Oracle® Revenue Management and Billing

Version 2.6.0.1.0

Federated Identity (FI) – SSO Web Application

Revision 1.0

E97715-01

June, 2018

ORACLE

Oracle Revenue Management and Billing Federated Identity (FI) – SSO Web Application

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Preface

About This Document

This document describes the steps to be executed on Identity Provider (OAM), ORMB Application and External Identity Provider to complete the ORMB authentication configuration.

This document covers following Software and versions:

Software	Version
ORMB Application	2.6.0.1.0
OAM Server (cloud)	11.1.2.3.0
OAM Server (on- premise)	11.1.2.3.0

Intended Audience

This document is intended for the following audience:

- Cloud Engineering Team
- Application Management Support Team
- Consulting Team

Note: The person who is setting up SSO web application should have basic knowledge on how to install and maintain ORMB authentication configuration for web. The configuration also includes SAML Token.

Organization of the Document

The information in this document is organized into the following sections:

Section No.	Section Name	Description
Section 1	Introduction	Explains the Identity Federation feature. It also provides an overview of the configuration steps for Federated SSO Login.
Section 2	Federated Indentity Login Flow	Gives an overview of data flow between the user and federation systems.
Section 3	Steps to be executed on IDP (OAM server as IDP)	Explains how to enable and configure the identity federation service. It also provides steps to register external Identity Provider partners.

Section No.	Section Name	Description
Section 4	Steps to be executed on SP (OAM server as SP)	Lists and describes the steps to be followed to set up OAM server as SP.
Section 5	Steps to be executed on ORMB Application	Lists and describes the steps to be executed on ORMB application.
Section 6	Restarting Servers	Lists the scripts and commands to restart the respective instances.
Section 7	Verifying SSO Web Application	Lists the steps to be performed to verify SSO web application setup.
Section 8	Internal SSO Login Configuration	Explains how to configure Internal SSO Login.

Related Documents

You can refer to the following documents for more information:

Document	Description
Oracle Revenue Management and Billing Version 2.6.0.1.0 Release Notes	Provides a brief description about the new features, enhancements, UI and database level changes, supported platforms, framework upgrade, supported upgrades, and technology upgrade made in this release. It also highlights the discontinued features, bug fixes, and known issues in this release.
Oracle Revenue Management and Billing Banking User Guide	Lists and describes various banking features in Oracle Revenue Management and Billing. It also describes all screens related to these features and explains how to perform various tasks in the application.
Oracle Revenue Management and Billing Insurance User Guide	Lists and describes various insurance features in Oracle Revenue Management and Billing. It also describes all screens related to these features and explains how to perform various tasks in the application.

Contents

1. Introduction

Oracle Identity Federation enables companies to provide services and share identity information across their respective security domains. The end user does not need to log in again to access a remote entity where business is conducted. Users authenticate at their local sites, and the federation mechanism enables this information to be shared. Enterprises do not need to manage the identities of users who are already known to a partner organization.

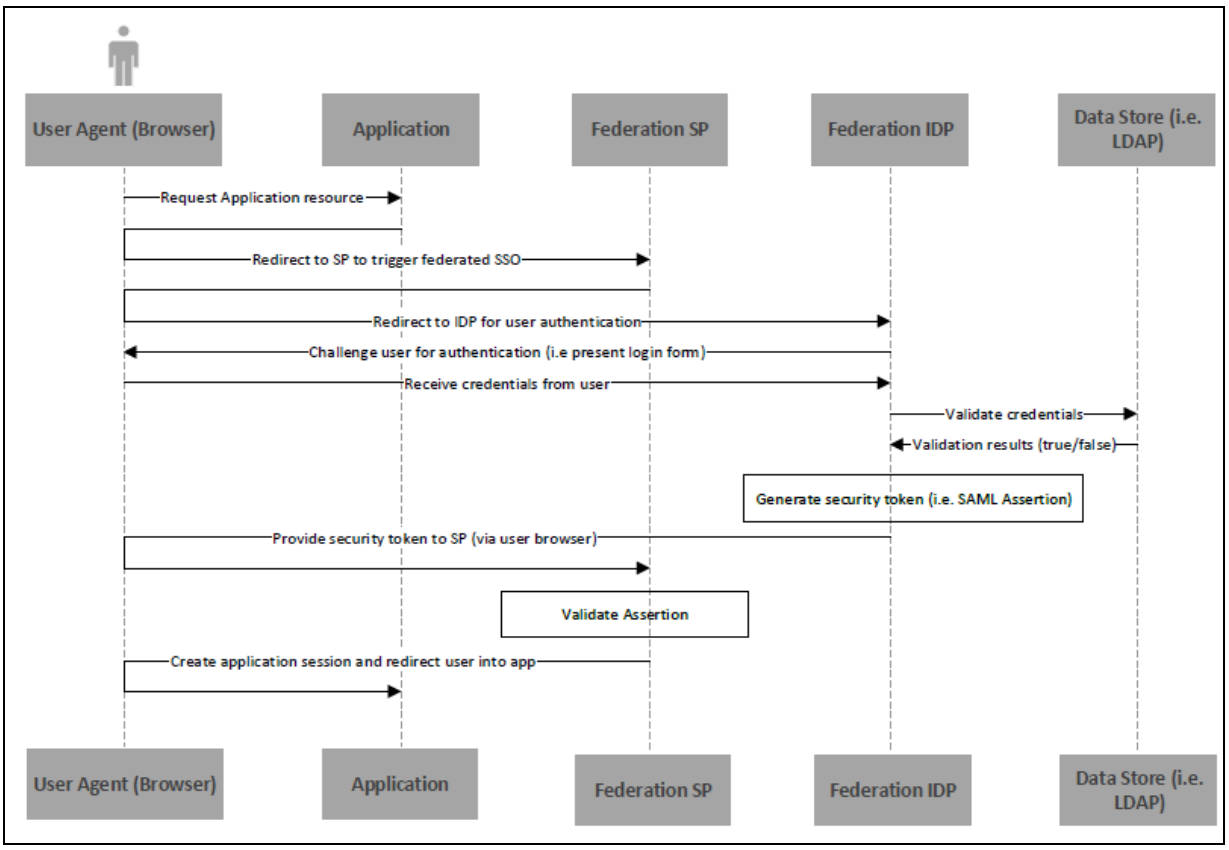
You can configure either Oracle Application Server Single Sign-On or Oracle Identity Federation to be the authentication mechanism for users who want to access resources that are protected by either product.

The below list gives an overview of the configuration steps for Federated SSO Login with each being described in detail later in this document.

1. IDP Configuration (OAM Server as IDP)
    - Enable OIF
    - Register OAM as IDP
    - Metadata XML file Import/Export
2. SP Configuration (OAM Server as SP)
    - Enable OIF
    - Register OAM as SP
    - Enable JIT User Provisioning in OIF
    - Configure OHS/WebGate Agent
    - Download WebGate Agent
    - Metadata XML file Import/Export
3. ORMB Application Configuration
    - Copy oamAuthnProvider jar file to OUAF domain
    - Copy ouaf-dbmsauth jar file to OUAF domain
    - Configure the OUAF app's web.xml
    - Add OAMIdentityAsserter
    - Add OuafDBMSAuthenticator

2. Federated Identity Login Flow

The flow of data between the two systems is illustrated below:



1. The user accesses the OUAF application via the OHS/WebGate URL.
2. The WebGate determines that the user has not been authenticated and responds with a redirect (302) back to the browser.
3. The browser accesses OAM to authenticate the user.
4. OAM determines that an external identity provider as configured in OAM should do the authentication. It creates a SAML 2.0 request and responds to the browser with a redirect to the IdP.
5. The IdP is invoked with the SAML request and the IdP challenges the user with a login prompt.
6. The IdP authenticates the user and responds with a SAML 2.0 assertion, which includes the authenticated user data.
7. The browser sends the SAML response to OAM.
8. OAM validates the assertion and responds with an OAM identity assertion for the SSO session.
9. The browser requests the original OUAF resource and this time WebGate grants access.
10. The OUAF response is returned to the browser.

3. Steps to be executed on IDP (OAM Server as IDP)

3.1 Enabling Identity Federation Service

Prerequisite

To set up federated identity on IDP, you should have:

- Access Manager Service and the Identity Federation service enabled in OAM.

Procedure

To enable the Identity Federation service, you need to follow the below steps:

1. Login to Oracle Access Management using the administrator's credentials.
2. Click the **Configuration** button. The **Launch Pad** tab appears.

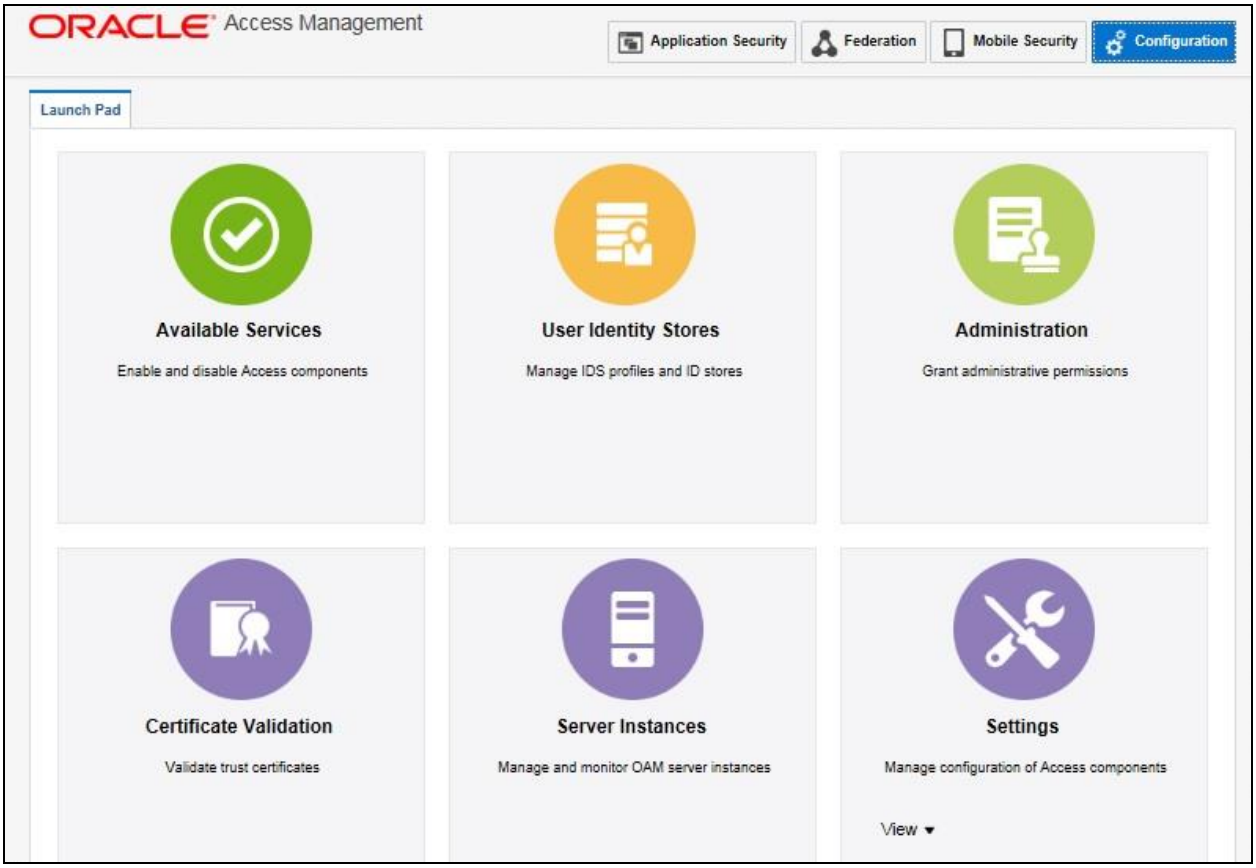


Figure 1: Configuration - Launch Pad

3. Click the **Available Services** icon. The **Available Services** tab appears.

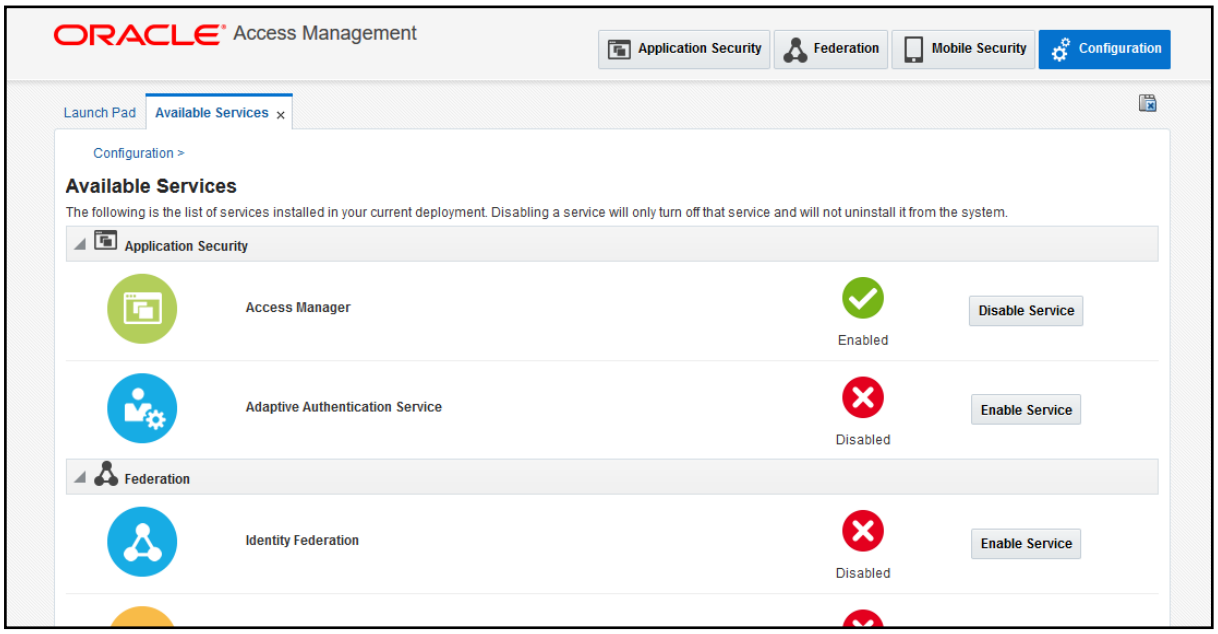


Figure 2: Available Services

The list of services installed in current deployment appears. The green and red status symbols highlight whether the corresponding service is enabled or disabled. Green check mark indicates Enabled service and Red cross mark indicating Disabled service.

4. Click the **Enable Service** button corresponding to the Identity Federation service in the **Federation** section.

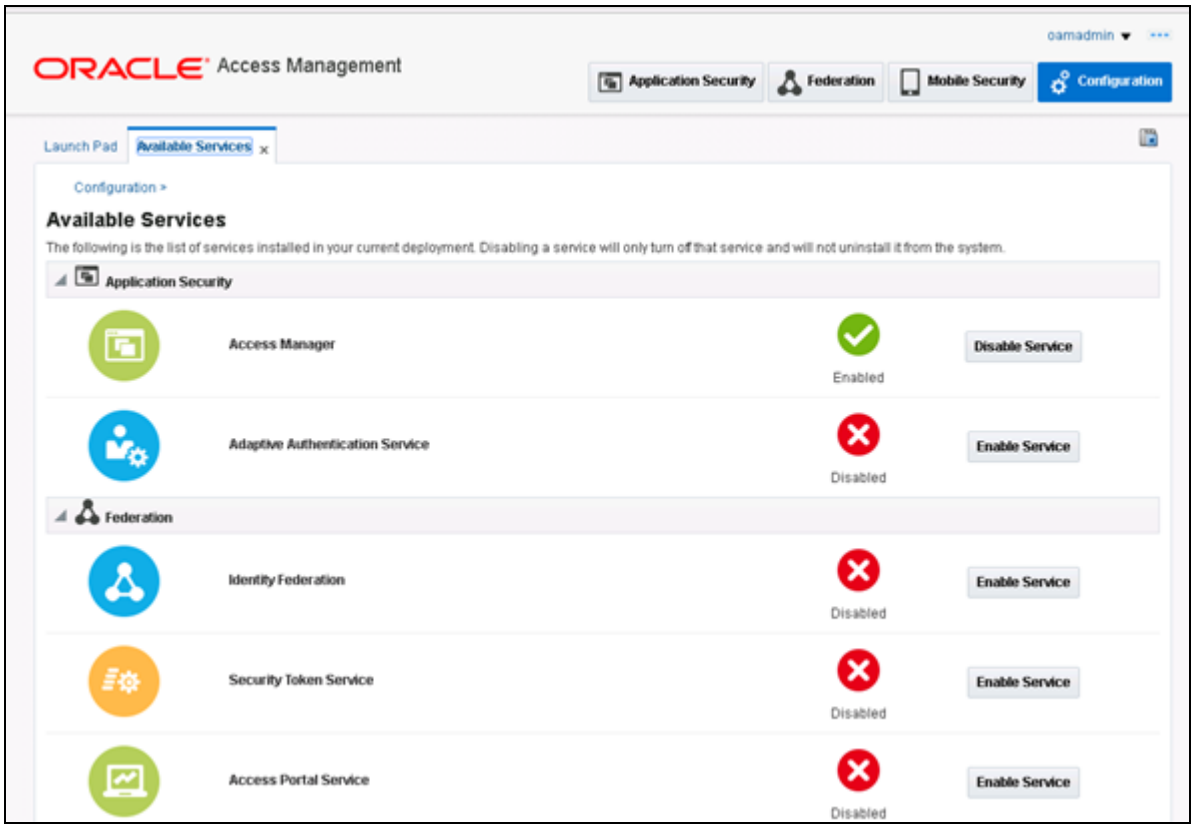


Figure 3: Identity Federation - Disabled Service

5. A confirmation message appears. Click **Enable Service**.

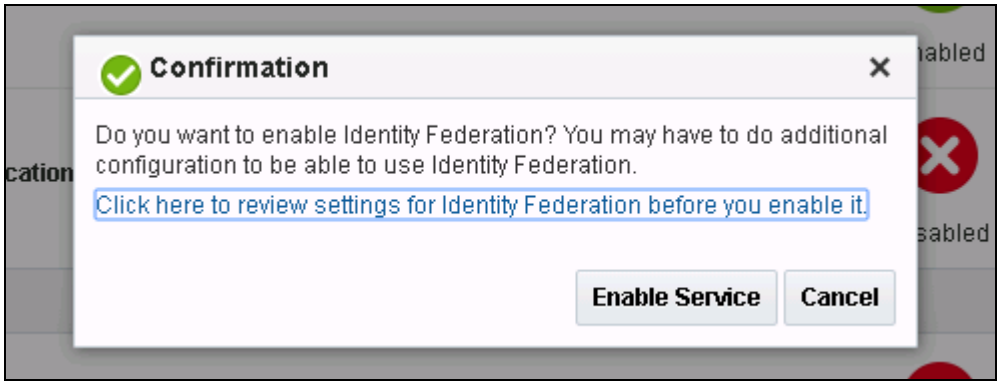


Figure 4: Confirmation Message

6. The **Enabled** icon appears corresponding to the adaptive authentication service indicating that the service is enabled.

