

Identity Propagation for REST using Oracle WebService Manager 12.1.2

August 2013

Step-by-Step Instruction Guide

Author: Prakash Yamuna

Oracle Corporation

Table of Contents

| 1 | Get | ting Started4 |
|---|------|---|
| | 1.1 | Pre-Requisites |
| | 1.2 | Install Locations4 |
| | 1.3 | Topology4 |
| | 1.4 | Install & Topology Verification |
| | 1.4. | 1 Verify all Product Consoles are reachable5 |
| 2 | Use | case5 |
| 3 | Crea | ate "rest-saml-idprop" Application7 |
| | 3.1 | Create "service" Project7 |
| | 3.2 | Create "HelloWorldIdPropSample" POJO class9 |
| | 3.3 | Add method "hello" to the POJO Class |
| | 3.4 | Add Jersey Libraries via Project Properties11 |
| | 3.5 | Create a RESTFul Service from the POJO Class |
| | 3.6 | Using @Context and SecurityContext16 |
| | 3.7 | Modify the Servlet name |
| | 3.8 | Secure the REST service in JDeveloper |
| | 3.9 | Create a Deployment Profile and WAR19 |
| | 3.10 | Deploy the REST service "helloworld.war" to WLS using EM22 |
| | 3.11 | Validate the REST service |
| 4 | Crea | ate REST client |
| | 4.1 | Create a "rest-client" Web Project |
| | 4.2 | Create "HelloWorld Servlet" |
| | 4.3 | Create REST Client Proxy |
| | 4.4 | Secure the REST Client Proxy |
| | 4.5 | Modify the HelloWorldServlet to call the RESTful Client Proxy |
| | 4.6 | Modifying the REST Client Security Policy |
| | 4.7 | Secure the HelloWorldServlet web application |
| | 4.7. | 1 Select Authentication Mechanism |
| | 4.7. | 2 Add Security Constraints |
| | 4.7. | 3 Final "web.xml" for the HelloWorldServlet45 |
| | 4.7. | 4 Create weblogic.xml deployment descriptor46 |

4.7.5

| | 4.8 | Create Deployment Profile and WAR for the Client | 18 |
|---|------|---|----|
| 5 | Crea | ate users in weblogic using WLS Console | 51 |
| | 5.1 | Mapping newly created "testuser" in weblogic.xml | 53 |
| 6 | Dep | oloy the client application to Weblogic using EM5 | 54 |
| | 6.1 | Negative Testing | 56 |
| 7 | Set | up Keystore | 57 |
| | 7.1 | Create "owsm" stripe and keystore | 58 |
| | 7.2 | Generate keypair | 59 |
| | 7.3 | Negative Testing | 52 |
| | 7.4 | Import the "democa" CA certificate into "owsm" stripe | 52 |
| | 7.4. | .1 Identify the Issuer of the "orakey" key | 53 |
| | 7.4. | .2 Export "democa" CA cert from "system" stripe6 | 55 |
| | 7.4. | .3 Import "democa" CA cert to "owsm" stripe6 | 57 |
| 8 | Test | ting6 | 59 |

weblogic.xml for the HelloWorldServlet......48

1 Getting Started

1.1 Pre-Requisites

This How-To guide assumes that you have already downloaded and installed the following products/components.

- Download and install FMW 12.1.2 this includes Oracle WebService Manager 12.1.2.
- Download and install Database 11.2.0.3
- Download JDeveloper 12.1.2
- JDK7 is preinstalled

1.2 Install Locations

This How-To does not provide installation instructions for the pre-requisite components. You can consult the following how-to for installing FMW 12.1.2: <u>http://www.oracle.com/technetwork/middleware/webservices-manager/owsm-installation-12c-1971739.pdf</u>

You can also consult the appropriate Install guides. OWSM documentation can be found at: <u>http://docs.oracle.com/middleware/1212/owsm/index.html</u>

The components in this How-To are installed at the following locations:

| Component | Install location |
|---|--------------------------------|
| Oracle Weblogic 12.1.2 | D:\oracle_12.1.2\wlserver_10.3 |
| Oracle Web Services Manager (OWSM) 12.1.2 | D:\oracle_12.1.2\oracle_common |
| Oracle Enterprise Manager (EM) 12.1.2 | D:\oracle_12.1.2\oracle_common |
| JDeveloper | D:\oracle_12.1.2\jdeveloper |
| JDK | D:\Java\jdk1.7.0_15 |

1.3 Topology

This How-To uses a single domain. The domain includes a single weblogic server. The steps provided in this How-To can vary based on Topology.

- Domain Name: base_domain
- Weblogic Server: AdminServer

1.4 Install & Topology Verification

Start the Admin Server Navigate to: D:\oracle_12.1.2\user_projects\domains\base_domain\bin

4

1.4.1 Verify all Product Consoles are reachable

Go to the product console URL and provide username as weblogic and password as appropriate to your installation.

| Product | URL | Note |
|--------------------------------|-------------------------------|-----------------------------------|
| Oracle WebLogic | http://localhost:7001/console | WebLogic Administration |
| | | Console |
| Oracle Web Services Manager | http://localhost:7001/wsm-pm | Indicates status of OWSM Policy |
| (OWSM) | | Manager. Presence of this page |
| | | indicates that the Policy |
| | | Manager |
| | | has started |
| | http://localhost:7001/wsm- | Show you all the out-of-the-box |
| | pm/validator | policy. If you see that page, |
| | | OWSM |
| | | policy store is properly deployed |
| | | and running |
| Oracle Enterprise Manager (EM) | http://localhost:7001/em | Oracle Enterprise Manager |

Usecase 2

Description

This How-To describes how to secure a JAX-RS REST service and client using OWSM 12.1.2.



2013

Objective

The main objective of this How-To:

- How to build a simple REST services using JAX-RS technology in JDeveloper •
- How to secure a simple HelloWorld JAX-RS application using OWSM Policy in JDeveloper ٠
- Deploy and Run the HelloWorld JAX-RS application to a Weblogic domain •
- How to build a simple HelloWorld REST Client Proxy for the HelloWorld REST service using JAX-RS ٠ technology in JDeveloper
- How to secure the HelloWorld REST Client Proxy using OWSM Policy in JDeveloper ٠
- Testing end to end. •

Policies Used

| Service | Policy | Туре |
|------------------------|---|--------------|
| HelloWorldIdPropSample | oracle/multi_token_rest_service_policy | REST service |
| HelloWorldRestClient | oracle/http_saml20_token_bearer_client_policy | REST Client |

3 Create "rest-saml-idprop" Application

This application will contain two projects. One for the REST service and another for the REST Client.

| 🔿 New Gallery | | | | |
|---|---|--|--|--|
| Q | | | | |
| Categories: | Items: Show All Descriptions | | | |
| Connections Connections Deployment Descriptors Deployment Profiles Diagrams | Java Desktop Application Creates an application configured for building a generic Lava application. The new application will include a project that is preconfigured to use Java, Swing, and JavaBeans features. | | | |
| Java Maven Projects UML | ADF Fusion Web Application ADF Java Desktop Application Application From EAR File | | | |
| XML Business Tier ADF Business Components ADF Business Components | Custom Application | | | |
| | Database Application Extension Application | | | |
| ·····TopLink/JPA ·····Web Services □···Client Tier | 园 Java EE Web Application 데 UML Application | | | |
| ADF Desktop Integration | | | | |
| Help | OK Cancel | | | |

Provide the necessary information for creating the Application as shown in the screenshot below.

| Create Java Desktop Ap Name your application | plication - Step 1 of 4 ON | 010101010101010101010000005550 | |
|---|-------------------------------|--------------------------------|--------|
| Application Name | Application Name: | | |
| Application Name | rest-saml-idprop | | |
| Project Name Project Java Settings | Directory: | | Browse |
| O Build Tool | Application Package Prefix: | | |
| | | | |
| Help | < <u>B</u> ack | <u>N</u> ext > <u>F</u> inish | Cancel |

Click "Next"

3.1 Create "service" Project

Create a project called "service" in JDeveloper as show in the screenshot below. This project will be used to build the REST service.

| Create Java Desktop Application - Step 2 of 4 | | | | | |
|---|---|---|--|--|--|
| Name your project | | | | | |
| Application Name | Project Name: | service | | | |
| 😠 Project Name | Dir <u>e</u> ctory: | D:\JDeveloper\mywork\rest-saml-idprop\service Browse | | | |
| Project Java Settings | Project Featu | res: | | | |
| U Build Tool | Java The Java pro the challenge network-wide | gramming language is a simple object-oriented language designed to meet s of application development in the context of heterogeneous, e distributed environments. | | | |
| Help | | < Back Next > Finish Cancel | | | |

Click "Next"

| Create Java Desktop Application - Step 3 of 4 | | | | | |
|---|--|-----------------|--|--|--|
| Configure Java settin | ngs | B | | | |
| Application Name Project Name Project Java Setting Build Tool | Your new project starts with a default package, a source root directory, and directory. Default Package: examples.wsm.helloworld Java Source Path: | an output | | | |
| | D:\JDeveloper\mywork\rest-saml-idprop\service\src Qutput Directory: D:\JDeveloper\mywork\rest-saml-idprop\service\classes | Brow <u>s</u> e | | | |
| Help | < <u>B</u> ack <u>N</u> ext > <u>F</u> inish | Cancel | | | |

Click "Next"

| 🧿 Create Java Desktop App | plication - Step 4 of 4 |
|---|---|
| Select Build Environr | nent ouororororororororororororororororororo |
| Application Name Project Name Project Java Settings Build Tool | • Use JDeveloper's default build tools O Use Maven Group ID: rest-saml-idprop Artifact ID: rest-saml-idprop Version: 1.0-SNAPSHOT O Use Ant Buildfile: build.xml Directory: D:\jDeveloper\mywork\rest-saml-idprop |
| Help | < Back Next > Einish Cancel |

2013

Click "Finish"

3.2 Create "HelloWorldIdPropSample" POJO class

Create a POJO class under the "service" Project.

| ations | | 3 Start Page × | | | Qv Search |
|--|---|-------------------------------|---|--|-----------|
| st-saml-idprop ects | ▼ ▼ | | PER | ORACLE | E |
| Edit Project Source Paths | Java Cross Java Interface From Gallery Ctrl-N | Learn & Exp | plore Get Started | Community | |
| Find Project Files Show Classpath Show Overview | | What's New | Featured Tutorials | Featured Documentation | i |
| Deploy. | | Release Notes | Getting Started with the JDeveloper IDE | Developing Applications with Oracle JDeveloper | |
| Make service.jpr Ctrl.F9 Rebuild service.jpr Alt.F9 | | Samples & Demos | Building and Using Web Services | Developing Web User Interfaces with Oracle ADF Faces | |
| Compare With | | | | Mobile Browser Developer's Guide for Oracle ADF | |
| Replace With Restore from Local History | * * | | | Developing Extensions for Oracle JDeveloper | |
| Q Project Properties | | | All Online Tutorials | All Online Doc mentation | - |
| | | Show on Startup | c | Dopyright © 1997, 2013, Oracle and/or its affiliates. All rights reserve | d. |
| No Structure | | | | | |
| | | < Live Issues: - Issues | | | |
| | | S 0 🛦 0 🖃 0 i 0 i 🖉 0 i 🖉 • i | | | Q |
| | | | No Issues | | |

2013

| Create Jav | a Class | | × |
|------------------|----------------------------|---|----------|
| Enter the | details of your new class. | | |
| | | | |
| Name: | HelloWorldIdPropSample | | |
| <u>P</u> ackage: | examples.wsm.helloworld | | <u> </u> |
| Extends: | java.lang.Object | | <u> </u> |
| Optional | Attributes | | |
| Implen | nents: | | + × |
| | | | |
| | | | |
| Acces | s Modifiers | Other Modifiers | |
| () p | <u>u</u> blic | Openeration of the second s | |
| P | ackage protected | ○ <u>a</u> bstract ○ <u>final</u> | |
| Con | structors from Superclass | | |
| Imp | lement Abstract Methods | | |
| <u>M</u> air | n Method | | |
| Hel | P | ОК | Cancel |

Click "OK"

3.3 Add method "hello" to the POJO Class

| Oracle JDeveloper 12c - rest-saml-idprop.jws : service.jpr : D:\JDeveloper 12c - rest-saml-jws : D:\JDeveloper | oper\mywo | ork\rest-saml-idproj | p\service\src\examples\wsm\helloworld | \HelloWorldIdPropSample.java | | | | | × |
|---|------------------|----------------------------------|---|------------------------------|-----------------------------|--------------|----------|-----------|-------|
| File Edit View Application Refactor Search Navigate Build | l <u>R</u> un So | io <u>u</u> rce Tea <u>m T</u> o | ools <u>W</u> indow <u>H</u> elp | | | | | Ox Search | |
| | | * | | | | | | Q+ Search | _ |
| Applications | × . | Start Page | HelloWorldIdPropSample.java | | | | | | L. |
| Test-saml-idprop | • • | Q.* (Find | <i>▲</i> <i>&</i> | i 🔁 i 🛟 i 📠 i 🚳 i 🗔 i 🛱 | 🔍 🎼 🎼 🛅 🚟 👘 | | | | ^ |
| al Projection Comparison Co | <u>بة</u> . | package | examples.vsm.helloworld; class HelloWorldIdPropSample () { super(); super(); lic Bering hello() { return "Hello"; } | | | | | | |
| .:) Application Resources .:) Recent Files Helo/World/ShopSampla java - Structure 0 € - □ 20 6 10 10 10 | * | | | | | | | | |
| samples um helsvord sendes um helsvord set s | | | | | | | | 13: | 2 - |
| | l l | Source History 4 | | | | | | Þ | 1 |
| | | Build - Issues | | | | | | | < E |
| | | 🙁 o 🔔 o 🕕 o | 🖉 🕶 📌 | | | | | Q | |
| | | Description | | Queread Duild en | | File | Location | Project | |
| | | | | Success! Build con | ipieted with 0 errors, 0 Wa | mings, o mos | | | |
| Source Design | | Live Issues: Helk | WorldIdPropSample.java Build × | | | | | | |
| D:\JDeveloper\mywork\rest-saml-idprop\service\service.jpr | | | | | | | | | 4 |

3.4 Add Jersey Libraries via Project Properties

We will use APIs that require Jersey Libraries in the Project. Add these Libraries via the Project Properties. This can be achieved by right-clicking on the "service" project and clicking on the "Project Properties" menu item as shown in the screenshot below.

| Oracle JDeveloper 12c - rest-saml-idprop.jws : service.jpr | | |
|---|---|--|
| Eile Edit View Application Refactor Search Navigate Build Run | Team Tools Window Help | |
| | - · · · · · · · · · · · · · · · · · · · | Qw(Search |
| | | |
| Applications | 3 Start Page 🐘 HelloWorldIdPropSample.java 👘 | |
| 🔁 rest-saml-idprop 🔹 👻 | 🛛 🖓 🖓 🖓 🖓 🖓 🖓 🖓 🖓 🖓 🖓 🖓 🖓 🖓 | |
| 🖃 Projects 💽 🖓 * 🍸 * | package examples.wsm.helloworld; | |
| Berr Ber Berr | <pre>Symblic class MelloWorldIdPropSample { public MelloWorldIdPropSample() { super(); } public Straig Mello() { return "Mello"; } </pre> | |
| | | |
| No Chrysteres | | 13:2 - |
| No Soucure | Source History | |
| | Build - issues | × . |
| | | 0 |
| | - Description | Location Project |
| | | |
| | Success! Build completed with 0 errors, 0 warning | s, 0 infos |
| | | |
| | Live Issues: HelioWorldIdPropSample.java Build × | |
| D:\JDeveloper/mywork/rest-sami-idprop/service/service.jpr | | a (1997) (19977) (19977) (19977) (1997) (1997) (1997) (1997) (1997) (1997) (199 |
| | | |

| Q. Search | Libraries and Classpath | | |
|------------------------------|-----------------------------|-----------|----------------------|
| | Use <u>C</u> ustom Settings | | Customize Settings |
| ADF Business Components | Use Project Settings | | |
| Model | | | |
| ····· ADF View | Java SE Version: | | |
| ⊡… Ant | 1.7.0_15 (Default) | | Change |
| 🖬 ···· Compiler | | | |
| ····· Dependencies | Classpath Entries: | Libraries | |
| Deployment | Export Description | | Add Li <u>b</u> rary |
| EJB Module | | | Add 1AP /Directory |
| Extension | | | Add SAR/Directory |
| ····· Facelets Tag Libraries | | | <u>R</u> emove |
| ····· Features | | | |
| Javadoc | | | <u>E</u> dit |
| ····· Java EE Application | | | Share As |
| ····· JPA | | -ur | |
| ····· JSP Tag Libraries | | 1 | |
| JSP Visual Editor | | | |
| Libraries and Classpath | | | |
| Maven | | | |
| ····· Resource Bundle | | | |
| Run/Debug | | | |
| | | | |
| | | | |

Click on "Add Library" button in the screenshot above. This will pop up the "Add Library" dialog below.



Click "OK"

| Project Properties - D:\JDevelop | per\mywork\rest-saml-idprop\service\service.jpr | × |
|--|--|-----------------------------|
| Q Search | Libraries and Classpath | |
| Project Source Paths ADF Business Components | Use Custom Settings | Customi <u>z</u> e Settings |
| ADF Model ADF View | Java SE Version: | |
| ⊞… Ant ⊞… Compiler | 1.7.0_15 (Default) | Cha <u>ng</u> e |
| ····· Dependencies ····· Deployment | Classpath Entries: Show Application Libraries Export Description | Add Li <u>b</u> rary |
| EJB Module Extension | JAX-RS Jersey (Bundled) | Add JAR/Directory |
| ····· Facelets Tag Libraries ····· Features | | <u>R</u> emove |
| | | Vi <u>e</u> w |
| JPA JSP Tag Libraries | т | |
| JSP Visual Editor Libraries and Classpath | ⊴ | |
| Maven Resource Bundle | | |
| Run/Debug | | |
| | | |
| Help | | OK Cancel |

Click "OK"

3.5 Create a RESTFul Service from the POJO Class

You can create a RESTFul Service by right clicking on the POJO Class and clicking on "Create RESTful Service" menu item as shown below.

| polations personnel de la constante de la con | Qe (Search |
|---|---|
| Indextors Intertered I | |
| Wets Deskage Package @ revice | |
| arvice → opkaton Sources → op | |
| | |
| Open Super Exclude Project Content 1 Image: Super () : 1 public String hello() (| |
| Exclude Project Content 1 Denow B | |
| Deploy | |
| string user = "No user"; | |
| Find Usages CM+AILU roturn "Hello" + user: | |
| A Make Cott+Shin-F9 | |
| <u>Atteshim:P9 </u> 1 | |
| hen Bernerer 🖗 Dehun | |
| Fies La Reformat All+Shift F | |
| dd/PropSample.java | |
| CO C C C C C C C C C C C C C C C C C C | |
| amples worn hellow Compare With co | |
| NeloWorld/dP Create Service Interface | |
| g helio() : String Crgate Web Service | |
| <u>C</u> reate RESTful Service | |
| 🔁 Create Data Control | |
| Source History 1 | |
| Duid - Issues | |
| | Q. |
| - Lead grant | The Exclusion Project |
| Success! Build completed with 0 e | errors, 0 warnings, 0 infos |
| esion Billive Tesues: HelloworldtdPronSample iava Bildi x | |
| per/mywork/rest-sami-idprop/service/se | |
| | |
| | |
| Create RESTful Service - Step 3 of 4 | |
| Cleate RESTRI Service - Step 5 014 | |
| | |
| reste DESTful Service From Java Class | |
| Teate RESTIN Service From Java Class | |
| | |
| | |
| | s in the resource class. Also provide the |
| Select the methods to be promoted as HTTP methods | |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. | |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. | |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. Generation Options Root Path: | |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. Generation Options Root Path: | |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. Generation Options Root Path: Create RESTful Servi Consumes: | roduces: No media types |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. Generation Options Root Path: Create RESTful Servi Consumes: No media types | roduces: No media types |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. Generation Options Root Path: Create RESTful Servi Consumes: Finish Construct HTTP M | roduces: No media types |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. Generation Options Root Path: Create RESTful Servi Consumes: Finish No media types Configure HTTP M | roduces: No media types |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. Generation Options Root Path: Create RESTful Servi Consumes: Einish No media types Configure HTTP M | roduces: No media types |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. Generation Options Root Path: Create RESTful Servi Consumes: Finish Configure HTTP M Name Type Consumes Rose | roduces: No media types Produces Path |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. Generation Options Root Path: Finish Consumes: No media types Provide type Configure HTTP M Name Type Consumes Hello GET | roduces: No media types Produces Path |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. Generation Options Root Path: Create RESTful Servi Consumes: Finish No media types Configure HTTP M Name Type Consumes GET | roduces: No media types Produces Path |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. Create RESTful Servi Root Path: hello Einish Consumes: No media types Configure HTTP M Name Type Consumes GET | roduces: No media types Produces Path |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. Generation Options Root Path: hello Create RESTful Servi Consumes: No media types Proceed to the data content of the data content of the data content. Finish Consumes: No media types Proceed to the data content of the data content of the data content. Name Type Consumes GET | roduces: No media types Produces Path |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. Generation Options Root Path: hello Create RESTful Servi Consumes: No media types Finish Configure HTTP M Name Type Consumes GET | roduces: No media types Produces Path |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. Generation Options Root Path: hello Create RESTful Servi Consumes: No media types Pi Configure HTTP M Name Name Type Consumes GET | roduces: No media types Produces Path |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. Generation Options Root Path: hello Create RESTful Servi Consumes: No media types Finish Configure HTTP M Name Type Hello GET | roduces: No media types Produces Path |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. Generation Options Root Path: hello Create RESTful Servi Consumes: No media types Finish Configure HTTP M Name Type Configure Parame | roduces: No media types Produces Path |
| Welcome Select the methods to be promoted as HTTP methods required MIME type for the data content. Generation Options Root Path: hello Create RESTful Servi Consumes: No media types Proceed for the data content. Finish Configure HTTP M Name Type Consumes GET Configure Parame Configure Parame | roduces: No media types Produces Path |

 Help
 < Back</td>
 Next >
 Finish
 Cancel

For the purposes of this How-To select the media type as text/plain by Clicking "Produces".

