User Manual

OIM Asset Development for Event Handler

(Event Handler to retrieve field value from external application)

Version: 1.7

Status: Final Version

Project Manager:

Author:

|  |  |  |
| --- | --- | --- |
|  | | |
| Change Log | | |
| Version | Reviewers / Author | Changes |
| 20/05/2011 | Pradeep Khopade | Initial Draft |
| 31/05/2011 | Pradeep Khopade | Added Javed’s review comments |
| 1/06/2011 | Pradeep Khopade | Modified as per Javed’s comments |
| 1/06/2011 | Pradeep Khopade | Embedded a document on how to create an authorization policy |
| 2/06/2011 | Pradeep Khopade | Modified the screenshots for creating custom attributes |
| 10/06/2011 | Pradeep Khopade | Included the Steps to create Generic Connector and to Run the Schedule Job. |
| 22/06/2011 | Pradeep Khopade | Removed Custom Attribute and authorization policy sections and modified Create Generic Connector section. |
| 28/07/2011 | Suhail Peerzade | Captured steps to add JAR files to project classpath. |

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# Use Case Description

If the employee is a Contractor, they must be registered in the Contractor Registration System, which is an external application. This application is a database application. The database has the following structure

|  |  |  |  |
| --- | --- | --- | --- |
| User ID | Contractor ID | First Name | Last Name |

After successful registration, their Contractor ID must be retrieved and updated in their OIM User Profile.

# How does this sample solve the use case?

This use-case will be developed as a plug-in and deployed on Oracle Identity Manager 11g environment.

The plug-in will be used for extracting “Contractor Id” or any configured column name from specified database table and update OIM User profile.

This event handler will be implemented as PostProcessHandler and registered for Create operation of User. It will be a conditional event handler, executing for only "contractor" users. If the user type is Contractor then it will connect the external application to retrieve the Contractor Id (field is defined in DB.table.column.to.retrieve) based on the OIM user id (defined in DB.Matching.OIM.User.Field) and updated the OIM User profile with contractor Id.

# Assumption

For this release it is assumed that all users would be associated to an organization which already exists in OIM. Recon for organization is out of scope for this delivery dated(10th June 2011).

# Deployment Procedure

Before running the ContractorID Event Handler, the following tasks need to be completed:

### Prerequisites for the sample

* Oracle Identity Manager 11g should be installed.
* Oracle JDeveloper should be installed.
* “OIM configuration Installer” JDeveloper extension should be installed.(For more details please refer document User\_Manual\_JDeveloper\_Oim\_Customization\_Installer\_For\_OIM\_Plugins\_1 3.docx included in ContractorID Event Handler deliverables for 1st June 2011)
* Following patches needs to be applied on RDBMS if the DB version is 11g Release 1 (11.1.0.7.0)
* p7614692\_111070
* p7000281\_111070
* p8327137\_111070
* p8617824\_111070

The patch details can be taken from section '14.4.4 Troubleshooting Database-Related Reconciliation Issues' of Recon trouble shooting guide using [link](http://review.us.oracle.com/review/reviewperf.do?fileId=219692&allNotes=false&statusFilter=6&matchOpt=all&fragment=sthref426)

* Following patches need to be applied on Oracle Identity Manager Release 11.1.1.3.0 or 11.1.1.3.1
  + Bundle Patch 11.1.1.3.2

Click on [link](https://support.oracle.com/CSP/ui/flash.html#tab=PatchHomePage%28page=PatchHomePage&id=%28%29%29,%28page=PatchSearchResultsHome&id=%28flag=search&viewItem=0&search=%3CSearch%3E%0A%20%20%3CFilter%20name=%22patch_number%22%20op=%22IS%22%20value=%2210257660%2) to download the bundle patch.

* Create database table ”Contractor” with the below table structure

|  |  |
| --- | --- |
| **Column Name** | **Data type** |
| User ID | varchar2(256) primary key |
| Contractor ID | varchar2(256) |
| First Name | varchar2(256) |
| Last Name | varchar2(256) |

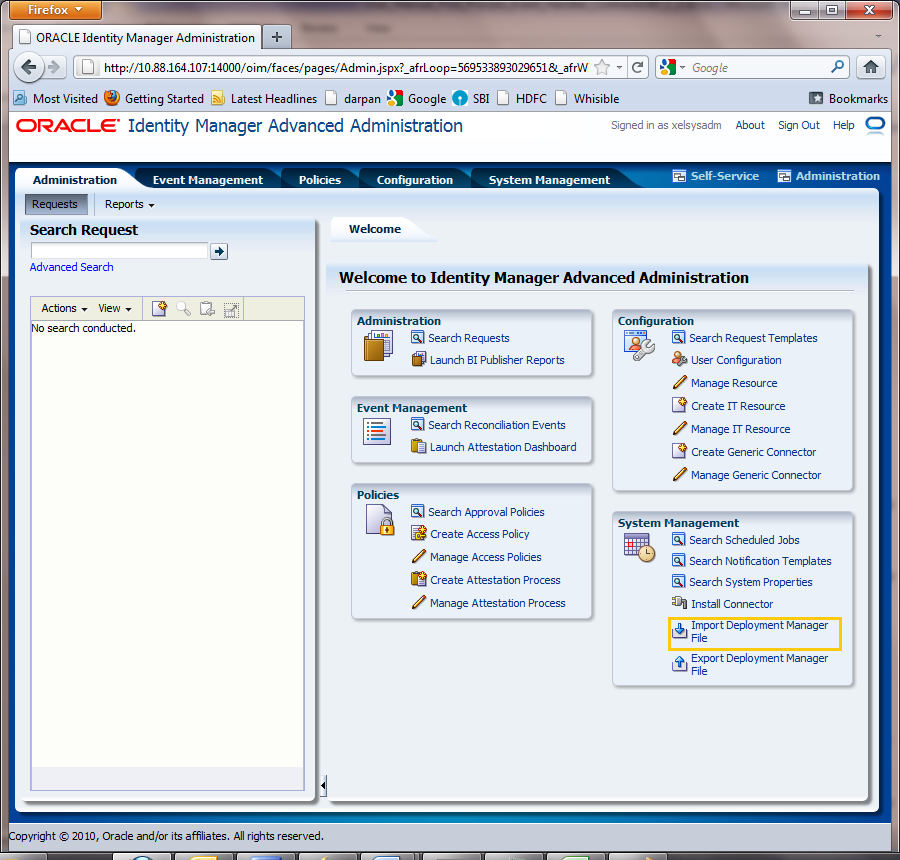
To create the required database table and insert the sample data in it:

* You can execute the sql script included with the ContractorId Event Handler 1.4 uploaded at the OIM ftp server. File name: contractor\_table\_script.sql.

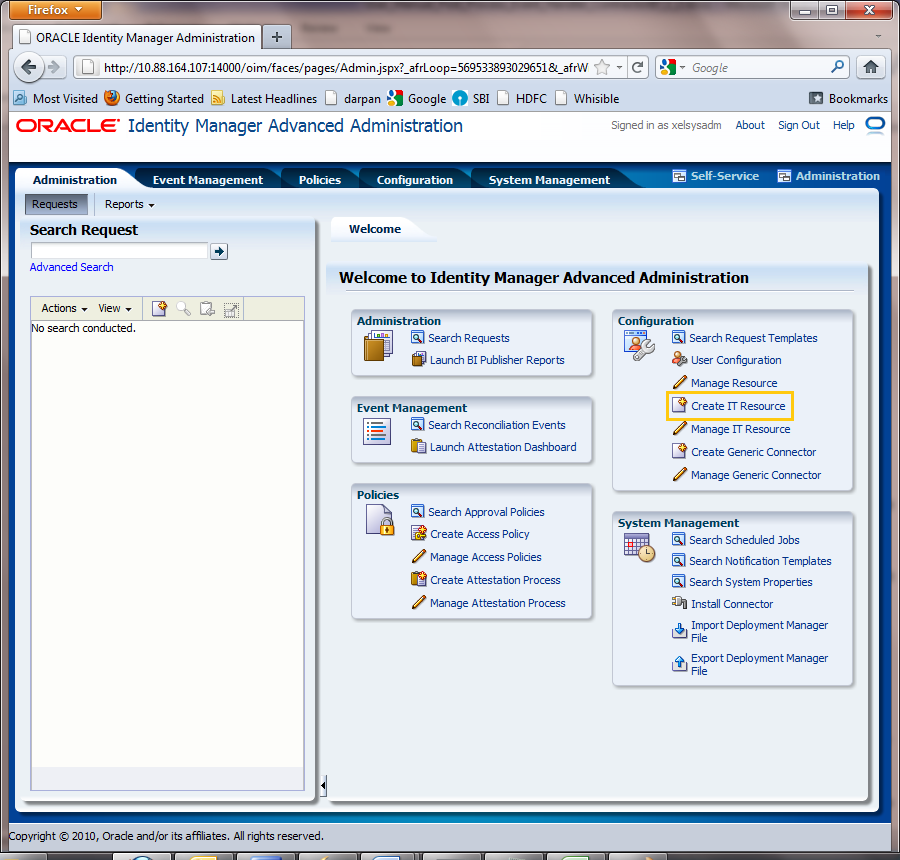
OR

* You can refer to the database section [below](#_SQL_Statements).
* Import “ContractorIDConfiguration.xml” file located at “oim\_objects/” in the package to create the following:-
  + ***lookup.externalDatabase.configuration***
  + ***Authorization Policy***
  + ***Custom Attribute “Contractor Id”***