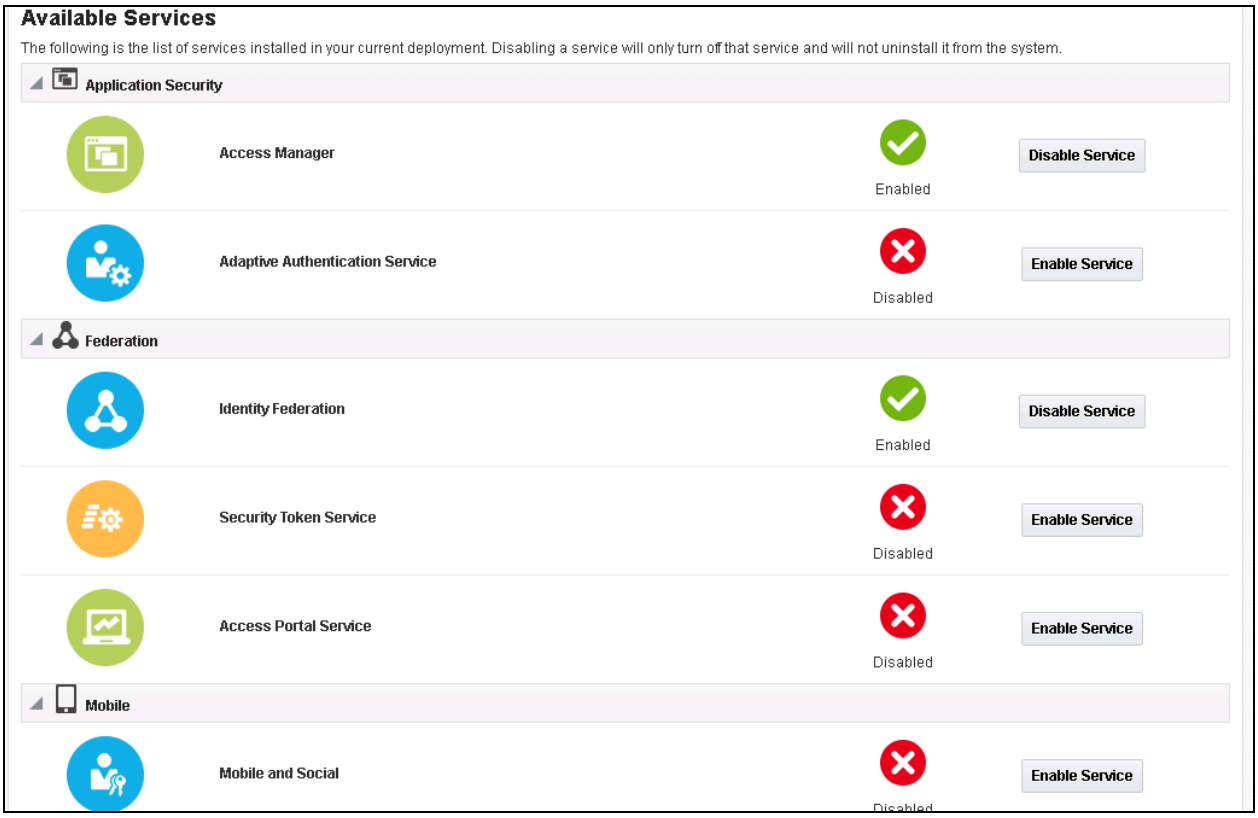


Figure 5: Identity Federation - Enabled Service

3.2 Administering Identity Provider

When Access Manager is configured as a Federation Service Provider, you must register external Identity Provider partners to set up OAM server as IDP. To register an identity provider partner:

1. Login to Oracle Access Management using the administrator's credentials.
2. Click the **Federation** button. The **Launch Pad** tab appears.
3. Click the **Identity Provider Management** link in **Federation** section.

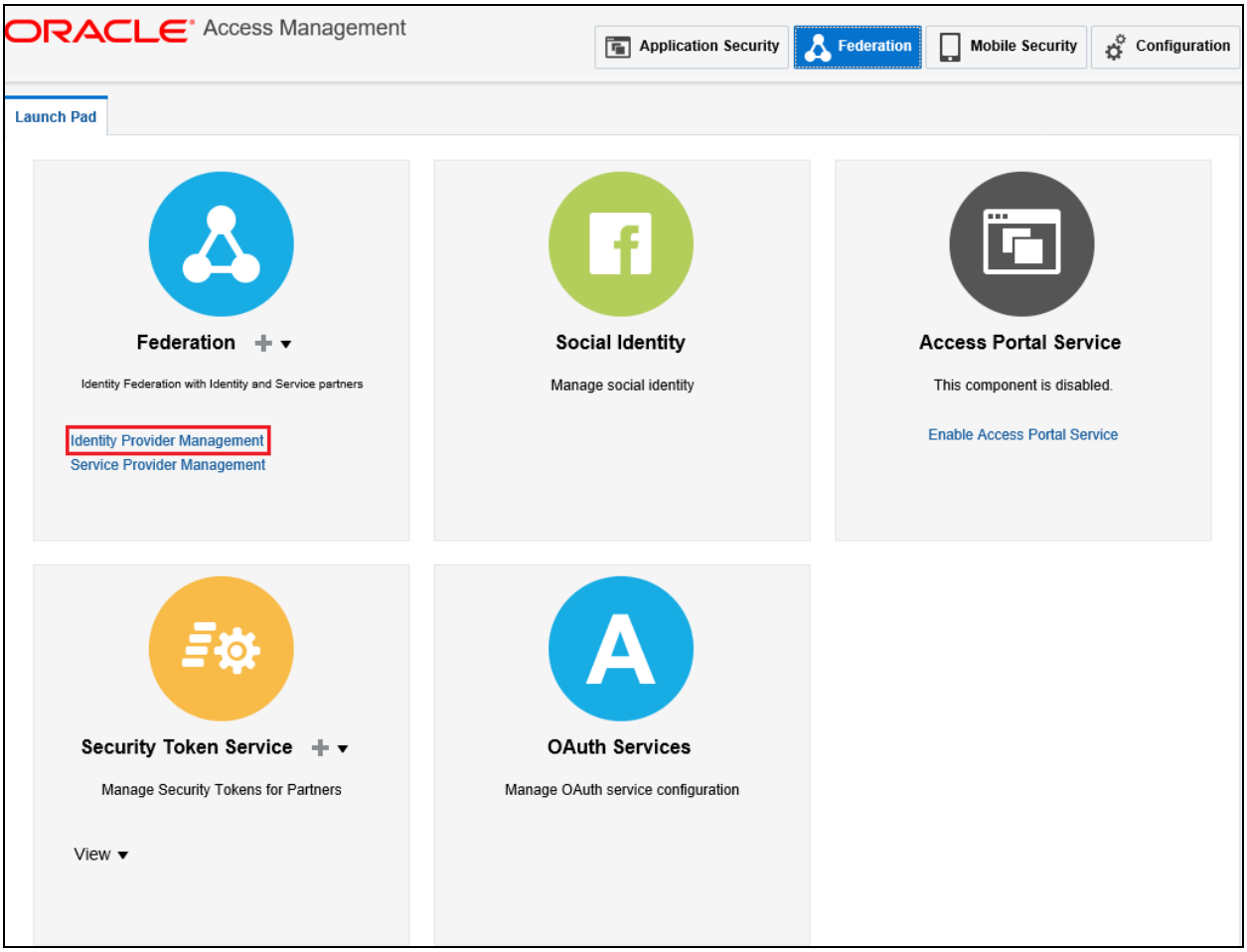


Figure 6: Federation - Identity Provider Management

4. The **Identity Provider Administration** tab appears. Click **Create Service Provider Partner**.

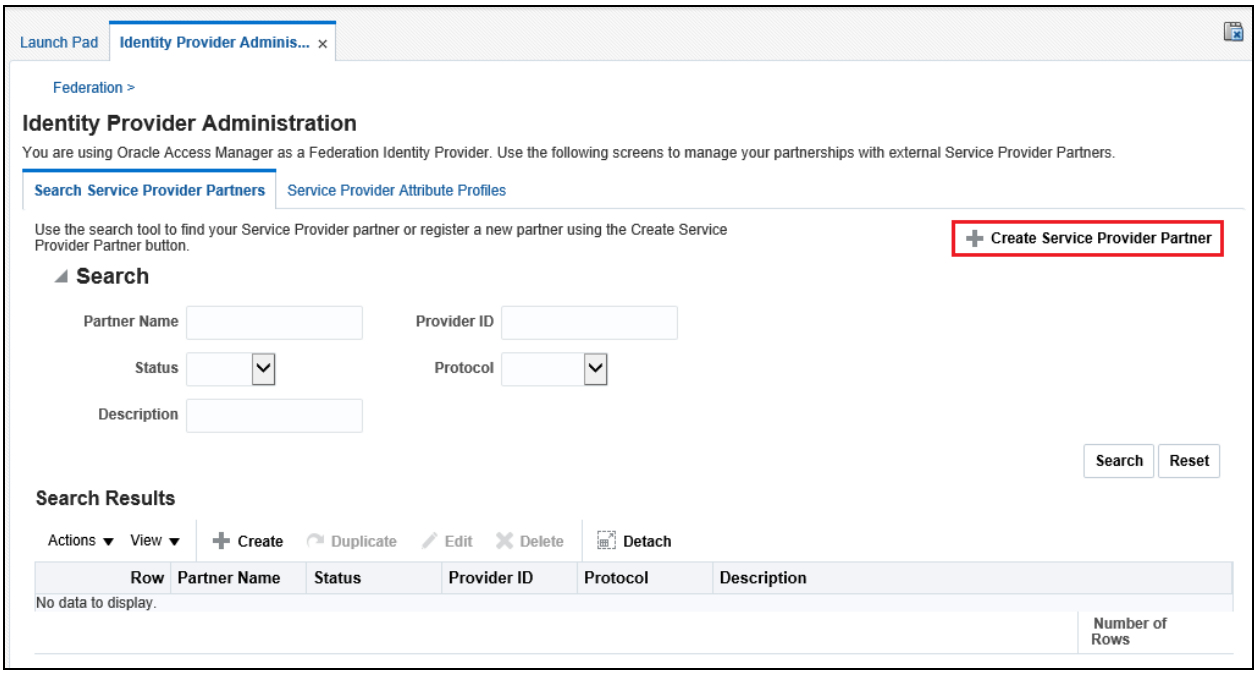


Figure 7: Identity Provider Administration

5. **Create Service Provider Partner** screen appears.

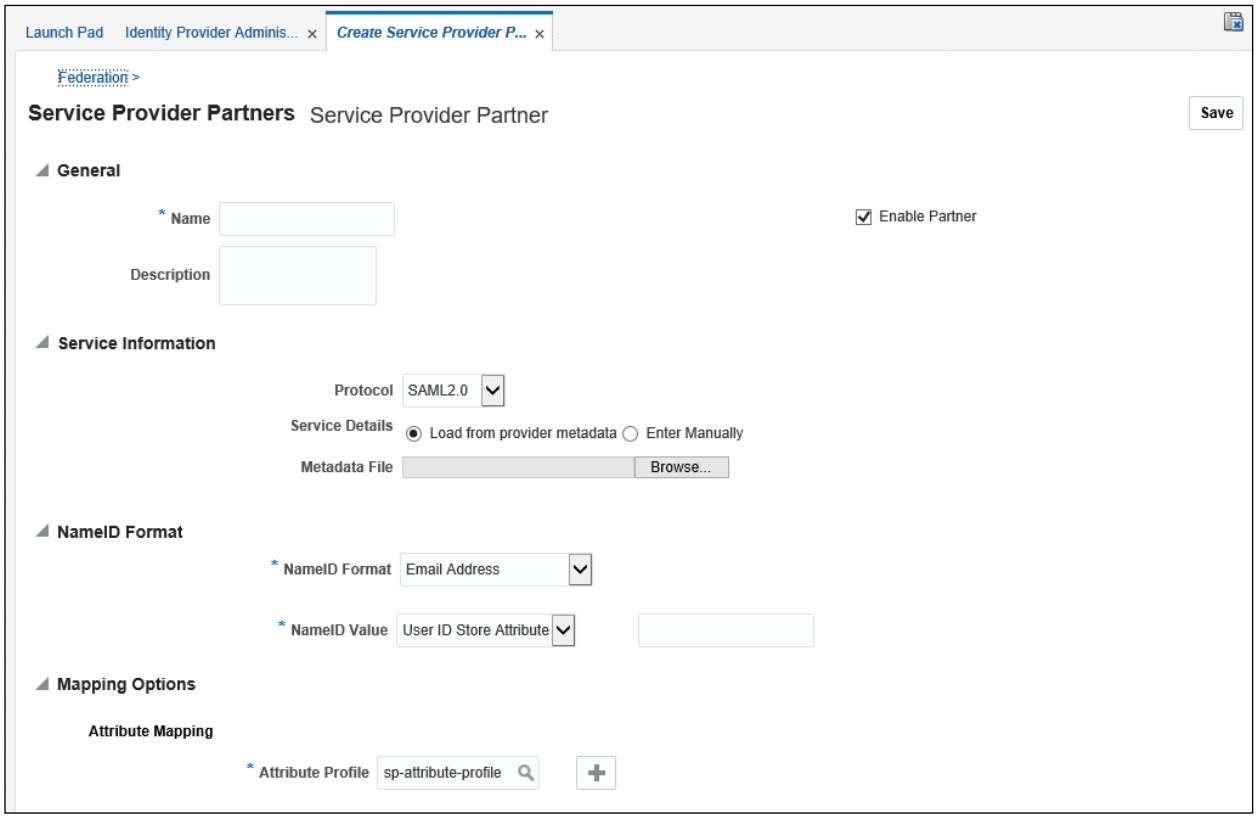


Figure 8: Service Provider Partners Screen

6. Enter a name for the Service Provider partner. For example, mum00xxx_sp.

7. Click **Browse** button corresponding to **Metadata File** to select and open the Metadata.xml file that you saved from Service Provider Server (SP).
8. Select 'User ID Store Attribute' from the **NameID Value** drop-down list and then specify **NameID Value**. For example uid.

Note: The user's uid attributes will be used to map the user to Service Provider Server.

9. Click **Save**.

3.3 Exporting OAM SAML Metadata

To export the metadata:

1. Login to Oracle Access Management using the administrator's credentials.
2. Click the **Configuration** button. The **Launch Pad** tab appears.
3. Click **View** button present within the **Settings** section.

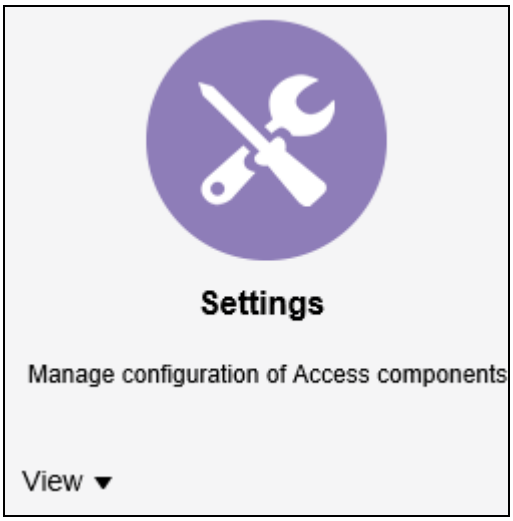


Figure 9: Configuration - Settings

4. Select **Federation** from the **View** list. The **Federation Settings** tab appears.

The unique Provider Id for the OIF instance is defined in these settings. This section also allows to export SAML 2.0 Metadata which can be exchanged with the Identity Provider.

Note that some IDPs can access the server directly and periodically download the metadata to keep it fresh whereas some IDPs require the metadata to be manually exchanged. You can export the metadata using this screen and import the same in the IDP.