× 🕐 Select Media Types Select Value application/atom+xml application/x-www-form-urlencoded application/json application/octet-stream application/svg+xml application/xhtml+xml application/xml multipart/form-data text/html image/jpeg image/gif text/plain ~ text/xml */*

Click "OK".

| Create RESTful Service - \$ | Step 3 of 4 | | | | | | | — |
|--------------------------------|-------------------------------|-----------------------------|----------------------|-------------------------|-----------------|--------------|-------------|----------|
| Create RESTful Service | ce From Ja | va Class | | | | | | |
| Welcome Generation Options | Select the me required MIM | thods to be E type for t | promote he data c | d as HTTP me ontent. | thods in the re | source class | . Also prov | ide the |
| | Roo <u>t</u> Path: | hello | | | | | | |
| Create RESTful Servi | Consumes: | No media t | ypes | | Produces: | No media | types | |
| <u>Finish</u> | | Configure H | ITTP M | | | | | |
| | Nar | ne | Туре | Consume | s Produces | Pa | ath | |
| | hello | | GET | | 1 media ty. | user | | |
| | | | | | | | | |
| | | Configure P | arame | | | | | |
| | Name | Data | Туре | Annotation | Parameter | Default | Encoded | |
| | | | | | | | | |
| Help | | | < <u>B</u> ack | Next | t > | Einish | Ca | ncel |

OK

Cancel

Click "Next"

2013

| Oreate RESTful Service - 3 | Step 4 of 4 |
|----------------------------|--|
| Finish | |
| Q Welcome | You have finished describing your RESTful service |
| Generation Options | When you click Finish, the wizard will create the RESTful service and configure the project for REST. |
| Finish | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| Help | < Back Next > Finish Cancel |

Click "Finish"

3.6 Using @Context and SecurityContext

Use the @Context annotation and the SecurityContext object to get the authenticated user. The code to use the @Context annotation and the SecurityContext object is provided below.

package examples.wsm.helloworld;

import java.security.Principal;

```
//...skipping few imports
```

import javax.ws.rs.core.Context; import javax.ws.rs.core.SecurityContext;

@Path("hello")

public class HelloWorldIdPropSample {

```
public HelloWorldIdPropSample() {
```

super();

```
}
```

@GET

```
@Produces("text/plain")
```

@Path("user")

public String hello(@Context SecurityContext sc) {

```
String user = "No user";
```

if (null != sc) {

Principal p = sc.getUserPrincipal();

```
if ( null != p) {
```

```
user = p.getName();
```

```
}
```

```
return "Hello " + user;
```

}

2013

NOTE: Modify the code to use the @Context annotation to get the authenticated user after creating a RESTful Service.

Pay special attention to the import statements.

import java.security.Principal;

import javax.ws.rs.core.Context;

import javax.ws.rs.core.SecurityContext;

Also note that that the method "hello" has a Path annotation.

WARNING: If you add the @Context parameter before creating the RESTful service – then you will not be able to use the "Create RESTFul Service" menu item as shown above to create a RESTful service. So the sequence described above is important.

While you can add the @Path annotations, etc manually the "Create RESTful Service" converts the project to a Web Project and adds the web.xml deployment descriptor – which allows you to secure the RESTful Service.

NOTE: There are other ways of programming this sample in JDeveloper. The sequence shown here is important only for this particular scenario.

3.7 Modify the Servlet name

When you create a RESTful service – Jdeveloper automatically modified the project to be a Web Project and adds web.xml. However the default servlet name is called "jersey". Modify the servlet name and provide a more user friendly name as shown below.

| 👌 Oracle JDeveloper 12c - rest-saml-idprop.jws : service.jpr : | D:\JDeveloper\mywork\rest-saml-idprop\service\public_html\WEB-INF\web.xml | | - • • |
|--|--|------------------------------|---|
| <u>Eile Edit View Application Refactor Search Navig</u> | ate <u>B</u> uild <u>R</u> un So <u>u</u> rce Tea <u>m</u> <u>I</u> ools <u>W</u> indow <u>H</u> elp | | |
| 🔮 🗢 🗐 🗊 🧐 🔍 🕥 🗸 🔒 | 🎄 🕍 瀳 🕨 👋 👘 | Q. (Search | |
| Applications × | 3 Start Page × ➡ HelloWorldIdPropSample.java × ➡ web.xml × | | Compo × |
| 🔁 rest-saml-idprop 🗸 👻 | 🔍 🖌 Find | A | Q. |
| - Projects Q 02 + 77 + 35 + | <pre><?xml version = '1.0' encoding = 'windows-1252'?></pre> | | Web Application |
| | <pre>bic (veb-app xm.ins="http://java.sun.com/xml/ns/javaee" xmlis:xs1="http://www.ws.org/2001/XM xs1:schemaLocation="http://java.sun.com/xml/ns/javaee http://java.sun.com/xml/ version="3.0"></pre> | LSchem ns/jav ≻ | absolute-o |
| Application Resources Accent Files web.xml - Structure × | <pre><servlet-name>neritoworid</servlet-name> <ur><ur><ur><servlet-mapping></servlet-mapping></ur></ur></ur></pre> | | env-entry |
| | | | • servlet-name *: |
| | web-app v servlet v | 6:1 - | async-supported |
| Serviet-toss | Q Q > Description File | × = a Projec v | description: display-name: enabled: isp-file: |
| ar 🗸 orpattern | Success! Build completed with 0 errors, 0 warnings, 0 infos | | load-on-startup: servlet-dass: |
| | Live Issues: web.xml Build × | - | |
| [4:42:14 PM] Successful compilation: 0 errors, 0 warnings. | | | <u>s</u> |

3.8 Secure the REST service in JDeveloper

You can secure a REST service by right-clicking on "web.xml" and selecting the "Secure RESTful Application" menu item as shown below.



You can search for a policy of a particular name in JDeveloper as shown below.

| Configure the policies for the service, if required. This list of valid policies is taken from application connections associated with the current application. Policy Store (def location): EV\AppData\Roaming\JDeveloper\system 12.1.2.0.40.66.67\Default Security Policies: multi Show Selected Policies Show Selected Policies SAML2 bearer assertion in HTTP header or SPNEGO from HTTP header and authenticates the verifies OAM agent has authenticated the user and establishes identity. Also verifies that the protocol is HTTPS if username password over HTTP or SAML2 bearer over HTTP is used. oracle/multi_token_rest_service_policy | <u> </u> |
|--|--------------------------------------|
| Policy Store (def location): EV\AppData\Roaming\JDeveloper\system 12.1.2.0.40.66.67\Default Security Policies: Q multi Show Selected Policies Oracle/multi_token_over_ssl_rest_service_policy This exactly one policy extracts credentials from username and password in the HTTP header SAML2 bearer assertion in HTTP header or SPNEGO from HTTP header and authenticates the verifies OAM agent has authenticated the user and establishes identity. Also verifies that the protocol is HTTPS if username password over HTTP or SAML2 bearer over HTTP is used. | server |
| Security Policies: Q multi Show Selected Policies oracle/multi_token_over_ssl_rest_service_policy This exactly one policy extracts credentials from username and pass word in the HTTP header of SPNEGO from HTTP header and authenticates th verifies OAM agent has authenticated the user and establishes identity. Also verifies that the protocol is HTTPS if username password over HTTP or SAML2 bearer over HTTP is used. Image: Comparison of the temperature of the temperature over HTTP is used. | Domain \store \gmds |
| Policies: Q multi Show Selected Policies oracle/multi_token_over_ssl_rest_service_policy This exactly one policy extracts credentials from username and password in the HTTP header SAML2 bearer assertion in HTTP header or SPNEGO from HTTP header and authenticates th verifies OAM agent has authenticated the user and establishes identity. Also verifies that the protocol is HTTPS if username password over HTTP or SAML2 bearer over HTTP is used. Image: Construction of the multi_token_rest_service_policy | |
| oracle/multi_token_over_ssl_rest_service_policy This exactly one policy extracts credentials from username and password in the HTTP head SAML2 bearer assertion in HTTP header or SPNEGO from HTTP header and authenticates th verifies OAM agent has authenticated the user and establishes identity. Also verifies that tr protocol is HTTPS if username password over HTTP or SAML2 bearer over HTTP is used. oracle/multi_token_rest_service_policy | Show Descriptions |
| This exactly one policy extracts credentials from username and password in the HTTP head SAML2 bearer assertion in HTTP header or SPNEGO from HTTP header and authenticates the verifies OAM agent has authenticated the user and establishes identity. Also verifies that the protocol is HTTPS if username password over HTTP or SAML2 bearer over HTTP is used. oracle/multi_token_rest_service_policy | |
| ✓ oracle/multi_token_rest_service_policy | der or View ne user or ansport |
| | |
| This exactly one policy extracts credentials from username and password in the HTTP head SAML2 bearer assertion in HTTP header or SPNEGO from HTTP header and authenticates th verifies OAM agent has authenticated the user and establishes identity. | der or View ne user or |
| | |
| | |
| | |
| | |
| | |
| Override Properties | |
| Help OK | Cancel |

Click "OK"

Securing a RESTful Service will create a wsm-assembly.xml document as shown below.



3.9 Create a Deployment Profile and WAR



| 🕜 Create Deployment Profile | × |
|---|--------|
| Click OK to create your new deployment profile and immediately open it to see its configuration. | |
| WAR File | • |
| Deployment Profile <u>N</u> ame: | |
| helloworld | |
| Description: | |
| Creates a profile for deploying the Java EE web module (WAR) to an application server. The WAR consists of the web components (JSPs and servlets) and the corresponding deployment descriptors. | * * |
| Help OK Cance | |

Click "OK"

| 👌 Edit WAR Deployment Profile F | Properties | | × |
|---|------------|--|---|
| Q Search | | General | |
| WAR Options WAR Options Web Files Contributors Filers WEB-INF/classes Contributors Filters WEB-INF/lib Contributors Filters WEB-INF/lib Contributors Filters WEB-INF/lib Contributors Filters WEB-INF/lib Contributors Filters Profile Dependencies Platform | | WAR File: per \mywork\rest-saml-idprop\service\deploy\helloworld.war Browse Deployment Plan: Browse Web Application's Context Root: Ouse Project's Java EE Web Context Root rest-saml-idprop-service-context-root Specify Java EE Web Context Root: rest-saml-idprop Deployment Client Maximum Heap Size (in Megabytes): | |
| New Delete | | | |
| <u>H</u> elp | | OK Cance | |



Identity Propagation for REST using OWSM 12.1.2

🕐 Oracle JDeveloper 12c - rest-saml-idprop.jws : service.jpr - - -<u>File Edit View Application Refactor Search Navigate Build Run Team Tools Window Help</u> 🔮 - 🗁 🗐 🗊 🔍 💿 - 💿 - 🔒 🛔 🕍 🚢 🕨 - 🎕 Q. Search 🕐 Start Page × 👶 HelloWorldIdPropSample.java × 🐏 web.xml 🛛 🦉 wsm-assembly.xml 🗵 × . Applications -Compo.. -🔁 rest-saml-idprop Q. Find Q,-- -- Projects Q 🗞 • 🖓 • 📴 • <orawsp:wsm-assembly xmlns:orawsp="http://schemas.oracle.com/ws/2006/01/policy"> OWSM Policy As stamp:ws=dssems; tamps:cll="http://dcs.osis-open.org/ns/pences/scs/200912" name="policyS appliesTo="REST-RESOURCE()" attachTo="SERVICE('helloworld')" orawsp:highId=" xml:id="REST-RESOURCE_SERVICE_helloworld_"> 🖃 🛅 ser New . ė-- 🛅 Edit Project Source Paths... AssertionT. ė <wsp:PolicyReference xmlns:wsp="http://www.w3.org/ns/ws-policy" DigestAlgorithm="http://www.w3.org/ns/ws-policy/ShalExc" X Delete Project ė-**P** Config Find Project Files URI="oracle/multi_token_rest_service_policy" orawsp:status="enabled" o </scal1:policySet> Show Classpath </orawsp:wsm-assembly> Sho<u>w</u> Overview quard ۰ Deploy hello ± Applicat OverridePr. Recent F Make service.jpr Ctrl-F9 New Deployment Profile... *a*\$ Rebuild service.jp Alt-F9 service.jpr 🕨 <u>R</u>un -Propert... × -? Q Find 🏽 🖉 🖉 Compare Wit<u>h</u> , Replace <u>W</u>ith 1:1 ▼ ▶ [] Source History 4 Restore from Local History Build - Issues -Project Properties... 🔕 o 🔔 o 🕕 o I 🖉 🔹 I 📌 Q - Description File Loca... Projec Success! Build completed with 0 errors, 0 warnings, 0 infos Live Issues: wsm-assembly.xml Build × Opened nodes (15); Saved files(1)

| Deploy helloworld | |
|-------------------------------|---|
| Deployment Action | |
| Deployment Action Summary | Select a deployment action from the list below. Deploy to Application Server Deploy to WAR |
| | Creates a Web Archive (WAR) file for the platform defined in the Profile. |
| Help | < Back Next > Finish Cancel |

Click "Next"



| 🔿 Deploy helloworld | |
|---------------------|-----------------------------|
| Summary | |
| Summary | Deployment Summary: |
| Help | < Back Next > Finish Cancel |

Click "Finish"

3.10 Deploy the REST service "helloworld.war" to WLS using EM

| Firefox /Domain_base_ | omain/base_domain (0 + | Ø |
|--|--|--|
| 🗲 🛞 localhost:7001/em/faces/as | as/domainHome?target=/Domain_base_domain/base_domain&type=weblogic_domain | ☆ マ C 0! - Yahoo 👂 🍙 |
| ORACLE Enterprise M | Inager Fusion Middleware Control 12c | Help 🕶 📃 weblogic 👻 Log Out |
| 📑 WebLogic Domain 👻 | | |
| Change Center 🔋 | base_domain 0 | Logged in as weblo |
| 눱 Changes 👻 🖂 Recording 👻 | WebLogic Domain * | Page Refreshed Aug 3, 2013 11:09:44 PM PDT |
| Target Navigation | × Summary ⊗+ | V Clusters |
| View - | General | View - Search |
| Application Deployments Deployments End Deployment | Administration Server AdminServer Administration Server Host PYAMUNA-LAP.oradev.oradecorp.com | Name Servers Address Mode Adjoint Session |
| ▽ 📩 base_domain | Administration Server Listen Port 7001 | No Clusters found |
| AdminServer | Tools 10 To configure and manage this Webling's Domain, use the Webling's Server Administration Console | |
| | gene cananalage and recording contrain) de une recorde de recorder contraine | ⊻ Deployments © - |
| | ∎Up (1) 100% | |
| | View - Search | Name Status Deployed On |
| | Name Active Request Processing (ber minute) Bit Request Processing (ber minute) Bit Processing (ber minute) Bit Processing (ber minute) Bit Processing (ber minute) Bit Processing (ber minute) Bit Processing (ber minute) Bit Processing Bit Processing <td>∨ O Application Deployments > O Application Explorations > O Resource Adapters</td> | ∨ O Application Deployments > O Application Explorations > O Resource Adapters |
| | AdminServer Transformer PYAMUN 7001 0.00 436.85 1 0 0.00 0 | |
| | м | heloworld 👚 AdminServer |
| | V Oracle WebLogic Domain Resource Center | ⊻ Web Services ©- |
| | Before You Benin | Name Server Application Web Service Endpoint Test |
| | What is a WebLogic Domain? | (http://diagnostic.wsm.orad AdminServer wsm-pm DiagnosticPort III |
| | Anage Oracle WebLogic Server with Fusion Middleware Control | |
| | Wanage Orade WebLogic Server with the Administration Console Typical Administration Tasks | |
| | Starting and Stopping Oracle WebLogic Servers | |
| | Deploying an Application Using Fusion Middleware Control | |
| | 🔯 Additional Eusion Middleware Control Common Tasks | |

Click "Webogic Domain->Deployments" from the RHS menu in the screenshot above.

2013

2013

| Fredox * Deploy Java EE Application: base_domai. + | - J - |
|---|--|
| 🌒 Biocalhost 7001/em/face/as/emas_deployment_task_flow/as/oclj/deploy/tep1?target=%2FDomain_base_domain%2Fbase_do | ዖ 🏠 🖸 י |
| ORACLE Enterprise Manager Fusion Middleware Control 12c | Help 👻 📿 |
| base_domain @ Sect Archive Select Target Application Attributes Deployment Settings Deploy Java EE Application : Select Archive Specify the application or the exploded directory. Optionally you can specify a deployment plan. | Back Step 1 of 4 Next Cancel |
| Archive or Exploded Directory Java EE archives, Web Hoddes (WAR files), EB Modules (EB JAR files), Resource Adapter Modules (RAR files), Coherence Archives (GAR files), JEBC Modules, JMS Modules, and Ibrary files (Jar files) can be deployed. You can also deploy an exploded archive that is present on the server where Enterprese Manager is running. Archive Is on the machine where this Web browser is running. D-UDeveloper Improvid: Yeat sami dopp learnice' deploy Malowed war Archive or exploded directory is on the server where Enterprise Manager is running. Browse | ✓ Information Use this page to deploy Java EE explications that require Oracle Metadata Services (MCS) or that take advantage of the Oracle Application Development Framework (Oracle ADP). If your application is a SOA composite, use the SOA Composite deployment witard. |
| Deployment Plan The deployment plan is not the texture is the deployment settings for an application. You can use a previoudly served deployment plan for this application. Later in the deployment plan is not applicable when you deploy a library. Oreste a new deployment plan is on the advisorment plan, one will be created automatically during the deployment process when deployment configuration is done. The deployment plan is not applicable when you deploy a library. Oreste a new deployment plan is on the advisorment configuration is done. Deployment plan is on the machine where this Web browser is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deployment plan is on the server where Enterprise Manager is running. Deploym | If your application is not a SOA comparity or MoTe comestions, then you can deploy an application using this water or the Oracle WebCopic Server Administration Console. |
| Deployment Type The profive or exploded directory can be deployed as a regular application or a library. Application libraries are deployments that are available for other deployments to share. Libraries should be available on all of the targets running their referencing applications. The deploy this archive or exploded directory as an application | |

Click "Next"

| Firefox Deploy Java EE Application: base_dom | nai + | | | - 7 🎫 |
|--|--|-----------------------|-------------|------------------------------|
| Contemporary and the second se | isk_flow/as/oc4j/deploy/step2?Adf-Window-Id=v | v0&Adf-Page-Id=10 | ☆ ♥ C Vahoo | ۹ 🖸 🕈 |
| ORACLE Enterprise Manager Fusion Mid | dleware Control 12c | | | Help 🔻 📿 |
| base_domain @ Select Artive Select Target Application Attributes Deplo Deploy Java EE Application : Select Target Select the WebLogs server or duster that you want this app | wyment Settings Vication to be deployed to. | | | Back Step 2 of 4 Next Cancel |
| Select Name | Туре | Deployed Applications | | |
| | | | | |

Click "Next"

2013

| Firefox Deploy Java EE A | pplication: base_domai + | | |
|--------------------------------------|---|-------------------|-------------------------------------|
| e localhost:7001/em/faces/as/ | emas_deployment_task_flow/as/oc4j/deploy/deployAppAttributes?Adf-Window-Id=w0&Adf-Page-Id=11 | ☆ マ C 🛛 🕬 - Yahoo | ۶ 🍙 د |
| | anager Fusion Middleware Control 12c | | Help 🔻 📿 |
| base_domain () | | | |
| Calact Archiva Calact Target Applica | | | |
| Deploy Java EE Application : | Application Attributes | | Back Step 3 of 4 Next Deploy Cancel |
| Archive Type We | b Module (WAR file) | | |
| Deployment Plan Cre | rate a new plan | | |
| Deployment Target Ad | ninServer | | |
| Deployment Type Ap | lication | | |
| | * Application Name helloworld | | |
| | | | |
| Context Root of Web Modules | | | |
| Web Module | Context Root | | |
| helloworld.war | rest-sami-idprop | | |
| | | | |
| Distribution | | | |
| | Install and start application (servicing all requests) | | |
| | Install and start application in administration mode (servicing only administration requests) | | |
| | Unstall only. Do not start. | | |
| ≥ Other Options | | | |
| Application Source Accessibility | | | |
| | Ouse the defaults defined by the deployment's targets. Recommended selection. | | |
| | Copy this application onto every target. During deployment, the files will be copied automatically to the managed servers to which the application is targeted. | | |
| | Make the application accessible from the source location that it will be deployed on. Tou must ensure that each target can reach the location. | | |
| Deployment Plan Source Accessibility | | | |
| | Use the same accessibility as the application. | | |
| | Copy the deployment plan onto every target. During deployment, the free will be copied automatically to the managed servers to which the application is targeted. | | |
| | О маке и е образнители рап ассезове полі и е зод се посацил насти міше образно отг. той пісах етізате вна сабит са уста по посацил. | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Click "Next"

| Firefox Deploy Java EE Ap | plication: base_dom | iai + | | | | | @_ <mark>_</mark> |
|--|---|--------------------------------------|--|-------------------------------------|----|-------------------|-------------------------------------|
| 🗲 🛞 localhost:7001/em/faces/as/en | mas_deployment_tas | sk_flow/as/oc4j/deploy/deployC | onfig | | | ☆ マ C 🛛 😢 - Yahoo | ۶ 🗈 ד |
| ORACLE Enterprise Mar | DRACLE Enterprise Manager Fusion Middleware Control 12c | | | | | | Help 🔻 🧲 |
| base_domain () | | | | | | | |
| | | - | | | | | |
| Select Archive Select Target Application | Attributes Deployr | ment Settings | | | | | |
| Deploy Java EE Application : D | eployment Sett | tings | | | | | Back Step 4 of 4 Next Deploy Cancel |
| Archive Type Web | Module (WAR file) A | Application Name helloworld | | | | | |
| Deployment Plan Creat | te a new plan | Version Not versioned | | | | | |
| Deployment Target Admin | nServer | Context Root rest-saml-idprop | | | | | |
| Deployment Type Applie | cation De | eployment Mode Install and start a | pplication (servicing all requests) | | | | |
| Deployment Tasks | | | | | | | |
| The table below lists common tasks that | t you may wish to do b | perore deploying the application. | | | | | |
| Name | Go To Task | Description | | | | | |
| Configure Application Security | | Configure application policy mi | gration, credential migration and other securi | ity behavior. | | | |
| You can optionally save the deployment Save Deployment Plan | t plan to your local dis | k. You can redeploy this application | later using your saved deployment plan and | not have to edit the deployment pla | 1. | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Click "Deploy"