To import the above file into OIM login to the advanced console of OIM and click on Import Deployment Manager File as shown below

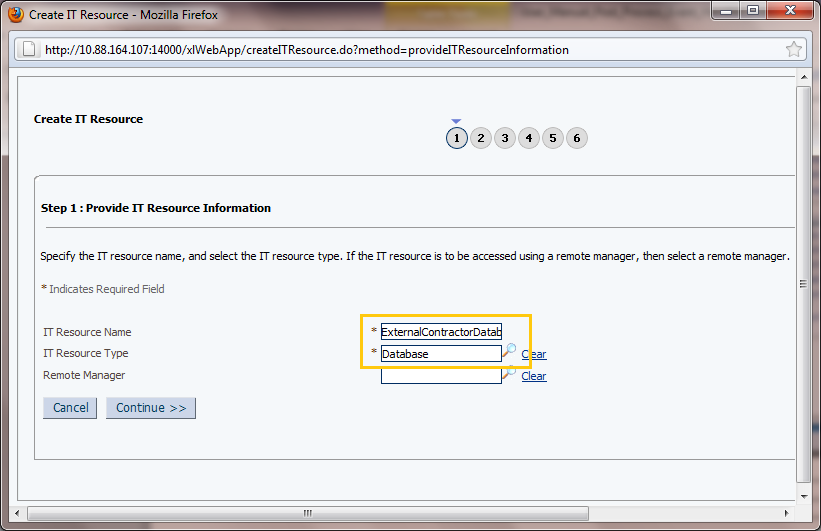


* To create IT resource from OIM web console follow the below steps

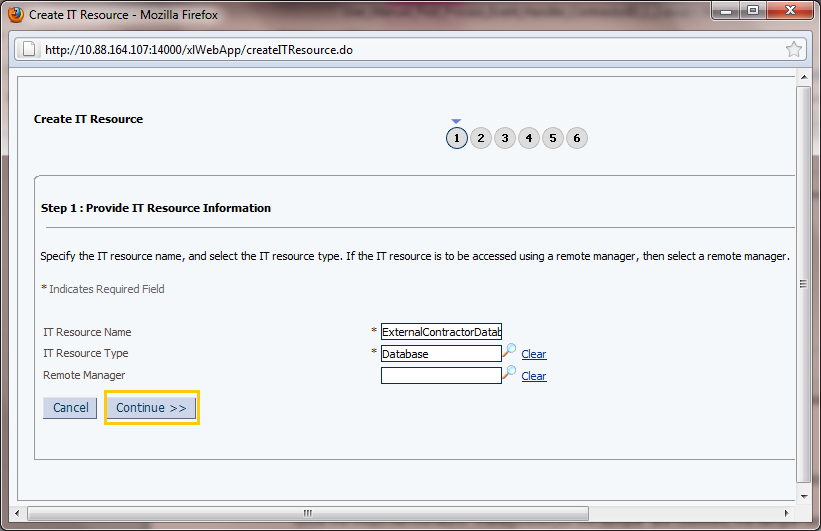


1. Provide the information given in the table below. **Please note that the IT Resource Type must be selected as Database.**

|  |  |
| --- | --- |
| IT Resource Name | ExternalContractorDatabase |
| IT Resource Type | Database |

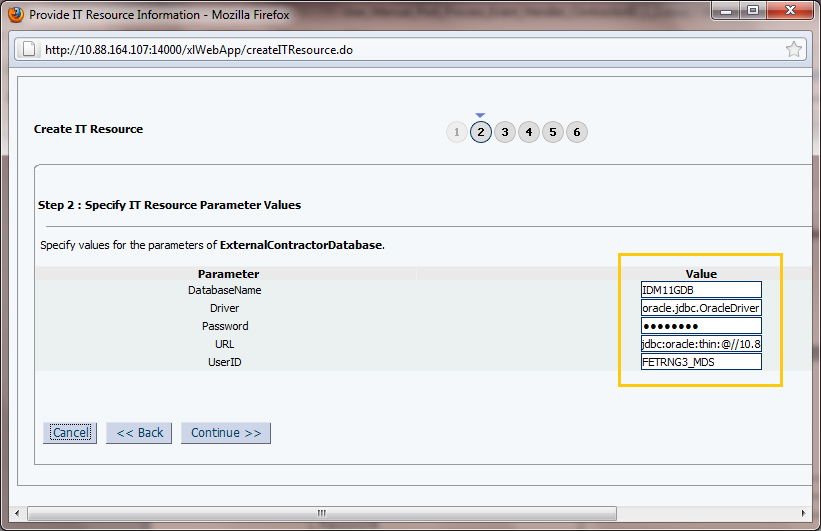


1. Click on “Continue”

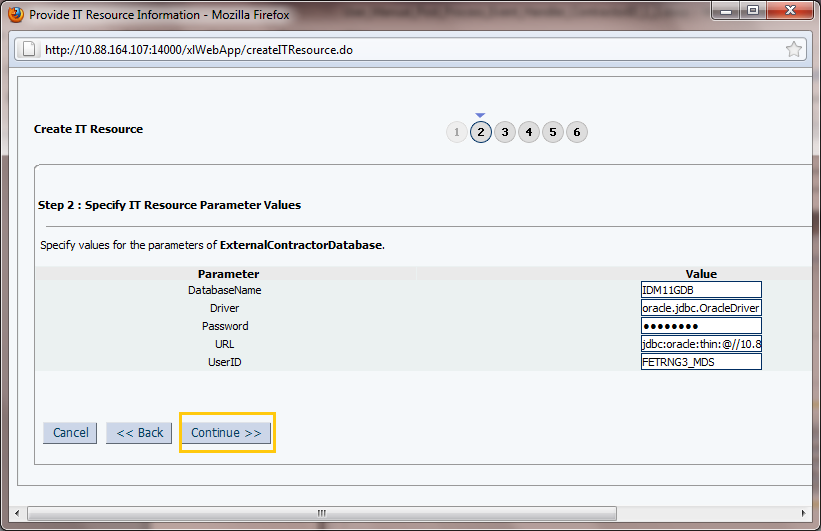


1. Specify IT Resource Parameter Values for desired database

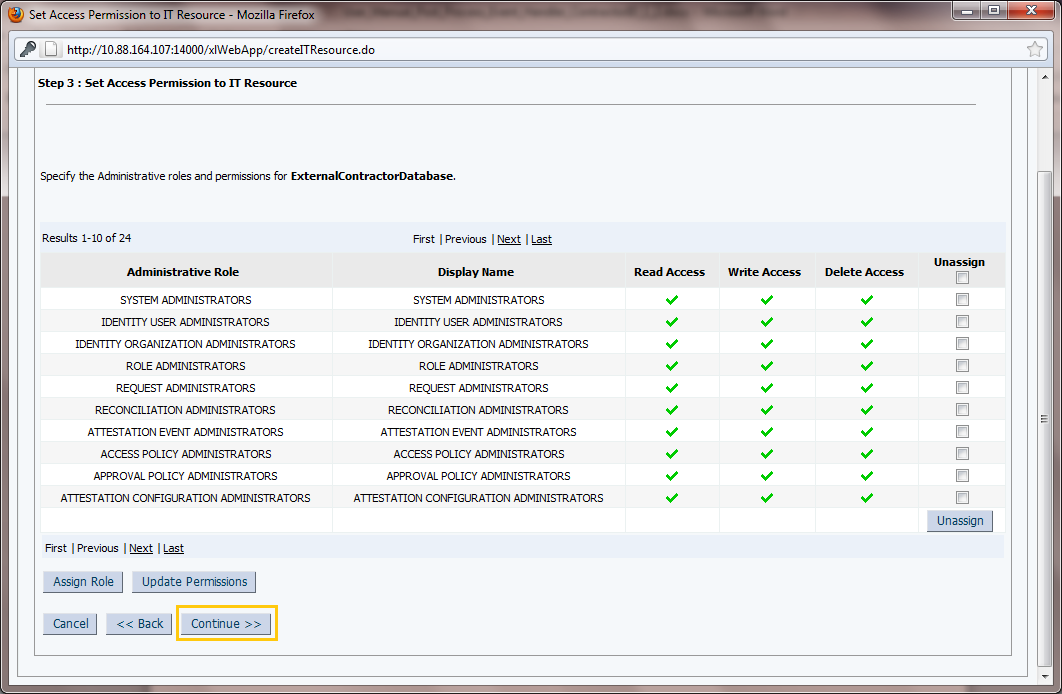
|  |  |
| --- | --- |
| DatabaseName | <Name of the database> |
| Driver | oracle.jdbc.OracleDriver |
| Password | <password to access database> |
| URL | jdbc:oracle:thin:@//host:port/SID |
| UserID | <Userid for the database> |