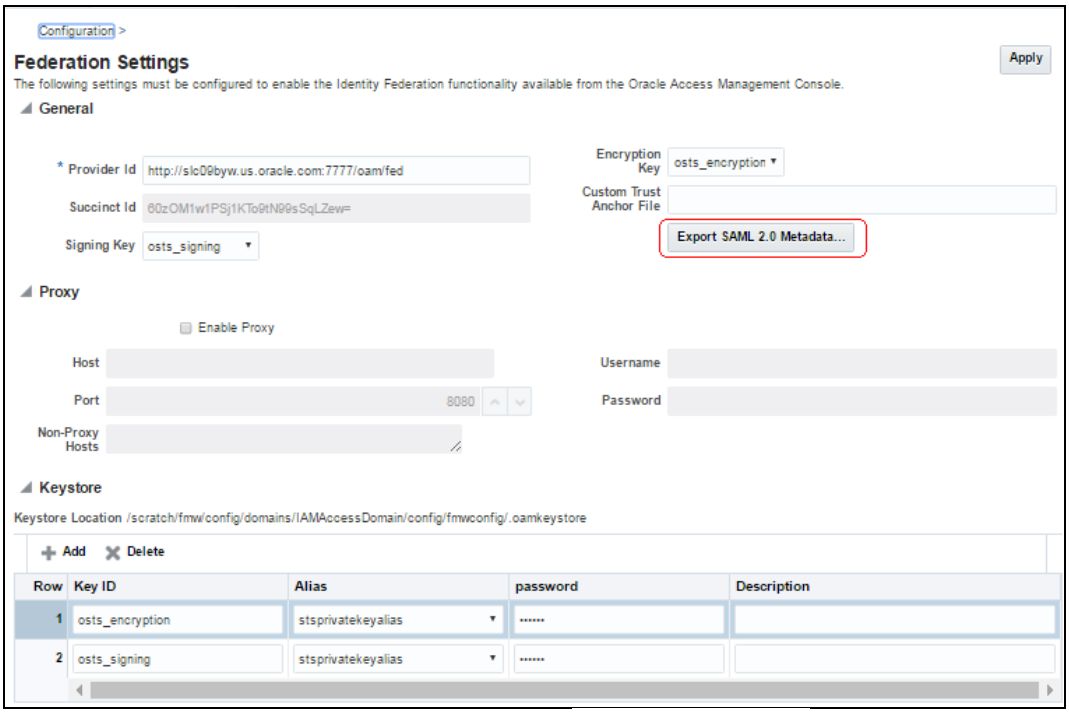


Figure 10: Federation Settings

4. Steps to be executed on SP (OAM Server as SP)

Prerequisite

To set up federated identity on IDP, you should have:

- Access Manager Service and the Identity Federation service enabled in OAM.

Procedure

1. To enable Identity Federation Service, refer Enabling Identity Federation Service section.
2. Once Identity Federation Service is enabled, you need to complete the following activities in the specified order to set up OAM server as SP:
    1. Administer service provider
    2. Enabling JIT user provisioning in OIF
    3. Defining WebGate agent
    4. Configuring federated logout settings
    5. Downloading WebGate agent
    6. Configuring authentication policy for the application domain

4.1 Administering Service Provider

When Access Manager is configured as a Federation Service Provider, you must register external Service Provider partners to set up OAM server as SP.

To register a service provider partner:

1. Login to Oracle Access Management using the administrator's credentials.
2. Click the **Federation** button. The **Launch Pad** tab appears.
3. Click the **Service Provider Management** link in **Federation** section.

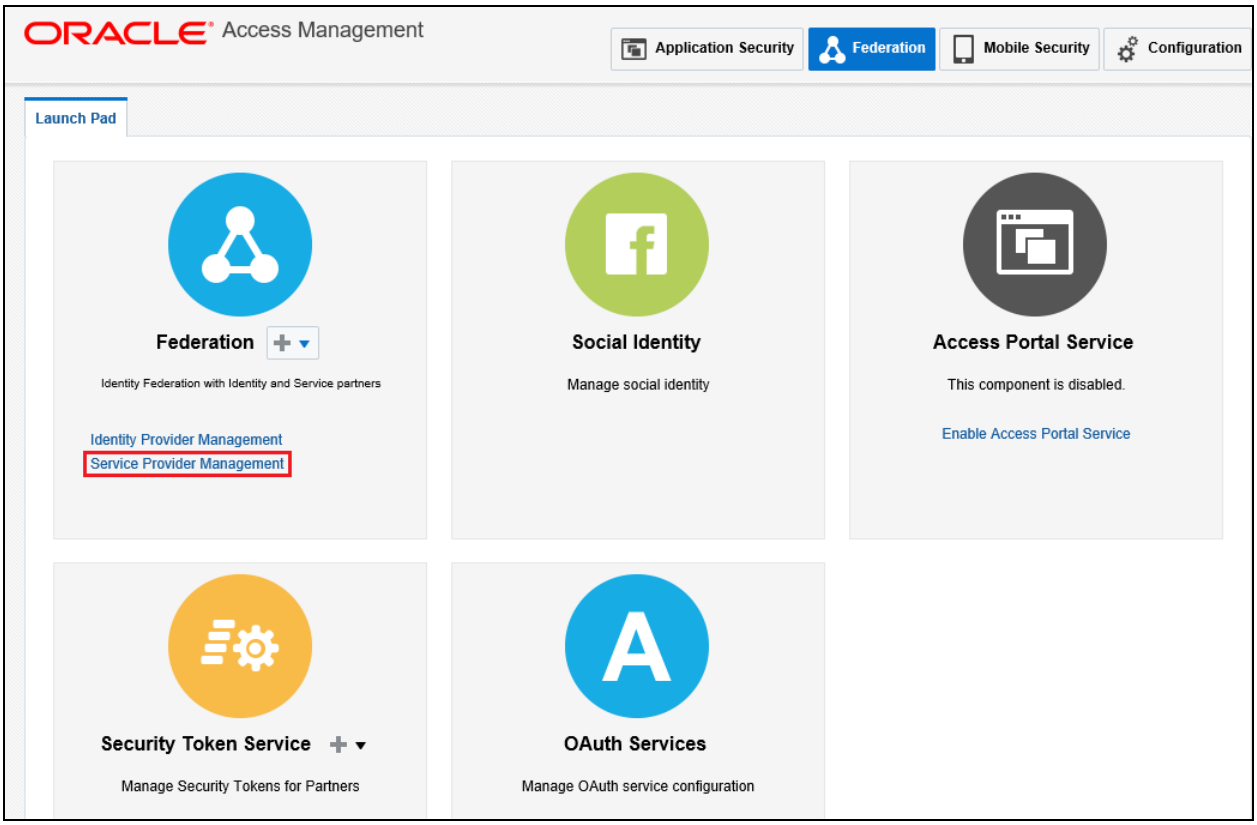


Figure 11: Federation – Service Provider Management

4. The **Service Provider Administration** tab appears. Click **Create Identity Provider Partner** button.

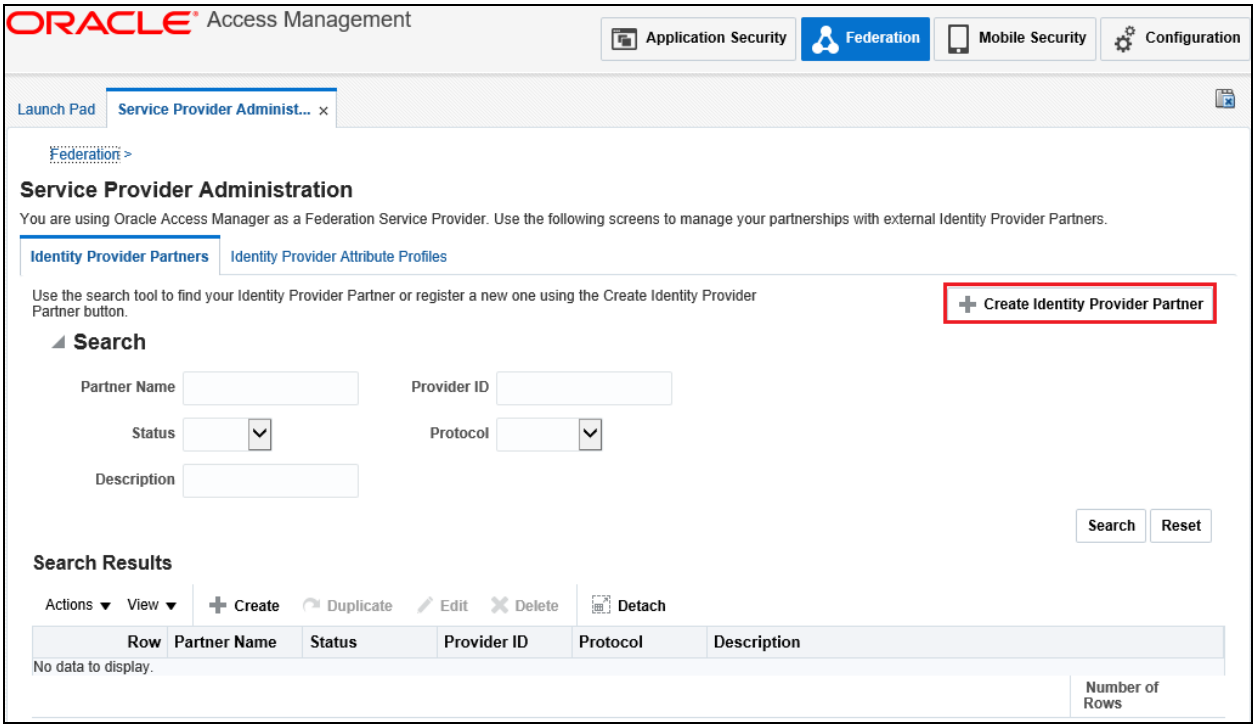


Figure 12: Service Provider Administration

5. **Create Identity Provider Partner** screen appears.

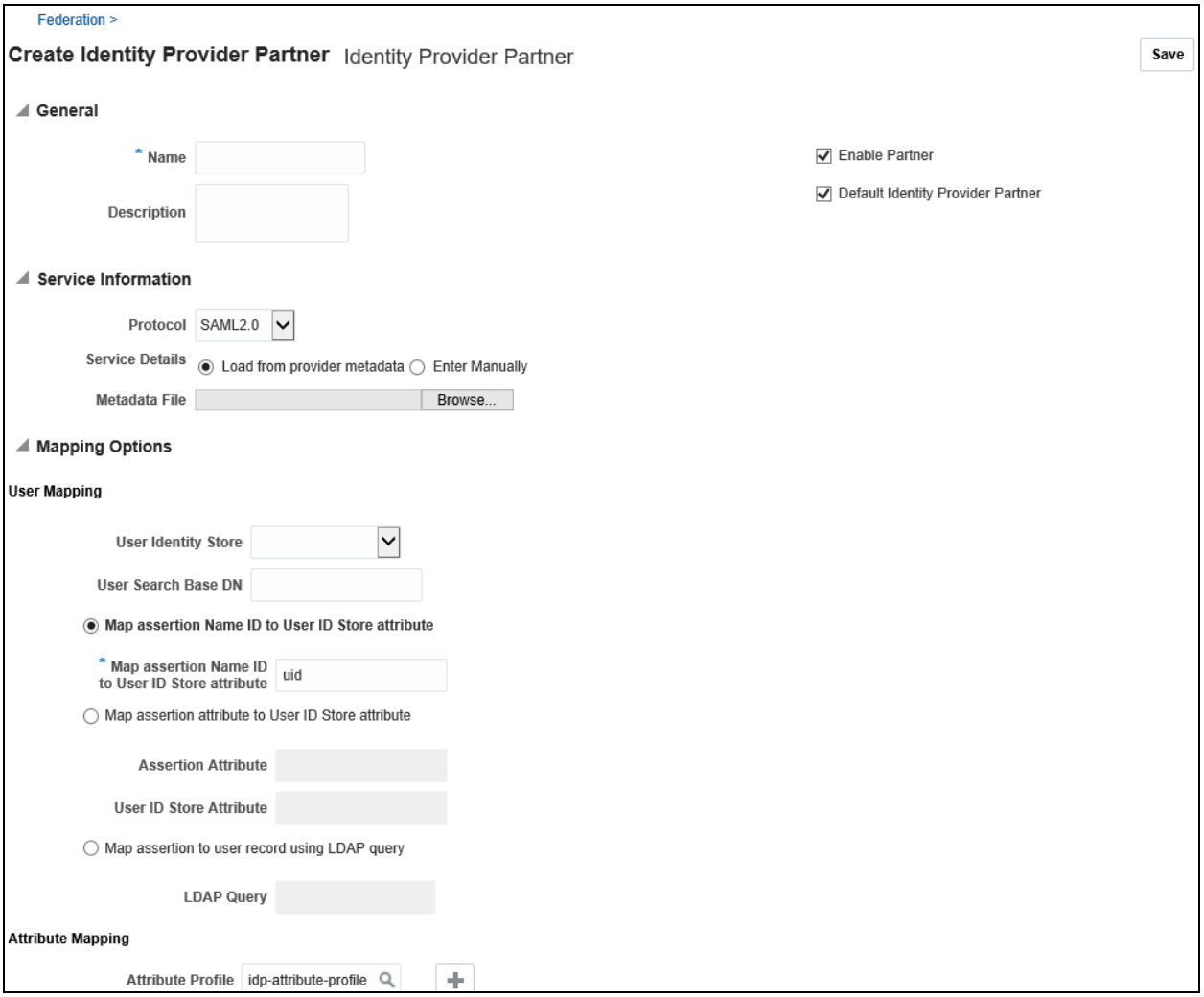


Figure 13: Identity Provider Partner

6. Enter name for the Service Provider partner. For example, mum00xxx_Idp.
7. Select 'SAML 2.0' from the **Protocol** drop-down list.
8. Click **Browse** button corresponding to Metadata File to select and upload the SAML 2.0 Metadata file from the IDP.
9. Optionally set the OAM Identity Store that should be used.
10. Optionally set the User Search Base DN (If the value is not set, it will use the user search base DN configured in the Identity Store)
11. Enter value in **Map assertion Name ID to User ID Store attribute** to select how the mapping will occur. For example, 'uid'. This will map the Assertion via the NameID to the LDAP uid attribute.
12. Select the Attribute Profile that will be used to map the names of the attributes in the incoming SAML Assertion to local names.

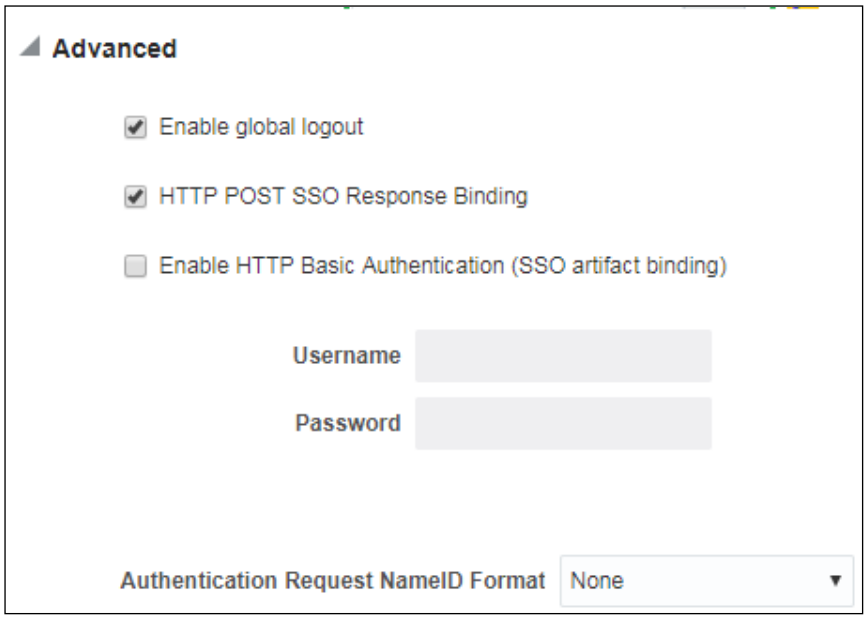


Figure 14: Identity Provider Partner - Advanced Option

13. When you enter all the required values, you will see an additional option 'Advanced'.
14. Select **Enable global logout** and **HTTP POST SSO Response Binding** options.
15. Select 'None' from the **Authentication Request NameID Format** drop-down list.
16. Click **Save** button to save this information.