Click "Close"

3.11 Validate the REST service

Expand the "helloworld" node in the LHS and click on the helloworld (AdminServer) instance as shown in the screenshot below. This will open up the Application Home page in EM. Select "Application Deployment->Web Services" menu item on the RHS as shown in the below screenshot.

| Firefox / Domain_base_domain/A + | |
|---|--|
| 📀 🕲 localhost.7001/em/faces/as/deployment/deploymentHome?Adf-Page-Id=16⌖=%2FDomain_base_domain%2Fbase_domain%2FAdminServer%2Fhellow | rorld&type=j2ee_application |
| ORACLE Enterprise Manager Fusion Middleware Control 12c | Help + 🎎 weblagic + Log Out 📿 |
| 🔡 WebLogic Domain 💌 | |
| Change Center | Logged in as weblogic IP PMALAA AAP.oradev.oradicorp.com Page Refreshed Aug 3, 2013 11:14:50 PM PDT C Indek Ivane Module Ivane Module Variant Web Application Response and Load 0.0< |

| Firefox * 🗌 🗍 Web Services: / | Domain_base_domain/b + | | | | | | | - 6 | x |
|---|---|-------------------------------------|-----------------------|--|-------|-------------------|------------------------------|-------------|-----|
| 🗲 🛞 localhost:7001/em/faces/as, | /wsmmt/j2eeAppWebServicesSummary?target=%2FDo | main_base_domain%2Fbase_ | domain%2FAdminS | ierver%2Fhelloworld&type=j2ee_application | ☆ マ C | ♥! - Yahoo | م | A E | 3- |
| | lanager Fusion Middleware Control 12c | | | | | | Help 🗸 🛛 🔝 weblogic 🗸 🗌 | Log Out | Q |
| 📑 WebLogic Domain 👻 | | | | | | | | | |
| Target Navigation | 1 helloworld 3 | | | | | Logged in as webl | ogicl 🗓 PYAMUNA-LAP.oradev. | pradecorp.c | :om |
| View - | Application Deployment • 🚺 Start Up 🚺 Shut | Down | | | | Page Re | freshed Aug 3, 2013 11:15:11 | PM PDT | 5 |
| ✓ application Deployments ▷ Internal Applications ▷ Resource Adapters ▽ a helioworld | Web Services (Java EE) This page provides summary information for the Web : Summary | ervices in this application. It dis | plays Web service end | points as well as application-level metrics. | | | | | |
| helloworld (AdminSer V Dublogic Domain | s | erver Name AdminServer | | Number of RESTful Applications 1 | | Java EE Web Serv | rice Client Ports 0 | | |
| ✓ → base_domain AdminServer | W Web Servic | eb Services 0 e Endpoints 0 | | Number of RESTful Resources 1 Java EE Web Service Clients 0 | | | | | |
| Metadata Repositories | Web Service Details | | | | | | | | 1 |
| | Web Services Web Service Endpoints | RESTful Services | | | | | | | |
| | Module Name and RESTful Application Name | Res Nat | Resource Path | Invocation Count | | | Average Execution | Time (ms) | |
| | > AdminServer_/rest-saml-idprop helloworld | | | 0 | | | | 0 | |
| | | | | | | | | | |
| ۲ | | | | | | | | | |

| Firefox * | tion - Oracle Enterprise + | | | | | - 0 💌 |
|-------------------------------|---|--|--|---------------------|-----------------------|----------------|
| e localhost:7001/em/faces/as/ | /wsmmt/j2eeJaxRsAppSummary?mbeanObjectName=com.bea%3A | ApplicationRuntime%3Dhelloworld%2CLocation%3DAdminServer% | CName%3Dhelloworld%2CServerRu 🏠 🔻 🥙 🐼 🛪 Yahoo | | م | ♠ 🖸 • |
| | anager Fusion Middleware Control 12c | | | Help + | 👥 weblogic 🗸 | Log Out 🧕 |
| 🔡 WebLogic Domain 👻 | | | | | | |
| Target Navigation | Thelloworld (1) | | Logged in as | weblogicl 🗒 PYA | MUNA-LAP.orade | .oradecorp.com |
| View - | 🗎 Application Deployment 👻 🚺 Start Up 🛛 Shut Down | | Pag | e Refreshed Aug | 3, 2013 11:15:44 | З РМ РОТ 🖒 |
| V 🛅 Application Deployments | | | | | | |
| Internal Applications | Web Services > RESTful Application | | | | | |
| Resource Adapters | helloworld (RESTful Application) | | | | Test Ri | ESTful Service |
| ∀ | | | | | | |
| helloworld (AdminSer | Application Name helloworld | Number of Methods 3 | Average Execution Time (ms) 0 | | | |
| V Webcogc Domain | Pestfel Application Name belowerdd | Truncation Count 0 | WADE DOCUMENT NEROWONG | | | |
| AdminServer | Number of Resources 1 | Error Count 0 | | | | |
| Metadata Repositories | | | | | | |
| | RESTful Resources WSM Policies | | | | | |
| | Select an expression from the Contraint dropdown to view the corre | sponding effective policy references. For policy set flagged as "Not Valid", | click the link to view the validation error details. For security policy references, click the | ne violations count | link to view violatio | xn details. |
| | When policies are attached/detached, effective policy references ar | e recalculated. | | | Ch- | - |
| | Clobally Attached Bolicies | | | | 518 | us secure |
| | Ciobally Accacited Policies | | | | | too too |
| | Category/Policy Name | | Poicy Set | Status | lot | al violations |
| | in this yet | | | | | |
| | 1 | | | | | |
| | | | | | | |
| | Diractly Attached Bolicies | | | | | |
| | View • Attach/Detach | Override Policy Configuration | - Detach | | | |
| | Category/Policy Name | 1 V 7 V 1 | Effective | Status | Tot | al Violations |
| | | | | | | |
| | orade/multi_token_rest_service_policy | | True | Enabled | | 0 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

2013

| 🕲 Mozilla Firefox | | - 7 - |
|---|---------------|--------------|
| http://pyamuna-lapes/application.wad + | | |
| Pyamuna-lap.oradev.oraclecorp.com:7001/rest-saml-idprop/resources/application.wadl | A ⊽ C C Vahoo | ۶ 🏠 ר |
| This XML file does not appear to have any style information associated with it. The document tree is shown below. | | |
| <pre>- <as0:application></as0:application></pre> | | |
| | | |
| | | |
| | | |

4 Create REST client

4.1 Create a "rest-client" Web Project

Create a new project by clicking on "File->New->Project" as shown in the screenshot below.

| Oracle JDevelope | er 12c - rest-saml-id | lprop.jws : service.jpr | | | | | 9 X |
|-----------------------|-----------------------|---|--------------------------|--|-----------|------------|------------|
| <u>File Edit View</u> | Application Refa | tor <u>S</u> earch <u>N</u> avigate <u>B</u> uild <u>R</u> un | Tea <u>m</u> <u>T</u> oo | s Window Help | | | |
| New | • | Application | 2 | | Q. | Search | |
| 🗁 Open | Ctrl-O | Project | | | | | |
| Reopen | • | Java Class | | 2) Start Page (ja) HelloWorldIdPropSample.java (ja) web.xml (ja) web.xml (ja) web.xml (ja) web.xml (ja) | | Components | ×) (a) |
| Close | Ctrl-F4 | S RESTful Client and Proxy | | Co Find | | | |
| Clos <u>e</u> All | Ctrl+Shift-F4 | S RESTful Service | 2: - | <pre><crewsp:wsm-assembly xmlnsiorawsp="http://schemas.oracle.com/ws/2006/01/policy"> <cselipolicyset xmlonsicseli="http://schemas.oracle.com/ws/2006/01/policy"> </cselipolicyset> </cselipolicyset> </cselipolicyset> </cselipolicyset> </cselipolicyset> </cselipolicyset> </cselipolicyset> <td></td><td></td><td></td></crewsp:wsm-assembly></pre> | | | |
| 🔀 Delete Applicatio | on | From Gallery Ctrl-N | | <pre>applesTo="REST-REST-REST-REST-REST-REST-REST-REST-</pre> | | | |
| Save | Ctrl-S | | | <pre>xml:id="REST-RESOURCE_SERVICE_helloworld_"></pre> | | | |
| Save As | | e.java | | <pre><wsp:policyreference <="" pre="" ungestpolicyreference="" xmlns:wsp="http://www.w3.org/ns/ws-policy"></wsp:policyreference></pre> | | | |
| Save As HTML | | | | URL="oracle/multi token rest service policy" orawsp:status="enabled" orawsp:id="1"/> | | | |
| 🗊 Save All | | | | | | | |
| Rename | | | | | | No Compone | nts |
| Import | | | | | | | |
| Export | | | | | | | |
| Compare With | • | | | | | | |
| Replace With | • | | | | | | |
| Page Setup | | | | | | | |
| Print | Ctrl-P | | | | | | |
| Print Preview | | | | | | | |
| Exit | Alt-F4 | | × 10 | | | Properties | × 6 |
| | |] | 11 100 | | | O Sad | |
| | | | | | | (G, Filla | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | No Structure | | Autom Mintern 1 | 1:1 ~ | | |
| | | | | uon co internet de la constance | will make | | |
| | | | 6 | | - 1 M | | |
| | | | | | _ | | |
| | | | | | | | |
| | | | | Nalaauaa | | | |
| | | | | 140 1850/68 | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | () |

Select "Web Project" from the "New Gallery" as shown in the screenshot below.

| New Gallery | | 2 |
|--|---|----|
| Categories: | Items: Show All Descriptio | ms |
| Projects | Extension Project | 1 |
| XML | a Import Maven Projects | |
| Business Tier | Java Application Project | |
| Contexts and Dependency Injecti | Project from Existing Source | |
| ····Data Controls | Project from WAR File | |
| Security | Roject Template | - |
| ······ I OpLink/JPA ······Web Services | REST Web Service Project | |
| | SOAP Web Service Project | |
| ADF Desktop Integration | UML Project | |
| Extension Development | D View and Controller | |
| Database Tier Database Files Database Objects Offline Database Objects | Web Project Launches the Create Web Project wizard, with which you create a project that contains the directory structure of a Java EE web module. To enable this option, you must select an application, a project, or a file within a project in the Application Navigator. | |
| Help | OK Cancel | |

Click "OK".

2013

We will create "Web Project" since the client will act as a JEE Client.

| 0 c | reate Web Project - Ste | p1 of 6 | — |
|---|---|--|--|
| Loc | ation | | |
| ●−− −−−−−−−−−−−−−−−−−−−−−−−−−−−−−− | Location Web Application Page Flow Technology Tag Libraries Web Project Profile Finish | The location and the file name of the new project are initialized based on def current workspace. Change these values to create the project in another loc another name. Changing the location will also update the locations of any pro- directories under the project's directory. Project Name: rest-client Directory: D:\JDeveloper\mywork\rest-saml-idprop\rest-client | aults for the ration or with oject-related |
| | Help | < Back Next > Finish | Cancel |

Click "Next"

| 🔿 Create Web Project - Ste | p 2 of 6 | |
|----------------------------|---|--|
| Web Application | | |
| Location | A web application does not yet exist in this project. Select the version to create. | |
| Web Application | Web Application Version: | |
| Page Flow Technology | ○ S <u>e</u> rvlet 2.5/JSP 2.1 (Java EE 5) | |
| Tag Libraries | Servlet 3.0/JSP 2.2 (Java EE 6) | |
| Veb Project Profile | | |
| U Finish | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| Help | < <u>B</u> ack <u>N</u> ext > <u>F</u> inish Cancel | |

Click "Next"

Create Web Project - Step 3 of 6 Page Flow Technology Choose a page flow technology to add to the web project. None Page Flow Technolog Tag Libraries Web Project Profile Finish Help < < Back Next > Einish Cancel

Click "Next"

| 🔿 Create Web Project - Ste | p 4 of 6 |
|---|---|
| Tag Libraries | |
| Location Web Application Page Flow Technology Tag Libraries Web Project Profile Finish | Choose tag libraries to add to the Web project. <u>Available Libraries:</u> <u>ADF Data Visualization 1.1</u> ADF Data Visualizations Core 1.: ADF Dynamic Components 1.2 ADF Faces Components 11 ADF Faces Databinding 1.0 JSF Core 2.1 JSFL Format 1.2 JSTL Format 1.2 JSTL Format 1.2 JSTL Format 1.2 JSTL Permitted Taglibs 1.2 JSTL Script Free 1.2 JSTL SQL 1.2 JSTL SQL 1.2 JSTL SQL 1.2 Struts Bean (Backwards Compat Struts HTML (Backwards Compat |
| Help | < <u>B</u> ack <u>N</u> ext > <u>F</u> inish Cancel |

Click "Next"

| 🧿 Create Web Project - Ste | p 5 of 6 | × |
|-------------------------------------|---|----------------|
| Web Project Profile | | |
| U Location | Create a Web Project by specifying the Document Root of your web applic Context Root to be used by the application server. | cation and the |
| Web Application | Document Root: | |
| Page Flow Technology | D:\JDeveloper\mywork\rest-saml-idprop\rest-client\public_html | Browse |
| Tag Libraries | Java EE Web Application Name: | |
| 🧅 Web Project Profile | rest-saml-idprop-client | |
| Einish | Java EE Context Root: | |
| | rest-saml-idprop-client | |
| | Add Page | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| Help | < <u>B</u> ack <u>N</u> ext > <u>F</u> inish | Cancel |

Click "Next"

| 🔿 Create Web Project - Ste | p 6 of 6 |
|----------------------------|---|
| Finish | |
| Q Location | You have completed the Web Project wizard |
| Web Application | Click Finish to create the new Web project. |
| Page Flow Technology | |
| Tag Libraries | |
| Web Project Profile | |
| inish 🖉 | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| Help | < Back Next > Einish Cancel |

Click "Finish"

4.2 Create "HelloWorld Servlet"

Create a HTTPServlet which will act as the REST Client. You can create a Servlet by right-clicking on the project and selecting "New->HTTPServlet" from the context menu.

| 🧭 Oracle JDeveloper 12c - rest-saml-idprop.jws : rest-client.jpr | | - 0 💌 |
|---|---------------------------------|---------------------------------|
| <u>File Edit View Application Refactor Search Navigate Build Run Team</u> To | ols <u>W</u> indow <u>H</u> elp | |
| 🔮 - 😂 🗒 🧐 🔍 🔾 - 🔾 - 🏦 🏦 🕌 🕨 - 🌞 - | | Q- Search |
| Oracle Developer 12c - rest-samt-lidprop.jvs : rest-client.jpr Ele Exit Yew Application Refactor Serich Navigate Build Bun Team To Projectors rest-client.jpr rest-client.jpr Revert File Sov Classpath Show C | ok Window Hep | Corponents X C No Components |
| | No Issues | |
| Opened nodes (9); Saved files(3) | | ý, |

| 0 | Create HTTP Servlet - S | itep 1 of 4 |
|--------------|--|---|
| We | lcome | |
| • | Welcome | Welcome to the Create HTTP Servlet Wizard |
| - 0-0 | Servlet Information Servlet Mapping Servlet Parameters | This wizard will help you to create a new HTTP Servlet. |
| | Help | Skip this Page Next Time |

Click "Next"

| 🔿 Create HTTP Servlet - Ste | :p 2 of 4 | | × |
|---------------------------------------|--|-------------------------|--------|
| Enter servlet details | | | |
| Welcome | <u>C</u> lass: | HelloWorldServlet |] |
| Servlet Information | <u>P</u> ackage: | examples.wsm.helloworld | Browse |
| Servlet Mapping Servlet Parameters | Generate Content Type: Generate Header Comments Registration: Configuration file (web.xm Annotations Implement Methods: doGet()doDelete service() | HTML | |
| ▲ <u>H</u> elp | < <u>B</u> ack | Next > Einish | Cancel |

Click "Next"

| Create HTTP Servlet - Ste | ep 3 of 4 | |
|---|---|--|
| Enter servlet mapping | g. | |
| Welcome Servlet Information Servlet Mapping Servlet Parameters | Mapping Details Name: HelloWorldServlet URL Pattern: /helloworlddient | |
| Help | < <u>B</u> ack <u>N</u> ext > <u>F</u> inish Cancel | |

Click "Next"

👩 Create HTTP Servlet - Step 4 of 4 × Enter servlet parameters: *-Required Field Name* Type* Variable* Description Default Servlet Mapping Servlet Parameters New Remove Next > Cancel Help < Back Finish

Click "Finish"



4.3 Create REST Client Proxy

You can create a REST Client Proxy by right-clicking on the project and selecting "New->From Gallery" as shown below.

| File Edit Vew Application Editory Sarch Navigete Baid Dun Teng, Tools Window Help | Oracle JDeveloper 12c - rest-saml-idprop.jws : rest-client.jpr | | - đ <mark>- x</mark> |
|---|--|---|----------------------|
| Implemente Implemente <td>Eile Edit View Application Refactor Search Navigate Build Run Team Ic</td> <td>ools <u>W</u>indow <u>H</u>elp</td> <td></td> | Eile Edit View Application Refactor Search Navigate Build Run Team Ic | ools <u>W</u> indow <u>H</u> elp | |
| Applications Image: Starting in MedicandEdiregization is you in the second is the second in the | | | Q+(Search |
| We student deponent in the state of the | Applications × | 🕐 Start Page 🛛 💩 HelloWorldIdPropSample.java 👋 🖓 web.xml 🖄 🦉 wsm-assembly.xml 🖄 🚳 HelloWorldServlet.java 🗡 | |
| Project Compto CSS File. Edit Project Source Path HTTM Savida By End Project Files JSON File By Insort; Edite Project File Shoc Casspit Jnwsórigt File By End Project Files JSON File By End Pr | 🔁 rest-saml-idprop 👻 👻 | 🔍 Find 🔁 1 🖉 1 🗶 1 🖓 1 🖓 1 🖓 1 🖓 1 🖏 1 🖏 1 🖏 1 🐘 1 🐘 1 🖼 1 | |
| We should be a finite of the service of the servic | 」Projects | package examples.wsm.helloworld; | |
| No Structure 111 - 11 - 111 - | Convertion Convert of Scolets Convert of Scolets Convert of Scolets Convert of Scolets | <pre>Binport; Binport; Binport;</pre> | |
| Image: Contract to the second sec | No Structure | Source Hatory 4 Live Issues: HelbVordServiztjave - Issues ③ 0 金 1 ○ 0 ② ○ ○ ○ ○ ○ ○ ○ ○ ● ▲ Serialazable class 'HelbVordServizt' does not declare a static final serial/versionUID field of type long ● ④ Comment tags are instancy Bowram, Otherwork. ● ④ Comment tags are instancy Bowram, Otherwork, Otherwork. | 33 * →[] Q |

Select the "Web Services" category from the "New Gallery" dialog on the Left Hand side. This will show all the options related to Web Services on the Right hand side. Select "Restful Client and Proxy" from RHS to create a REST client as shown in the screenshot below.

| Q, | | |
|--------------------------------------|---|---|
| Categories: | | Items: Show All Description |
| Data Controls | ^ | Sava Web Service |
| Security | | Sava Web Service from WSDL |
| TopLink/JPA Web Services | | S TopLink DB Web Service Provider |
| Client Tier | | Service Client and Proxy |
| ADF Desktop Integration ADF Swing | | 🕞 UDDI Registry Connection |
| Extension Development | | S RESTful Service |
| Swing/AWT | | SRESTful Client and Proxy |
| Database Files | | Launches the Create RESTful Client and Proxy wizard, in which you generate Java classes that can be used to make a call to a remote web service. |
| Offline Database Objects | | URL Service Data Control |
| Web Tier | | Web Service Data Control (SOAP/REST) |
| JSF/Facelets | | WSDL Document |
| Servlets | | Connection |
| All Items | - | |
| | | |

Click "OK"

Oreate RESTful Proxy Client - Step 1 of 5 × Welcome Welcome to the Create RESTful Proxy Client Wizard. Welcome This wizard helps you to create a RESTful client proxy from a WADL. This wizard will also generate JAX-B model classes for any specified XML grammar definitions. Select WADL Customize Proxy Names Client Policy Configuration Click Next to continue. Finish Skip This Page Next Time Help < <u>B</u>ack **Einish** <u>N</u>ext > Cancel

Click "Next"

To create a RESTful Proxy Client – you will need the WADL of the REST service.

| 0 | Create RESTful Proxy Clie | ent - Step 2 | of 5 | | | | × |
|----|-----------------------------|--------------------------|--|---|---|------------------------------------|------------------------------------|
| Se | ect WADL | | | | | | |
| φ | Welcome | Select a W provide cu | ADL, or resource that will return a WADL for the OPT stomization files to control to generation of the mode | IONS method, with I element where ap | n which you want to gene oplicable along with the lo | rate the client cation of the g | proxy from, and enerated client |
| | Select WADL | proxy. | | | | | |
| ψ | Customize Proxy Names | URL: | http://localhost:7001/rest-saml-idprop/resources/a | pplication.wadl | | | Browse |
| 4 | Client Policy Configuration | | | | | Custom | ization Files |
| 9 | Finish | Pac <u>k</u> age: | examples.wsm.helloworld | | | | Browse |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| •€ |) > | | | | | | |
| | Help | | | < <u>B</u> ack | Next > | Einish | Cancel |

NOTE: Either you need to save the WADL of the service a priori or have the RESTful Service running in order to be able to provide the WADL url.

