

JBoss ESB 4.5

SOA Software Integration

JBESB-GS-2/11/09



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Software Version

JBoss ESB 4.5

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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 4.5.GA.

jbossesb-properties.xml

Edit `server/<profile>/deploy/jbossesb.sar/jbossesb-properties.xml` and change the following lines :

```
<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

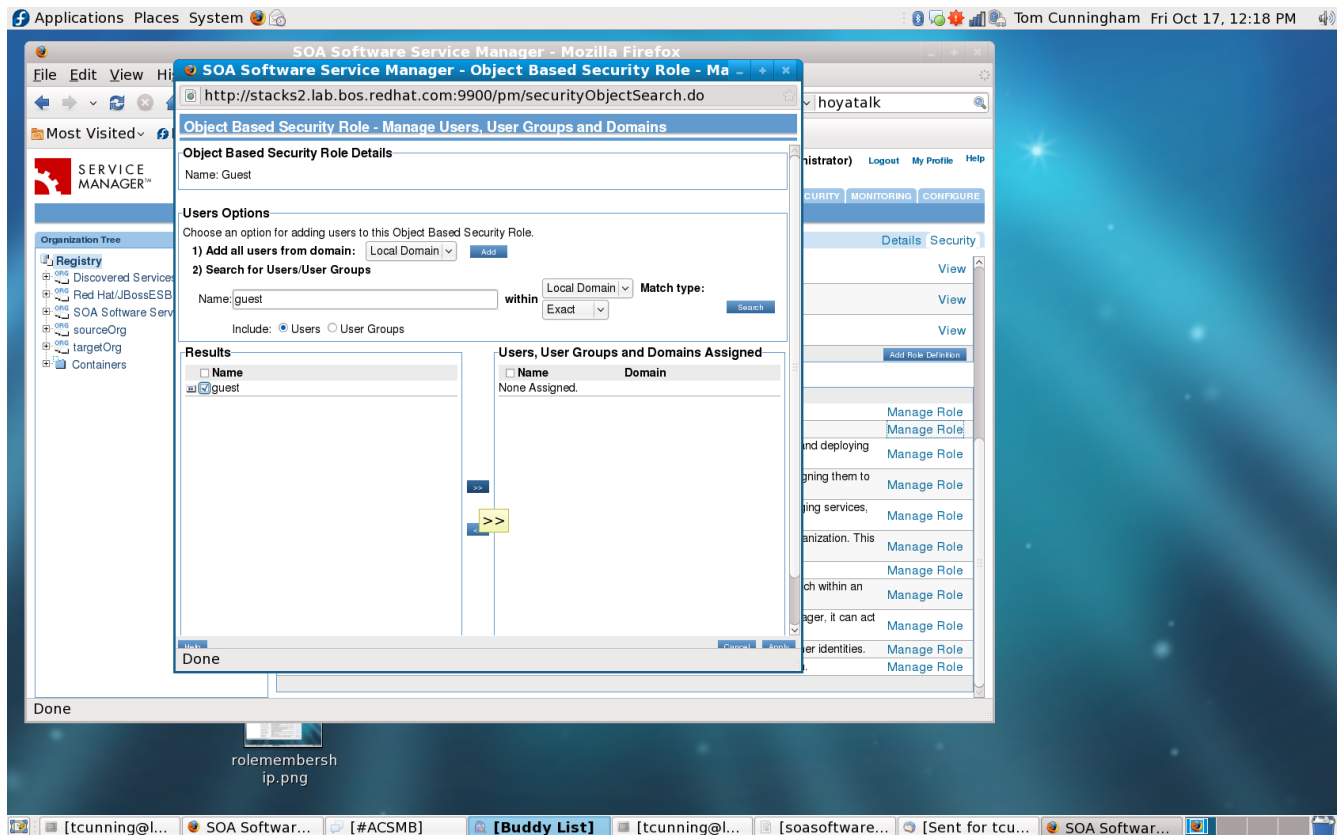
Configure the guest user in Workbench to the guest role. Go to the top level registry node in Workbench on the right hand side of the screen and click on the second-level “Security” tab (within the Workbench hierarchy). Hit modify on “Guest” under “Role Memberships :

The screenshot shows the SOA Software Service Manager interface in Mozilla Firefox. 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. The left sidebar shows the Organization Tree with nodes: Registry, Discovered Services Business Entity, Red Hat/JBossESB, SOA Software Service Manager, sourceOrg, targetOrg, and Containers. The main content area displays the Registry details for the Security tab, showing a list of Role Memberships. The Guest user is selected, and the Role Memberships table is visible.

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

javascript:manageUserWithRolesPrivileges('Guest')

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



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/securityObjectSearch.do`. The page title is "Object Based Security Role - Manage Users, User Groups and Domains".

Object Based Security Role Details
Name: Guest

Users Options
Choose an option for adding users to this Object Based Security Role.

1) Add all users from domain: Local Domain Add
2) Search for Users/User Groups

Name: guest within Local Domain Match type: Exact Search

Include: ☒ Users ☐ User Groups

Results

Name
<input checked="" type="checkbox"/> guest

Users, User Groups and Domains Assigned

Name	Domain
None Assigned.	

Buttons: Done, Cancel, Apply

The right sidebar contains navigation links: Administrator, Logout, My Profile, Help, SECURITY, MONITORING, CONFIGURE, Details, Security, View, Add Role Definition, Manage Role, and a list of roles with "Manage Role" links.

The taskbar at the bottom shows the following open applications: [tcunning@l...], SOA Softwar..., [#ACSMB], [Buddy List], [tcunning@l...], [soasoftware...], [Sent for tcu...], and SOA Softwar...

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="Pending Approval" status="Pending Approval" step="300"
owner="${caller}"/>
  </results>
  <post-functions>
    <function type="setLifecycleStage">
      <arg name="stage">Published</arg>
    </function>
  </post-functions>
</action>
```