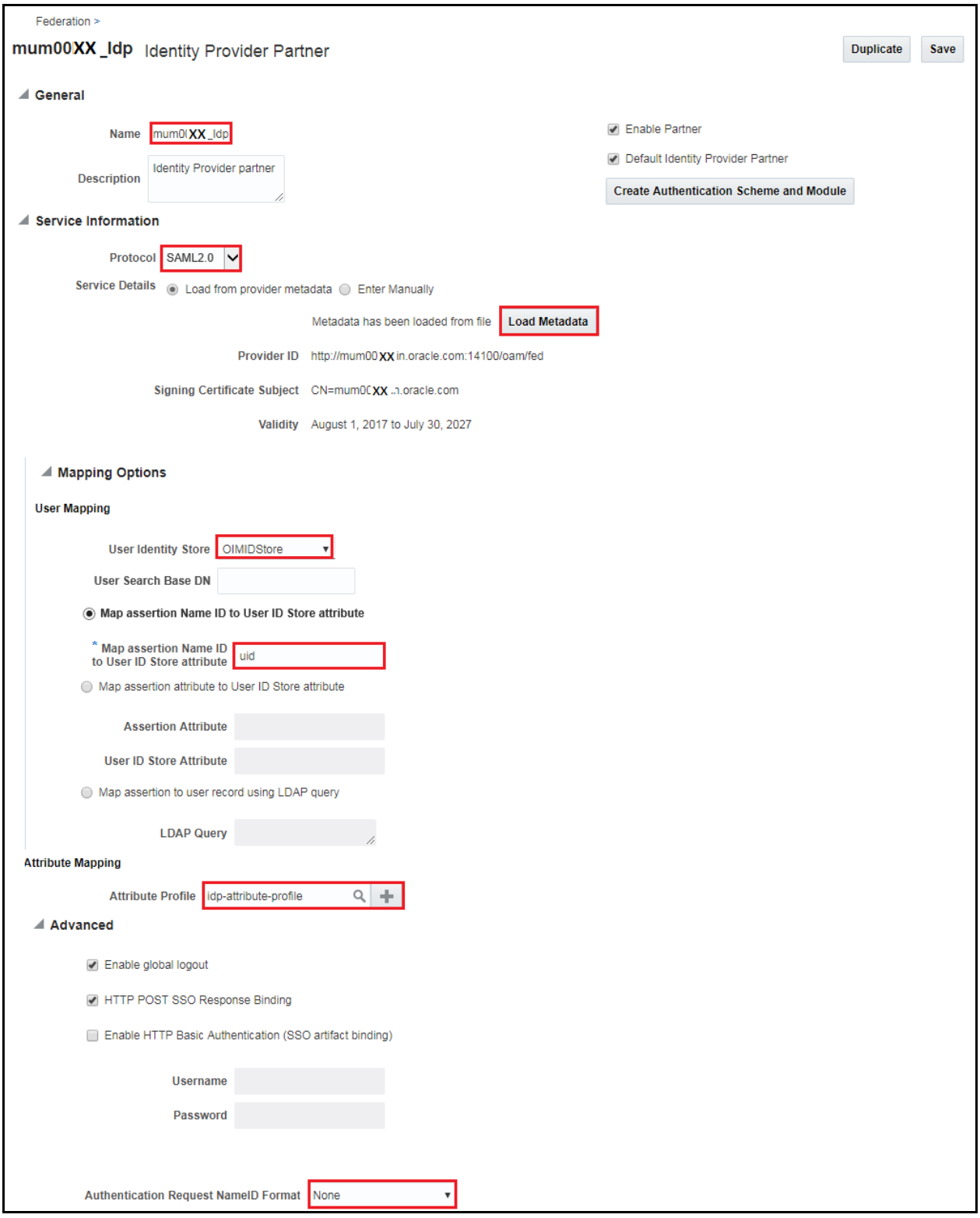


Figure 15: Service Provider Administration

4.2 Enabling JIT User Provisioning in OIF

Prerequisite

To enable JIT user provisioning in OIF, you should:

- Restart the WebLogic Admin and OAM manage server.

Procedure

To enable JIT user provisioning:

1. Execute below WLST commands using Putty:

```
connect('oamadmin','<password>','t3://<OAM-host>:7001');

cd /u01/oracle/products/fmw/10.3.6/Oracle_IDM/common/bin/

./wlst.sh

connect('wlsadmin','Welcome1','t3://mum00XXX.in.oracle.com:7001
');

domainRuntime();

getBooleanProperty("/fedserverconfig/userprovisioningenabled");

putBooleanProperty("/fedserverconfig/userprovisioningenabled","
true");
```

```
>> cd /u01/oracle/products/fmw/10.3.6/Oracle_IDM/common/bin/
>> ./wlst.sh
>> connect('wlsadmin','Welcome1','t3://mum00xxx.in.oracle.com:7001')
>> domainRuntime();
>> getBooleanProperty("/fedserverconfig/userprovisioningenabled") ;
>> putBooleanProperty("/fedserverconfig/userprovisioningenabled","true");
```

4.3 Defining WebGate Agent

1. Login to Oracle Access Management using the administrator's credentials.
2. Click the **Application Security** button. The **Launch Pad** tab appears.
3. Click the **Agents** icon.

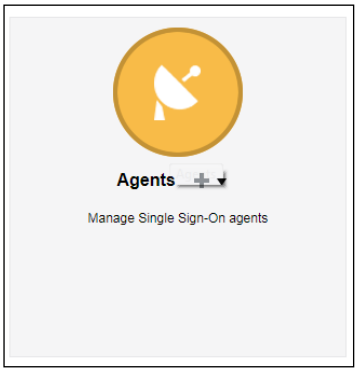


Figure 16: Application Security - Agents

4. **Search SSO Agents** tab appears. Click **Create Webgate**.

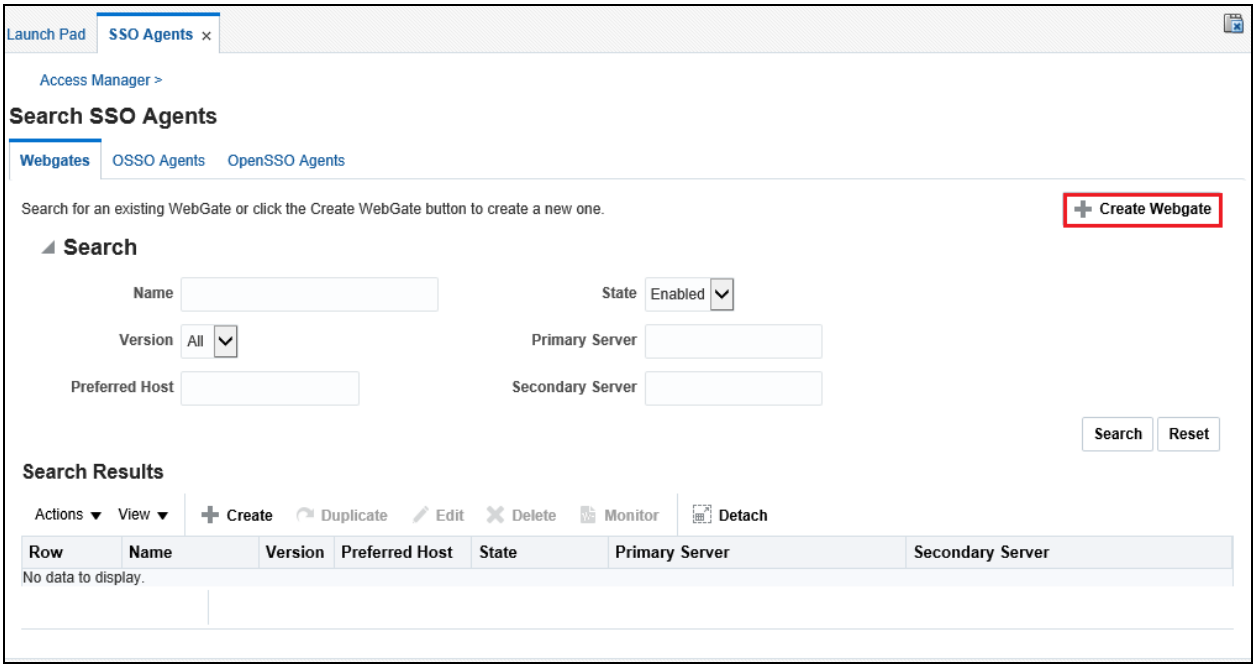


Figure 17: Search SSO Agents

5. **Create WebGate** screen appears. Enter the following parameter values.

Parameter	Description	Mandatory (Yes or No)
Version	Used to define WebGate version. For example, 11g.	Yes
Name	Used to define unique identifying name for this Agent registration. This is often the name of the computer that is hosting the web server used by WebGate.	Yes
Description	Used to define description.	No
Base URL	Used to define the host and port of the computer on which the Web server for the WebGate is installed. For example, http://example_host:port or https://example_host:port.	No

Parameter	Description	Mandatory (Yes or No)
Access Client Password	Used to authenticate a registered WebGate and prevent unauthorized WebGates from connecting to OAM Servers and obtaining policy information.	No
Security	Used to define the level of communication transport security between the Agent and the OAM Server (this must match the level specified for the OAM Server). The valid values are: • Open - No transport security. • Simple - SSL v3/TLS v1.0 secure transport using dynamically generated session keys. • Cert - SSL v3/TLS v1.0 secure transport using server side x.509 certificates. Choosing this option displays a field where you can enter the Agent Key Password.	No
Host Identifier	Used to represent the Web server host. This is automatically seeded with the value in the agent Name field.	No
User-defined Parameters	Used to define parameters to enable specific WebGate behaviors. **Note:** Specify multiple User Defined Parameters separated by a new line. They should be of the form 'Attribute=Value'.	No
Virtual Host	Flag to validate if a WebGate is installed on a Web server that contains multiple Web site and domain names. **Note:** The WebGate must reside in a location that enables it to protect all of the Web sites on that server.	No
Auto Create Policies	Flag to check whether authentication and authorization policies are to be created automatically during agent registration.	No If Selected, authentication and authorization policies are created automatically.
IP Validation	Flag to validate whether a client's IP address is the same as the IP address stored in the ObSSOCookie generated for single sign-on.	No

Parameter	Description	Mandatory (Yes or No)
IP Validation Exceptions	Used to define IP addresses to be excluded from validation using standard notation for the addresses. For example, 10.20.30.123.	No
Protected Resource (URI) List	Used to define URIs for the protected application. For example, /myapp/login **Note:** Each URI for the protected application should be specified in a new row of the table for the Protected Resource List. Default value: /**	No
Public Resource (URI) List	Used to define public application for the Public Resource List.	No

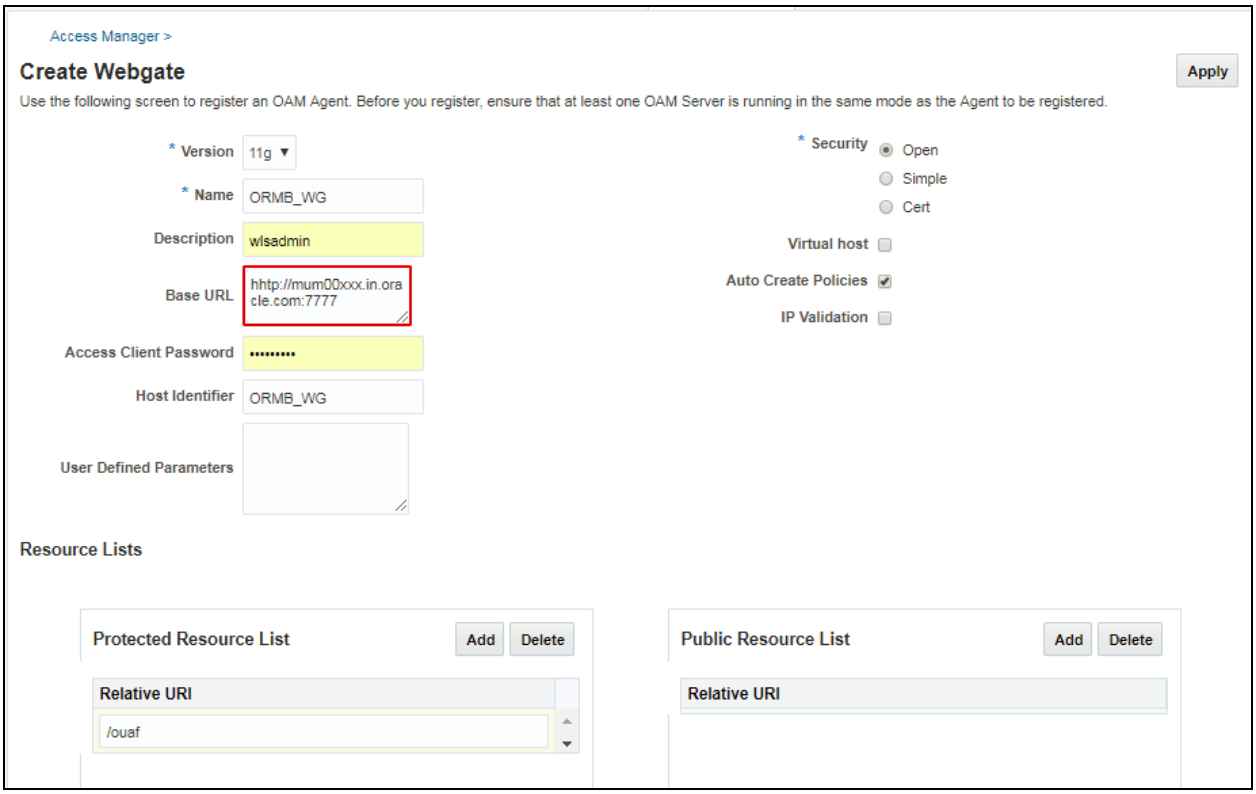


Figure 18: Create WebGate

Note: It may be necessary to add "User Defined Parameter" authorizationResultCacheTimeout=0. The default for this is 15 seconds, but in local tests, it intermittently caused online logins to be rejected with "Invalid SAML Assertion" errors in the OUAF application's log. Disabling this cache prevented these errors and made for a smoother login experience. It is not clear exactly what effect this setting has on performance or anything else; our tests so far have shown no noticeable differences.

4.4 Configuring Federated Logout Settings

The WebGate configuration defined in Defining WebGate Agent can be modified to redirect to the third party IDP's logout URL.

For example, `http://<OAM server address>/oam/server/logout` must be called to end the OAM session.

To configure settings for Federated Logout:

1. Login to Oracle Access Management using the administrator's credentials.
2. Click the **Application Security**. The **Launch Pad** tab appears.
3. Click the **Agents** icon.
4. In the **Search** section, click **Search.**
5. In the **Search Results** section, select the newly created WebGate agent from the list.
6. Update the values in following fields:

Parameter	Description
Logout Callback URL	Specify the third party IDP's logout URL. OAM logout URL: http://mum00xxx.in.oracle.com:14100/oam/server/logout?end_url=http://mum00xxx.in.oracle.com:7001/oamconsole//faces/admin.jspx
Logout URL	/sso/logout
Logout Target URL	end_url

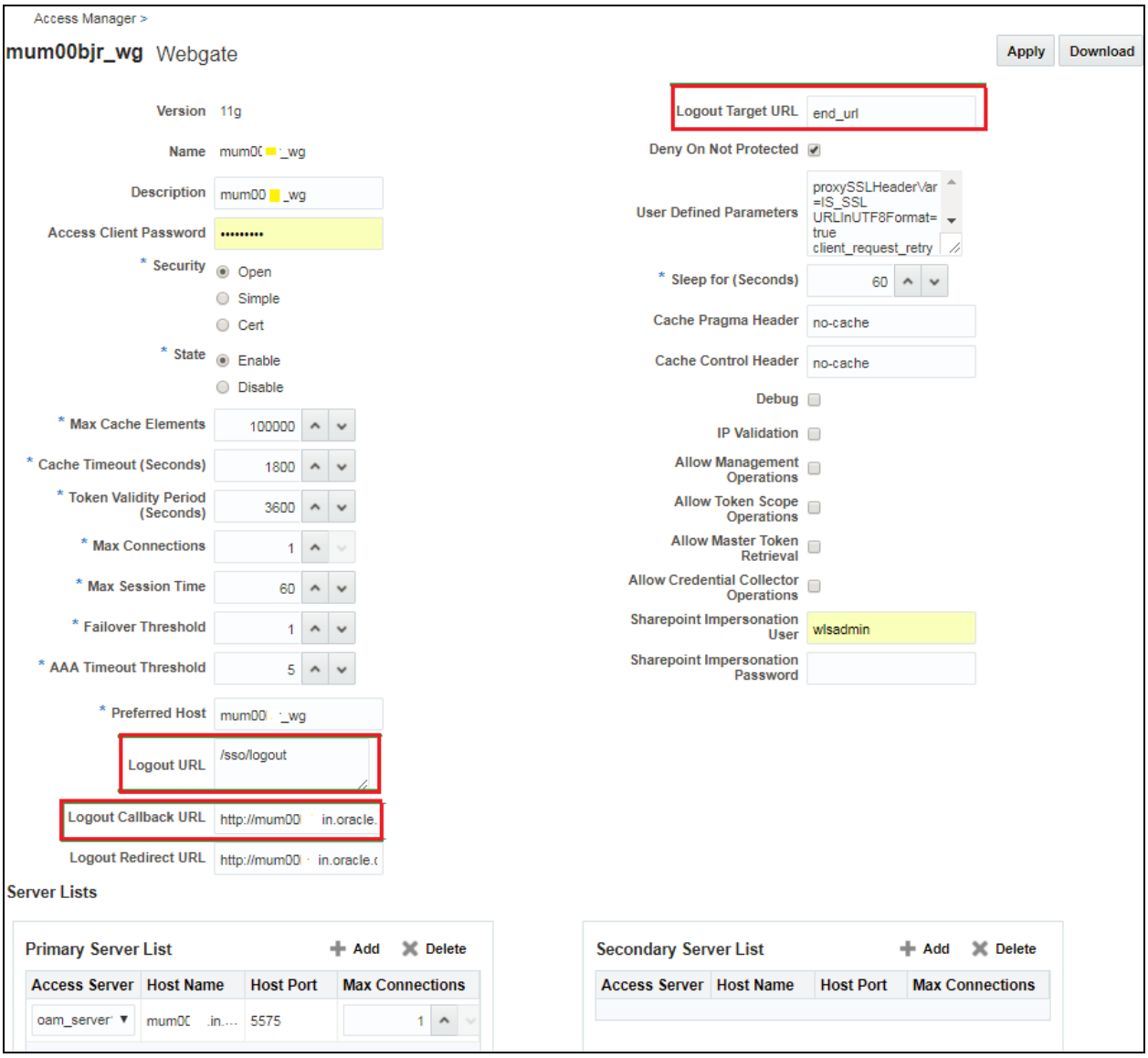


Figure 19: Configuring Federated Logout Settings

4.5 Downloading WebGate Agent

To download WebGate agent:

1. Login to Oracle Access Management using the administrator's credentials.
2. Click the **Application Security**. The **Launch Pad** tab appears.
3. Click the **Agents** icon.
4. In the **Search Results** section, click **Search.**
5. Search for the required WebGate.

   Tip: You can click **Search** to view all existing WebGates.