Click "Next"

| 0 | Create RESTful Proxy Clie | ent - Step 3 of 5 | |
|----------|-----------------------------|--|--|
| Cu | stomize Proxy Nar | nes | |
| Ŷ | Welcome | A class is generated for each root resource in the WADL, by default the user to override this. | the name of the class is derrived from the base URI, this panel allows |
| <u> </u> | Select WADL | Mapping Table | |
| - | Customize Proxy Nai | Base URI | Class Name 💌 |
| Ŷ | Client Policy Configuration | http://localhost:7001/rest-saml-idprop/resources/ | HelloWorldRestClient |
| 0 | Finish | | |
| •• | Help | | < Back Next > Einish Cancel |

By default JDeveloper generates a classname for the Proxy client. Provide a more user friendly name in this dialog as shown in the screenshot above.

Click "Next"

| Create RESTful Proxy Clie | ent - Step 4 of 5 | | | × |
|---|---|--|---|--|
| Client Policy Configu | ration | | | |
| Q Welcome | Configure OWSM policies fo | r the RESTful dient, if re | quired. | |
| Q Select WADL | Policy Store (deflocation): | sers\pyamuna.ORADE | V\AppData\Roaming\JDeveloper\system12.1.2.0.40.66. | 67\DefaultDomain\store\gmds |
| Customize Proxy Names | Show only the <u>c</u> ompatib | le dient policies for selec | tion. | |
| Client Policy Configured Confi | Security | | | |
| - Finish | Policies: | Q Search | Show Selected Policies | ✓ Show <u>D</u> escriptions |
| | protocol is HTTPS. If a HTTP-based client | i non-HTTPS transport pi | rotocol is used, the request is refused. This policy can be | applied to any |
| | oracle/http_saml2 | 0_token_bearer_ov | er_ssl_client_policy | |
| | This policy includes S The issuer name and restriction condition c transport protocol is u | AML Bearer V2.0 token subject name are provid an be specified. It also v ised, the request is refus | in the HTTP header. The SAML Bearer v2.0 token is autor ed either programmatically or declarative through policy. <i>i</i> erifies that the outbound transport protocol is HTTPS. If a sed. This policy can be attached to any Http-based client | natically created. View Audience non-HTTPS |
| | ✓ oracle/http_saml2 | 0_token_bearer_clie | ent_policy | |
| | This policy includes S The issuer name and restriction condition c | AML Bearer v2.0 token i subject name are provid an be specified. This pol | n the HTTP header. The SAML Bearer v2.0 token is auton ed either programmatically or declarative through policy. / icy can be attached to any Http-based client. | natically created. View Audience |
| | Override Properties | | | |
| Help | | | < <u>B</u> ack <u>N</u> ext > <u>F</u> | Einish Cancel |

Select the OWSM policy you want to use to secure the client and click "Next".

Create RESTful Proxy Client - Step 5 of 5 Finish Vuelcome Select WADL Customize Proxy Names Client Policy Configurativ Finish Eleb Kext > Enish Kext >

IMPORTANT: Although JDeveloper provides you a policy selection dialog to select the OWSM policy in the REST Client Proxy creation wizard – there is a bug in JDeveloper - due to which the Policy is not added to the Client Proxy code. You will need to manually add the following lines of code show below.

Click "Finish"

4.4 Secure the REST Client Proxy

| A LAR VIEW ADDIVIDUATION TREASED SEALSH PROVIDED AND A | un Source T | eam Tools | Window Help | | | | | | |
|---|-------------|---------------------------------|--|--|---|---|----------------------|--------------------------|--------|
| ·⊳∋;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;; | ⊳ - 🎍 | | | | | | | Q+(Search | |
| oplications | × . | 3 Start Page | 🔹 🐸 HelloWorldIdPropSample.java 🔹 | 🔁 web.xml 👋 🦉 wsm-asser | ibly.xml 👋 遇 HelloWorldServlet.java | × 🔠 HelloWorldRestClier | nt.java 🐣 👶 HelloWor | rldRestClientClient.java | |
| b] rest-saml-idprop | • • | Q. Find | <u>1</u> | 🥒 🦧 🛟 👼 🚳 | 🔁 i 🖾 i 🗋 i 🐘 i 🎥 i 🔛 | | | | - |
| Projects 🔍 🖓 • | 7-2- | | */ | | | | | | |
| rest-dent rest-dented rest-dentedtentedtenteltent rest-dentedtenteltente rest-dentedtenteltente rest-dentedtenteltente rest-dentedtenteltenteltente rest-dentedtenteltenteltente rest-dentedtentelt | | | <pre>private static void customir MacString, Objecto Pyco- properties.put/Abstracth new Polic) /** * Template method to allow * */ */ private static com.sum.jerser return com.sum.jersey.ap }</pre> | <pre>clientConfiguration(Cliv tries - co.getProperties to co.getProperties detFeature (folicyReterneoFeature (* cooling to override Client cooling to override Client .client.Client.create(c)</pre> | <pre>nctonfig oc) { (); ICY_FEATURE, racle/http_maml20_token_bear</pre> | <pre>rer_client_policy")) f cc) {</pre> |); | | |
| In Content Application Resources Recent Fles NoVordRestClent, Java - Structure | * * = | | /** * Create a new Client insta: * * public static com.sun.jersey ClientConfig cc = new De | api.client.Client creat; | Client() { | | | | |
| examples.vem.helevorld reports vem.helevorld reports vem.helevorld reports vem.helevorld reports vem.helevorld ve | | B | <pre>customizeClientConfigura return createClientInsta } public static HelloWorldRest return hello(createClien } multic static WorldWorldRest HelloWorldRest HelloWorldRest</pre> | <pre>cion(cc); cc(cc); client.Hello hello() { (), BASE_URI); client.Bello hello() { (), Context (); (); Context (); (); Context (); Context ()</pre> | n ianau ani alian Miant a | lione) f | | | 73:1 * |
| 🔄 🍕 hello(com.sun.jersey.api.client.Client, URI) : HelloWorldRestClient.F | ello | Source Histor | y +C | | | | | | |
| | | Build - Issues | | | | | | ٩ | × |
| | | Description | | Success! Build | completed with 0 errors, 0 | File warnings, 0 infos | Location | Project | |
| | | | | | | | | | |
| YC9 1199000 | | the second second second second | a bladla Manfall Land Trank survey blad a | | | | | | |

}

```
import com.sun.jersey.api.client.GenericType;
import com.sun.jersey.api.client.config.ClientConfig;
import com.sun.jersey.api.client.config.DefaultClientConfig;
import oracle.wsm.metadata.feature.AbstractPolicyFeature;
import oracle.wsm.metadata.feature.PolicyReferenceFeature;
import oracle.wsm.metadata.feature.PolicySetFeature;
import oracle.wsm.metadata.feature.PropertyFeature;
import oracle.wsm.security.util.SecurityConstants;
import weblogic.jaxrs.api.client.Client;
//...
private static void customizeClientConfiguration(ClientConfig cc) {
    // Client policy features configuration.
    Map<String, Object> properties = cc.getProperties();
    properties.put(AbstractPolicyFeature.ABSTRACT POLICY FEATURE,
            new PolicySetFeature(new
PolicyReferenceFeature("oracle/http_saml20_token_bearer_client_policy")));
  }
  public static com.sun.jersey.api.client.Client createClient() {
    ClientConfig cc = new DefaultClientConfig();
    customizeClientConfiguration(cc);
    return createClientInstance(cc);
```

Pay special attention to the import statements in the code snippet above.

import oracle.wsm.metadata.feature.AbstractPolicyFeature; import oracle.wsm.metadata.feature.PolicyReferenceFeature; import oracle.wsm.metadata.feature.PolicySetFeature; import oracle.wsm.metadata.feature.PropertyFeature; import oracle.wsm.security.util.SecurityConstants; import weblogic.jaxrs.api.client.Client;

Few other things to note:

• The oracle/ oracle/http_saml20_token_bearer_client_policy – creates a SAML bearer token from the Subject.

4.5 Modify the HelloWorldServlet to call the RESTful Client Proxy

package examples.wsm.helloworld;

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.*;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.*;

import com.sun.jersey.api.client.Client;

import examples.wsm.helloworld.HelloWorldRestClient.Hello;

@WebServlet(name = "HelloWorldServlet", urlPatterns = { "/helloworldclient" })

public class HelloWorldServlet extends HttpServlet {

//...

public void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {

response.setContentType(CONTENT_TYPE);

//...

Client client = HelloWorldRestClient.createClient();

HelloWorldRestClient.Hello hello = HelloWorldRestClient.hello(client);

String output = hello.user().getAsTextPlain(String.class);

out.println("Output from REST service:"+output);

out.println();

```
//...
```

out.close();

}

For purposes of brevity I have provided the code snippet for how to call the generated RESTful Proxy Client code above.

4.6 Modifying the REST Client Security Policy

One can modify the OWSM client policy used to secure the client by right-clicking on the RESTful Client Proxy class and selecting "Secure RESTful Client" from the context menu as shown below.

| Oracle JDeveloper 12c - rest-saml-idprop.jws : rest-client.jpr | | | | | | | | | ā <u>×</u> |
|---|----------|---------------|---------------------------------------|-----------------|--------------------|--------------------------|---------------------|-------------------------|----------------------|
| <u>Eile Edit View Application Refactor Search Navigate Build Run Team</u> | Tools | Window | Help | | | | | | |
| 💁 · 🗁 🗄 🗊 🕫 💿 · 🕥 - 🔒 🛔 🕍 🕌 🕨 · 🀲 | | | | | | | | | Q- Search |
| | | | | | 1.0 | | | | |
| Applications | |) Start Page | HelloWorldIdPropSample.java | C web.xml | u≱ wsm-assembly.xm | HelloWorldServiet.java | HelloWorldRestClier | nt.java 👋 📴 HelloWorldR | estClientClient.java |
| E rest-saml-idprop | • · · | ۲. Find | | 2 # # { | 3 💯 🖓 😋 | | | | |
| Projects | | | Map <string, object=""> pro</string,> | perties = cc.g | etProperties(); | TP A MI MUP | | | |
| - I rest-client | | | new Poli | cvSetFeature(n | ABSIRACI_FOLICI_F | eFeature("oracle/http s | am120 token bearer | client policy"))); | |
| Appication sources | | | | | | | | | |
| HelloWorldRestClientClient.java | | | } | | | | | | |
| examples.wsm.helloworld | | | | | | | | | |
| HelloWorldRestClient Saus | | | * Template method to allow | tooling to ov | erride Client fac | tory | | | |
| Relative Content | | | • | | | | | | |
| WEB-INF Exclude Project Content | | | */ | | | | | | |
| web.xml | | | private static com.sun.jers | ey.api.client. | Client createClie | entInstance(ClientConfig | 1 cc) { | | |
| E Service Deploy / | | | } | 17 | | | | | |
| E-m examples.wsm.hellow | <u> </u> | | | | | | | | |
| HelloWorldIdProps 🚵 Make Ctri+Shift-F9 | | = | /** | | | | | | |
| 🖻 🛅 Web Content 🔛 Rebuild Alt+Shift-F9 | - | | * Create a new Client inst * | ance | | | | | |
| Application Resources | | | */ | | | | | | |
| Recent Hes Poly | \$ | | public static com.sun.jerse | y.api.client.C | lient createClier | at() { | | | |
| HelloWorldRestClient.iava - Structure | - | 9 | ClientConfig cc = new D | efaultClientCo | nfig(); | | | | |
| Alt-Shift-F | | | customizeClientConfigur | ation(cc); | | | | | |
| Cigange imports Carvaido | | | } | | | | | | |
| E Imports | | | | | | | | | |
| E HelloWorldRestClient | | 8 | public static HelloWorldRes | tClient.Hello | hello() { | | | | |
| | | | 1 | IIC(), DADE_ORI | | | | | |
| Create Service Interface | | | · | | | | | | |
| Gestecici di interce Create Web Service | | 8 | public static HelloWorldRes | tClient.Hello | hello(com.sun.jer | sey.api.client.Client c | lient) { | | |
| | | | return hello(client, BA | SE_URI); | | | | | |
| | | HelloWorld | dRestClient -> createClient() | | | | | | 97:1 |
| BASE URI : URI | 30 | dice history | | | | | | | |
| Helo | В | ulia - issues | | | | | | | |
| 🗄 🔤 🌯 WebApplicationExceptionMessage | | 0 🕐 0 🖉 | J 0 22 • 🔎 | | | | | | Q |
| | - | Description | | | | | File | Location | Project • |
| | | | | Succ | ess! Build com | pleted with 0 errors. 0 | warnings, 0 infos | | |
| | | | | | | | | | |
| Source Design | 21 | Live Issues: | HelloWorldRestClient.iava Build × | | | | | | - |
| 111:40:38 DMI Successful compliation: 0 errors: 0 wernings | | | | | | | | | |
| (The second second compliation, or entrols, or warnings. | | | | | | | | | |

| Client Policy Configuration | × |
|--|------|
| Infigure OWSM policies for the web service client, if required. | |
| icy Store (def location): EV\AppData\Roaming\JDeveloper\system 12. 1. 2. 0. 40. 66. 67\DefaultDomain\store | gmds |
|] Show only the compatible client policies for selection. | |
| Security | |
| olicies: Q Search Show Selected Policies Show Descript | ions |
| oracle/ittp_basic_auti_over_ssi_client_policy | - |
| This policy includes username and password in the HTTP header for outbound client requests. The Username and password are provided either programmatically or declarative through policy. It also verifies that the outbound transport protocol is HTTPS. If a non-HTTPS transport protocol is used, the request is refused. This policy can be applied to any HTTP-based client | w |
| oracle/http_saml20_token_bearer_over_ssl_client_policy | |
| This policy includes SAML Bearer V2.0 token in the HTTP header. The SAML Bearer v2.0 token is automatically created. The issuer name and subject name are provided either programmatically or declarative through policy. Audience restriction condition can be specified. It also verifies that the outbound transport protocol is HTTPS. If a non-HTTPS transport protocol is used, the request is refused. This policy can be attached to any Http-based client | w |
| oracle/http_saml20_token_bearer_client_policy | |
| This policy includes SAML Bearer v2.0 token in the HTTP header. The SAML Bearer v2.0 token is vie automatically created. The issuer name and subject name are provided either programmatically or declarative through policy. Audience restriction condition can be specified. This policy can be attached to any Http-based client. | *) |
| Override Properties | |
| Help OK Cancel | |

You can use the above dialog to make a different policy selection if required. In this case I did not modify the policy since I had already selected the correct policy.

2013

NOTE: Any changes you do in terms of selecting a different policy via this dialog will be effective and the corresponding code in the RESTful Proxy Client will be modified.

4.7 Secure the HelloWorldServlet web application

Open web.xml for the "rest-client" Project in JDeveloper and add an entry for the HelloWorldServlet as shown below.

| | 🗧 📖 🛗 HelloV | VorldRestClient.java 👋 🛗 | HelloWorldRestClientClie | nt.java 👋 🛅 web.xml | 🐣 🔠 Servlet1.java 🐣 | 🗠 web.xml 👘 🐏 weblogic.xml | × 🔳 | | Components |
|---------------------------------|-----------------|-----------------------------|---------------------------------------|-------------------------|------------------------|-------------------------------|--------------|----------|-----------------|
| al-idprop | | | | | | | | 2 | Q* |
| 🔍 🗞 • 🖓 • 🐲 | * Application | | | | | | | | Web Application |
| ent | Sondate | Servlets | | | | | | ۲ (| |
| ation Sources | Eltore | | | | | | | | • |
| nples.wsm.helloworld | Facers | N | ame | | Туре | Servlet Class / J | SP File 💌 💮 | 6 | absolute-o |
| lelloWorldRestClientClient.java | Beconty | HelloWorldServlet | | Servlet Class | | examples.wsm.helloworld.Hello | WorldServlet | | • |
| es.wsm.helloworld | Pages | | | | | | | | context-pa |
| NondRestClient.java | References | | | | | | 2 | <u> </u> | 0 |
| Joe viet java | | | | | | | | e | data-source |
| | | General Servlet Serv | let Mappings Initializa | ation Parameters Sec. | irity Role References | | | | |
| | | | | | | | | | •• |
| | | Display Human | | | | | | | distributable |
| | * | Description: | | | | | | | • |
| | | | | | | | | | ejb-local-ref |
| | | | | | | | | | 0 |
| | | | | | | | | | etb-ref |
| | | Load Serviet on: | Application Start | | | | | | |
| | | | First Request | | | | | | V |
| | | Load Order: | Lower | numbers are loaded befo | re biober numbers. | | | | web-app - 3.0 - |
| | | | | | i e rigrier riano e ar | | | | O Find |
| | | Run As: | - | | | | | | |
| | \$ | Enabled | | | | | | | version *: |
| | × | ET an and the second second | | | | | | | description: |
| | | Async supported | | | | | | | dicolay-came |
| | | File Location: | | | | | | | unapha y marrie |
| | | Maximum File Size: | By A | har | | | | | metadata-con |
| | | | by | ue a | | | | | module-name: |
| | | Maximum Request Size | 11 By/ | tes | | | | | schemaLocation |
| eloWorldServiet | Question Farmer | Materia d | | | | | | | a vmloer |
| VIEL | overview source | rustory . | | | | | | U | |
| ccess | Build - Issues | | | | | | | × 📖 | • xsi: |
| | 😢 o 🔔 o 🕕 | 0 🖉 🕶 📌 | | | | | Q | | |
| | Description | | | | | File Local | tion Project | - | |
| | | | | | | | | | 1 |
| | | | Success! Buil | d completed wit | h 0 errors, 0 warn | ings, 0 infos | | | |
| | | | | | | | | | |
| | | | | | | | | | |

4.7.1 Select Authentication Mechanism

Select "HTTP Basic Authentication" mechanism.

| plications | × 🔲va 🖨 HelioWorldRestClient.java × 🖨 HelioWorldRes | tClientClient.java 🔹 🛅 web.xml 🐣 🐻 Servlet1. | java 🗧 🔛 web.xml 🔺 🔛 weblogic.xml 🔹 | | Components |
|---|---|--|-------------------------------------|------------------|-------------------|
| rest-saml-idprop | · · | | | ? | Q*(|
| rojects 💽 🕅 | Application Faculty | | | | Web Application |
| D rest-dient | Serviets | | | | 0 |
| Application Sources Examples.wsm.helloworld | Filters E Login Authentication | | | | absolute-o |
| HelloWorldRestClientClient.java | Security | | | | 0 |
| m examples.wsm.helloworld | Pages (Http Basic Authentication (REC 26) | 7) | | | context-pa |
| HelloWorldRestClient.java | References Realm: | ., | | | 0 |
| Web Content | Hitto Disert Authentication (REC 2) | 17) | | | data-source |
| 🖨 🫅 WEB-INF | Realm: | , | | | 0 |
| web.xml | Company Record Authorites For | | | | distributable |
| Application Sources | V Login Pages | 0. | | | • |
| ication Resources | Court open | | | | ejb-local-ref |
| Build Files | Error Page: | | | | • |
| Connections | Http Client Authentication (public k | ey certificate) | | | ejb-ref |
| Descriptors | | | | | • |
| | Security Roles | | | | |
| | Role | Name | Description | - | web-app - 3.0 - P |
| t Fies | webuser | | | | Q, Find |
| i i ies | a Security Constraints | | | | version *: |
| I - Structure | × = | | | | description: |
| | - Constraint | | | ~ | display-name: |
| eb-app - 3.0 | C. Constant | | | ~ | metadata-complete |
| servlet - HelloWorldServlet | Web Resource Collections Au | thorization User Data Communication | | | metadata complete |
| serviet-dass | Querieu Enurse Mistery 1 | • •• - | | | module-name: |
| | Did hours | | | | schemaLocation: |
| servlet-mapping - HelloWorldServlet | Build - Issues | | 0 | ~ | xmins: |
| Security-constraint i- O web-resource-collection - Success | | | ų | I market and the | • xsi: |
| auth-constraint | A Description | | He Location | Project | |
| > login-config | | | | | |
| security-role - webuser | Succes | s! Build completed with 0 errors, 0 | warnings, 0 infos | | |
| | | | | | |
| | | | | | |