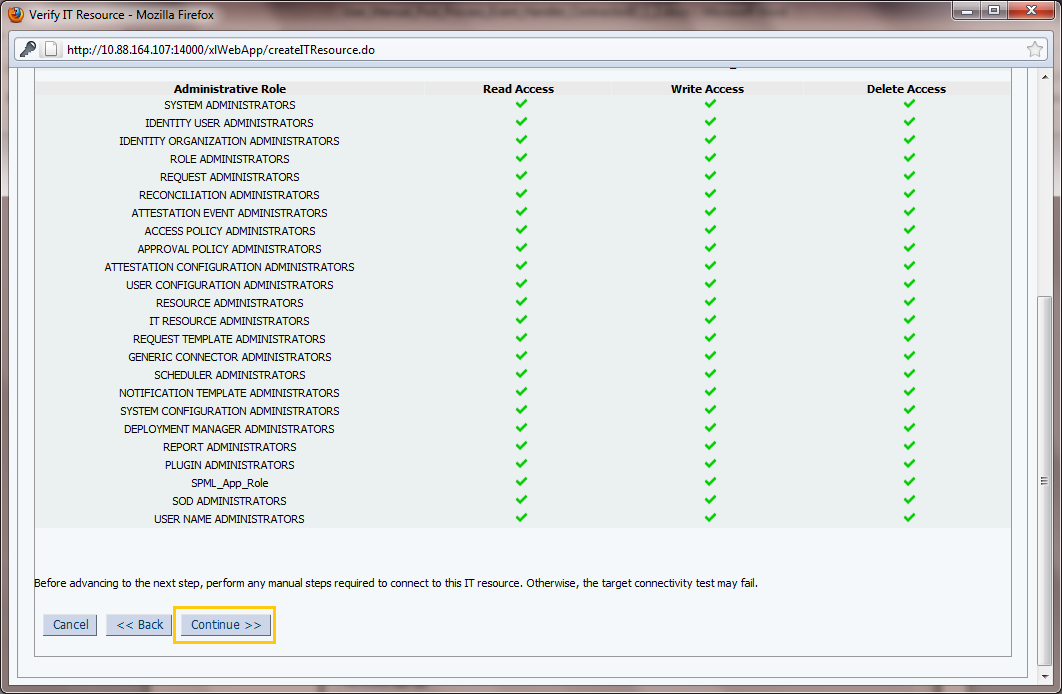
1. Click on “Continue”



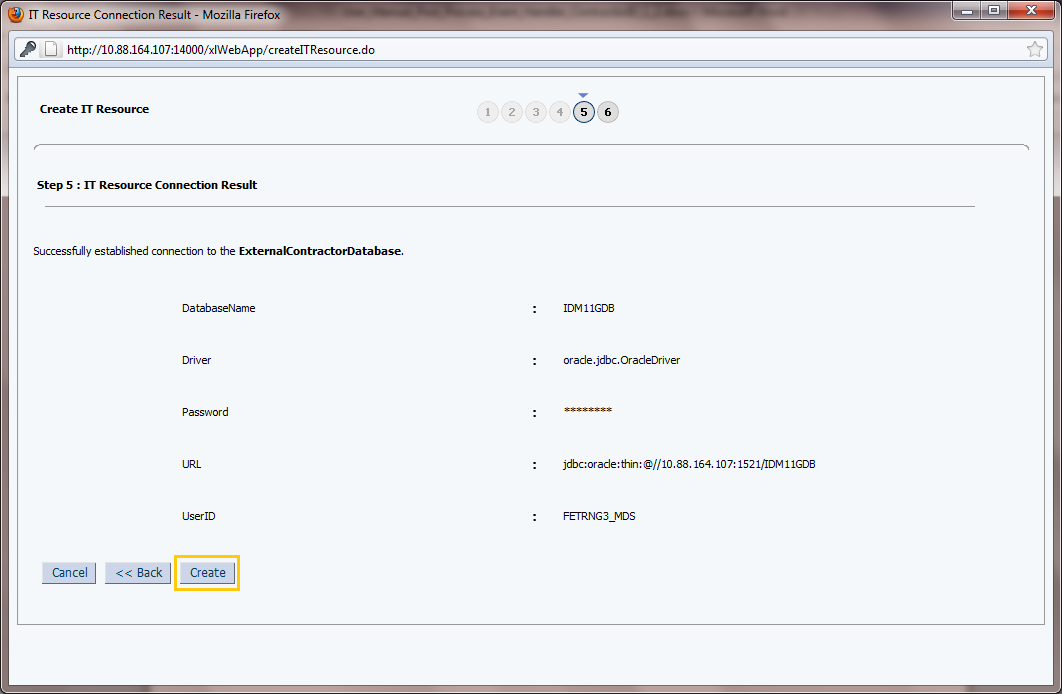
1. Set Access Permission to IT Resource and then click on “Continue”



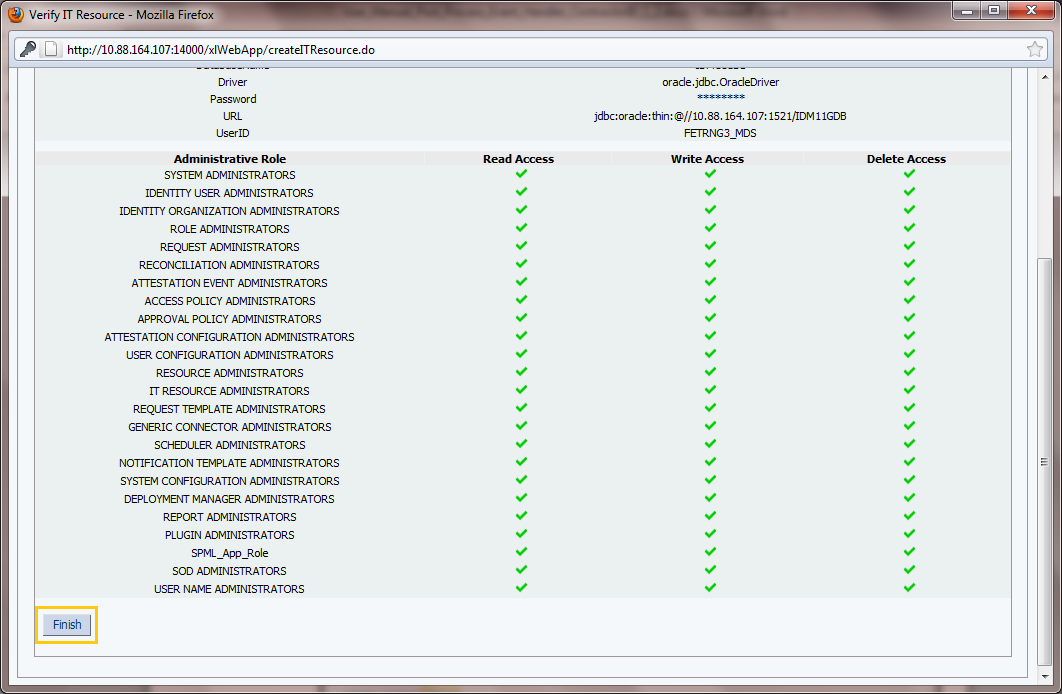
1. Verify IT Resource Details and click on “Continue”



1. Click on create on below window



1. Click on Finish



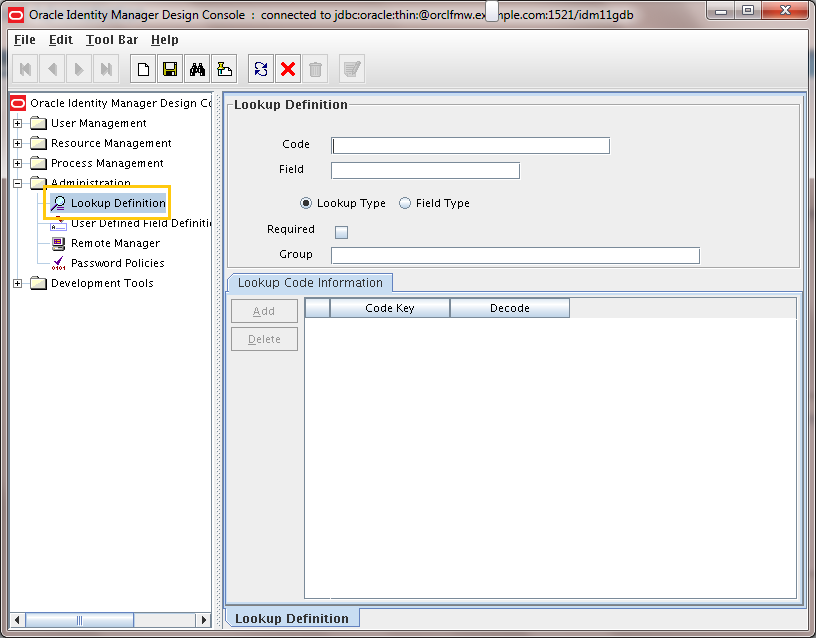
Create a new Generic Connector **Note**:To perform bulk user recon a generic connector needs to be created.