6. In the **Search Results** section, select the newly created WebGate agent from the list.

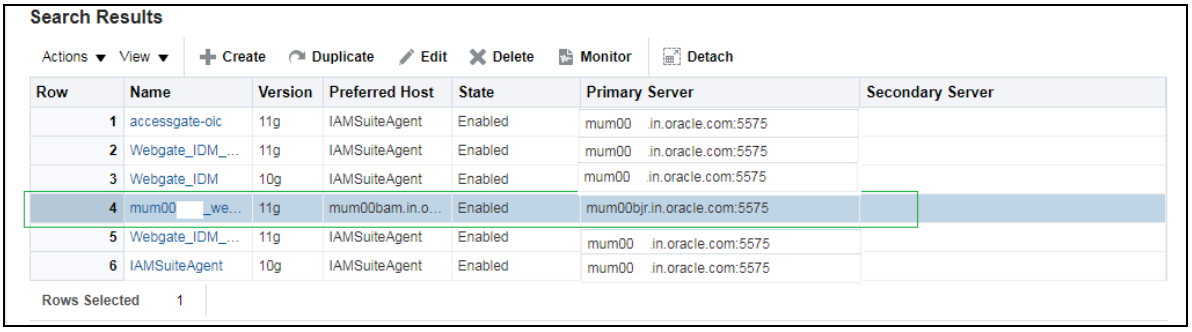


Figure 20: WebGate Agent Search Results

7. The WebGate screen appears. Click **Download**.

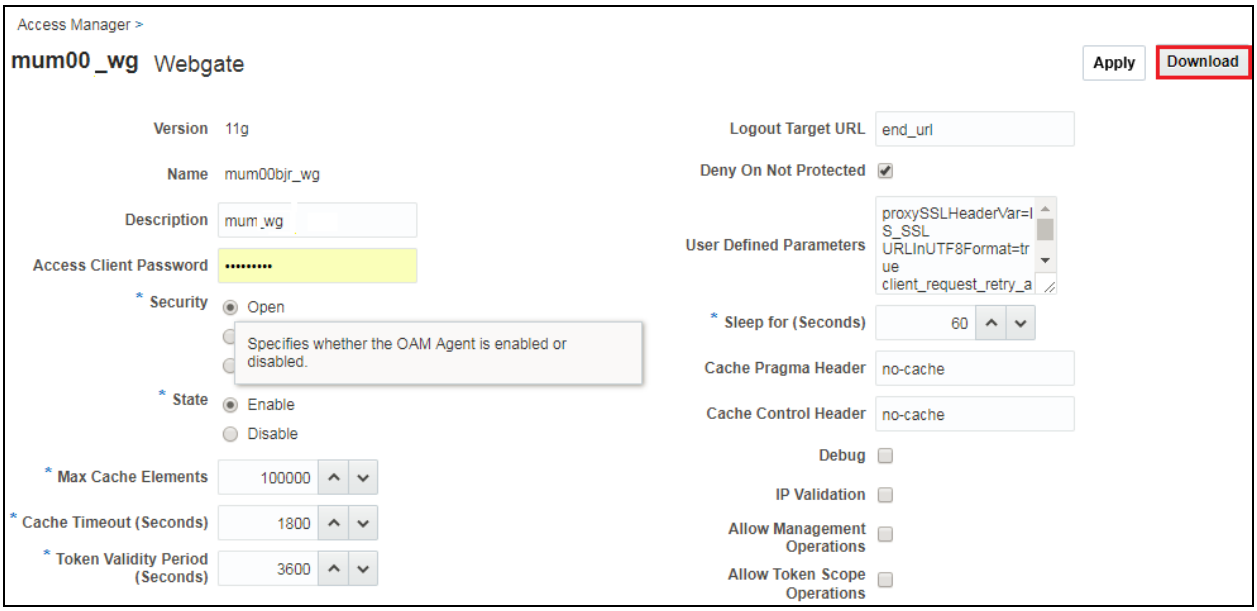


Figure 21: Downloading WebGate Agent

8. Save the zip file.
9. Copy downloaded files (cwallet.sso, ObAccessClient.xml, wallet) to ORMB server.

4.6 Configuring Authentication Policy for Application Domain

To configure authentication policies, follow the below steps:

1. Login to Oracle Access Management using the administrator's credentials.
2. Click the **Application Security** button. The **Launch Pad** tab appears.
3. Click the **Application Domains** link in the Access Manager section. The **Application Domain** tab appears.

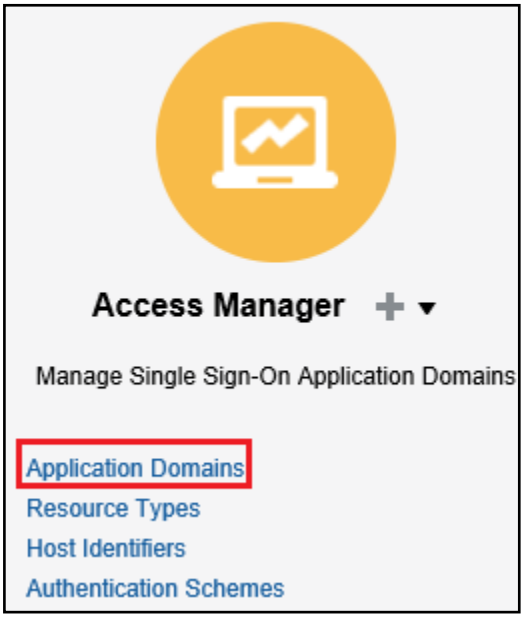


Figure 22: Access Manager

4. Search for the required application domain in the **Application Domain** tab. For example, “mum00xxx_webgate”.
5. In the **Search Results** section, click Application Domain Name in the **Name** column whose resources you want to configure using the authentication policy.

Note: The Application Domain should have been automatically generated when the WebGate Agent was created and it should have the same name as the WebGate Agent. Therefore, the given example, Application Domain “mum00xxx_webgate” should now exist.

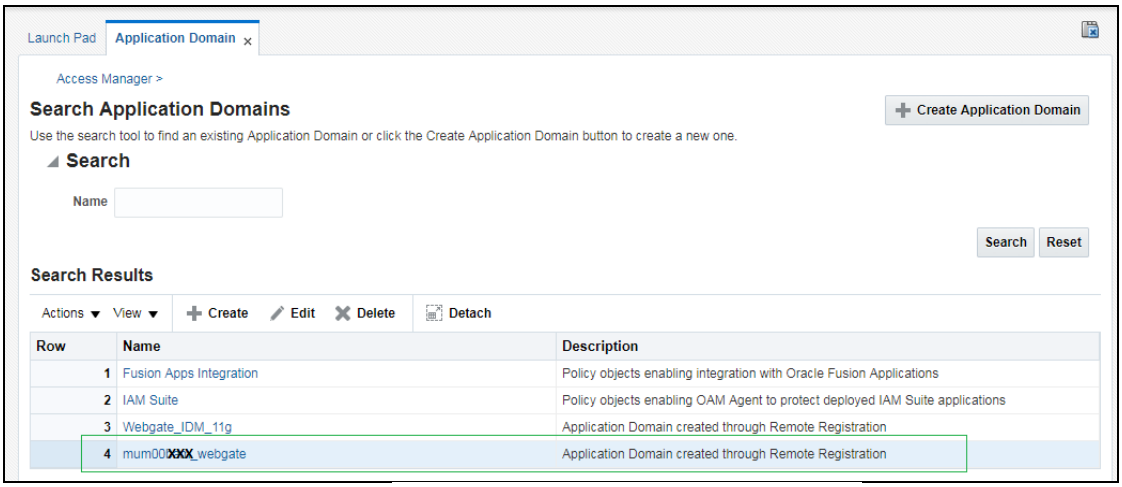


Figure 23: Search Application Domains

6. Selected Application Domain opens in a new tab.

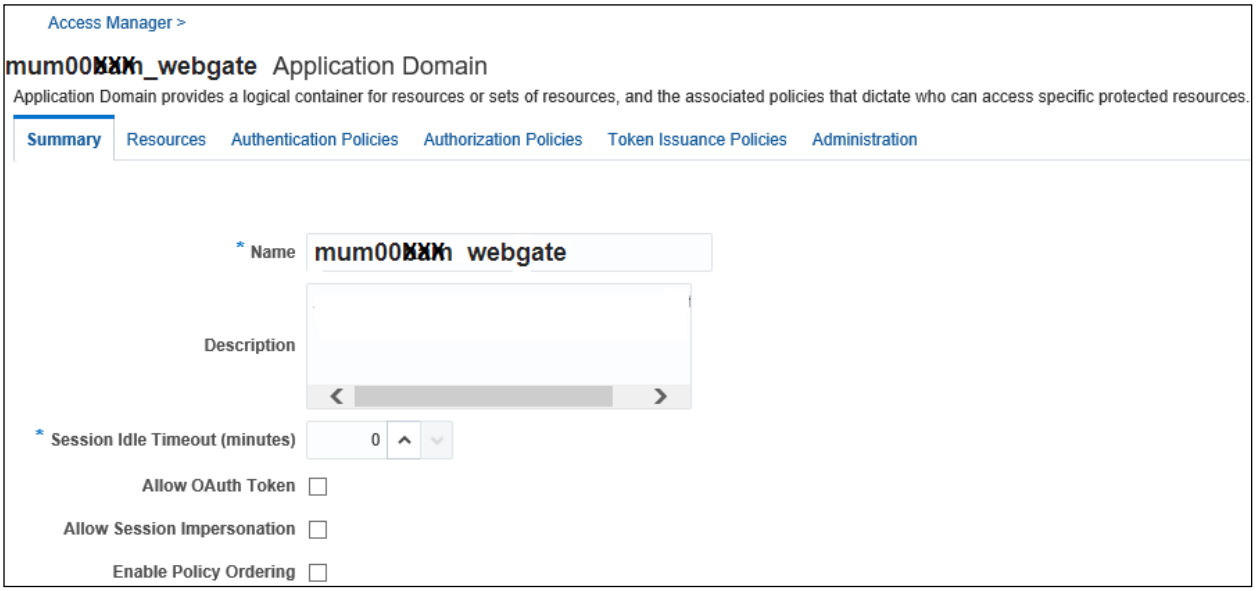


Figure 24: Application Domain

7. Click the **Authentication Policies** tab. A list of existing Authentication Policies appears.

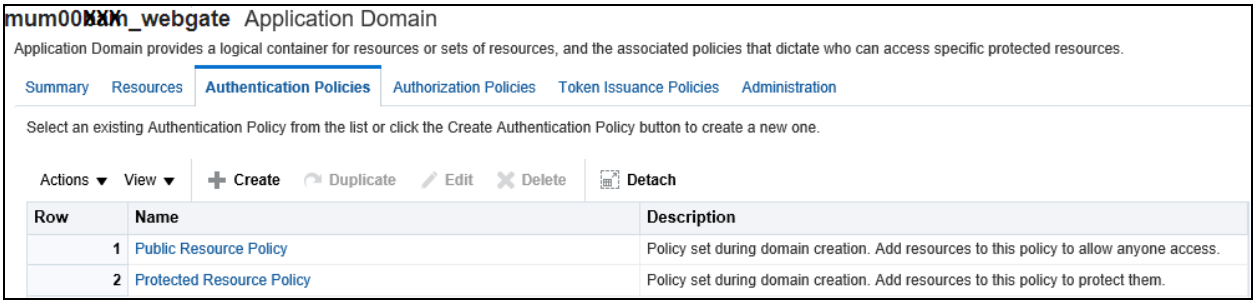


Figure 25: Application Domains - Authentication Policies

8. Click **Create** button to create a new authentication policy. The **Create Authentication Policy** tab appears.

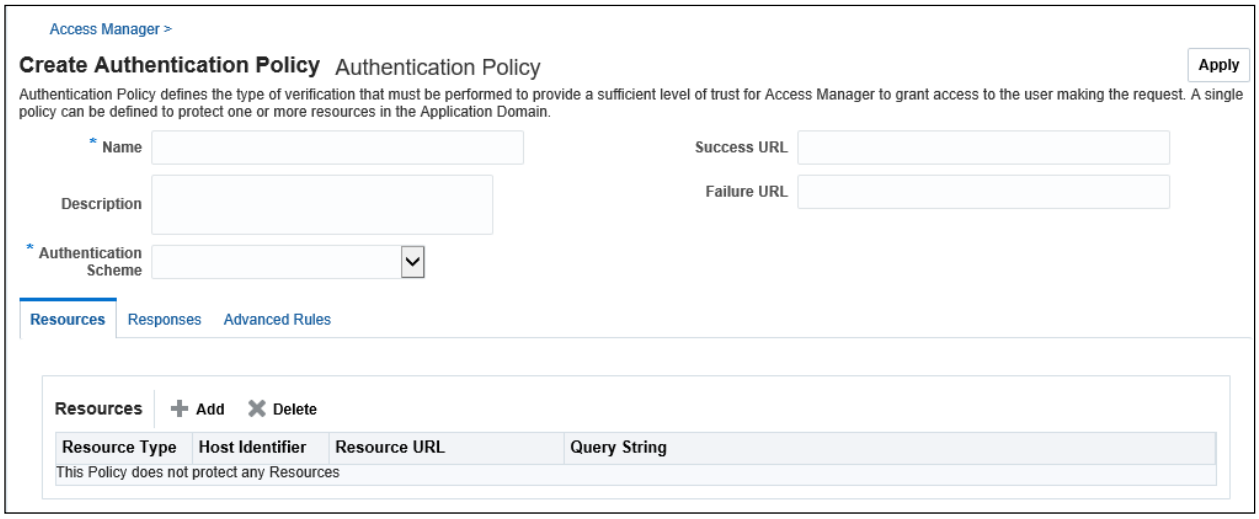


Figure 26: Create Authentication Policy

9. Specify a name and the authentication scheme generated for the identity provider as defined Services Provider Administration section. Ensure that the entered name does not contain any punctuation marks.
10. Click **Apply**. The new authentication policy has been added.
11. To verify the policy, go to application domain's Authentication Policies tab. The new authentication policy appears in the list.
12. Select the application domain's Resources tab and click **Search**.
13. To add newly created Authentication Policy, click 'HTTP' text present in resource type field. The selected resource is highlighted. Click **Edit**.

Note: Repeat this step to attach authentication policy with all resource URLs.

14. Select the Authentication Policy name from the **Authentication Policy** drop-down list.
15. Click **Apply**.

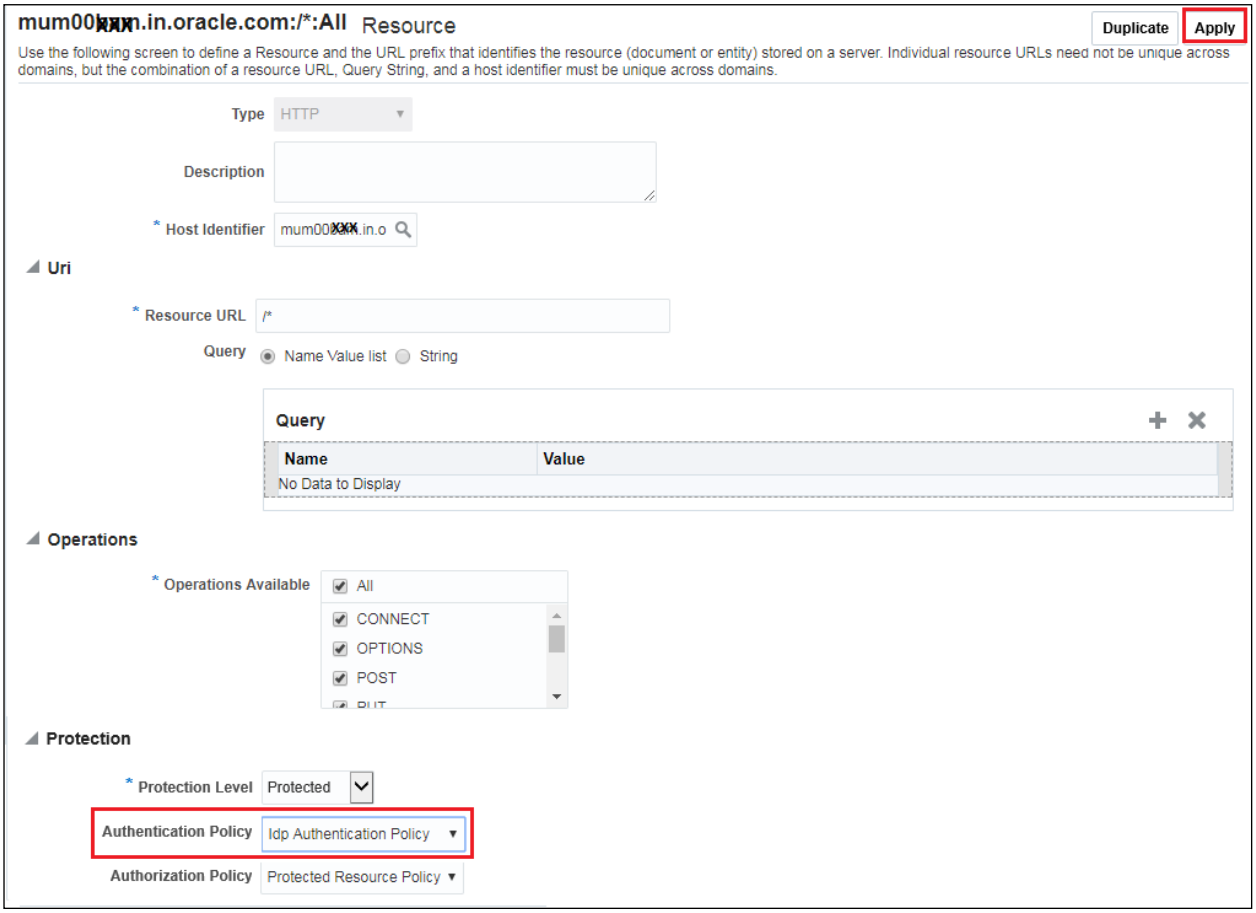


Figure 27: Attaching Authentication Policy

16. To confirm whether the authentication policy is attached, go to the Resources tab and search for the respective host.