4.7.2 Add Security Constraints

| Oracle JDeveloper 12c - rest-saml-idprop.jws : rest-client.jpr : D | :\JDeveloper\mywork\rest-saml-idprop\ | rest-client\public_html\WEB-IN | F\web.xml | | | | | | - 6 | × |
|---|---------------------------------------|--------------------------------|-------------------------------|-----------------------|------------------------------|----------------------|------------------|-------|---------------------|---------------------|
| <u>File Edit View Application Refactor Search Navigate</u> | Build Run Team Tools Window | <u>H</u> elp | | | | | | | | |
| 💽 - 🗁 🗒 🗐 🗐 🔍 🕤 - 🕥 - 🔒 🛔 🕯 | â 🚜 🕨 👙 | | | | | | | Q. | Search | |
| | | 1 | | | | | | | | |
| Applications | × =va 🖨 He | lloWorldRestClient.java 🛛 💩 H | elloWorldRestClientClient.jav | a 👋 🛗 web.xml 👋 | Servlet1.java | 🖞 web.xml 👘 🖞 web | ogic.xml × | | Components × | - |
| 🔁 rest-saml-idprop | • • | | | | | | | ? | Q.+ | |
| | a @ • 7 • 2 • | | Dala Mana | | | Description | | | Web Application | • |
| - Carest-client | â | wahupar | Kole Name | | | Description | | | 0 | 1 |
| Application Sources | | webuser | | | | | | _// | absolute-o | |
| HelloWorldRestClient.java | | Security Constraints | | | | | | + | ~ | |
| examples.wsm.helloworld | | | | | | | | _ | context-pa | |
| HelloWorldRestClient.java | | Constraint | | | | | > | ٤ - ا | 0 | |
| Web Content | | Web Resource Colle | ctions Authorization U | ser Data Communicatio | ion | | | _ | data-source | |
| B- D WEB-INF | | | | | | | | | ~ | |
| web.xml | | | | + × | Applies to: <a>All HTTP | Methods | | | distributable | |
| envice Annication Sources | | | Web Resource Name | - | Selected | HTTP Methods | | | 0 | |
| Application Resources | | Success | | | GET | | TRACE | | eib-local-ref | |
| Build Files | | | | | POS | T THEAD TO DELETE | | | | |
| Connections | | | | | All But Sr | ected HTTP Methods | | | etb-ref | |
| Descriptors | | | | | | | 779.405 | | 0 | |
| tubranes | | | | | GEI | | TRACE | | | â |
| | | | | | POS | ST [] HEAD [] DELETE | | | web-app - 3.0 - P × | - |
| | | | | | | | | | Q, Find | ? |
| Recent Files | 2 | | | | | IIDI Datterne | T ~ | | 0 vertice * | 2.0 |
| web.xml - Structure | × - | | | 1 | hellorestclient | one r ditterns | | | densistant | 5.0 |
| 92 🏔 | | | | | | | | | description: | _ |
| | | | | | | | | | display-name: | _ |
| 😑 🚸 servlet - HelloWorldServlet | | | | | | | | | metadata-complete: | <def< td=""></def<> |
| we servlet-name | | | | | | | | - | module-name: | |
| examples.wsm.helloworld.HelloWorldServlet | Overview So | rce History 4 | | | | | | | schemaLocation: | nttp: |
| ⊕ - � servlet-mapping - HelloWorldServlet | Build - Issues | | | | | | | × | • xmins: | in.co |
| | 🛛 0 🛆 0 🖉 | 1) 0 🖉 🕶 📌 | | | | | Q | | • xsi: | /XML |
| webresource-collection - Success | Description | | | | | File | Location Project | - | | |
| ⊕ 🎲 login-config | | | | | | | | | | |
| | | | Success! Build co | mpleted with | 0 errors, 0 warr | nings, 0 infos | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | C ¹ Live Issues | : web.xmi Buid × | | | | | | | 4() | |
| D:UDeveloper/mywork/rest-sami-idprop/rest-client/public_htm/WEB-INF/w | veb.xml | | | | | | | | | - ûn |

| Oracle JDeveloper 12c - rest-saml-idprop.jws : rest-client.jpr : D:\JDeveloper\myw | rk\rest-saml-idprop\rest-client\public_h | tml\WEB-INF\web.xml | | | | _ # <mark>*</mark> |
|---|---|--|---------------------------------|------------------------------|-----------|---|
| $\underline{\underline{F}} ile \underline{\underline{F}} dit \underline{\underline{V}} iew \underline{\underline{A}} pplication \underline{Refactor} \underline{\underline{S}} earch \underline{\underline{N}} avigate \underline{\underline{B}} uild \underline{\underline{R}} un \underline{Teap}$ | <u>T</u> ools <u>W</u> indow <u>H</u> elp | | | | | |
| 📑 - 🗁 🖩 🗊 🔍 💿 - 🕥 - 🚷 📥 🕍 🦝 🕨 - 🕯 | | | | | Q- | Search |
| Applications | va 🖶 HelloWorldRestClient.ia | va × 🖶 HelloWorldRestClientClient.iava | × 🖷 web.xml × 🛱 Servlet1.iava × | 🖻 web.xml 🔺 🖻 weblogic.xml 🔺 | | Components × □ |
| 🔁 rest-saml-idorop | • | | | | 0 | Q. |
| ⊒ Projects | | | | | | Web Application |
| B- D rest-dient | | Role Name | | Description | • | |
| Application Sources | webuser | | | | <i>l</i> | |
| wamples.wsm.helloworld HelloworldRestClientClient iava | Security Const | traints | | | 4 | absolute-o |
| E examples.wsm.heloworld | | | | | | context-pa |
| HelloWorldRestClient.java | 🖂 Constrain | t | | | × | |
| Hellowondserviet.java | Web R | esource Collections Authorization Use | Data Communication | | | data-source |
| 😑 - 🤭 WEB-INF | ind k | Authorize | | Security Role | - | 0 |
| web.xml | | v | webuser | | | distributable |
| Application Sources | * | | | | | 0 |
| - Application Resources | | | | | | ejb-local-ref |
| 🗑 - 🦳 Build Files | | | | | | 0 |
| B-Connections | | | | | | ejb-ref |
| Libraries | | | | | | O |
| | | | | | | 1 |
| | | | | | | web-app - 3.0 - P × |
| ± Recent Files | | | | | | Q Find |
| | 2 | | | | | version *: 3.0 |
| web.xml - Structure | - | | | | | description: |
| | | | | | | display-name: |
| web-app - 3.0 Government - HelloWorldServlet | | | | | | metadata-complete: <det< td=""></det<> |
| ⊕ · ⊗ servlet-name | | | | | - | module-name: |
| · · · · · · · · · · · · · · · · · · · | Overview Source History | | | | | schemaLocation: http://www.action.com/act |
| examples.wsm.neloworld.eeloworldserviet | Build - Issues | | | | × | • xmins: in.co |
| 😑 🚸 security-constraint | 😢 0 🛕 0 🕦 0 🖉 🕶 📌 | | | Q | | • xsi: /XML: |
| web-resource-collection - Success | Description | | | File Location | Project 💌 | |
| B - ♦ login-config | | | | | | |
| Generation - webuser | | Success! Build con | pleted with 0 errors, 0 warni | ngs, 0 infos | | |
| | | | | | | |
| | | | | | | |
| | Live Issues: web.xml Build × | | | | | (\longrightarrow) |
| D.UDeveloper/mywork/rest-sami-idprop/rest-client/public_htm/WEB-INF/web.xml | | | | | | l In 🖗 |

4.7.3 Final "web.xml" for the HelloWorldServlet

| xml version = '1.0' encoding = 'windows-1252'? |
|--|
| <web-app <="" td="" xmlns="http://java.sun.com/xml/ns/javaee" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"></web-app> |
| xsi:schemaLocation="http://java.sun.com/xml/ns/javaee http://java.sun.com/xml/ns/javaee/web-app_3_0.xsd" |
| version="3.0"> |
| <servlet></servlet> |
| <servlet-name>HelloWorldServlet</servlet-name> |
| <servlet-class>examples.wsm.helloworld.HelloWorldServlet</servlet-class> |
| |
| <servlet-mapping></servlet-mapping> |
| <servlet-name>HelloWorldServlet</servlet-name> |
| <url-pattern>/hellorestclient</url-pattern> |
| |
| <security-constraint></security-constraint> |
| <web-resource-collection></web-resource-collection> |
| <web-resource-name>Success</web-resource-name> |
| <url>pattern>/hellorestclient</url> |
| |
| <auth-constraint></auth-constraint> |
| <role-name>webuser</role-name> |
| |
| |
| <login-config></login-config> |
| <auth-method>BASIC</auth-method> |
| |
| <security-role></security-role> |
| <role-name>webuser</role-name> |
| |
| |

4.7.4 Create weblogic.xml deployment descriptor

Right click on the project and select "New->From Gallery".

| New Gallery | |
|---|--|
| ۹ | |
| Categories: | Items: Show All Descriptions |
| Deployment Descriptors Deployment Profiles Diagrams Java Maven Projects UML XML Contexts and Dependency Injecti Data Controls EJB Security TopLink/JPA Web Services Client Tier | Coherence Deployment Descriptor Coherence Deployment Descriptor Java EE Deployment Descriptor Java Web Start (JNLP) Files Java Web Start (JNLP) Files for ADF Swing Oracle Deployment Descriptor Taglib.tld (JSP Tag Library Descriptor) Taglib.tld (JSP Tag Library Descriptor) WebLogic Deployment Descriptor Launches the Create WebLogic Deployment Descriptor wizard, in which you select the specific WebLogic descriptor type and version you wish to create. |
| | |
| Help | OK Cancel |

Click "OK"

| 🗿 Create WebLogic Deplo | oyment Descriptor - Step 1 of 3 |
|-------------------------|---|
| Select Descriptor | |
| Select Descriptor | Select the deployment descriptor you wish to create: weblogic-cmp-rdbms-jar.xml weblogic-diagnostics.xml weblogic-ejb-jar.xml weblogic-jdbc.xml weblogic-jms.xml weblogic-rabms-jar.xml weblogic-webservices.xml weblogic-webservices.xml weblogic-wsee-clientHandlerChain.xml weblogic-wsee-databinding.xml weblogic-wsee-standaloneclient.xml weblogic-wsee-standaloneclient.xml weblogic-see-standaloneclient.xml weblogic-see-standaloneclient.xml weblogic-see-standaloneclient.xml weblogic-wsee-standaloneclient.xml weblogic-wsee-standaloneclient.xml weblogic-wsee-standaloneclient.xml weblogic-wsee-standaloneclient.xml weblogic-wsee-standaloneclient.xml weblogic-wsee-standaloneclient.xml weblogic-wsee-standaloneclient.xml |
| Help | Navigator. You may have only one weblogic.xml deployment descriptor in a project. < Back Next > Einish Cancel |

Click "Next"

| 👩 Create WebLogic Deploy | yment Descriptor - Step 2 of 3 |
|--|---|
| Select Version | 01010101010101010101010101010 |
| Select Descriptor Select Version Summary | Select the deployment descriptor version you wish to use: 10.3.3 12.1.1 10.3.6 10.3.4 10.3.1 Description: Version 12.1.1 of the WebLogic-specific web application descriptor is compatible with WebLogic 12.1.1 or higher |
| <u>H</u> elp | < <u>B</u> ack <u>N</u> ext > <u>F</u> inish Cancel |

Click "Next"

| 🔿 Create WebLogic Deploy | /ment Descriptor - Step 3 of 3 |
|--|---|
| Summary | |
| Select Descriptor Select Version Summary | You have completed creating your new deployment descriptor. When you click Finish, the wizard will create the following deployment descriptor: weblogic.xml 12.1.1 |
| Help | < Back Next > Einish Cancel |

Click "Finish"

2013

| Oracle JDeveloper 12c - rest-saml-idprop.jws : rest-client.jpr : D:\JDeveloper\mywork\re | t-saml-idpropt.rest-client\public_htm?WEB-INPLweblogic.xml | |
|--|---|--|
| Eile Edit View Application Refactor Search Navigate Build Run Team I | ols <u>Window</u> Help | |
| 🕐 🗢 🖬 🗊 🔍 💿 💿 👻 🚵 🚵 🖝 💊 🔹 | | Q+ (Search |
| Applications | va Detektiverktileerktiteerktileerktileerktileerktileerktileerktileerktileerkt | Components Components Components Components Component Component |
| Web Uniter Web Uniter Web Not Are Web Not Are Web Not Are webSp0c.mm Application Resources | Message Security Role Assignments ◆ Serviets Security Role Assignments ◆ Security Role Assignments ◆ Role Name | #text |
| Conceptors Conceptors Conceptors | Anyndrionus Ceferei externaly Priscipals ************************************ | principal-name - P × |
| al Recent Files 2 weblogc.wn-Structure • 1 2 @ @ weblogc.web-app ⊕ @ weblogc.web-app | Authentication Provider: | d Find |
| (i) ⊕ rok-name Li ⊕ rektoorename | Overlee, Saurai History 4 Data : Name Data : Name Description Pla Location Project Success! Build completed with 0 errors, 0 warnings, 0 infos Chartersuses webgec.mm Pud - | |
| D:UDeveloper/mywork/rest-sami-idprop/rest-client/rest-client.jpr | Inserting inside principal name Selected; principal-name | (J) |

4.7.5 weblogic.xml for the HelloWorldServlet

| xml version = '1.0' encoding = 'windows-1252'? |
|--|
| <weblogic-web-app <="" td="" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"></weblogic-web-app> |

xsi:schemaLocation="http://xmlns.oracle.com/weblogic/weblogic-web-app http://xmlns.oracle.com/weblogic-web-app/1.4/weblogic-web-app.xsd"

xmlns="http://xmlns.oracle.com/weblogic/weblogic-web-app">

<security-role-assignment>

<role-name>webuser</role-name>

<principal-name>weblogic</principal-name>

</security-role-assignment>

</weblogic-web-app>

4.8 Create Deployment Profile and WAR for the Client

| Oreate Deployment Profile | × |
|--|------------|
| Click OK to create your new deployment profile and immediately open it to see its config Profile <u>Type</u> : | juration. |
| WAR File | - |
| Deployment Profile <u>N</u> ame: | |
| helloworld-restclient | |
| Description: | |
| Creates a profile for deploying the Java EE web module (WAR) to an application server consists of the web components (JSPs and servlets) and the corresponding deployment | r. The WAR |
| Help | Cancel |

Click "OK"

| O Edit WAR Deployment Profile Properties | |
|---|---|
| Edit WAR Deployment Profile Properties Search General WAR Options File Groups Web Files Contributors Filters WEB-INF/classes Contributors Filters WEB-INF/lib Contributors Filters WEB-INF/lib Contributors Filters Web Files Web Files | General WAR File: est-saml-idprop\rest-client\deploy\helloworld-restclient.war Deployment Plan: |
| New Delete | OK Cancel |

Click "OK"

| Oracle JDeveloper 12c - rest-saml-idprop.jws : rest-client. | .jpr | | | | | | | | J X |
|--|---|---|---|---|--|------------------------|--------------|----------|---------------------------|
| Eile Edit View Application Refactor Search Navig | gate <u>B</u> uild <u>R</u> un Tea <u>m</u> <u>I</u> o | ools <u>W</u> indow <u>H</u> elp | | | | | | | |
| 🔮 - 🗁 🗒 🗊 🤎 🔍 - 🚱 - 🚷 | 🎄 않 🚜 🕞 - 👙 - | | | | | | Q. | (Search | |
| Applications | × - | ml 🛱 HelloWorldServlet.java | HelloWorldRestClient.java | HelloWorldRestClientClient.java | web.xml 🛛 🐻 Servie | et1.java 🔹 📇 web.xml 🗧 | weblogic.xml | weblogic | $\mathbf{T} = \mathbf{T}$ |
| 🖂 rest-sami-idorop | • • | Q*(Find | 10 | | | - | - | | |
| - Projects | a a • ∇ • 5 • | | | | | | | | |
| | 1 helloworld-restclient. websp New Deployment Profile | G MebServlet (name = G public class Hello private static public void in super.init public void do response.s PrintWrie out.printl out.printl client cil | "HelloworldServlet", urlPa MorldServlet extends Https final String CONTENT_TYPE it(ServletConfig config) th (config); Set(RttpServletRequest requ etContentType(CONTENT_TYPE) etContentType(CONTENT_TYPE) (~Chalx)~); (~CheckvtiteNtelloWorldS (~CheckvtiteNtelloWorldS (~CheckvtiteNtelloWorldSetClenc. | <pre>tterns = { "/belloworldclie rvlet { "ext/html; charset-windo rows ServletException { est, RttpServletResponse re ; ;; ervletc/title>"); createClient();</pre> | nt" }) wwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwww | tException, IOExcept | ion (| | |
| Connect Debug Compare With Perform Replace With Replace With Bestore from Local History Convert to Facelets rest-client pr-t Replace With Poject Properties | : - × | Relickorid String out out.printl out.printl out.printl out.cpintl out.close(| RestClient.Hello hello = He put = hello.user().getAsTex n("Output from REST service n(); n("The servlet has recei n(: | iloWorldRest(): tFlsin(String.class); :*+output); ved a GET. This is the repl | ient); y."); | | | | - |
| | | HelloWorldServlet - doGe | et(HttpServletRequest, HttpServletRes | ponse) | | | | 34: | :1/282 - |
| | | Source History 4 | | | | | | | > [|
| | | Build - Issues | | | | | | | × |
| No Structure | | 🔞 o 🔥 o 🕦 o 🥬 🔹 📌 | | | | | | Q | |
| | | Description | | | Fi | le Lo | cation | Project | |
| | | i @Live Issues: HelioWorldServlet.;; | Succi | ess! Build completed with | n 0 errors, 0 warning | gs, 0 infos | | | |
| (1:45:39 AMI Successful compilation: 0 errors, 0 warnings, | | | | | | | | | a) |
| | ~ | | | 1 | | | | | |

2013

Deploy helloworld-restclient Deployment Action Select a deployment action from the list below. Deploy to Application Server Deploy to WAR Deploy to WAR Creates a Web Archive (WAR) file for the platform defined in the Profile.

 Creates a Web Archive (WAR) file for the platform defined in the Profile.

 Help

 < Back</td>
 Next >

 Einish
 Cancel

Click "Next"

| 🔿 Deploy helloworld-resto | lient |
|---------------------------|--|
| Summary | |
| Deployment Action | Deployment <u>Summary:</u> = Details Itput file: D:\JDeveloper\mywork\rest-saml-idprop\rest-client\deploy\helloworld-restclient.war clude manifest: No mpressed: No ydule plication Name: helloworld-restclient ydule Type: war |
| Help | < <u>B</u> ack <u>N</u> ext > <u>F</u> inish Cancel |

Click "Finish"

ole.portal?_nfpb=true&_pageLa

5 Create users in weblogic using WLS Console

We will create some users for purposes of testing. These users will be created in embedded Ldap that ship with Weblogic. Log into WLS console as shown below.

| Societa 2021/console/cons | bbetrue8L_pageLabel=Home8ageL istalion Conside 12C Prone Log Out Preferences III Record Heb IIII IIII IIIIIIIIIIIIIIIIIIIIIIIII | General Information Common Administration Task Descriptions Read the documentation Advisation on My Oracle Support | ☆ マ C Scopic Wekome, weblogic Connected to: base_ |
|--|--|---|---|
| Configuration cating is maked. Future cating is maked. Future changes and restarts Configuration cating is maked. Future changes will automatically be activated as you modely, add or detert tems in the domain. Domain Structure base, domain @10-thing owneds to the configuration of t | Intration Console 12c I Home Log Out: Preferences Coll Record Hebp Q Q Information and Resources Information and Resources Configure applications Configure ap | General Information • Common Administration Task Descriptions • Read the documentation • Adula question on My Oracle Support | Welcome, weblogic Connected to: base_s |
| Change Center Vew changes and restarts Changes and restarts Configuration effong is enabled. Future changes of automatically be activated as you activated as you activate them is this domain. Domain Structure Hit Be-changements Description | | General Information Common Adversitation Task Descriptions Read the documentation • Adv. a question on My Oracle Support | Wekome, weblogic Connected to: base_ |
| View changes and restarts H Configuration editing is enabled. Future damages will automissibly be activated as you modify, add or delete items in this domain. Her Domain Structure Her bese, doman Her -Deployments Her | tome Summary of Security Realms in Summary of Security Realms me Page Information and Resources Configure explositions Configure explositions Configure explositions Configure explositions Configure explositions Configure explositions Securit Task Status Set your consider performents | General Information Common Administration Task Descriptions Read the documentation Adv. a question on My Oracle Support | |
| Configuration editing is enabled. Future dhanges will automatically be activated as you modify, add or delete items in this domain. — Domain Structure base, domain thit -Environment | me Page Information and Resources Information and Resources Configure applications Configure applications Configure of main Cluster Recent Task Statua Set your conside preferences | General Information Common Administration Task Descriptions Read the documentation Adds a question on My Oracle Support | |
| changes will automatically be activated as you modify, add or delete items in this domain. | Information and Resources elphil Tools Configure applications Configure a Dynamic Cluster Resent Taki Status Set your console preferences | General Information Common Adversitation Task Descriptions Read the documentation Advection My Oracle Support | |
| Domain Structure He base_domain (B)=Environment —Deployments | elpful Tools Configure griduite' for FAC Data Source Configure of vidue's for FAC Data Source Configure of Autore Recent Tata's Data Set your console preferences | General Information Common Administration Task Descriptions Read the documentation Ads a question on My Oracle Support | |
| base_domain IB-Environment Deployments | Configure explositions Configure cristiant for RAC Data Source Configure a Dynamic Cluster Recent Task Status Set your conside preferences | Common Administration Task Descriptions Read the documentation Ask a question on My Oracle Support | |
| Environment Deployments | Configure GridLink for ARC Data Source Configure a Dynamic Cluster Recent Task Status Set your console preferences | Read the documentation Ask a question on My Oracle Support | |
| Deployments | Configure a Dynamic Cluster Recent Task Status Set your console preferences | Ask a question on My Oracle Support | |
| D. Services | Recent Task Status Set your console preferences | | |
| Security Realms | Set your console preferences | | |
| III-Interoperability . | | | |
| Diagnostics | Oracle Enterprise Manager | | |
| | Domain Configurations | | |
| De | omain | Services | Interoperability |
| | Domain | Messaging | WTC Servers |
| | | JMS Servers | Jolt Connection Pools |
| En | nvironment | Store-and-Forward Agents | |
| How do L | Servers | JMS Modules | Diagnostics |
| Search the configuration | Clusters | Path Services | Log Files |
| Use the Change Center | Server Templates | Bridges | Diagnostic Modules |
| Record WLST Scripts | Migratable Targets | Data Sources | Built-in Diagnostic Modules |
| Change Console preferences | Coherence Clusters | Persistent Stores | Diagnostic Images |
| Manage Console extensions | Machines | XML Registries | Request Performance |
| Monitor servers | Virtual Hosts | XML Entity Caches | Archives |
| | Work Managers | Foreign JNDI Providers | Context |
| System Status 🗉 🔒 | Startup And Shutdown Classes | Work Contexts | SNMP |
| Health of Running Servers | | JCOM | |
| Failed (0) Yo | our Deployed Resources | Mail Sessions | Charts and Graphs |
| Critical (0) | Deployments | FileT3 | Monitoring Dashboard |
| Overloaded (0) | | • JTA | |
| Warning (0) Yo | our Application's Security Settings | OSGi Frameworks | |
| OK (1) | Security Realms | | |
| | • | | |
| | | | |