To create a new generic connector refer to guide “User\_Manual\_User\_On-boarding\_Asset.dcox”

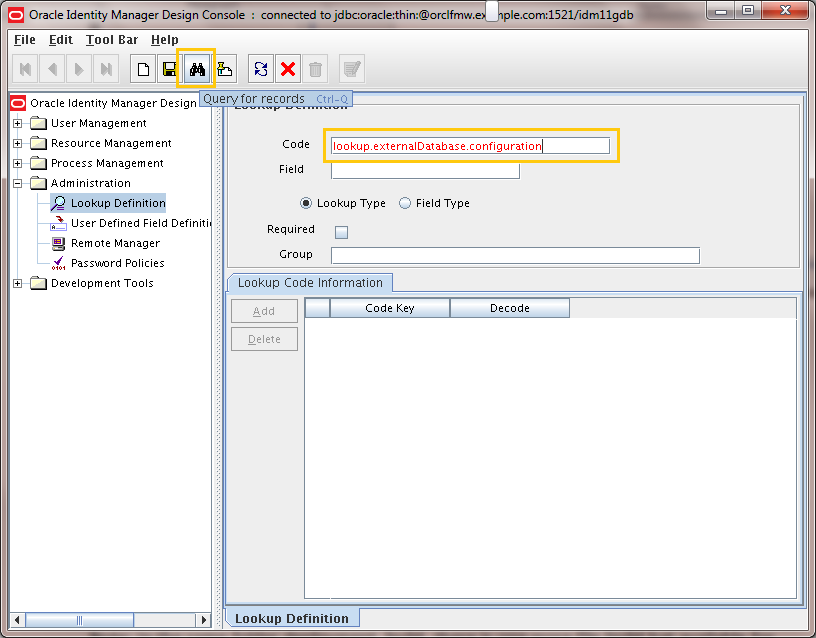
# OIM Design Console



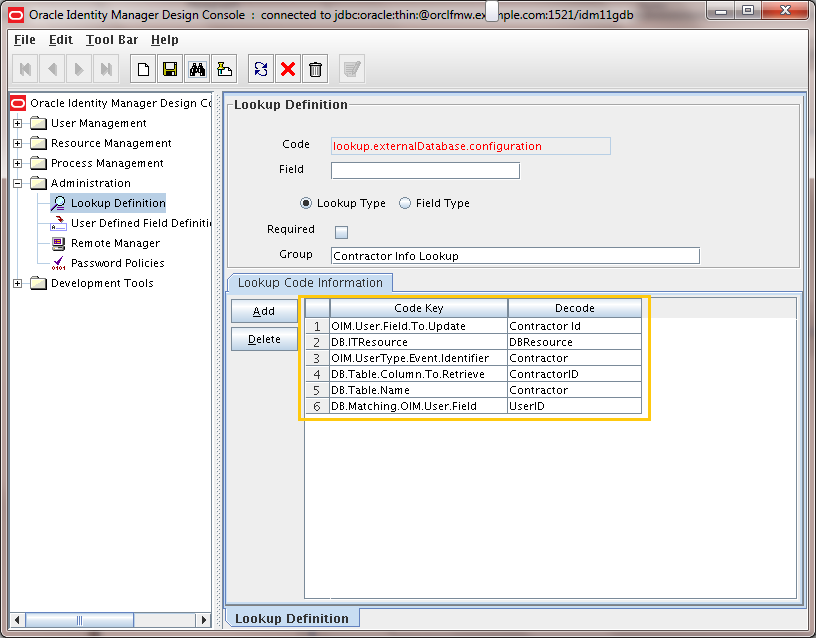
1. Select “Administration” -> “Lookup Definition”



1. Enter “***lookup.externalDatabase.configuration***” and then click on search query/ binoculars in the menu bar.



1. Following search result will be displayed

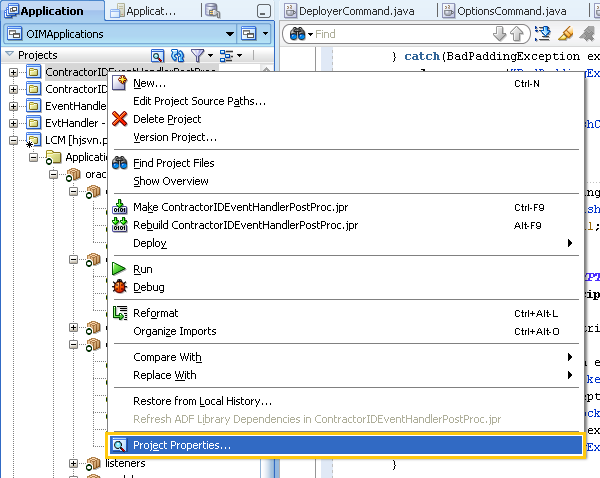


1. Description about the table

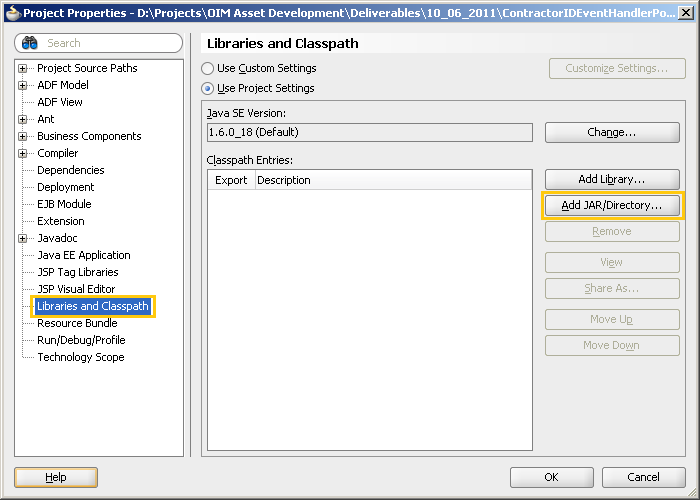
|  |  |  |
| --- | --- | --- |
| **Code Key** | **Decode** | **Information** |
| DB.Matching.OIM.User.Field | UserID | The OIM user field. This field value will be used to find matching record in DB column defined in the LKU key DB.table.column.to.retrieve |
| DB.ITResource | DBResource | The DB table name. This table will be used to retrieve column value defined in LKU: DB.table.field.to.retrieve |
| DB.Table.Name | Contractor | The DB table name. This table will be used to retrieve column value defined in LKU: DB.table.field.to.retrieve |
| DB.Table.Column.To.Retrieve | ContractorID | The DB column name. This column name will be used to retrieve value from table defined in LKU key : DB.table.name |
| OIM.User.Field.To.Update | Contractor Id | The OIM User field. This field value will be updated with corresponding DB table field value. |
| OIM.UserType.Event.Identifier | Contractor | The user type identifier. This must be same as OIM User Type as it will be used to match OIM User Type during the execution of event handler. |

# Build & Deploy the sample

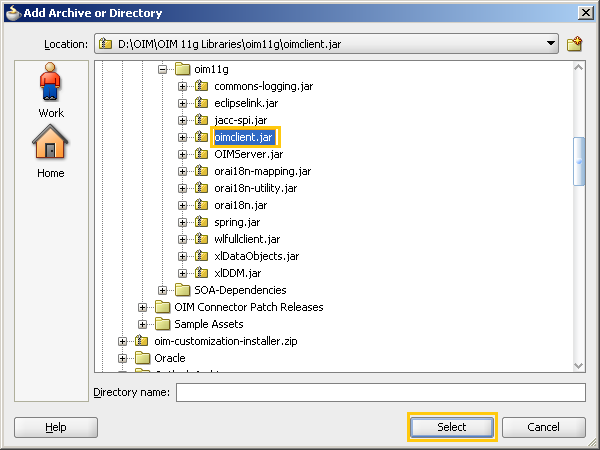
1. Open ContractorIDEventHandlerPostProc.jpr in JDeveloper.
2. Open ContractorIDEventHandlerPostProc.jpr in JDeveloper.
3. Right click the project and click on **Project Properties** from the context menu.



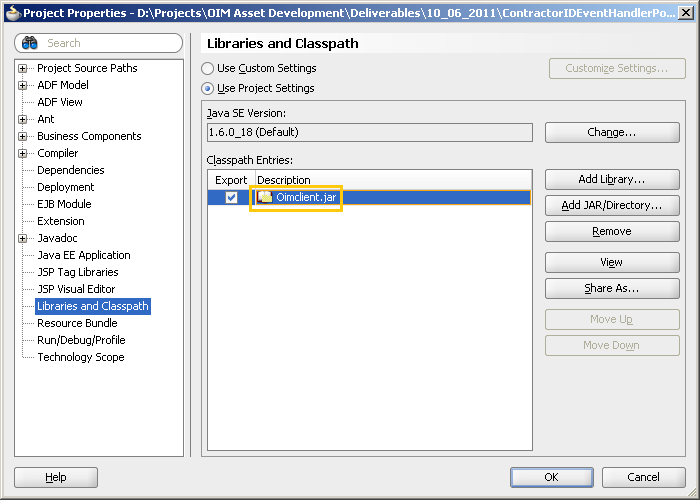
1. Go to **Libraries and Classpath** section.



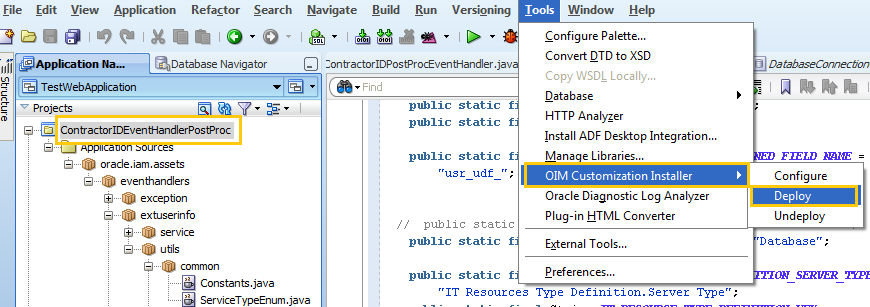
1. Add **oimclient.jar** file to the classpath.