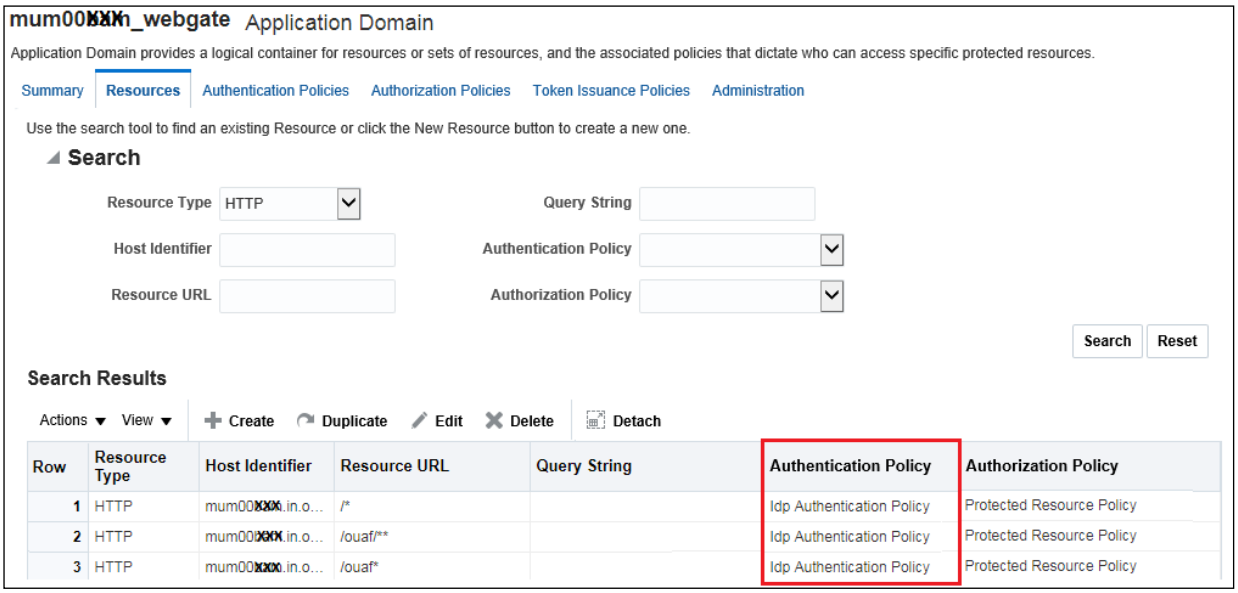


Figure 28: Authentication Policy

5. Steps to be executed on ORMB Application

This section lists and describes the following activities that you need to complete in the specified order to set up ORMB Application:

1. Copying WebGate Files
2. Copying required JAR files into application domain
3. Configuring the OUAF app's web.xml
4. Adding identity asserter
5. Adding WebLogic data sources
6. Adding OUAF DBMS authenticator
7. Configuring default authenticator
8. Reorder authentication providers

5.1 Copying WebGate Files

1. Download WebGate Agent by executing the steps mentioned in Downloading WebGate Agent.

   The WebGate configuration as per the section Defining WebGate Agent must be copied to the OHS/WebGate instance's config directory. For example,

   ```
   /u01/app/product/fmw/ohs/Oracle_WT1/
   instances/instance1/config/OHS/ohs1/webgate/config
   ```

5.2 Copying Required JAR Files into Application Domain

1. Copy the `<FMW_HOME>/oracle_common/modules/oracle.oamprovider_11.1.1/oamAuthnProvider.jar` from the OAM/OIF server to the ORMB application server's <domain>/lib directory.
2. Copy the `<FMW_HOME>/oracle_common/modules/oracle.oamprovider_11.1.1/oamAuthnProvider.jar` from the OAM/OIF server to the ORMB application server's "<WL_HOME>/wls12c/wlserver/server/lib/mbeantypes/" directory.
3. Copy the `…/oracle_common/modules/oracle.oamprovider_11.1.1/oamAuthnProvider.jar` from the OAM/OIF server to the WebLogic server's "<ORACLE_HOME>/oracle_common/modules/oracle.oamprovider/" directory.
4. Copy the `$SPLEBASE/tools/bin/auth/ ouaf-dbmsauth-4.3.0.4.0.jar` to the OUAF application server's <domain>/lib directory.
5. Restart the app server.

IMPORTANT: The oamAuthnProvider.jar must be the exact same one used by OAM. A version of this jar may already be in the OUAF app server's "oracle_common/modules" directory structure; that must be deleted so that the one from OAM that was copied (above) to the OUAF app's <domain>/lib directory gets used. If the same version of the OAM identity asserter is not used, SAML assertions may not be accepted and SSO logins will be mysteriously rejected.

5.3 Configuring OUAF app's web.xml

1. Specify the OUAF authentication login page type of CLIENT-CERT
   `configureEnv.sh -a` menu #52 can be used to do that
2. Change following web.xml templates from location:
   `/scratch/rmbbuild/spl/ORMB26000/templates`
   - web.xml.template
   - web.xml.appViewer.template
3. Update existing code

   From

```
#ifdef WEB_WLAUTHMETHOD=CLIENT-CERT
<login-config>
     <auth-method>CLIENT-CERT</auth-method>
   </login-config>
#endif
```

   To

```
#ifdef WEB_WLAUTHMETHOD=CLIENT-CERT
   <login-config>
          <auth-method>CLIENT-CERT,FORM</auth-method>
           <form-login-config>
<form-login-page>@WEB_FORM_LOGIN_PAGE@</form-login-page>
<form-error-page>@WEB_FORM_LOGIN_ERROR_PAGE@</form-error-page>
            </form-login-config>
      </login-config>
#endif
```


5.4 Adding Identity Asserter

1. Login to the WebLogic console.
2. Click **Security Realms** and select myrealm.

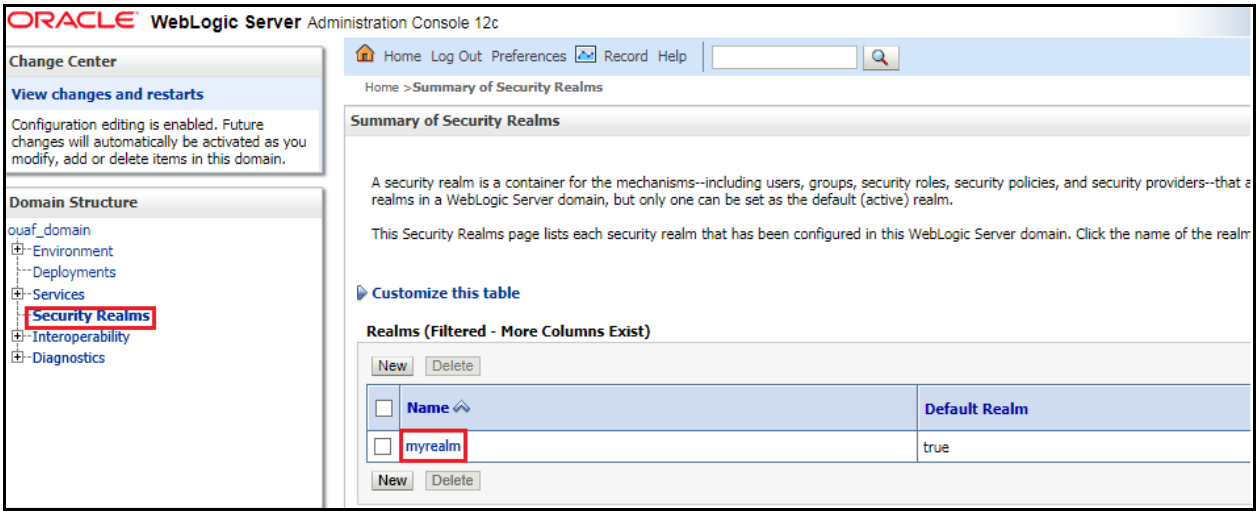


Figure 29: WebLogic Security Realms

3. Select **Providers** tab and click on **Authentication** tab.
4. Click **New**.

Figure 30: myrealm Settings

5. The **Create a New Authentication Provider** window appears.
6. Specify a name for the new provider and select type “OAMIdentityAsserter” from the Type drop-down list.

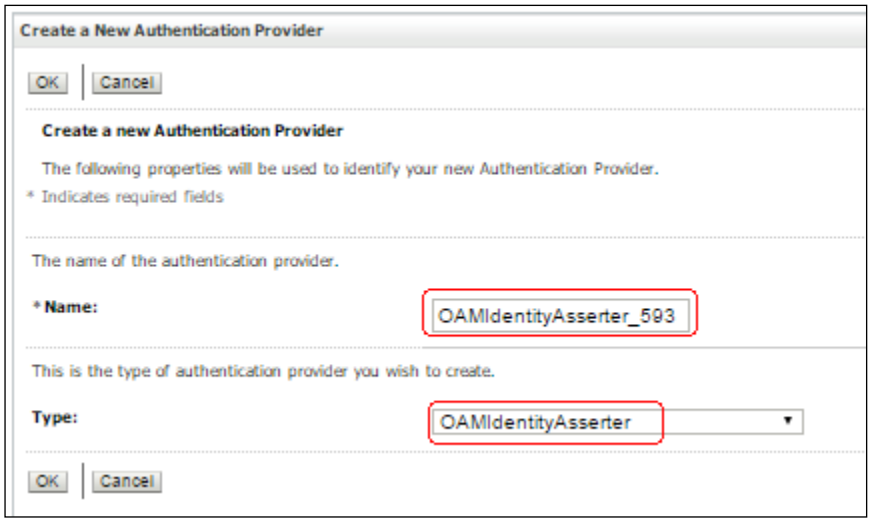


Figure 31: Creating New Authentication Provider

7. Click **OK**.
8. Click the newly created provider name. The configuration settings screen appears.
9. By default, Common tab appears. Select “SUFFICIENT” from the Control Flag drop-down list.
10. In Active Types field, select “OAM_REMOTE_USER” and “OAM_IDENTITY_ASSERTION” from ‘Available’ list and move the same to Chosen list.
11. Click **Save**.

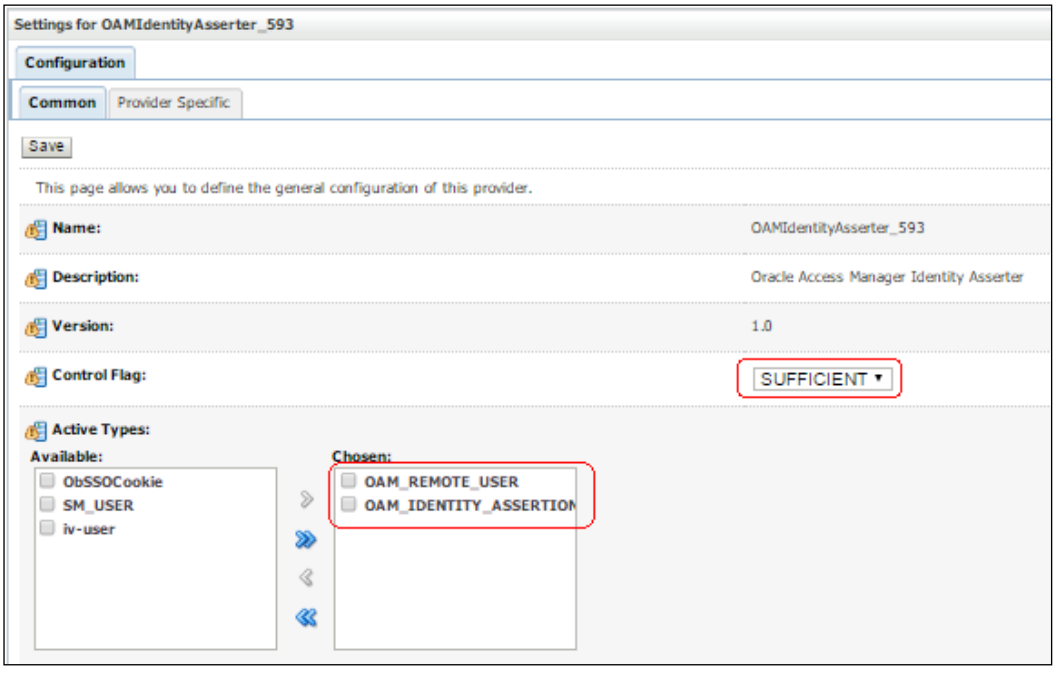


Figure 32: Authentication Provider - Configuration Settings

5.5 Adding WebLogic Data Sources

1. Login to the WebLogic console.
2. Expand the **Domain Structure** node in the left pane.
3. Expand Services and then click **Data Sources**.

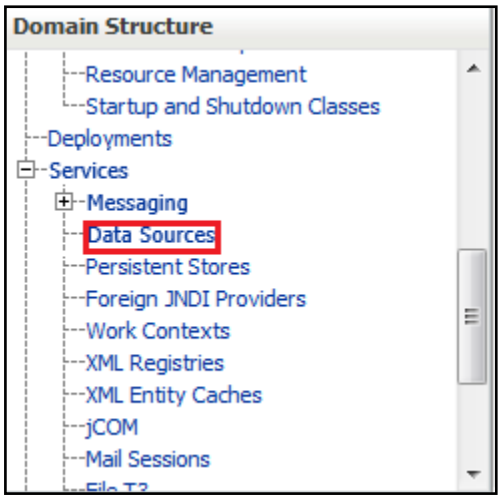


Figure 33: Domain Structure – Data Sources

4. The **Data Sources** section appears. It summarizes the JDBC data source objects that have been created in this domain.
5. Select **Generic Data Source** from the '**New'** drop-down list.

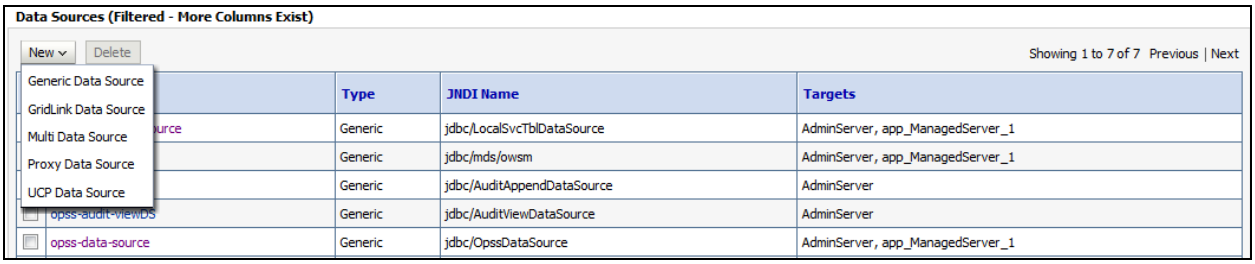


Figure 34: Generic Data Source

6. Enter the name of the data source. For example, **ORMBDatabaseSource**.
7. Enter the JNDI Name of the data source. For example, **ORMBDatabaseSource**.

Note: There is no requirement that the data source name and the JNDI name match.

8. Select **Oracle** from the **Database Type** drop-down list.
9. Click **Next**.

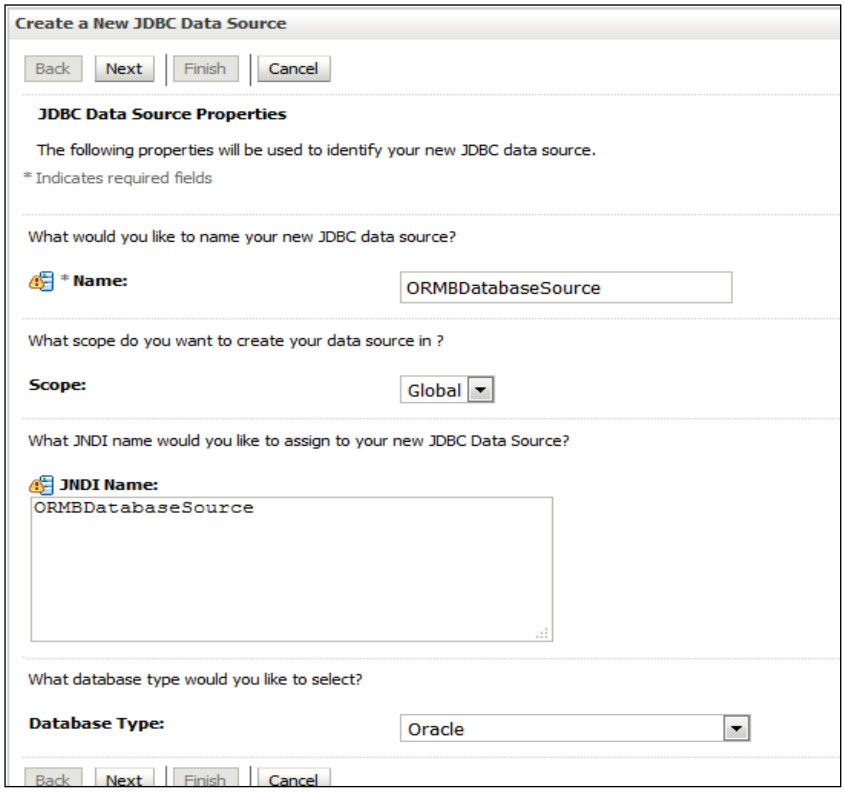


Figure 35: Creating New JDBC Data Source

10. Select "*Oracle's Driver (Thin) for Application Continuity; Versions:Any" from the **Database Driver** drop-down list.

