorization Decision Service	0	- select action -
✓	Container Service	-	-	Container Service	0	- select action -
✓	Container State Service	-	-	Container State Service	0	- select action -
✓	DataCollectorService	1.0	Published	Service which sends a CommandMessage with statistics	0	- select action -
✓	DataFileService	1.0	Published	Service that files data into the database	0	- select action -
✓	DeadLetterService	1.0	Published	Dead Messages can be send to this service, which is configured to store and/or notify	0	- select action -
✓	InvokerFileService	1.0	Published	Service that files data into the database	0	- select action -
✓	InvokerService	1.0	Published	Service which sends a CommandMessage with operations result	0	- select action -
✓	JBpmCallbackService	1.0	Published	Service which makes Callbacks into jBPM	0	- select action -
✓	Management Console	-	-	Management Console Subsystem Service	0	- select action -

The interface also shows a taskbar at the bottom with several open applications, including `messagecount`, `avg.png`, `orgtree.png`, and `SOA Software Servi...`.