1. **Oimclient.jar** is successfully added to the project.



1. Please make sure you have OIM Customization Installer extension installed on this JDeveloper instance.
2. Select the project (ContractorIDEventHandlerPostProc) in the Application Navigator.
3. Go to “Tools” -> OIM Customization Installer->Deploy



# Post deployment Unit testing Procedure

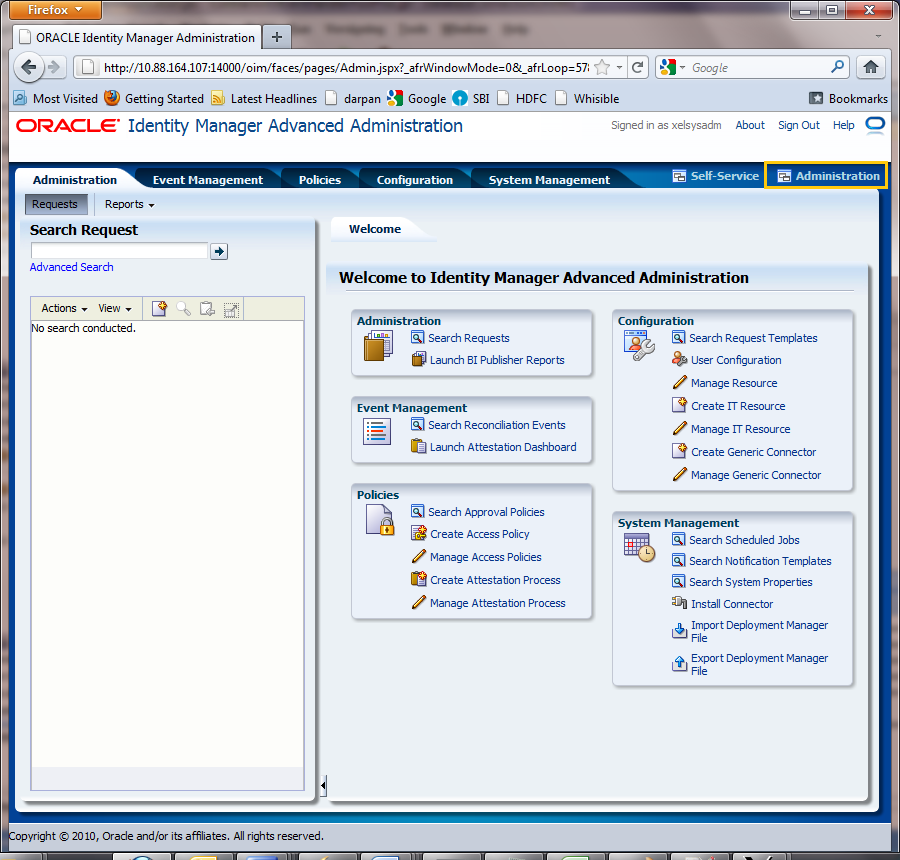
Once the steps mentioned in "Deployment Procedure" are followed, the sample can be

Run against an existing OIM installation on the same host.

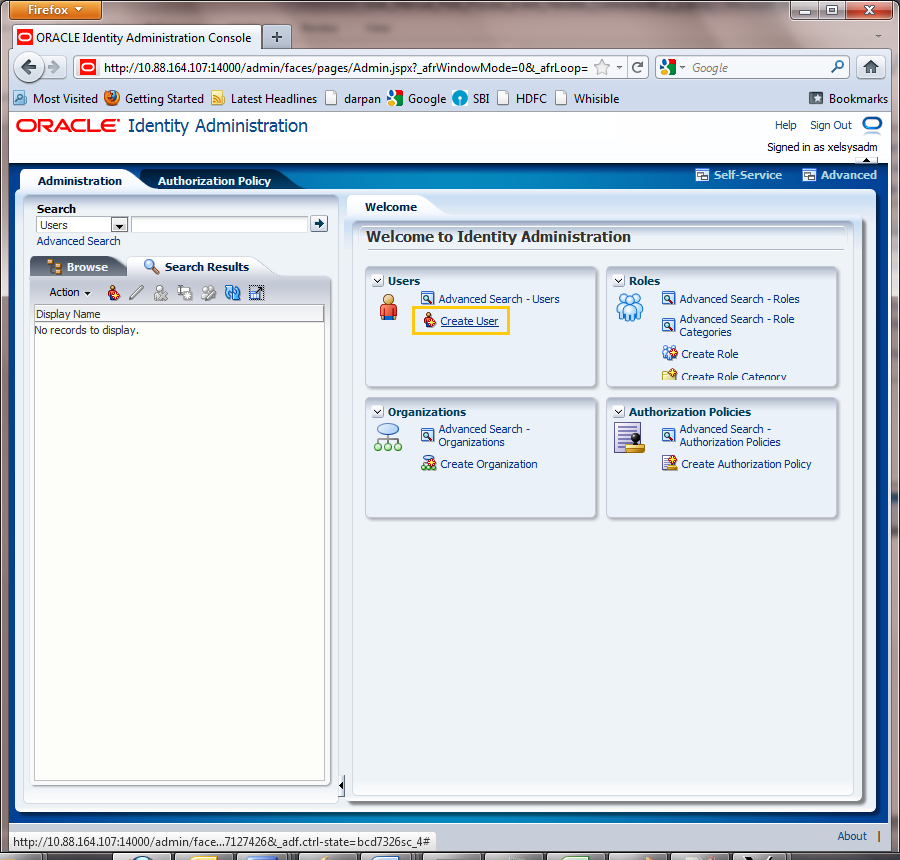
To create a new User [click here](#_Steps_to_create) and to perform Bulk user reconciliation using flat file [click here](#_Steps_for_Bulk)

### Steps to create a new User

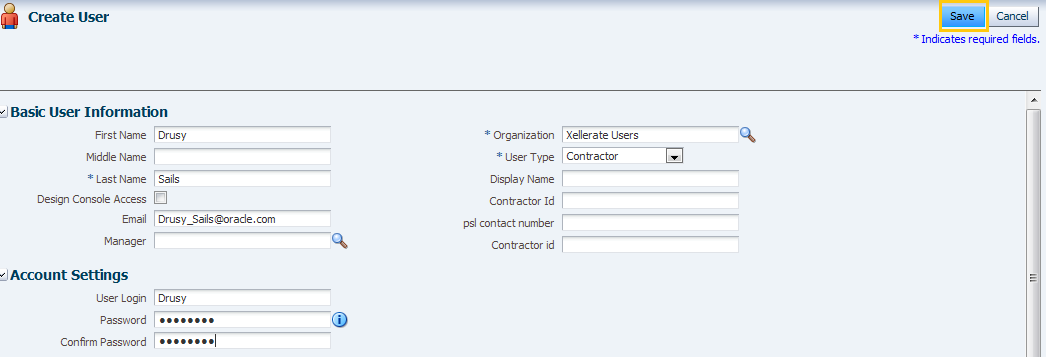
1. Open OIM console and create new user of type “Contractor”.
2. Go to “Administration”.



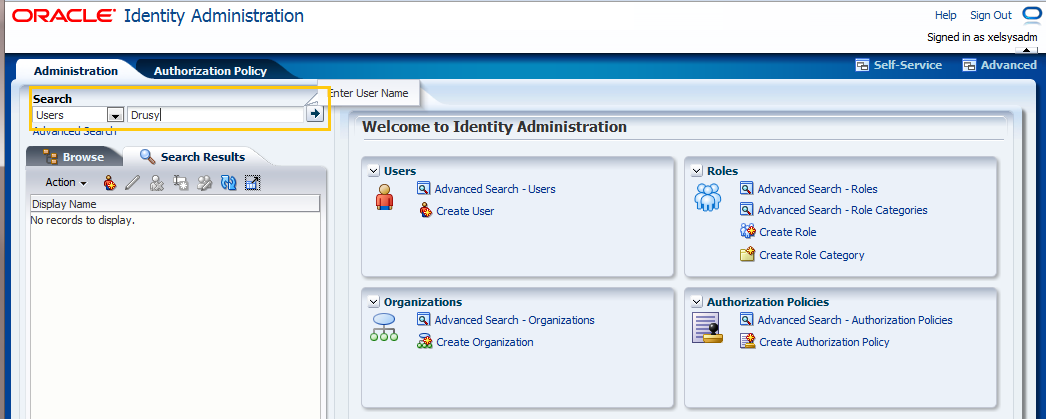
1. Click on “Create User”