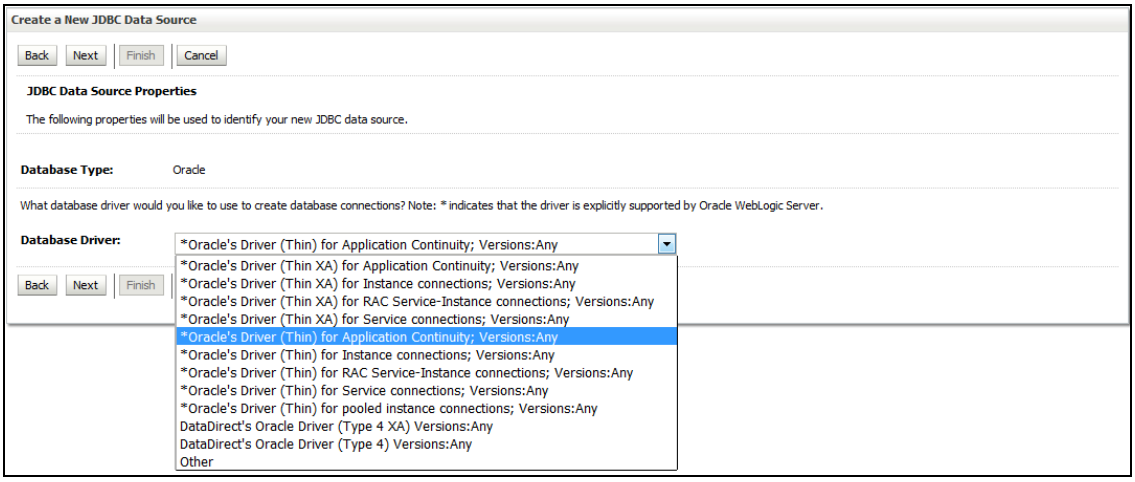


Figure 36: Selecting Database Driver

11. Click **Next**.
12. Keep all the default Transaction Options. Click **Next**.

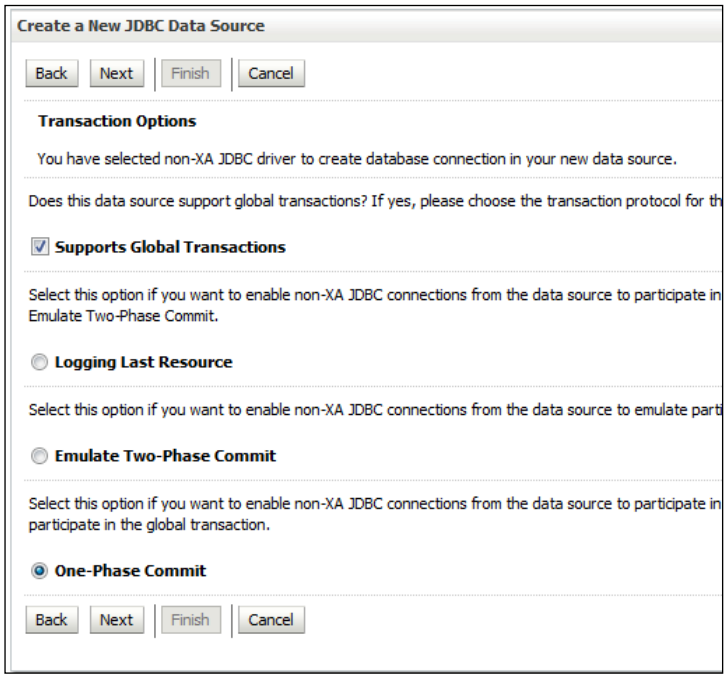


Figure 37: Default Transaction Options

13. Enter the Database Name. For example, V26010. The database name may vary at your end.
14. Enter the DB Host Name.
15. Enter the database Port. The default value is 1521. The value may vary at your end.
16. Enter the Database User Name.
17. Enter the database user's password in the Password and Confirm Password fields.
18. Click **Next**.

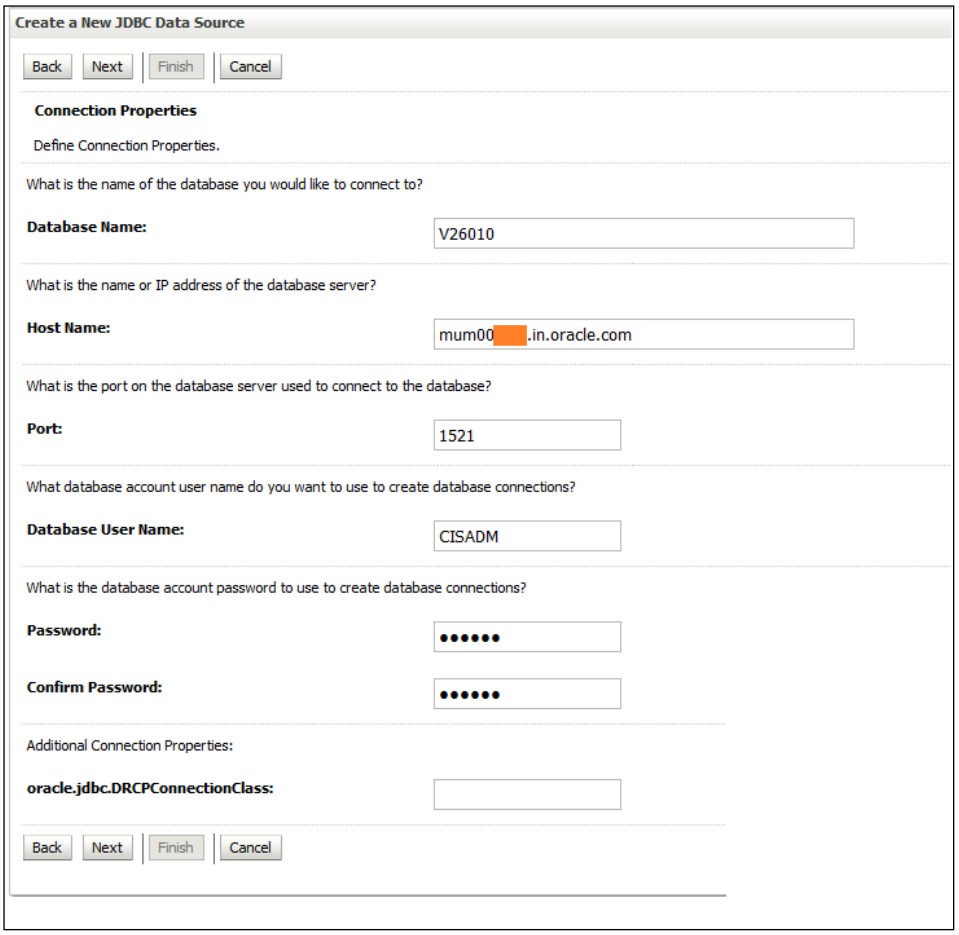


Figure 38: Connection Properties

19. Click the Test Configuration button to check if a connection to the Database can be made, based upon the information entered.
20. A message "Connection test succeeded", informing that the connection test is successful appears. Click **Next**.
21. To target a data source to Admin and managed servers, select the check box next to servers.

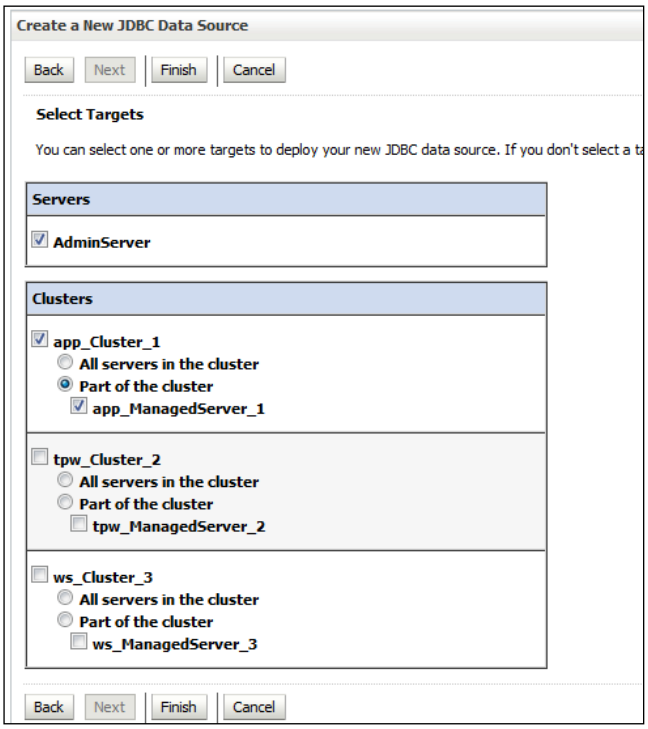


Figure 39: Select Targets

22. Click **Finish**.

5.6 Adding OUAF DBMS Authenticator

1. Login to the WebLogic console.
2. Click **Security Realms** and select myrealm.
3. Select **Providers** tab and click on Authentication tab.
4. Click **New**.
5. Specify a name for the new provider and select "CustomDBMSAuthenticator" from the **Type** drop-down list.

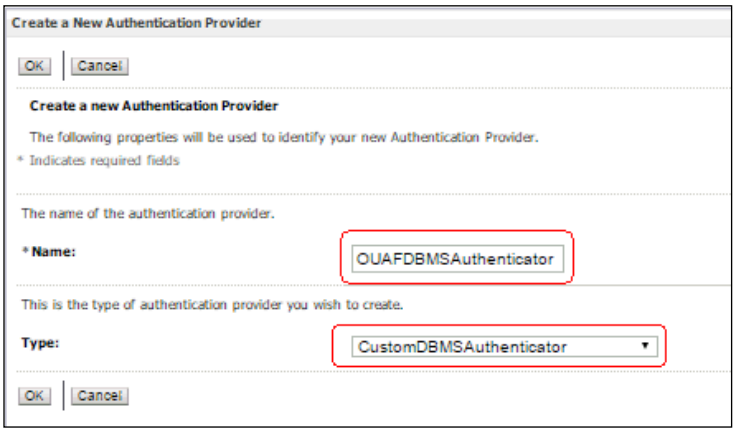


Figure 40: Creating a New Authentication Provider

6. Click **OK**.
7. Click the newly created provider name. The configuration settings screen appears.
8. By default, Common tab appears. Select 'SUFFICIENT' from the **Control Flag** drop-down list.

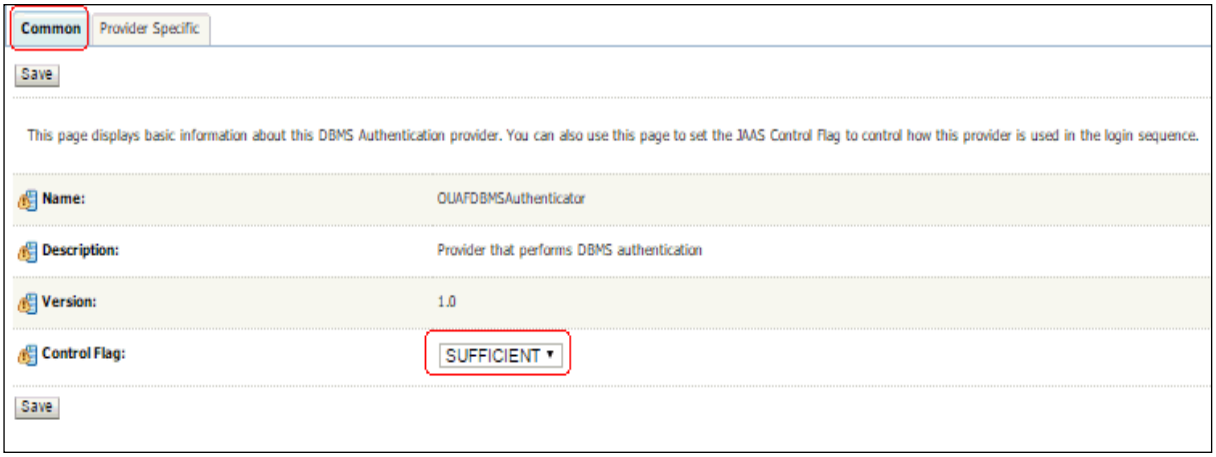


Figure 41: Authentication Provider – Common Configuration Settings

9. Click **Save**.
10. Select the Provider Specific tab and enter the values in the fields as below:

Field Name	Values	Mandatory (Yes or No)
Data Source Name	The name of the data source to connect to the OUAF database. It is same as defined in Adding WebLogic Data Sources section.	Yes
Plugin Class Name	com.oracle.ouaf.fed.OuafDBMSAuthenticator	Yes
Plugin Properties	• userGroup=cisusers • excludeUsers= system,weblogic,OracleSystemUser • debug=true	No

Note: The debug property is set to true to troubleshoot the provider. To exclude troubleshooting the provider, set the property to false or do not specify.

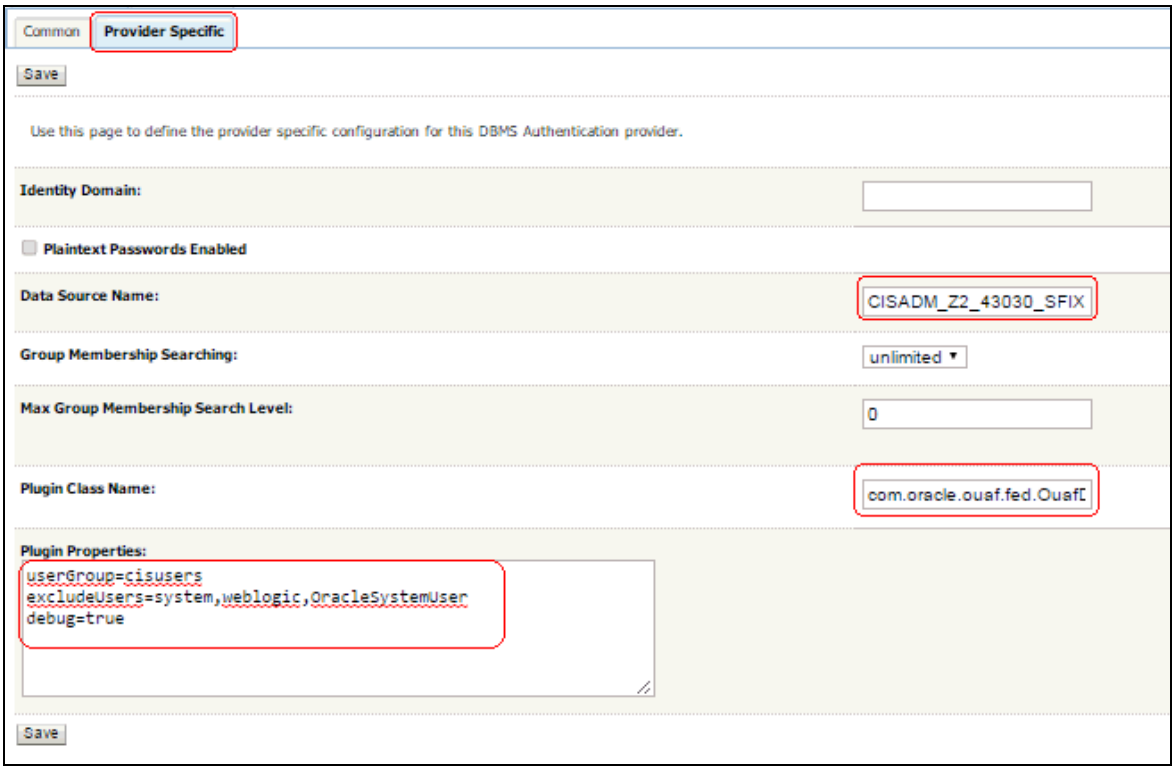


Figure 42: Authentication Provider – Provider Specific Configuration Settings

11. Click **Save**.

Note: Important to note is that this authentication provider requires a data source to the OUAF database to access the SC_USER table.

5.7 Configuring Default Authenticator

The 'DefaultAuthenticator', which authenticates against the embedded LDAP, is always required in a typical WebLogic application server, but its Control Flag should be changed from REQUIRED to SUFFICIENT to prevent it from always prompting for a login.

1. Login to the WebLogic console.
2. Click **Security Realms** and select myrealm.
3. Select providers and click on Authentication Tab.
4. Select DefaultAuthenticator from the list.
5. Change the **Control Flag** to 'SUFFICIENT' and click **Save**.

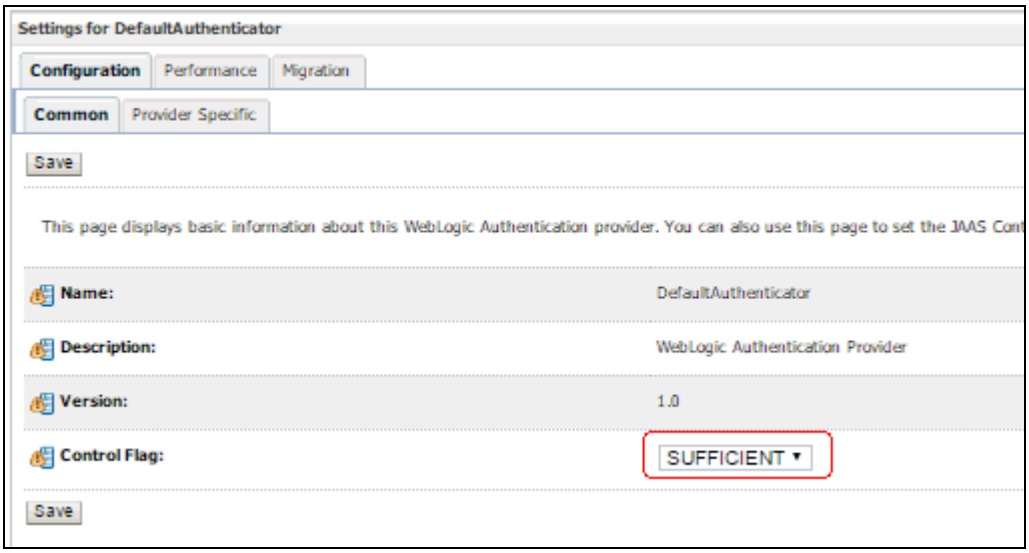


Figure 43: Authentication Provider – Common Configuration Settings

5.8 Reordering Authentication Providers

Authentication providers are called in the order in which they are configured. The Authentication Providers table lists the authentication providers in the order they are called. You can use the table to change the order of the providers. The two new providers should be ordered so that they are invoked before any other providers.