Running

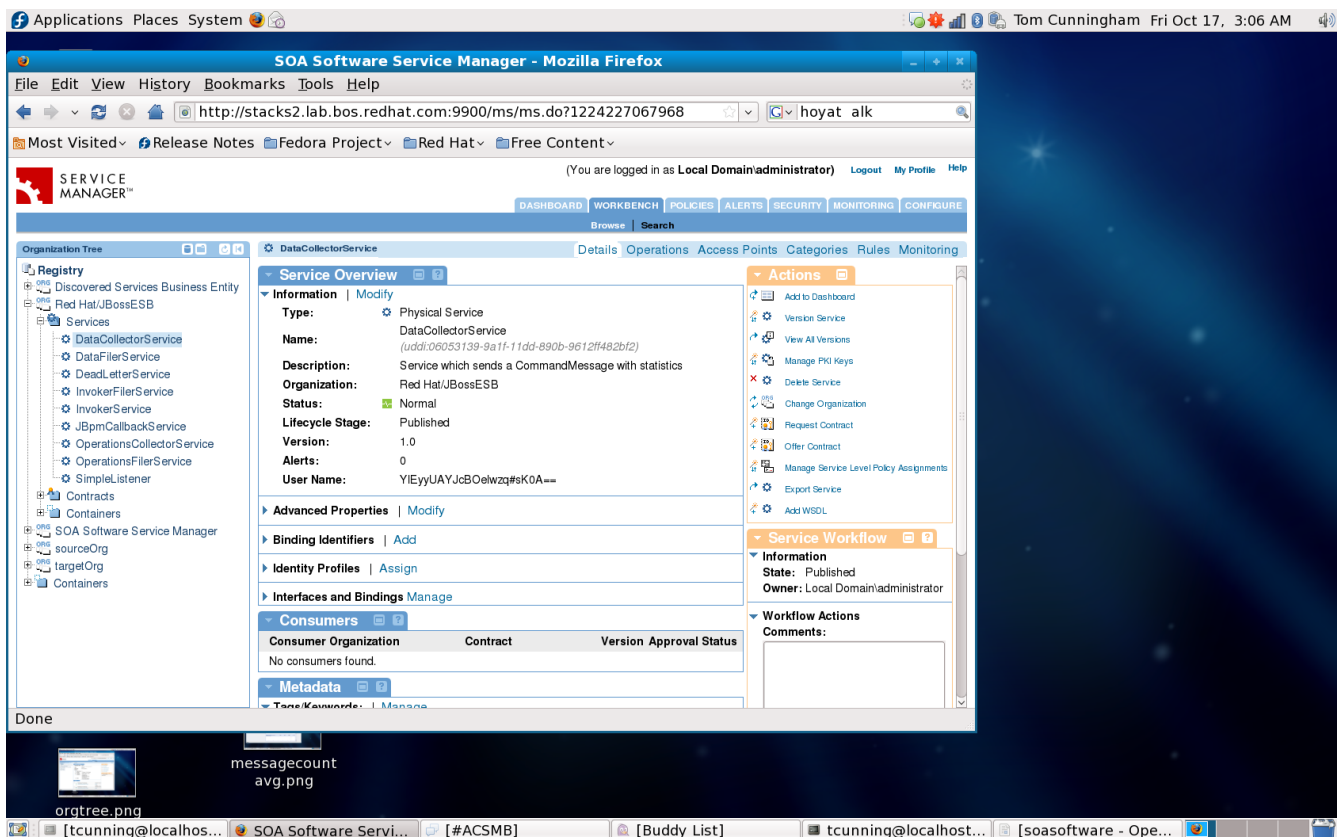
Start JBossESB :

```
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 Mozilla Firefox. The user is logged in as Local Domain administrator. The interface displays a table of search results for services, including their status, name, version, stage, description, alerts, and actions.

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

The interface also shows a search criteria section with a dropdown for "Load Saved Search" and buttons for "Search" and "Clear". The bottom of the screen displays a taskbar with various applications and a system tray.