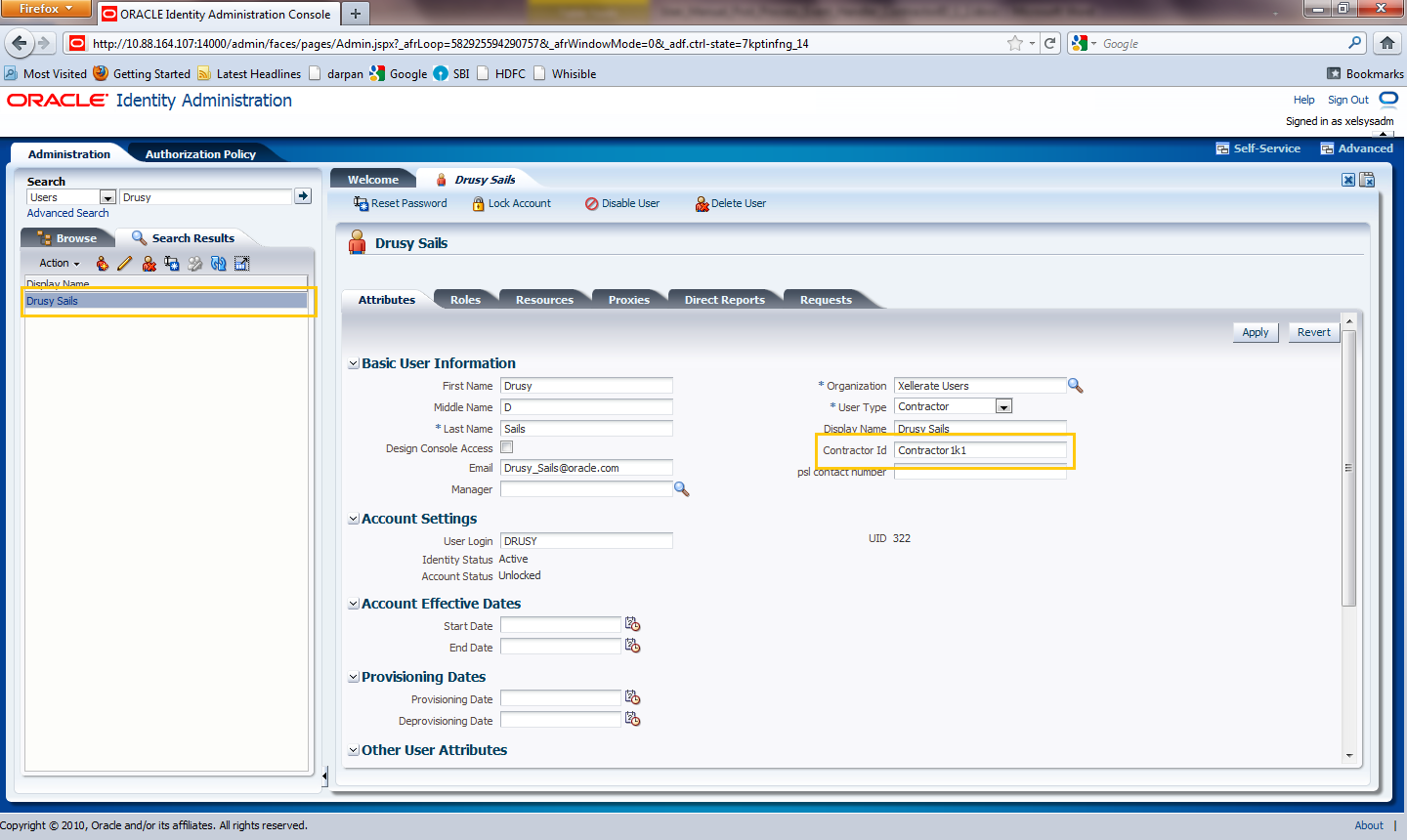
1. Fill the User details and then click on Save