Click on "Security Realms" on the LHS, this will open the Security Realms page on the RHS. By default Weblogic ships with a single realm called "myrealm"

| Firefox Summary of Security Rea | alms - base_do + | |
|---|---|---|
| Console/console.port | tal?_nfpb=true&_pageLabel=SecurityRealmRealmTablePage | ☆ マ C 🛃 - Google 🔎 🏠 🖬 - |
| | Administration Console 12c | Q |
| Change Center | 🔒 Home Log Out Preferences 🔤 Record Help | Welcome, weblogic Connected to: base_domain |
| View changes and restarts | Home >Summary of Security Realms >myrealm >Summary of Security Realms | |
| Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain. | Summary of Security Realms | |
| Domain Structure | A security realm is a container for the mechanisms-including users, groups, security roles, security polici set as the default (active) realm. | es, and security providersthat are used to protect WebLogic resources. You can have multiple security realms in a WebLogic Server domain, but only one can be |
| base_domain | This Security Realms page lists each security realm that has been configured in this WebLogic Server dor | ain. Click the name of the realm to explore and configure that realm. |
| -Services | Customize this table | |
| le -Interoperability | Realms (Filtered - More Columns Exist) | |
| Er-Diagnosucs | New Delete | Showing 1 to 1 of 1 Previous Next |
| | 🔲 Name 🌣 | Default Realm |
| | myrealm | true |
| | New Delete | Showing 1 to 1 of 1 Previous Next |
| How do I 🗉 | | |
| Configure new security realms | | |
| Delete security realms Change the default requirity realm | | |
| Change the dentities accurity realm | | |
| System Status 😑 | | |
| Health of Running Servers | | |
| Failed (0) | | |
| Overloaded (0) | | |
| Warning (0) | | |
| OK (1) | | |
| WebLogic Server Version: 12.1.2.0.0 Copyright © 1996,2013, Oracle and/or its affiliates. Al Oracle is a registered trademark of Oracle Corporatio | Il rights reserved. on and/or its stillates. Other names may be trademarks of their respective owners. | |
| | | |

Click on "myrealm" in the above page. Click on the "Users and Groups" tab as shown below. This will list all the users/groups associated with that realm.

| Firefox • Settings for myrealm - ba | ase_domain - W + | | |
|---|--|--|---|
| (Iocalhost:7001/console/console.porta | al?_nfpb=true&_pageLabel=RealmUserManagementTabPage&han | dle=com.bea.console.handles.SecurityMBeanHandle("Security%3AName%3Dmyrealm%3Bweblo 🏫 🛡 😋 🚷 🔹 G | ioogle 🔎 🎓 🖸 🗸 |
| | dministration Console 12c | | Q |
| Change Center | 🔒 Home Log Out Preferences 🔤 Record Help | Q. | Welcome, weblogic Connected to: base_domain |
| View changes and restarts | Home >Summary of Security Realms >myrealm >Summary of Security | Realms >myrealm >Users and Groups | |
| Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain. | Settings for numeration Configuration Users and Groups Roles and Policies Cred | ential Mappings Providers Migration | |
| Domain Structure | Users Groups | | |
| base_domain Environment Deployments B-Services | This page displays information about each user that has been con | fgured in this security realm. | |
| -Security Realms | Customize this table | | |
| Diagnostics | Users | | |
| | New Delete | | Showing 1 to 2 of 2 Previous Next |
| | 🗖 Name 🗇 | Description | Provider |
| | OracleSystemUser | Oracle application software system user. | DefaultAuthenticator |
| | weblogic | This user is the default administrator. | DefaultAuthenticator |
| How do L | New Delete | | Showing 1 to 2 of 2 Previous Next |
| Manage users and groups | | | |
| Create users Madificures | | | |
| Delete users | | | |
| | | | |
| System Status | | | |
| Health of Running Servers | | | |
| Failed (0) Oritical (0) Overloaded (0) Warning (0) OK (1) | | | |
| WebLogic Server Version: 12.1.2.0.0 Copyright © 1996,2013, Oracle and/or its affiliates. All | i rights reserved. | | |
| Oracle is a registered trademark of Oracle Corporation | n and/or its attiliates. Other names may be trademarks of their respective own | | |

Click "New" to create a new user in the above page.

Create a user called "testuser". Provide the password for "testuser" as shown below.

| Firefox Create a New User - base | domain - WLS + | | - 0 - |
|---|--|---|---|
| Console/console.port | al?SecurityUsersCreateUserPortletreturnTo=RealmUserN | /lanagementTabPage&SecurityRealmRealmUserManagementUsersPortlethandle=com.bea.console.handles.S 🏠 🗢 C 🛛 🚷 🔹 | Soogle 🔎 🎓 🖸 🕶 |
| | dministration Console 12c | | Ď |
| Change Center | 👔 Home Log Out Preferences 🔤 Record Help | Q | Welcome, weblogic Connected to: base_domain |
| View changes and restarts | Home >Summary of Security Realms >myrealm >Summar | y of Security Realms >myrealm >Users and Groups | |
| Configuration editing is enabled. Future changes will automatically be activated as you | Create a New User | | |
| modify, add or delete items in this domain. | OK Cancel | | |
| Domain Structure | User Properties | | |
| base_domain | The following properties will be used to identify your n | tew User. | |
| Deployments | * Indicates required fields | | |
| Security Realms | What would you like to name your new User? | | |
| | * Name: | testuser | |
| | How would you like to describe the new User? | | |
| | Description | | |
| | | test user | |
| How do I | Please choose a provider for the user. | | |
| Create users | Provider: | DefaultAuthenticator - | |
| Modify users | The password is associated with the login name for the | new User. | |
| Delete users Create groups | * Password | | |
| Manage users and groups | rassword. | ******* | |
| Curture Christer | * Confirm Password: | ***** | |
| Health of Running Servers | OK Cancel | | |
| Failed (0) | | | |
| Critical (0) | | | |
| Overloaded (0) Warning (0) | | | |
| OK (1) | | | |
| WebLogic Server Version: 12.1.2.0.0 Copyright © 1996,2013, Oracle and/or its affiliates. Al Oracle is a registered trademark of Oracle Corporatio | l rights reserved. n and/or its affiliates. Other names may be trademarks of their re | spective owners. | |

Click "OK" to complete creation of the new user "testuser"

| Firefox • Settings for myrealm - ba | ase_domain - W + | | | |
|---|---|--|----------------------|-----------------------------|
| 🗲 🛞 localhost:7001/console/console.porta | tal?_nfpb=true&_pageLabel=RealmUserManagementUserTabPage | | ⊤ C Soogle | 오 俞 🖸 🗸 |
| | Administration Console 12c | | | õ |
| Change Center | 😰 Home Log Out Preferences 🔤 Record Help | Q | Welcome, weblogie | Connected to: base_domain |
| View changes and restarts | Home >Summary of Security Realms >myrealm >Summary of Security | Realms >myrealm >Users and Groups | | |
| Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain. | Messages | | | |
| Domain Structure | Settings for myrealm | | | |
| base domain | Configuration Users and Groups Roles and Policies Cre | dential Mappings Providers Migration | | |
| Environment | Users Groups | | | |
| E Services | | | | |
| Security Realms | This page displays information about each user that has been co | figured in this security realm. | | |
| Diagnostics | Customize this table | | | |
| | P Customize chis table | | | |
| | Users | | | |
| | New Delete | 1 | Showing | 1 to 3 of 3 Previous Next |
| | 🔲 Name 🌣 | Description | Provider | |
| How do L | CracleSystemUser | Oracle application software system user. | DefaultAuthenticator | |
| Manage users and groups | E testuser | test user | DefaultAuthenticator | |
| Create users Modify users | weblogic | This user is the default administrator. | DefaultAuthenticator | |
| Delete users | New Delete | | Showing | 1 to 3 of 3 Previous Next |
| | | | | |
| System Status | | | | |
| Health of Running Servers | | | | |
| Failed (0) | | | | |
| Overloaded (0) | | | | |
| Warning (0) | | | | |
| OK (1) | | | | |
| WebLogic Server Version: 12.1.2.0.0 Copyright © 1996.2013. Oracle and/or its affiliates. All | l rights reserved. | | | |
| Oracle is a registered trademark of Oracle Corporation | on and/or its affiliates. Other names may be trademarks of their respective own | ers. | | |
| | | | | |
| | | | | |

If user creation is successful – then testuser will be listed along with the prebuilt users that ship with Weblogic as shown in the screenshot above.

5.1 Mapping newly created "testuser" in weblogic.xml

| Oracle JDeveloper 12c - rest-saml-idprop.jws : rest-client.jpr : D:\JDeveloper\mywork\res | t-saml-idprop\rest | -client\public_html\WEB-INF\weblogic.xml | | | - 0 - |
|---|---|---|-------------------------------------|------------------|-----------------------------------|
| | ools <u>W</u> indow <u>H</u> | lelp | | | |
| S - S - S - S - S - S - S - S - S - S - | | | | Q | Search |
| Applications × | va 🔠 HelloV | VorldRestClientClient.java 👋 📬 web.xml 👋 🏭 Servlet1.java 💉 📬 web.xml | 🔹 📇 weblogic.xml 🔺 🖷 weblogic.xm/ 🐣 | | Components × . |
| - Projects | | | | | VAR |
| Carl Go Content C | Application Coherence Container Directories JSP | Security Run-As Role Assignments Role Name | Principal | + × | #cdata-se |
| HellWorldRestClent, Java | Libraries References Message | | | + × | #comment |
| WEBJWF Web.xml web(spic.xm/ | Security Servlets | Security Role Assignments | ale Marco | + × | A #text |
| 🗄 🔲 service | Session | Ki webuser | ole Name | | |
| Application Kesources Point (Fes Point Connectors | Asynchronus | Defined externally Principals reblogic testuser | | + X | principal-name - P × |
| Recent Files | | Subtraction results and the subtraction of the sub | Q | | id: |
| Image: Security-role-assignment Image: Order-name Image: Order-name | Overview Source | History 4 | | →] [↓] | - principal runne. <u>Prevoge</u> |
| | Build - Issues | 4 <u></u> | | × . | 1 |
| | 🙁 0 🔔 0 🕕 | a 🖉 🕶 📌 | Q | Destant | |
| | Description | Success! Build completed with 0 | errors, 0 warnings, 0 infos | Project V | 4 |
| D:UDeveloper/mywork/rest-sami-idprop/rest-client/public_htm/WEB-INF/weblogic.xml | | | | | |

NOTE: Here I have mapped the role to individual Ldap users. It is better to map it to an Ldap Group.

6 Deploy the client application to Weblogic using EM

| Firefox * 🔄 Deploy Java EE Application: base, do × 🔒 OWSM Development > Overview 🛛 × + | |
|--|--|
| 🔄 🛞 localhost 7001/em/faces/as/emss_deployment_task_flow/as/oc6j/deploy/step1?targets%2FDomain_base_domain%2Fbase_ | P ⋒ 🖸 - |
| ORACLE Enterprise Manager Fusion Middleware Control 12c | Help 🔻 👱 |
| base_domain @ Select Archive Select Tarpet Application Attributes Deployment Settings Deploy Java EE Application or the exploded directory. Optionally you can specify a deployment plan. | Back Step 1 of 4 Next Cancel |
| Archive or Exploded Directory Joine EX archive, web Hoodales (NAR Rise), EXB Modules, EXB Modules (RAR Rise), Coherence Archives (GAR Rise), XBBC Modules, JMS Modules, and Ibrary Rises (Lar Rise) can be deployed. You can also deploy an exploded archive that is present on the server where Enterprise Manager is running. Archive to complete directory is on the server where Enterprise Manager is running. Archive or exploded directory is on the server where Enterprise Manager is running. Rowse Browse Brow | ✓ Information Use this age to deploy Java EE age to deploy Java EE deviations of the Crack a Cracks Areadata Savares (MSG) or that take advantage of the Crack Application Development Framework (Oracle ADP). If your application is sOA composite, use the SOA Composite deployment witard. |
| Deployment Plan The deployment plan is the deployment settings for an application. You can use a previously saved deployment plan for this application. Later in the deployment process, you can optionally edit the deployment plan and save it for a future deployment of this application. Later in the deployment plan is not applicable when you deploy a library. © Create anew deployment plan when deployment configuration is done. © Deployment plan is on the machine where this Web browser is running. © Deployment plan is on the server where Enterprise Manager is running. © Deployment plan is on the server where Enterprise Manager is running. © Deployment plan is on the server where Enterprise Manager is running. | If You raphcaton is not a SOA compatie of the on te sair an MPG repository or APE connectors, then you can deploy your application using this ward or the Oracle Webkogic Server Administration Console. |
| Deployment Type The provided detectory can be deployed as a regular application or a library. Application libraries are deployments that are available for other deployments to share. Libraries should be available on all of the targets running their referencing applications. The deployment type option will be set as library automatically when you deploy a library file (Jar file). B) Deploy this archive or exploded directory as an application O O Deploy this archive or exploded directory as a library | |

Click "Next"



Click "Next"

2013

| Firefox • Deploy Java EE | Application: base_do × 🔂 OWSM Development > Overview 🛛 × 🕂 | | - - - |
|--------------------------------------|---|------------------|---------------------------|
| 🗲 🛞 localhost:7001/em/faces/as | emas_deployment_task_flow/as/oc4j/deploy/deployAppAttributes?Adf-Window-Id=w0&Adf-Page-Id=4 | ☆ マ C 0! - Yahoo | ዖ 🏠 🖾 🕇 |
| | anager Fusion Middleware Control 12c | | Help 🔻 📿 |
| base_domain 🔋 | | | |
| Calast Asshing Calast Tassat Applie | Line Attributer Deployment Celline | | |
| Deploy Java EE Application : | Application Attributes | Badk Step | 3 of 4 Next Deploy Cancel |
| Archive Type W | eb Module (WAR file) | | |
| Deployment Plan Cr | eate a new plan | | |
| Deployment Target Ad | minServer | | |
| Deployment Type Ap | pication | | |
| | * Application Name helloworld-restdient | | |
| Context Root of Web Modules | | | |
| Web Module | Context Root | | |
| helloworld-restdient.war | rest-saml-idprop-dient | | |
| | | | |
| Distribution | | | |
| | Bit half and data spokolskon (surviving all requests) □ Install and data spokolskon in administration mode (serviving only administration requests) □ Install only. Do not start. | | |
| ≥ Other Options | | | |
| Application Source Accessibility | , | | |
| | Ouse the defaults defined by the deployment's targets. Recommended selection. | | |
| | 🗇 Copy this application onto every target. During deployment, the files will be copied automatically to the managed servers to which the application is targeted. | | |
| | 🔘 Make the application accessible from the source location that it will be deployed on. You must ensure that each target can reach the location. | | |
| Denloyment Plan Source Accessibility | | | |
| Deproymenter fait 3000 CE Accessione | Use the same accessibility as the apolication. | | |
| | © Cooy the deployment plan onto every target. During deployment, the files will be cooled automatically to the managed servers to which the application is targeted. | | |
| | Make the deployment plan accessible from the source location that it will be deployed on. You must ensure that each target can reach the location. | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Click "Next"

| Firefox * Deploy Java EE Application: base_do × 📑 OWSM Development > O | erview × + | | - 0 - 0 |
|--|---|-------------------------------|-------------------------------------|
| 🗧 🕙 localhost:7001/em/faces/as/emas_deployment_task_flow/as/oc4j/deploy/deployCom | g | ∱ ⊽ C [*] Ø! ~ Yahoo | ዖ 🏫 🖸 |
| DRACLE Enterprise Manager Fusion Middleware Control 12c | | | Help 🔻 🥥 |
| base_domain 🕡 | | | |
| | | | |
| Select Archive Select Larget Application Attributes Deployment Settings | | | Back Step 4 of 4 Next Deploy Cancel |
| Archive Tune Web Module (WAD file) Application Name bellowerld-certifient | | | |
| Deployment Plan Create a new plan Version Not versioned | | | |
| Deployment Target AdminServer Context Root rest-saml-idprop-die | t | | |
| Deployment Type Application Deployment Mode Install and start appl | tation (servicing all requests) | | |
| Deployment Tasks | | | |
| The table below lists common tasks that you may wish to do before deploying the application. | | | |
| Name Go To Task Description | | | |
| Configure Application Security / Configure application policy migra | ion, credential migration and other security behavior. | | |
| Save Deployment Plan | r dang you burcu acpoyment plan and not have to call the acpoyment plan | | |
| Save Deployment Plan | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Click "Deploy"

| Firefox C Deploy Java EE Application: base_do × 🛱 OWSM Development > Overview × + | |
|---|-------------------------------------|
| 💽 🛞 localhost.7001/em/face/ss/emas_deployment_task_flow/as/oct/jdeploy/deploy/config | ዖ 🏫 🖸 🗸 |
| ORACLE Enterprise Manager Fusion Middleware Control 12c | Help 🔻 📿 |
| Decidence Enterprise Manuaged Fundamentation (and the second metal data) Decidence Deploy lave E Application 18th Data Deployment Sectings Deploy lave E Application 18th Data Deployment Sectings Performent Sectings Deploy lave E Application 18th Data Deployment Sectings Performent Sectings Deployment Mine Case and priority Compare Application Network/restdent* has been successfully deployed. Deployment Mine Case and priority Compare Application Network/restdent* has been successfully deployed. Deployment Mine Case Application Network/restdent* Instrument Secting* Deployment Network/restdent* and the section Network/restdent*, use the Optick With Deployment Network/restdent. Deployment Mine The deplotection Network/restdent* Instrument Secting* Deployment Mine The Application Network/restdent* Sec Deployment Mine The Application Network/restdent* Sec Deployment Mine The Application Network restdent* | Back Step 4 of 4 Next Deploy Cancel |
| | |

Click "Close"

6.1 Negative Testing

For the SAML token to work we need to set up the keystore. This is required as the SAML token is signed. Since we have not set up the keystore – testing will fail.