To change the ordering of Authentication providers:

1. Login to the WebLogic console.
2. Click **Security Realms** and select myrealm.
3. Select providers and click on Authentication Tab.
4. Click **Reorder**.
5. Select an Authentication provider from the list of configured Authentication providers and use the arrow buttons to move it up or down in the list. For example, OAMIdentityAsserter can appears in first position and OUAFDBMSAuthenticator appears in second position.

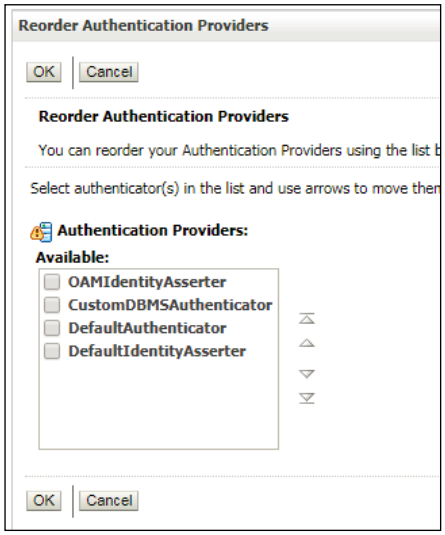


Figure 44: Reorder Authentication Providers

6. Click **OK**.

6. Restarting Servers

Once you configure IDP, SP and ORMB application, you need to restart the instances associated with these services.

6.1 OAM (SP and IDP)

In general, the OAM system does not need to be restarted for any of the configurations described in this document to take effect. However, in case the system needs to be restarted, you can use the below scripts using Putty:

```
<FMW home>/config/scripts/stopall.sh
```

```
<FMW home>/config/scripts/startall.sh
```

6.2 OHS/WebGate

The OHS instance needs to be restarted to refresh its configuration from the WebGate agent configuration in OAM. To restart OHS instance:

1. Change directory to

```
<FMW home>/Oracle_WT1/instances/instance1/bin.
```

2. Run the following commands:

```
./opmnctl stopall
```

```
./opmnctl startall
```

6.3 ORMB Application Server

The application server may need to be restarted to activate the authentication providers. To restart the server, you can follow the standard process specified in Release specific SIQ.

7. Verifying SSO Web Application

This section lists the steps to be performed to verify SSO web application setup.

7.1 Adding User into ORMB Application

The created user will be used to login from IDP Server into ORMB application. You can create user through application UI or Web service.

To create user through application:

1. Login into ORMB application.
2. Create new user. For example, “FIUser3”.

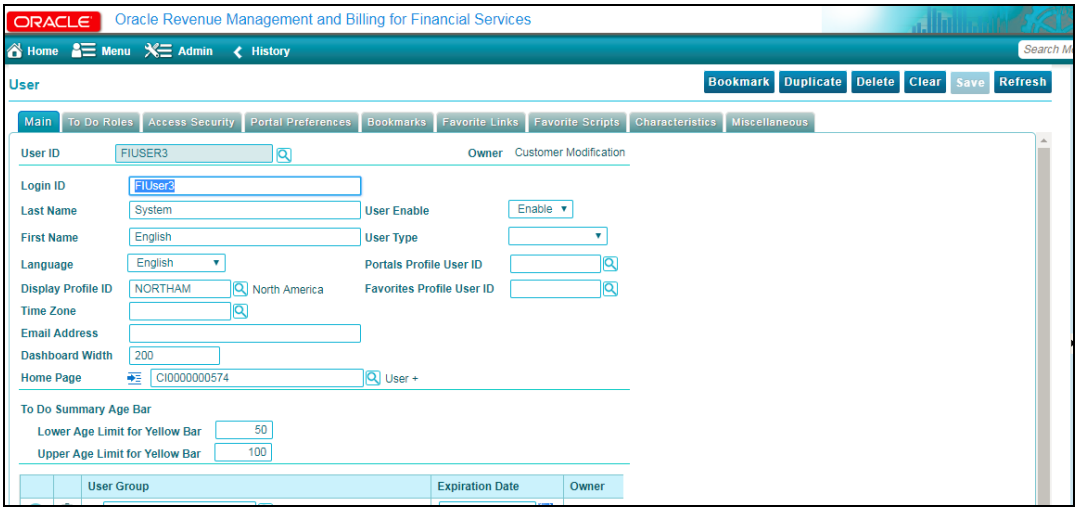


Figure 45: Creating New User

7.2 Login to OUAF Application

Prerequisite

To login to OUAF Application, you must:

- Ensure that all the previous tests pass.
- Create a user with same user ID in IDP and ORMB application.

Procedure

To login to the WebGate-protected OUAF application:

1. Close all instances of the browser to invalidate the session for the following login.

2. Open the URL for the WebGate (typically the one on port 7777) – for example, `http://<OHS/Webgate-host>:7777/ouaf`
3. You will be redirected to the same OAM Server's (External IDP login page) login page.

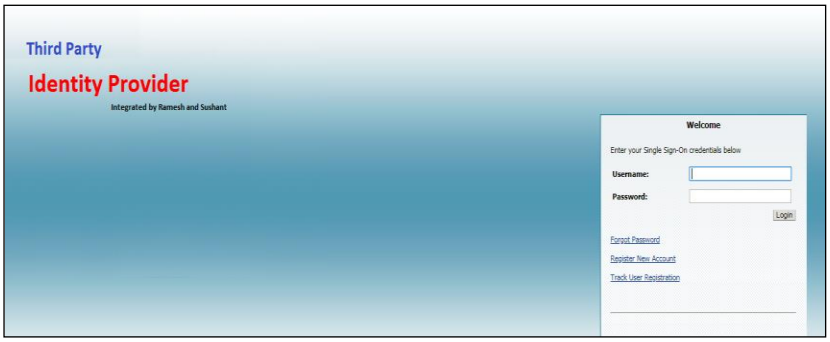


Figure 46: External IDP Login Screen

4. Login to a user id that exists in both External Providers LDAP and the OUAF application.

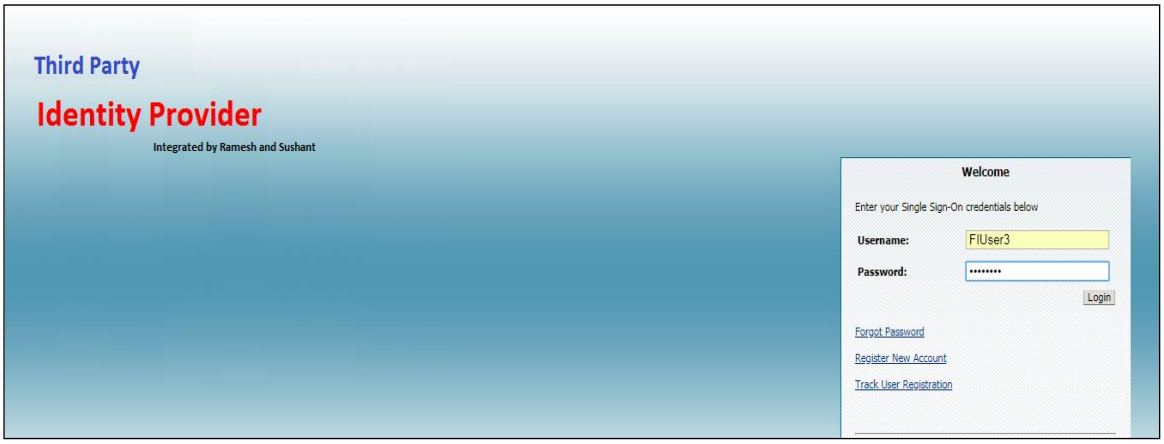


Figure 47: External IDP Login Screen

5. The browser should be redirected back to the OHS/WebGate and OUAF application server and the user should be logged in to the application.

7.3 Logout from OUAF Application

1. To validate the Logout Callback URL that was specified to end the IDP's session, logout from the OUAF application and verify that the logout was successful.
2. To verify successful logout, access the application `URL: http://<OHS/Webgate-host>:7777/ouaf`. The External Provider login page should appear.
3. Provide the authentication details and verify that the login was successful.

8. Configuring Internal SSO Login

The SSO login capability allows you to login to an OUAF application from an internal server. For example, an Oracle employee can login on behalf of any customer. To login to an OUAF application, you need to set up a second OHS/WebGate instance which will authenticate against the OAM user store (For example, OUD).

8.1 Configuring OHS/WebGate

Refer to Defining WebGate Agent section.

8.2 Defining WebGate Agent

Refer to Defining WebGate Agent section. Note that the name and base URL should be different and the base URL should reference the "internal" OHS/WebGate instance.

8.3 Copying WebGate Agent Configuration to OHS/WebGate

1. Download WebGate Agent as mentioned in Downloading WebGate Agent section.
2. Transfer the zip file to the "internal" OHS/WebGate instance's config directory.

8.4 Modifying Authentication Scheme for Application Domain

1. Login to Oracle Access Management using the administrator's credentials.
2. Click the **Application Security** button. The Launch **Pad** tab appears.

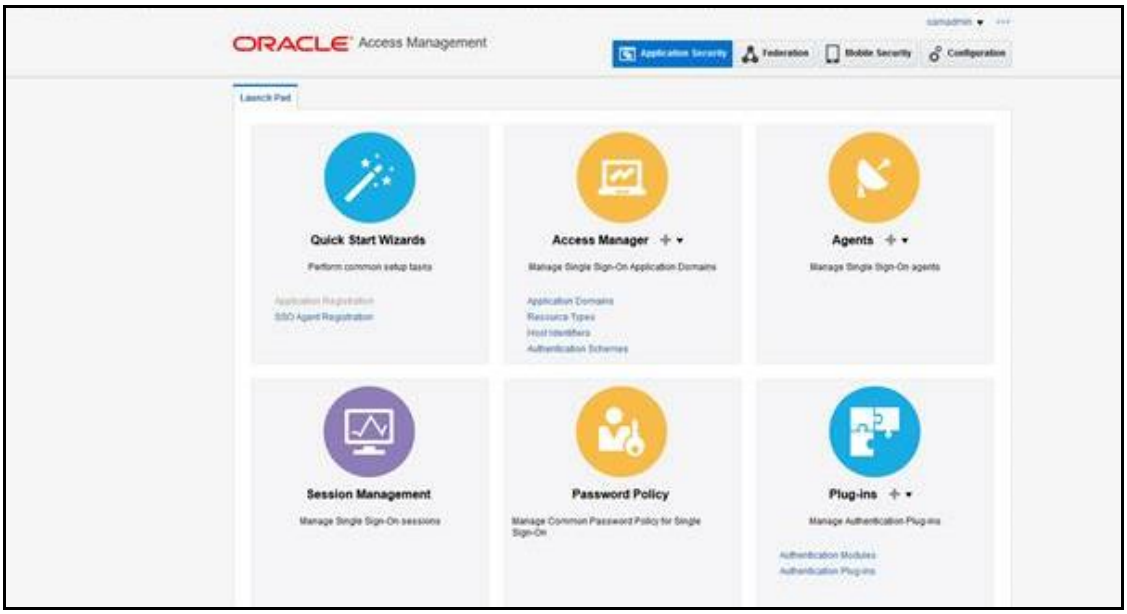


Figure 48: Application Security Launch Pad

3. Click the **Application Domains** link in the **Access Manager** section. The **Application Domain** tab appears.

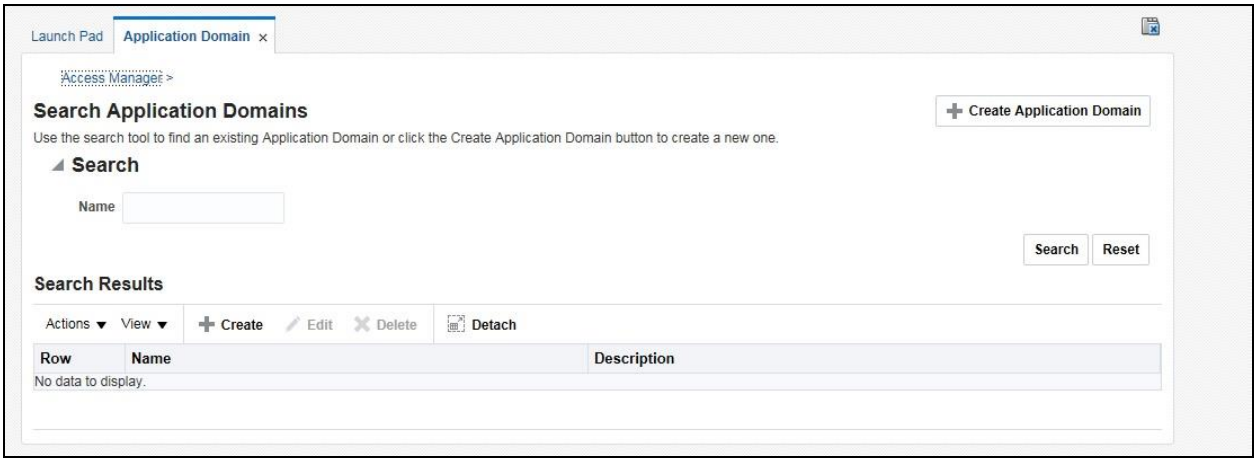


Figure 49: Application Domain Tab

4. Search for the required application domain in the Application Domain tab.
5. In the Search Results section, click the application domain name whose resources you want to protect using the authentication policy.
6. Click the **Authentication Policies** tab. The **Authentication Policies** tab appears.
7. Click the **Protected Resource Policy** link in the **Name** column. The {**Application Domain}: Protected Resource Policy** tab appears.

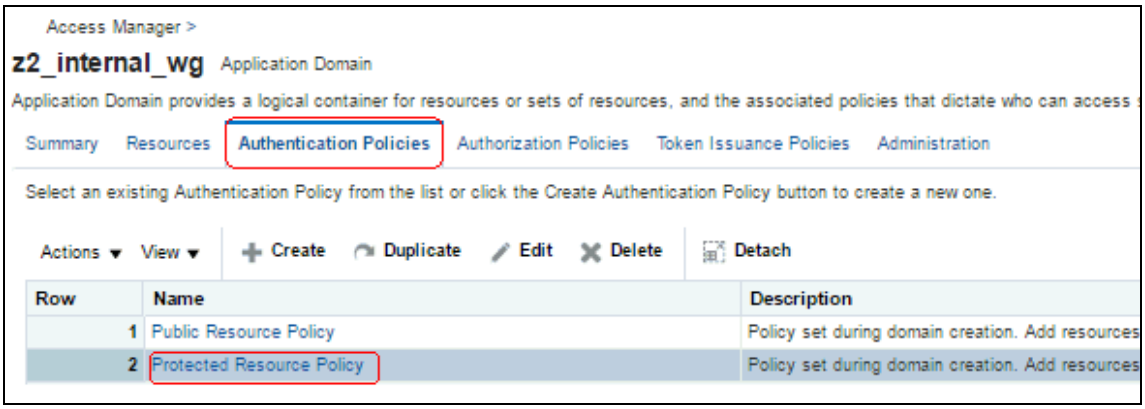


Figure 50: {Application Domain} – Authentication Policies Tab

8. Click the **Resources** tab. The Resources section appears.
9. Change the Authentication Scheme to 'LDAPScheme' and click **Apply**.

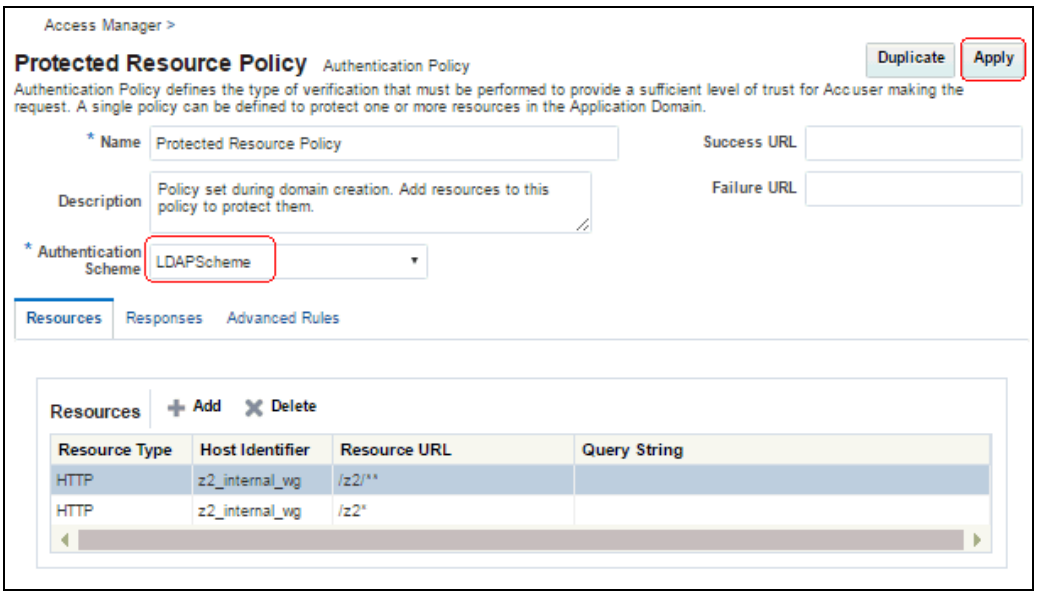


Figure 51: {Application Domain}: Protected Resource Policy Tab

Note: This assumes the default LDAPScheme authenticates against the OUD user store. If another user store is preferred, modify this appropriately.

8.5 Restarting OHS/WebGate

The OHS instance needs to be restarted to refresh its configuration from the WebGate agent configuration in OAM. To restart OHS instance:

1. Change directory to `<FMW home>/Oracle_WT1/instances/instance1/bin`.
2. Run the following commands:

```
./opmnctl stopall

./opmnctl startall
```