1. Search for user that was created.

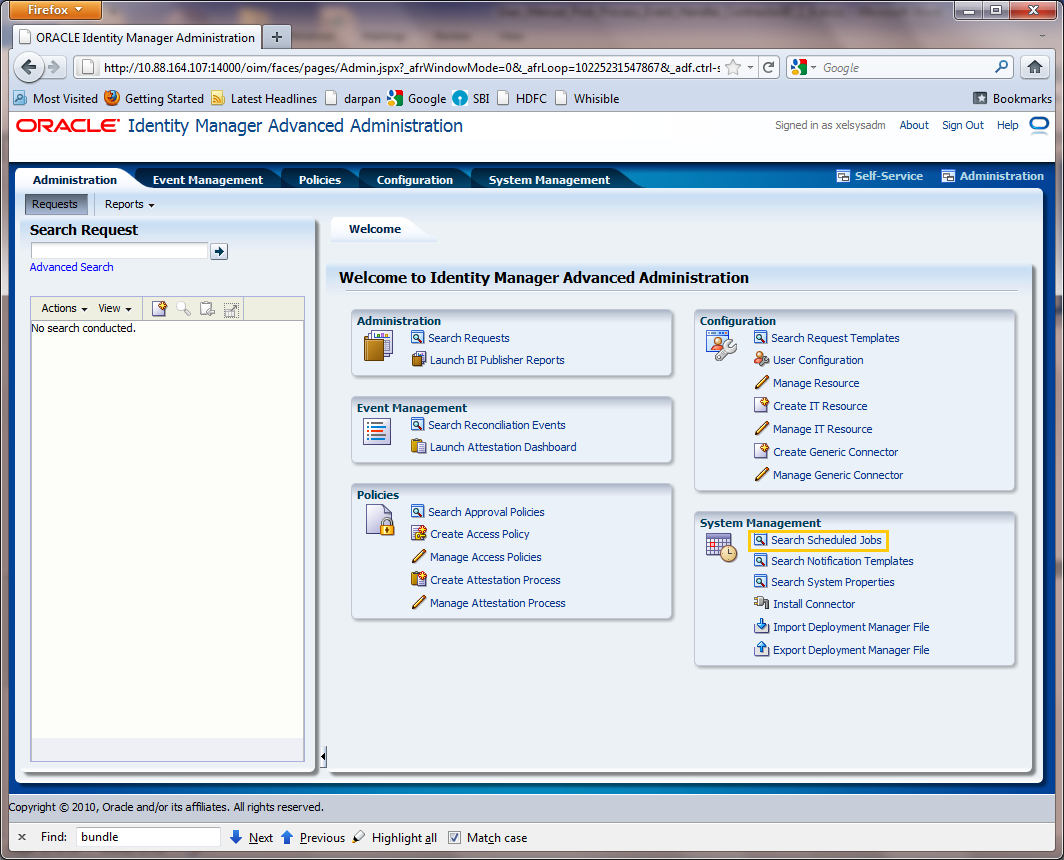


1. Click on the User from the search result, the Contractor ID gets updated in the user profile.

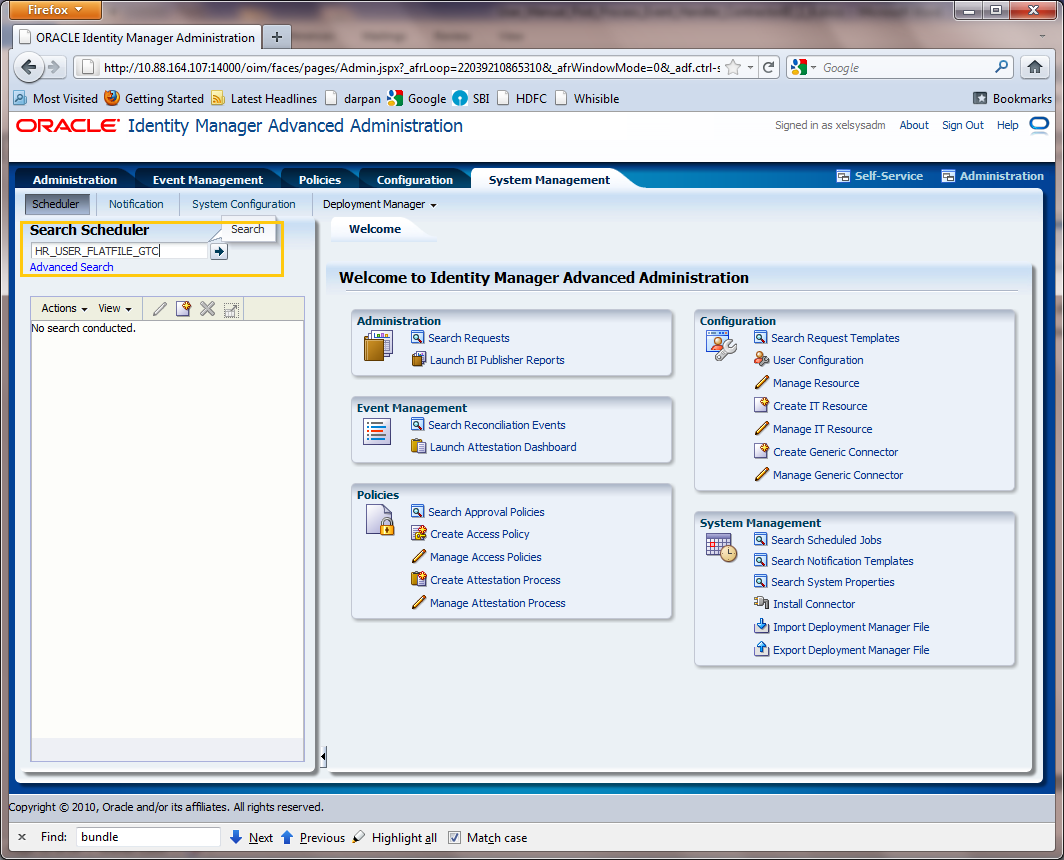


### Steps for Bulk User Reconciliation Using Flat File

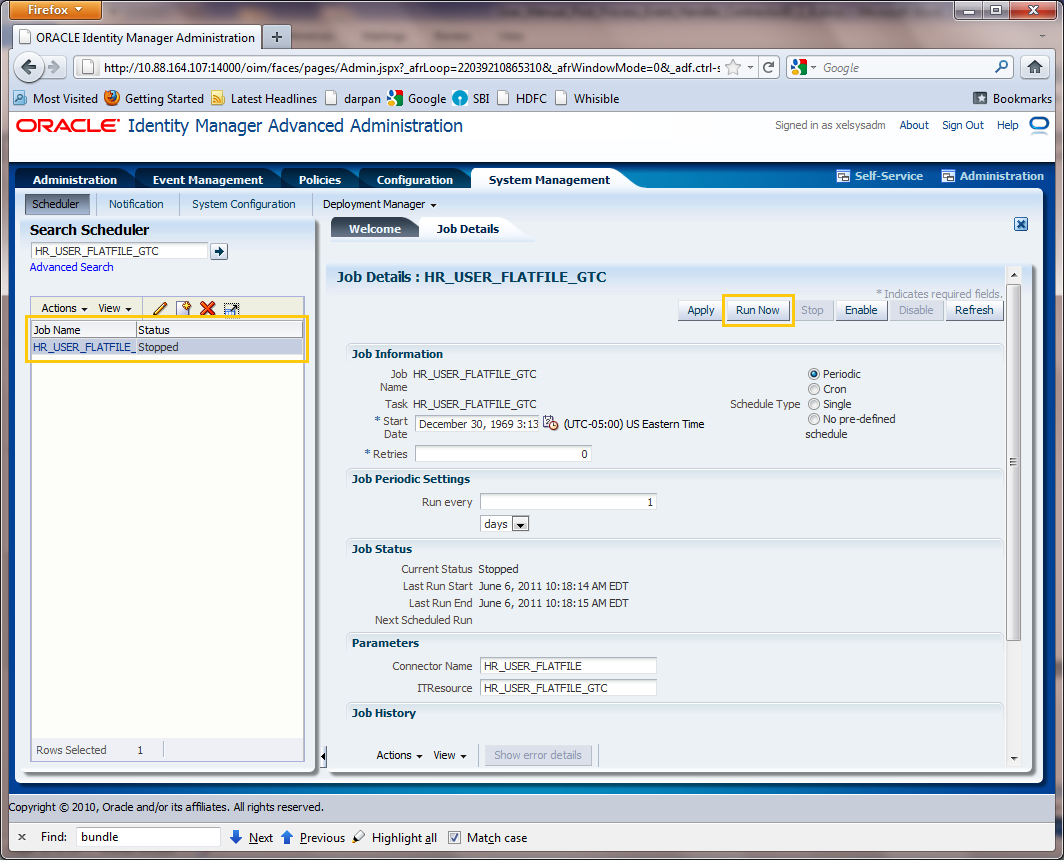
1. Login to the OIM “Advanced” console and click on “Search Scheduled Jobs”.



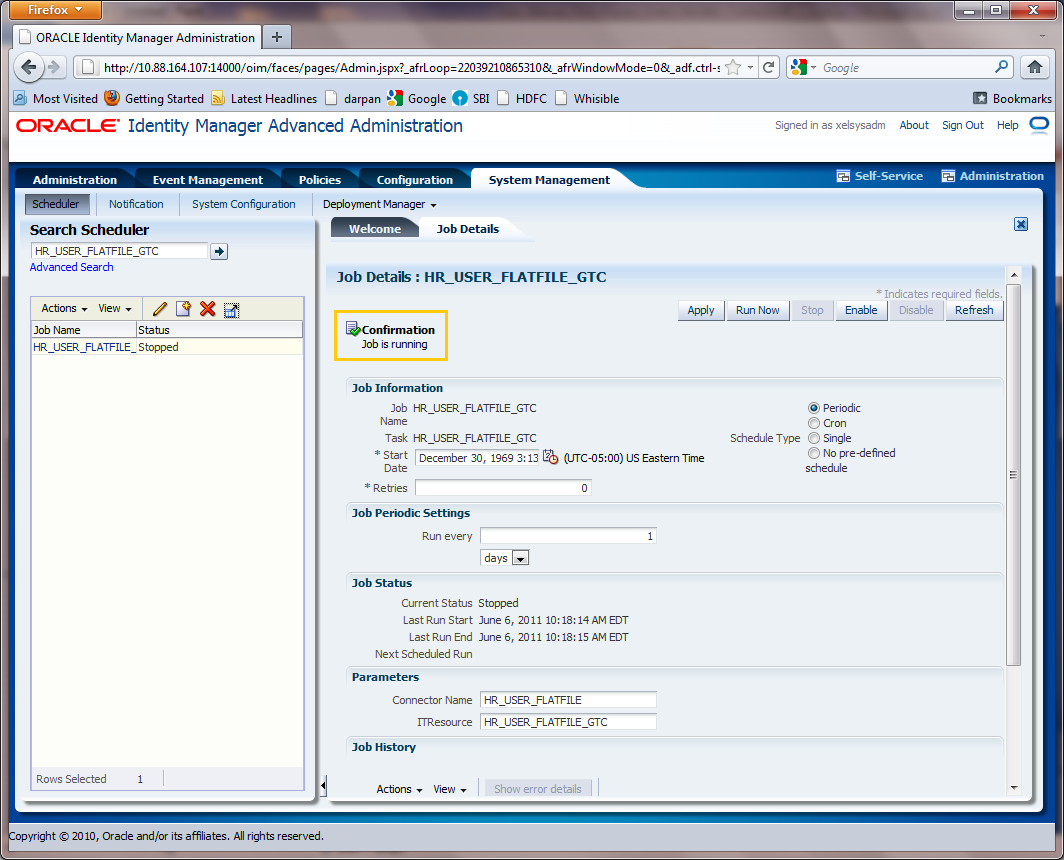
1. Search for the scheduled job created while creating the generic connector. Enter the name of scheduled job as <<name of generic connector>>\_GTC in the text box and click on the search arrow button as shown below.



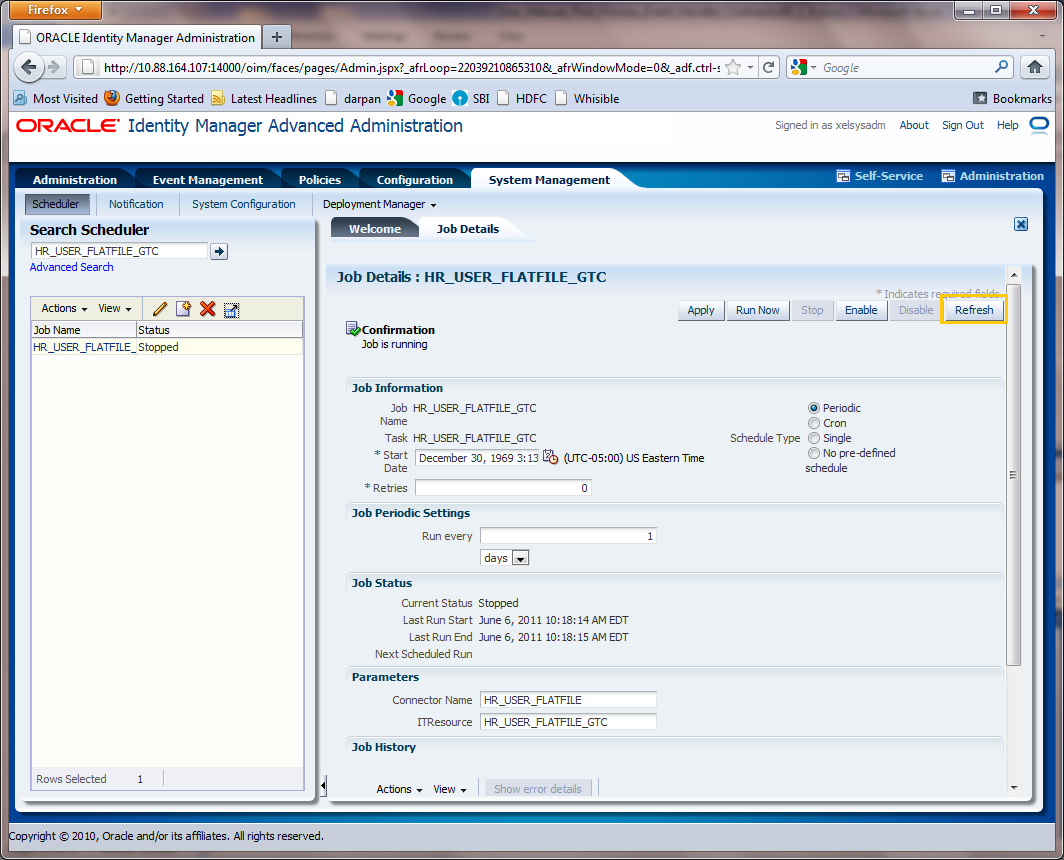
1. Click on the schedule job from the search result and then click on “Run Now”.