2013

| 🗢 🖉 http://iocalhost?001/rest-saml-idprop-client/heliorestclient | → → ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ | |
|--|---|----------------------|
| O Medifier / | | |
| | | |
| ravorites 🙀 🖉 web slice Gallery 👻 expression | | |
| ror 500Internal Server Error | 🟠 🔻 🖾 👻 🚍 🖶 Page 🕶 Safety | 🕶 T <u>o</u> ols 🕶 🔞 |
| | | |
| ror 500Internal Server Error | | |
| n.sun.jersey.api.client.ClientHandlerException: oracle.wsm.common.sdk.WSMException: WSM-00237 ; KSS keystore with URI kss://owsm/keystore can not be lo at oracle.wsm.acent.handler.iaxrs.EESTClientFliter.handleRESTClientFliter.java:1760 | paded due to java.security.PrivilegedActionException. | |
| at oracle.j2ee.ws.client.jaxrs.TenantClientFilter.handle (TenantClientFilter.java:64) | | |
| at com.sun.jersey.api.client.Client.handle(Client.java:648) | | |
| at com.sun.jersey.api.client.WebResource.handle(WebResource.java/s80) | | |
| at com.sun.jersey.apj.client.webkesource.accesss/200 (webkesource_java:/4) | | |
| at com.sum.jerzey.apricizenciweksesurezesurizer.methodyeksesurize.java.org/ | | |
| at examples.wsm.helloworld.HelloWorldServlet.doGet(HelloWorldServlet.java:31) | | |
| at javax.servlet.http.HttpServlet.service(HttpServlet.java:731) | | |
| at javax.servlet.http.HttpServlet.service(HttpServlet.java:844) | | |
| at weblogic.servlet.internal.StubSecurityHelper\$ServletServiceAction.run(StubSecurityHelper.java;280) | | |
| at weblogic.servlet.internal.StubSecurityHelper\$ServletServiceAction.run(StubSecurityHelper.java:254) | | |
| at weblogic.servict.internal.stubsecuritymelper.invokeservict(Stubsecuritymelper.java:136) | | |
| at weblogic.servlet.internal.servletStubimp.execute(ServletStubimp.java:341) | | |
| at weblogic.servlet.internal.idifilter.durilder(lalifilter.jävä:2) at usblogic servlet internal Filtar/Daintani doFiltar/Ethar/Daintani iava-70) | | |
| at oracle security ins.ee.http.inshefilteril.run(inshefilteri.ava:137) | | |
| at java.security.AccessController.doPrivileged(Native Method) | | |
| at oracle.security.jps.util.JpsSubject.doAsFrivileged(JpsSubject.java:315) | | |
| at oracle.security.jps.ee.util.JpsPlatformUtil.runJaasMode(JpsPlatformUtil.java:460) | | |
| at oracle.security.jps.ee.http.JpsAbsFilter.runJaasMode(JpsAbsFilter.java:120) | | |
| at oracle.security.jps.ee.http.JpsAbsFilter.doFilter(JpsAbsFilter.java:217) | | |
| at oracle.security.jps.ee.http.JpsFilter.doFilter(JpsFilter.java:81) | | |
| at weblogic.serviet.internal.riterchainimpi.doriter(riterchainimpi.java:/9) | | |
| | | |
| at oracle.dms.servlet.DMSServletFilter.doFilter(DMSServletFilter.java:225) | | |
| at oracle.dms.servlet.UNSServletFilter.doFilter(UNSServletFilter.java:225) at weblogic.servlet.internal.FilterChainImpl.doFilter(FilterChainImpl.java:79) at weblogic.servlet.internal.BéhamGervletConterstServletTonorationation.uranBun (BéhamGervletContext.java:3367) | | |
| at oracie.dms.serviet.DMSServietFilter.dofiler(HMSServietFilter.java:225) at weblogic.serviet.internal.FilterChainpl.dofiler(FilterChainpl.java:79) at weblogic.serviet.internal.WebbogServietContextServietInvoorationAction.vrspNum(MebAgpServietContext.java:3367) at weblogic.serviet.internal.WebbogServietContextServietInvoorationAction.rum(MebAgbServietContext.java:3333) | | |
| at oracle.dms.servlet.IMSServletFilter.dofilter(IMSServletFilter.java:225) at weblogic.servlet.internal.FilterConinUp.ldofilter(FilterChainUp.ljava:79) at weblogic.servlet.internal.WebApgServletContextServletInvocationAction.vrapRun(WebApgServletContext.java:3367) at weblogic.servlet.internal.WebApgServletContextServletInvocationAction.run(WebApgServletContext.java:333) at weblogic.secruity.acl.internal.WethInticateSubject.doda/GuthenticateSubject.java:321) | | |
| at oracle.dms.servlet.IMSServletFilter.doFilter(IMSServletFilter.java:225) at weblogi.servlet.imetanal.FilterChaingl.doFilter(FilterChaingl.java:79) at weblogi.servlet.imetanal.WebbgServletContextServletInvocationAction.vrsgNu(WebbgServletContext.java:3367) at weblogi.servlet.imetanal.WebbgServletContextServletInvocationAction.run(WebbgServletContext.java:333) at weblogi.security.sel.internal.WebbgServletContextServletInvocationAction.run(WebbgServletContext.java:333) at weblogi.security.sel.internal.WebbgServletContextServletInvocationAction.run(WebbgServletContext.java:333) at weblogi.security.sel.internal.AuthenticatedSubject.doAs(AuthenticatedSubject.java:321) at weblogi.security.sel.internal.AuthenticatedSubject.doAs(AuthenticatedSubject.java:321) | | |
| at oracle.dms.zervlet.IMSServletFilter.dofliter(IMSServletFilter.java:225) at weblogic.zervlet.imternal.FilterChaingl.dofliter(FilterChaingl.java:79) at weblogic.zervlet.imternal.FilterChaingl.dofliter(FilterChaingl.java:79) at weblogic.zervlet.imternal.Weblogics.cervlet.comtextServlet.ImterChaingl.zervletContext.java:3367) at weblogic.zervlet.provinesenal.Weblogics.cervlet.Context.java:3367) at weblogic.zervlet.provinesenal.Weblogics.cervlet.Context.java:3367) at weblogic.zervlet.provines.Result.internal.Weblogics.cervlet.Servlet.Servlet.Context.java:3367) at weblogic.zervlet.provines.Result.interstal.Servlet.Servl | | |
| at oracle.dms.servlet.IMSServletFilter.doFilter(IMSServletFilter.java:225) at weblogic.servlet.imternal.FilterChingDal.doFilter(FilterChiningL) java:79) at weblogic.servlet.imternal.Webbg0etvletContextServletInvootainaktion.vrapRund(Webbg0etvletContext.java:3367) at weblogic.servlet.imternal.Webbg0etvletContextServletInvootainaktion.urun(Webbg0etvletContext.java:333) at weblogic.servlet.imternal.Webbg0etvletContextServletInvootainaktion.urun(Webbg0etvletContext.java:333) at weblogic.servlet.imternal.Webbg0etvletContextServletInvootainaktion.urun(Webbg0etvletContext.java:333) at weblogic.servlet.imternal.Nebbg0etvletContext.dosurityManger.java:120) at weblogic.servlet.imternal.Nebbg0etvletContext.dosuredRestore(Mebbg0etvletContext.java:2220) | | |
| at orsale.dms.serviet.iMtStervietFilter.doffleter(MtStervietFilter.java;25) at weblogt.serviet.imternal.Hiterchamingl.doffleter(FilterChamingl.java;7) at weblogt.serviet.imternal.Hiterchamingl.doffleter(FilterChamingl.java;7) at weblogt.serviet.imternal.Hiterchamingl.doffleter(FilterChamingl.java;7) at weblogt.serviet.imternal.Hiterchamingl.doffleter(FilterChamingl.java;7) at weblogt.serviet.imternal.Hiterchamingl.doffleter(FilterChamingl.java;7) at weblogt.serviet.imternal.Hiterchamingl.doffleter(FilterChamingl.java;7) at weblogt.serviet.imternal.Hiterchamingl.doffleter(FilterChamingl.java;7) at weblogt.serviet.imternal.Hiterchamingl.doffleter(FilterChamingl.java;7) at weblogt.serviet.imternal.Hiterchamingl.doffleter(FilterChamingl.gova;7) at weblogt.serviet.imternal.Hiterchamingl.doffleter(FilterChamingl.gova;7) at weblogt.serviet.imternal.Hiterchamingl.doffleter(FilterChamingl.gova;7) at weblogt.serviet.imternal.Hiterchamingl.doffleter(FilterChamingl.gova;7) at weblogt.serviet.imternal.Hiterchamingl.doffleter(FilterChamingl.gova;7) at weblogt.serviet.imternal.Hiterchamingl.doffleter(FilterChamingl.gova;7) at weblogt.serviet.imternal.Hiterchamingl.doffleter(FilterChamingl.gova;7) at weblogt.serviet.imternal.Hiterchamingl.gova;7) | | |
| at oracle.dms.zerviet.IMESGerviefTitter.dofTiter(IMESGrviefTitter.java;25) at weblogt.zerviet.internal.FiterChinallpl.dofTitter(TitterChainlpl.java;79) at weblogt.zerviet.internal.HebkgoServietContextServietInvocationAction.vzngBungKebkgoServietContext.java;3367) at weblogt.zerviet.internal.HebkgoServietContextServietInvocationAction.un(WebkgoServietContext.java;3367) at weblogt.zerviet.internal.HebkgoServietContextServietInvocationAction.un(WebkgoServietContext.java;3387) at weblogt.zerviet.internal.HebkgoServietContextServietInvocationAction.un(WebkgoServietContext.java;3387) at weblogt.zerviet.internal.HebkgoServietContext.sevietInvolationActionAction.un(WebkgoServietContext.java;3387) at weblogt.zerviet.internal.HebkgoServietContext.sevietInvolationActi | | |
| at orsale.dms.serviet.internal.Hitschchningl.ddFilter(HMSServietFilter.java:23) at weblogic.serviet.internal.Hitschchningl.ddFilter(Hitschchningl.java:73) at weblogic.serviet.internal.HebsgbServietContextServietInvorationAction.urspM(HebsgbServietContext.java:333) at weblogic.serviet.internal.HebsgbServietContextServietInvorationAction.urspM(HebsgbServietContext.java:333) at weblogic.serviet.internal.HebsgbServietContextServietInvorationAction.urspM(HebsgbServietContext.java:333) at weblogic.serviet.internal.HebsgbServietContextServietInvorationAction.urspM(HebsgbServietContext.java:333) at weblogic.serviet.internal.HebsgbServietContext.servietWietServiet.Java:3210) at weblogic.serviet.internal.HebsgbServietContext.doSecuredExceute(HebbgbServietContext.java:2220) at weblogic.serviet.internal.HebsgbServietContext.servietWietContext.java:2124) at weblogic.serviet.internal.HebsgbServietContext.serviet(WebbgDServietContext.java:2124) at weblogic.serviet.internal.HebsgbServietContext.serviet(WebbgDServietContext.java:2124) at weblogic.serviet.internal.HebsgbServietContext.serviet(WebbgDServietContext.java:2124) at weblogic.serviet.internal.HebsgbServietContext.servietSiterWietContext.serviet(WebbgDServietContext.java:2124) at weblogic.serviet.internal.HebsgbServietContext.serviet(WebbgDServietContext.java:2124) at weblogic.serviet.internal.HebsgbServietContext.serviet(WebbgDServietContext.java:2124) at weblogic.serviet.internal.HebsgbServietContext.serviet(WebbgDServietContext.java:2124) | | |

7 Set up Keystore

OWSM needs to signs the SAML bearer token, in order to do that it uses public key cryptography. Thus a keystore needs to be setup. In 12.1.2 the default keystore is KSS (Keystore Service) and this is different from 11g where the default keystore was JKS.

KSS is a service provided by Oracle Platform Security Services (OPSS) and there are a number of reasons for preferring KSS over JKS.

- KSS provides integrated tooling
 - EM and WLST support for creating/updating/import/exporting keys/certs
 - Internal CA for generating CA signed keys/certs
- KSS provides better lifecycle management.
 - Ability for multiple domains to share the same keystore is easier since KSS provides centralized storage (ex: DB based storage)
 - Ability for segregation of keystores ex: OWSM can have it's own keystore via the concept of "stripe" that exists in KSS.
 - Simplified management as it doesn't need passwords for accessing the private keys in the keystore.

7.1 Create "owsm" stripe and keystore

Click on the Weblogic domain on the LHS. Click on "Weblogic Domain->Security->Keystore" as shown in the screenshot below.

| Firefox Birefox Biref | ment > Overview × Keystore: /Dom | ain_base_domain/bas × + | | | - 6 - |
|--|---|---|--|---|--|
| Contemport | security/keystore/keystoreHome?target=%2FD | omain_base_domain%2Fbase_do | omain&type=weblogic_domain | 😭 🔻 C 🛛 🚷 👻 Jersey JAX-RS client Proxy sample | ₽ 🏠 🖸 ד |
| | anager Fusion Middleware Control 12c | | | Heb 🔸 | 🔽 weblogic 🗸 🕴 Log Out 📿 |
| 📑 WebLogic Domain 👻 | | | | | |
| Kek kögit Domán ▼ Target Navigation Ver ▼ Per ▼ | WebLogic Domain Home Monitoring Control Logs Dapboyments JBC Data Sources Monitoring Criss Component Wring Criss Component Wring Bis Services Other Services Environment Administration Refersh WebLogic Domain Routing Topology Scystem Mean Boroser WebLogic Server Administration Console Target Information | s, and its acore applies to an applic to a stripe or keystore. 2 Delate to do Manage // Protection n/a n/a n/a Credentails Security Provider Configuration Application Policies Application Policies Augit Policy System Policies Audit Policy | calon shipe. To work with a shipe or a keystore, select its row in the table of a many select its row in the table of the select its row in table of the select its row in the select its row in table of tabl | Page Refreshed Aug | Logged n as weblogic (4, 2013 1:5203 AM PDT C stripe, manage certificates in a |
| < > | | | | | |
| × Find: JEE 🖊 | Next 👚 Previous 🖌 Highlight <u>a</u> ll 📃 Mat | h case | | | |

Click on "Create Stripe" as shown in the screenshot below.

| Firefox 🔭 📑 OWSM Developn | ment > Overview × | Keystore: /Domain_base_domain/bas | × + | | | | - 07 | X |
|--|--|--|---|--|---|---------------------|-------------|--------|
| employed localhost:7001/em/faces/as/s | security/keystore/keystore | Home?Adf-Page-Id=43⌖=%2FDomain | | | ☆ ▽ ৫ 🚺 ▾ Jersey JAX-RS client Proxy sample | م | Â | • |
| | anager Fusion Middlewa | are Control 12c | | | Help + | 👥 weblogic 🕶 | Log Ou | t O |
| 🔡 WebLogic Domain 👻 | | | | | | | | |
| Target Navigation | base_domain () | | | | | Logged i | nas wel | blogic |
| View + | 🔡 WebLogic Domain 👻 | | | | Page Refreshed A | ug 4, 2013 1:52:03 | AM PDT | C |
| ✓ Application Deployments → ☐ Internal Applications → ☐ Resource Adapters → heloworld excitent ↓ heloworld excitent ↓ heloworld excitent ↓ test (AsimoServer) ✓ Wetextoc Coman → heloworld excitent // heloworld excitent // heloworld excitent // // heloworld excitent // // wetextoc Coman // // // heloworld excitent // / | Keystorc A keystore is a repositor keystore, drange a keystore, water Name Name Name Name Name Name Name Name | y of sourity certificates, and its cope applies to fore password, or delete a stripe or keystere. • Create Keystere © Delete Protection n/a n/a | an application stripe. To work with a stripe or a keystore, select Create Stripe Enter Stripe Name. * Stripe Name overn | t its row in the table and select a menu option. | . On the page you can create a stripe, create a keystore within | a stripe, manage ce | tificates i | na |
| | | | | | | | | |
| × Find: JEE | Next 1 Previous 🖉 Hi | ghlight <u>a</u> ll 📃 Mat <u>c</u> h case | | | | | _ | |

Create a Keystore under the "owsm" stripe by clicking on "Create Keystore" button. The keystore can be policy protected or password protected. Password protected will make it behave similar to JKS. I suggest you retain the default which is policy based and uncheck the "Grant Permission" checkbox as shown in the screenshot below.

| Firefox 🔭 📑 OWSM Develops | ment > Overview × 💭 Keystore: /Domain_base_domain/bas × 🖸 OWSMS.pdf (application/pdf Object) × + | - J 🕰 |
|---|--|--|
| Contemport Contemport | security/keystore/keystoreHome?Adf-Page-Id=43⌖=%2FDomain_base_domain%2Fbase_domain&type=weblogic_domain | ☆ マ C 🚼 v Jersey JAX-RS client Proxy sample 🔎 🎓 💟 v |
| | anager Fusion Middleware Control 12c | Help 🕶 🛛 👥 weblogic 👻 🗌 Log Out 📿 |
| 📰 WebLogic Domain 🛩 | | |
| Target Navigation Ver + V → Application Deployments > → Internal Applications > ⊕ Thermody Applications | base_domain bit Webkogc Domain bit Webkogc Domain bit Webkogc Domain bit Deformation The attract norm have haven meahed Keystore The attract norm have haven meahed Keystore is a repository of exacting certificates, and its accore applies to an application stripe. To work with a stripe or a keystore, select its row in the table and a keystore Ceater Stripe bit Ceater bit Ceater | Looped in as weblogic Page Refreshed Aug 4, 2013 152203 AM POT |
| K | | |
| × Find: Keystore | Next 👚 Previous 🖌 Highlight all 📃 Match case 🛛 🚯 Phrase not found | |

7.2 Generate keypair

The next step is to generate a keypair. You can do this by selecting the "owsm->keystore" and clicking on "Manage" as shown in the screenshow below.

📕 🔁 OWSM Development > Overview 🛛 👋 🗍 Keystore: /Domain_base_domain/bas... 🗙 💽 OWSMS.pdf (application/pdf Object) 🛛 🔸 🕂 ₽ 🕯 🖸 • ☆ マ ৫ 🚷 - Jersey JAX-RS client Proxy sample 🗲 🕘 localhost:7001/em/faces/as/security/keystore/keystoreHe Adf-Page-Id=18ttarget=%2FDo? Help 🕶 🛛 🔽 weblogic 🕶 🗍 Log Out 📿 E Enterprise Manager Fusion Middleware Control 120 base_domain 🔋 Logged in as weblogic Target Navigation 🔠 WebLogic Domain 👻 Page Refreshed Aug 4, 2013 1:57:25 AM PDT 💍 View -Application Deplo Keystore A keystore is a repository of security certificates, and its keystore, change a keystore password, or delete a strip ✓ WebLogic Domain ✓ WebLogic Domain ✓ WebLogic Domain ✓ AdminServer you can create a stripe, create a keystore within a stripe, manage certif 💠 Create Stripe 💠 Create Keystore 💥 Delete 🛛 🔂 Manage 🖉 Cha Name Protec vame ▷ _____ opss ▷ _____ system ▽ _____ owsm @ keystore n/a n/a n/a Policy reHome?Adf-Page-Id=1&target=/Domain_base_domain/base_domain&type × Find: Keyston 🖡 Next 👚 Previous 🖌 Highlight <u>a</u>ll 📃 Mat<u>c</u>h case 🛛 (1) Phrase not found

Generate a keypair by clicking on "Generate Keypair".

| Firefox 🔪 🚍 OWSM Deve | lopment > Overview 🛛 👋 🦳 Manage Certificates: /Domain_base 🗙 💽 OWSMS.pdf (application/pdf Object) 🛛 🕹 🕂 | | |
|---|--|---|-------------------------|
| localhost:7001/em/faces | $\label{eq:label} as/security/keystore/manageCertificate?Adf-Page-Id=2⌖=\%2FDomain_base_domain\%2Fbase_domain&type=weblogic_domain \end{target} as a second se$ | 😭 🗢 C 🛛 🚼 👻 Jersey JAX-RS client Proxy sample | ₽ 🏦 🖸 • |
| | Manager Fusion Middleware Control 12c | Help + 🛛 👥 web | plogic 🖌 🕴 Log Out 🔵 |
| 🔡 WebLogic Domain 👻 | | | |
| Target Navigation | base_domain () | | Logged in as weblogic |
| View - | WebLogic Domain 🔻 | Page Refreshed Aug 4, 2013 | 1:57:41 AM PDT 🗸 |
| Application Deployments Application Deployments WebLogic Domain Base_domain AdminServer AdminServer Metadata Repositories | Keystore > Manage Certificates Manage Certificates: owsm/keystore To work with a certificate runted certificate, select is row in the table and select a meru option. On this page you can generate a keypair; gen or import a CA-signed certificate or fusited certificate, A CA-signed certificate must be imported into the wallet from which the CSR was generate | nerate a certificate signing request (CSR) which you send to your CA to verify your identity and return a signed cd. | certificate; and export |
| | Change Password | Carlforde Trans Carl Munices Carlforde (UM) Examples | Furthering Data |
| | No Certificates Found. | | |
| × Find: Keystore | // xeystore/managec.erumcaterAgr-Page-tg=2extarget=/∪omain_base_domain/base_domain&type=weblogic_domain [®] | | |
| | | | |

Use the default alias "orakey". If you want to use a different alias – then additional steps will be required.

2013

Identity Propagation for REST using OWSM 12.1.2

| Firefox Construction | oment > Overview × Manage Certificates: /Domain_base > | OWSMS.pdf (application/pdf Object) × + | | | | | - | |
|--|---|--|------------------------|----------------|--|------------------------------|--|---------------|
| e localhost:7001/em/faces/as | /security/keystore/manageCertificate?Adf-Page-Id=2⌖=%2FDoma | in_base_domain%2Fbase_domain&type=weblogic_domain | | ☆⊽ | C Versey JAX-RS client Pro | xy sample | ۹ | |
| | lanager Fusion Middleware Control 12c | | | | | Help 🔻 🛛 👥 web | ogic 👻 🕴 Log Ou | ut O |
| 📑 WebLogic Domain 👻 | | | | | | | | |
| Vew > Application Deployments ∨ MebLogic Doman ∨ Meace domain ∴ AdminServer > Metadata Repositories | base_domain | and select a menu option. On this page you can generate a keypair; generate a certificate much the most efficiency which the CSR was generated. | ificate signing reques | it (CSR) which | Page you send to your CA to verify your ide | Refreshed Aug 4, 2013 | Logged in as we 1:57:41 AM PDT rertificate; and ex | plogic r 🕐 |
| | Generate Keypar Generate CSR Import T Exp | Generate Keypair | e Type Serial | Number | Certificate SHA1 Fingerprint | | Expiration Date | |
| | No Certificates Found. | * Alas orakey * Common name orakey Organizational Unit (us Organization Oty State Country United State Solid to key size. RSA Key Size 1024 • CK Concel | | | | | | |
| × Find: Keystore | 🖡 Next 👚 Previous 🖌 Highlight <u>a</u> ll 📃 Mat <u>c</u> h case 🛛 📵 Phrase no | tfound | | | | | | |

| Firefox 🔪 🗟 OWSM Developr | ment > Overview 🛛 🗌 Manage Certificates: /Domain_base 🗙 🖸 OWSMS.pdf (application/pdf Object) 🛛 🕂 | | - ē 💌 | | |
|---|---|--|---|--|--|
| Contemport Contemport | security/keystore/manageCertificate?Adf-Page-Id=2⌖=%2FDomain_base_domain%2Fbase_domain&type=weblogic_domain | 🏫 マ C 🛛 🚼 → Jersey JAX-RS client Proxy sample | ۶ 🏠 ר | | |
| | anager Fusion Middleware Control 12c | Help 🕶 🛛 🎎 weblogic 🖛 🛛 Log Out 📿 | | | |
| 🔡 WebLogic Domain 🕶 | | | | | |
| Target Navigation | base_domain 0 3 WebLogic Domain • | Page Refreshed Aug 4, 2013 | Logged in as weblogic 1:57:41 AM PDT 🖒 | | |
| Acpictation Deployments WebLogic Domain Base_domain AdminServer Metadata Repositories | Reystore > Manage Certificates Manage Certificates: owsmi/keystore To work with a certificate or trusted certificate, select its row in the table and select a menu option. On this page you can generate a keypair; genera or import a CA-agned certificate or trusted certificate. A CA-agned certificate must be imported into the wallet from which the CSR was generated. | ale a certificate signing request (CSR) which you send to your CA to verify your identity and return a signed i | certificate; and export | | |
| | Generate Keypair Generate CSR Generate CSR | Cartificate Tune Carial Mumber Cartificate CHA1 Experiment | Evolution Data | | |
| | orakey CN=orakey,OU=us,C=US | Certificate Type Serial Number Certificate Sh41 migerprint Public CA Signed C 0x140488e633c 34 2a bf a1 90 b0 6 40 54 88 14 df b6 c6 c2 4f 6c 32 4a 13 | August 3, 2018 | | |
| | | | | | |
| × Find: Keystore | Next 1 Previous 🖌 Highlight all 🗌 Match case 🕕 Phrase not found | | | | |

2013

7.3 Negative Testing

Even though we created the keystore – if you test – you will see it results in a failure as shown below.

| 🏉 Error 500Internal Server Error - Windows Internet Explorer | | - 8 - |
|--|--|---------------|
| 🛇 🕞 🔻 🔊 http://localhost:7001/rest-saml-idprop-client/hellorestclient | ✓ See See See See See See See See See Se | + م |
| X O Medfoo' - | | |
| 🖕 Favorites 🐁 🔊 Web Slice Gallery 👻 🖉 eXpressSR | | |
| Gerrer Stou-Internal Source France | 🚵 💌 🖾 👻 🖃 🚔 💌 Page 🕶 Safety: | Tools ▼ |
| <pre>prov: V00-Internal Server Error prov: V00-Internal Filternal Internal Server Error prov: V00-Internal Filternal Internal Error prov: V00-Internal V00-Interna</pre> | jin + ⊠ - ⊡ ⊯ - Page - Safety | - Tgok - @- " |
| | | |
| Done | 💊 Local intranet Protected Mode: Off 🛛 🐇 | ▼ € 95% ▼ |

7.4 Import the "democa" CA certificate into "owsm" stripe

The reason it fails even after the keystore is set up is that the keypair we generated was signed by the Internal CA that ships with KSS and the validation of the cert on the service side will fail as OWSM Agent is unable to validate the Certificate path for the signing certificate.