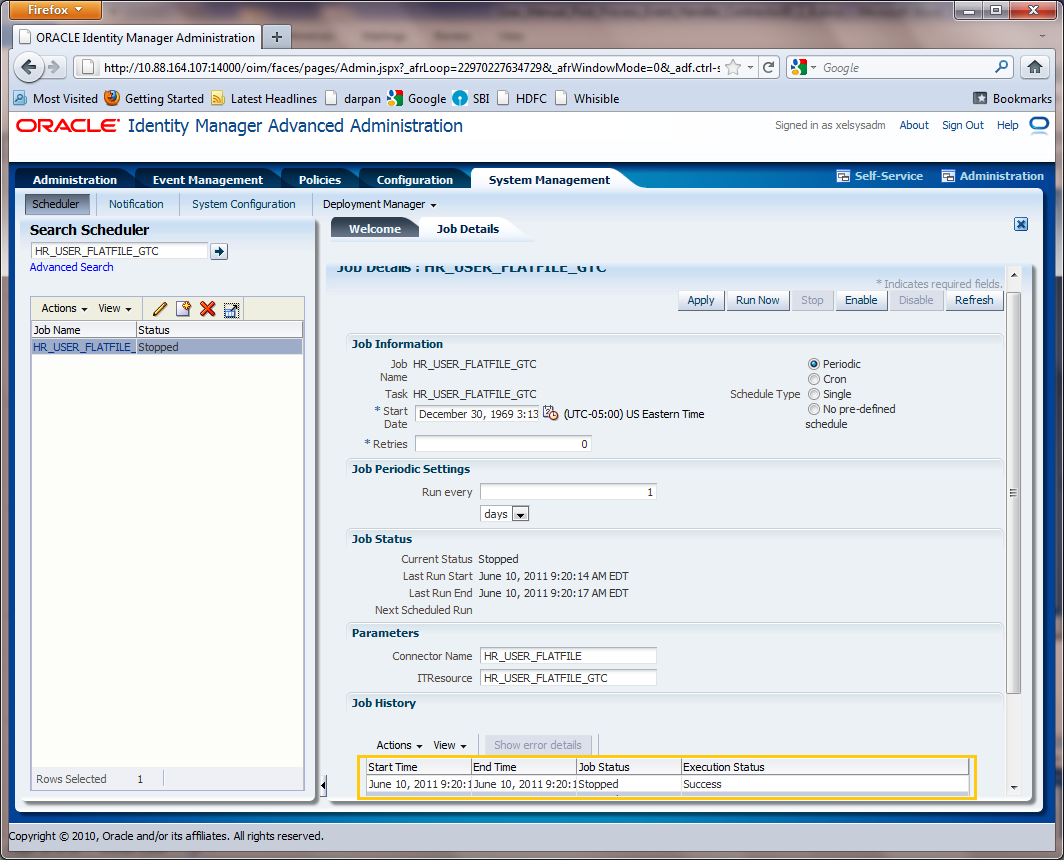
1. After clicking the Run Now below screen appears.



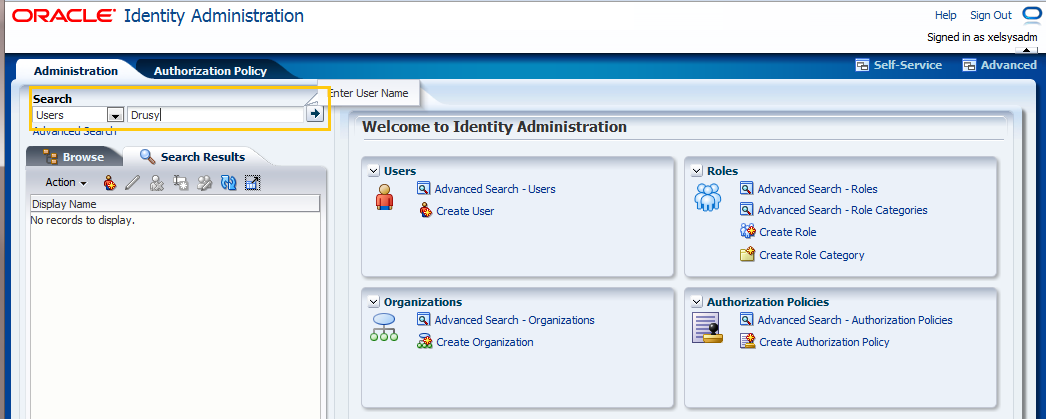
1. Click on the “Refresh” button.



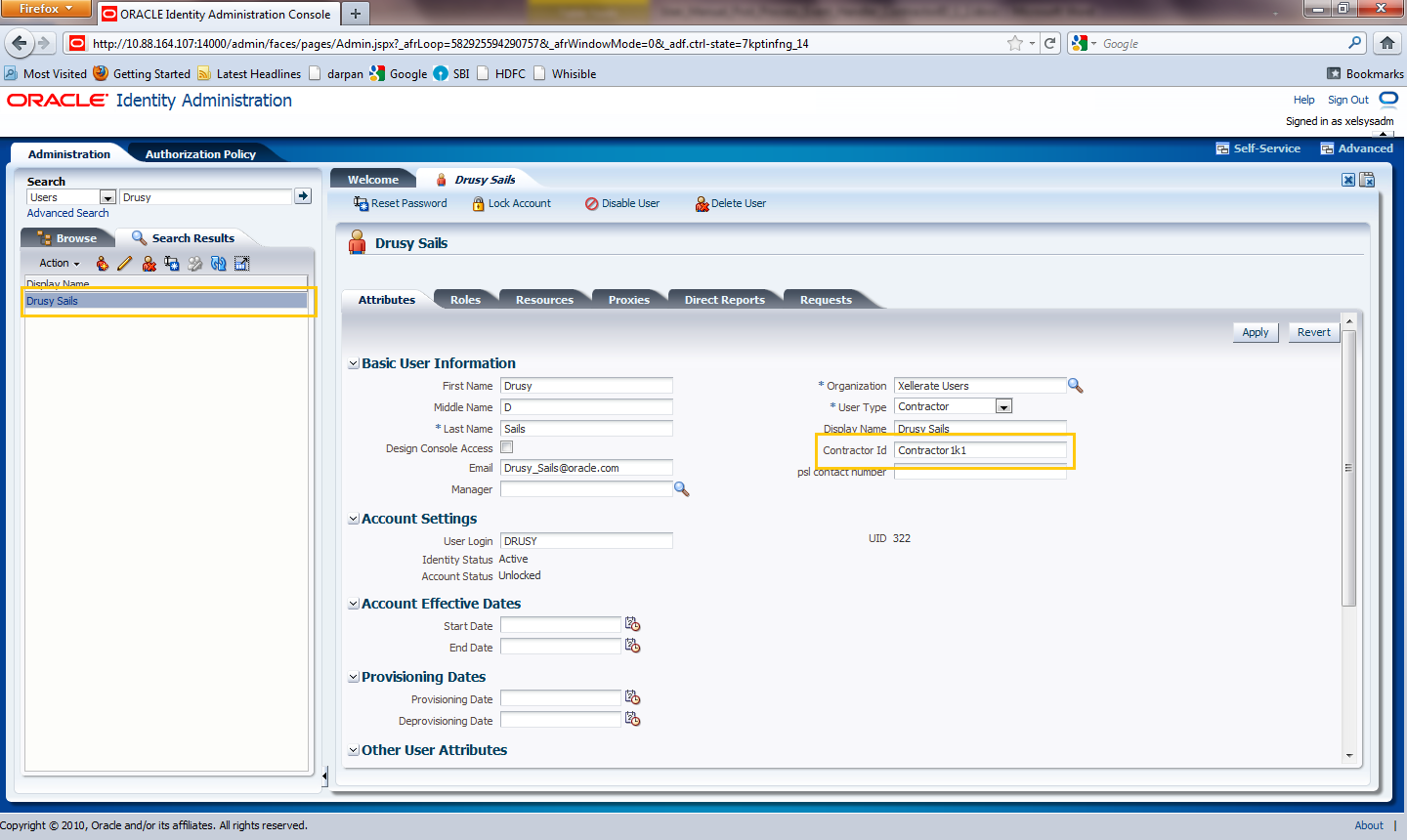
1. Below screen appears.



1. Search for any one user that was present in the flat file.



1. Click on the User from the search result, the Contractor ID gets updated in the user profile.



# SQL Statements

**Create a table in database**

CREATE TABLE Contractor (

USERID varchar2(256) primary key,

CONTRACTORID varchar2(256),

FIRSTNAME varchar2 (256),

LASTNAME varchar2 (256)

);

**Insert data in the table**

Insert into contractor values('Drusy','Contractor1k1','Drusy','Sails');

**Sample Data**

|  |  |  |  |
| --- | --- | --- | --- |
| **User ID** | **Contractor ID** | **First Name** | **Last Name** |
| Drusy | Contractor1k1 | Drusy | Sails |
| Silvia | Contractor1k2 | Silvia | Matson |
| Van | Contractor1k3 | Van | Oman |
| Hitoshi | Contractor1k4 | Hitoshi | Filkins |
| Froukje | Contractor1k5 | Froukje | Fontanilla |
| Ramonda | Contractor1k6 | Ramonda | Schyving |