Note: You will not run into this issue if you use self-signed certificates. Since we have used CA signed (albeit an Internal CA signed certificate) – you need to import the CA cert into the OWSM keystore.

So you need to import the public certificate of the CA into the "owsm" stripe. Importing CA cert is a three step process:

- a) Identify the Certificate Authority (CA)
- b) Export the CA cert from the "system" stripe in KSS.
- c) Import the CA cert into the "owsm" stripe in KSS

7.4.1 Identify the Issuer of the "orakey" key

Navigate to the Keystore service in EM as shown in the screenshot below. "Weblogic Domain->Security->Keystore"

| Firefox Manage Certifica | tes: /Domain_base_do + | | | | | | - J J |
|---|--|--|--|-----------------------------------|----------------------|--|---------------------------|
| e localhost:7001/em/faces/as/s | ecurity/keystore/manageCertificate?Adf-Pag | e-Id=7⌖=%2FDomain_base_dor | main%2Fbase_domain&type=weblogic_domain | | 습 v | 7 🕑 🛃 = Google | ዖ 🏦 🖸 🕶 |
| | Inager Fusion Middleware Control 12c | | | | | Help 🗸 📃 👥 | eblogic + 🕴 Log Out 📿 |
| 🔠 WebLogic Domain 👻 | | | | | | | |
| Target Navigation | base_domain () | | | | | | Logged in as weblogic |
| View - | WebLogic Domain | | | | | Page Refreshed Aug 11, 20 | 13 8:42:56 PM PDT |
| Application Deployments Deployments | Monitoring Control Logs | re select its row in the table and select a r ificate. A CA-signed certificate must be | menu option. On this page you can generate a keypair; ger imported into the wallet from which the CSR was generated | nerate a certificate signin d. | g request (CSR) whic | h you send to your CA to verify your identity and return a signe | d certificate; and export |
| heloworld-restdient (Adr | Deployments | ion Import in Export X | Delete // Change Password | | | | |
| ⊳ 😭 test | Messaging | | 100 | Certificate Type | Serial Number | Certificate SHA1 Fingerprint | Expiration Date |
| V WebLogic Domain | Cross Component Wiring | , s | | Public CA Signed C. | 0x140488e633c | 34 2a bf a 1 90 b0 6 40 54 88 14 df b6 c6 c2 4f 6c 32 4a 13 | August 3, 2018 |
| AdminServer | Web Services | • | | | | | |
| Metadata Repositories | Other Services | • | | | | | |
| | Environment | • | | | | | |
| | Administration | | | | | | |
| | Refresh WebLogic Domain | | | | | | |
| | Security | Credentiale | | | | | |
| | System MBean Browser | Security Provider Configuration | | | | | |
| | 🕼 WebLogic Server Administration Console | Application Policies | | | | | |
| | Target Information | Application Roles | | | | | |
| | | Keystore | | | | | |
| | | System Policies | | | | | |
| | | Audit Policy | | | | | |
| | | | , | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 4 III > | | | | | | | |

Expand the "owsm" stripe as shown in the screenshot below.

| Firefox Keystore: /Doma | iin_base_domain/base_d + | | | |
|--|--|--|---|---|
| localhost:7001/em/faces/as/ | security/keystore/keystoreHome?target=%2FD | main_base_domain%2Fbase_domain&type=weblogic_domain | ☆ マ C 🚼 - Google | ዖ 🏫 🖸 🗸 |
| | anager Fusion Middleware Control 12c | | | Help + 🛛 🎎 weblogic + 🔹 Log Out 📿 |
| 📑 WebLogic Domain 👻 | | | | |
| Target Navigation | base_domain () WebLogic Domain * | | | Logged in as weblogic Page Refreshed Aug 11, 2013 8:46:50 PM PDT 🖒 |
| ♥ Application Deployments ▶ Internal Applications ▶ Image: Resource Adapters ▷ Image: Resource Adapters ▷ Image: Resource Adapters | Keystore A keystore is a repository of security certificat keystore, change a keystore password, or delo | s, and its scope applies to an application stripe. To work with a stripe or a ke te a stripe or keystore. | ystore, select its row in the table and select a menu option. On this page you can create a stripe, | create a keystore within a stripe, manage certificates in a |
| ∀ | 💠 Create Stripe 🛛 🗣 Create Keystore 💈 | 🖇 Delete 🛛 6x3 Manage 🖉 Change Password | | |
| hellowond-restdient (Adr b) (b) test | Name | Protection | | |
| V 🛅 WebLogic Domain | > in opss | n/a | | |
| V base_domain | > 🔄 system | n/a | | |
| Metadata Repositories | v in owsm | n/a Policy | | |
| | | | | |
| | | | | |

Select "keystore" and click on "Manage". This will list all the keys/certs in the keystore as shown in the screenshot below.

2013

| Firefox * 🗌 Manage Certificates: /Domain_base_do + | | | | | |
|--|--|---|---|--|--|
| 🗲 🛞 localhost:7001/em/faces/as/s | ecurity/keystore/manageCertificate?target=%2FDomain_base_domain%2Fbase_domain&type=weblogic_domain | 🏠 マ C 🔀 - Google | ዖ 🏠 🖸 🗸 | | |
| | nager Fusion Middleware Control 12c | Help 👻 🔢 v | weblogic 🗸 🕴 Log Out 👱 | | |
| 📑 WebLogic Domain 👻 | | | | | |
| Target Navigation View - V Comparison | base_domain ⊚ ∃ Wekkogc Doman + | Page Refreshed Aug 11, 20 | Logged in as weblogic 013 8:52:29 PM PDT 🖒 | | |
| ▷ Internal Applications ▷ Resource Adapters ▷ ⑤ helloworld ℃ ♡ ⑤ helloworld-restclient ⑥ ● ⑥ ● helloworld-restclient | Kepstore > Namage Certificates Manage Certificates: own/Keystore To work with a certificate or trutted certificate, select this row in the table and select a meru option. On this page you can generate a keysair, or inport a CA-signed certificate or trutted certificate. A degreed certificate must be imported into the walet from which the CSR was generate or inport a CA-signed certificate or trutted certificate. Select a meru option. On this page you can generate a keysair, or inport a CA-signed certificate to must be imported miss the walet from which the CSR was generate or inport a CA-signed certificate to must be imported miss the walet from which the CSR was generate or inport a CA-signed certificate to must be imported miss the walet from which the CSR was generate the central term of the certificate select the certificate term of the certificate select term of term of the certificate select term of term o | generate a certificate signing request (CSR) which you send to your CA to verify your identity and return a sign ated. | ed certificate; and export | | |
| ⊳ 🔁 test | Alias Subject Name | Certificate Type Serial Number Certificate SHA 1 Fingerprint | Expiration Date | | |
| V ■ <u>Base_domain</u> Anto-Greve ▷ ■ Metadata Repositories | | | | | |
| ۰ III ا | | | | | |

Click on "orakey" for details.

You will notice that the key pair that was generated was CA signed as shown in the screenshot below.

| 🔄 🕲 localhost.7001/en/faces/as/security/keystore/manageCertificate?Adf-Page-Id=78target=%2FDomain_base_domain%2F | _ |
|--|-----------------|
| | |
| ORACLE Enterprise Manager Fusion Middleware Control 12c beb v 🔢 weblog c 🔹 Log Ox | Dut 🖸 |
| Weltogic Donan + | |
| Torget Navigation base_domain @ | eblogic pr C |
| | _ |

7.4.2 Export "democa" CA cert from "system" stripe

Expand the "system" stripe. Select "castore" and click on "Manage".

| Firefox T C Keystore: /Doma | ain_base_domain/base_d + | | - 0 - |
|---|--|---|---|
| localhost:7001/em/faces/as/ | security/keystore/keystoreHome?Adf-Page-Id=8&tar | et=%2FDomain_base_domain%2Fbase_domain&type=weblogic_domain | ☆ マ C 🛃 - Google 👂 🎓 🖬 - |
| ORACLE Enterprise M | anager Fusion Middleware Control 12c | | Help 🔻 🎎 weblogic 👻 Log Out 🔤 |
| 📲 WebLogic Domain 👻 | | | |
| Target Navigation | base_domain () | | Logged in as weblogic |
| View • | 📑 WebLogic Domain 👻 | | Page Refreshed Aug 11, 2013 8:46:50 PM PDT 💍 |
| ♥ Application Deployments ▶ Internal Applications ▶ ■ Resource Adapters ▶ ● heloworld | Keystore A keystore is a repository of security certificates, and keystore, change a keystore password, or delete a st | ts scope applies to an application stripe. To work with a stripe or a keystore, select i pe or keystore. | ts row in the table and select a menu option. On this page you can create a stripe, create a keystore within a stripe, manage certificates in a |
| | 💠 Create Stripe 🗣 Create Keystore 💥 Delet | e 6d Manage 🖉 Change Password | |
| hellowond-restalent (Adr b) (Adr | Name | Protection | |
| V 🛅 WebLogic Domain | > in opss | n/a | |
| | | n/a | |
| AdminServer | a trust | Policy | |
| Metadata Repositories | astore | Policy | |
| | | Password | |
| | V o owsm | n/a | |
| | | | |
| ¢, | | | |

You will see a "democa" alias.

| Firefox 🔭 🗍 Manage Certifica | ttes: /Domain_base_do + | | - 8 🗙 |
|---|--|---|-----------------------------|
| en localhost:7001/em/faces/as/ | security/keystore/manageCertificate?Adf-Page-Id=12⌖=%2FDomain_base_domain%2Fbase_domain&type=weblogic_domain | ਨੂੰ ⊽ 🕑 🚼 - Google | ۶ 🗈 ד |
| ORACLE Enterprise M | anager Fusion Middleware Control 12c | Help + 🛛 💶 | weblogic 🕶 🕴 Log Out 👱 |
| 🔡 WebLogic Domain 👻 | | | |
| Target Navigation | base_domain 0 | | Logged in as weblogic |
| View • | 🔡 Weblogic Domain 💌 | Page Refreshed Aug 11, 2 | 013 8:55:18 PM PDT 🖒 |
| ▼ Application Deployments ▶ Internal Applications ▶ Resource Adapters ▶ helloworld ▼ helloworld ▼ helloworld ↑ helloworld | Keystore > Manage Certificates Manage Certificates: system/castore To work with a certificate or trusted certificate, setcil is row in the table and setcil a meru option. On this page you can generate a keypair; gr or mout a CA signed certificate or trusted certificate. A CA-signed certificate must be imported into the wallet from which the CSR was generate Image: Cartificate Service: Image: Cartificate or trusted certificate. A CA-signed certificate must be imported into the wallet from which the CSR was generate Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: Image: Cartificate Service: <td>enerate a certificate signing request (CSR) which you send to your CA to verify your identity and return a sig ed.</td> <td>ned certificate; and export</td> | enerate a certificate signing request (CSR) which you send to your CA to verify your identity and return a sig ed. | ned certificate; and export |
| ▷ ⓑ test | Alas Subject Name | Certificate Type Serial Number Certificate SHA1 Fingerprint | Expiration Date |
| V DebLogic Domain | democa CN=CertGenCA,OU=FOR TESTING ONLY,O=MyOrganization,L=MyTown,ST=MyState,C=US | Self Signed Certific 0x643a8066409af ca 61 71 5b 64 6b 2 63 c6 fb 83 b1 71 f0 99 d3 54 6a f7 c8 | December 1, 2032 |
| Metadata Repositories | ystore/manageCertificate/Adf-Page-1d=128target=/Domain_base_domain/base_domain8type=:weblogic_domain* | | |

Click on "Export" and click on "Export Certificate" as shown in the screenshot below. You will be prompted to save the cert to a file. Save it on the file system.

7.4.3 Import "democa" CA cert to "owsm" stripe

To import the "democa" cert, navigate to the "owsm" strip and click on "Manage". This will open the owsm/keystore page. Click on "Import" as shown in the screenshot below.

| Contract Contract | Firefox 💌 📋 Manage Certifica | tes: /Domain_base_do + | | - 0 <mark>- x</mark> |
|---|--------------------------------|--|---|-----------------------------|
| | (Iocalhost:7001/em/faces/as/s | ecurity/keystore/manageCertificate?Adf-Page-Id=14⌖=%2FDomain_base_domain%2Fbase_domain&type=weblogic_domain | ☆ マ Œ 😽 - Google | P ⋒ 🖸 • |
| Viduoge Consult Target Navigation Ver Ver Ver Ver Ver Ver Ver Ver V | | Inager Fusion Middleware Control 12c | Help - | weblogic + 🛛 Log Out 📿 |
| Target Navigation Date: | 🔡 WebLogic Domain 👻 | | | |
| We is Image: Control of the section of the sectin of the section of the section of the section | Target Navigation | base_domain 0 | | Logged in as weblogic |
| Very Archance Deployment Very Archance Deplo | View * | 📑 WebLogic Domain 👻 | Page Refreshed Aug 11, 2 | 013 8:57:05 PM PDT 🖒 |
| Image: Seried Number Order and Report Control Resord V Wetage: Seried Number Control Relation Office V Vetage: Seried Number Control Relation Office V Vetage: Seried Number Control Relation Office < | ✓ | Reystore > Manager Cartificates: Manage Cartificates: ownsm/keystore To work with a cartificate or tituate, select its row in the table and select a menu option. On this page you can generate a keypary gener or most a CA-signed cartificate or trusted cartificate. A CA-signed cartificate must be imported into the walket from which the CSR was generated with the company of the | rrate a certificate signing request (CSR) which you send to your CA to verify your identity and return a sign | ned certificate; and export |
| Vett dog: Comming Diff-oradicy, CU-us, C-US Padic CA Signed C Dx14049866332: 34 2a bf a 190 bo 5-49 54 88 14 df bo 6 d; 2 4f 6; 32 4a 13 Adm:Gave Padic CA Signed C Dx14049866332: 34 2a bf a 190 bo 5-49 54 88 14 df bo 6 d; 2 4f 6; 32 4a 13 Adm:Gave Padic CA Signed C Dx14049866332: 34 2a bf a 190 bo 5-49 54 88 14 df bo 6 d; 2 4f 6; 32 4a 13 Adm:Gave Padic CA Signed C Dx14049866332: 34 2a bf a 190 bo 5-49 54 88 14 df bo 6 d; 2 4f 6; 32 4a 13 | ▷ (b) test | Generate Keypar Generate CSR | Certificate Tune Serial Number Certificate SH&1 Einnerwint | Expiration Date |
| | V 🛅 WebLogic Domain | orakey CN=orakey,OU=us,C=US | Public CA Signed C 0x140488e633c 34 2a bf a1 90 b0 6 40 54 88 14 df b6 c6 c2 4f 6c 32 4a 13 | August 3, 2018 |
| localhost:7001/em/faces/as/security/keystore/manageCertificate?Adf-Page-Id=14⌖=/Domain_base_domain&type=weblogic_domain# | Metadata Repositories | ytore/manag <cettificate1adit-page-ids14&starget= base_domain="" base_domain&typesyseblogic_domain#<="" domain="" td=""><td></td><td></td></cettificate1adit-page-ids14&starget=> | | |

Clicking on "Import" will open a dialog box as shown in the screenshot below. Select the Certificate Type as "Trusted Certificate". Provide the alias as "democa" and select the file from the file system saved from section 7.4.2.

| Manage Certificates: /Domain_ | n_base × 🖸 Managing Keys and Certifica | es with × 🖸 Managing Keys and Certificates with × 🕂 | | | - | |
|--|--|---|---|--|---|--|
| 🗲 🕙 localhost:7001/em/faces/as/security/keysto | tore/manageCertificate?Adf-Page-Id=14&targ | t=%2FDomain_base_domain%2Fbase_domain&type=weblogic_domain | ☆ × | C Google | P | ☆ 🖸 - |
| ORACLE Enterprise Manager Fusio | ion Middleware Control 12c | | | Help + 🛛 🎎 v | eblogic 👻 🕴 L | og Out 🔵 |
| 📑 WebLogic Domain 👻 | | | | | | |
| Target Navigation Dase_dom Ver Asplaaton Deployments > Thermal Applications > Resource Adapters > Indexord restationt (Aria > Indexord restationt (Aria | main C Correction C Constant Cons | In the table and elect a menu option. On this page you can generate a largest ge grad certificate must be imported into the walet from which the CSR was generate incate per Trusted Certificate Paste Certificate Paste Certificate or Certificate Chan @ select a file that contains the Certificate or Cert @ select a file that contains the Certificate or Cert D'oldform dev'wern dev'how to bowse_ | ervenste a certificate signing request (CSR) which ed. | Page Refreshed Aug 11, 20 you send to your CA to verify your identity and return a sign [Certificate SH41 Fingerprint 34 2a bf a 1 90 b0 6 40 54 88 14 df b6 c5 c2 4f 6c 32 4a 13 | Logged in as 13 8:57:05 PP ed certificate; a Expiration (August 3, 2 | weblogic IPDT C d opport Use 018 |
| | | | | | | |

Click "OK"

Identity Propagation for REST using OWSM 12.1.2

2013

| Firefox * Manage Certific | cates: /Domain_base × 🔽 Managing Keys and Certificates with × 💽 Managing Keys and Certificates with × | + | | | | - 67 - ×- |
|--|--|---|---------------------------|--|------------------------------|-------------------|
| e localhost:7001/em/faces/as | /security/keystore/manageCertificate?Adf-Page-Id=14⌖=%2FDomain_base_domain%2Fbase_domain&type=weblc | ogic_domain | ☆ ▼ C | 🖞 🚼 🗝 Google | ۹ 1 | • 🖸 • |
| | lanager Fusion Middleware Control 12c | | | Help 👻 📃 we | ologic + 🕴 La | g Out 👱 |
| 📑 WebLogic Domain 👻 | | | | | | |
| Target Navigation Verv V Application Deployments D P P P P P P P P P P P P | base_domain | | | Page Refreshed Aug 11, 201 | Logged in as 3 8:57:05 PM | weblogic PDT C |
| | Manage Certificates: owsmi/keystore: To not with a certificate builded efficiate, select target in the table and select a meru cotion. On this page you can gene or more to 4-longed certificate builded certificate. A CA signed certificate must be imported into the walkt from which the i effects of the select from the select from the select and the select and the select from the | rate a keypair; generate a certificate sign CSR was generated. | ing request (CSR) which y | ou send to your CA to verify your identity and return a signed | certificate; an | d export |
| Metadata Repositories | Alias Subject Name | Certificate Type Duble CA Signed Certificate | Serial Number | Certificate SHA1 Hingerprint | Expiration Da | ste |
| | democa CN=CertGenCA,OU=FOR TESTING ONLY,O=MyOrganization,L=MyTown,ST=MyState,C=US | Trusted Certificate | 0x643a8066409afc | . ca 61 71 5b 64 6b 2 63 c6 fb 83 b1 71 f0 99 d3 54 6a f7 c8 | December 1, | 2032 |
| | | | | | | |
| 4 | | | | | | |

8 Testing

| Windows Security | / | x | | | |
|--|---|---|--|--|--|
| The server localhost at weblogic requires a username and password. | | | | | |
| Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection). | | | | | |
| | weblogic •••••• Remember my credentials | | | | |
| | OK Cance | | | | |

| 🕖 HelloWorldServlet - Windows Internet Explorer | | - 6 🔀 |
|--|--|---|
| 🕒 🔍 🗷 🔊 http://localhost7001/rest-saml-idprop-client/hellorestclient | - 😒 47 🗙 🔎 Google | • ٩ |
| × O McAfee | | |
| 👷 Favorites 🔹 🔊 Web Slice Gallery 👻 🔊 eXpressSR | | |
| HelloWorldServlet | 🟠 🕶 🗟 👻 🖶 🖷 🖉 | ge ▼ <u>S</u> afety ▼ T <u>o</u> ols ▼ @ ▼ [≫] |
| Output from REST service Hello weblogic | | * |
| The servlet has received a GET. This is the reply. | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | ~ |
| Done | 🕵 Local intranet Protected Mode: Off | 🖓 🕶 🍕 95% 👻 🚊 |

Identity Propagation for REST using OWSM 12.1.2

2013

đ 🛛 🔀

| Windows Security | × |] | |
|--|---|----------------------|---|
| The server localhost at weblogic requires | a username and password. | | |
| Warning: This server is requesting that yo sent in an insecure manner (basic authen connection). | our username and password be tication without a secure | | |
| testuser testuser Remember my crede | entials | | |
| | OK Cancel | | |
| 🟉 HelloWorldServlet - Windows Internet Explorer | | | - 0 |
| | | 👻 🔄 🖌 🖓 Google | م |
| A UMCALCE ↓ ★ Favorites ☆ @ Web Slice Gallery ▼ @ eXpressSR | | | |
| HelloWorldServlet | | 🟠 👻 🖾 👻 🖶 🖶 🖕 Page 🕶 | • <u>S</u> afety ▼ T <u>o</u> ols ▼ @ ▼ |
| Output from REST service Hello testuser The servlet has received a GET. This is the reply. | | | |
| | | | |