

HP OpenView Select Identity

Connector for JD Edwards EnterpriseOne

Connector Version: 1.0

Installation and Configuration Guide

Document Release Date: November 2006
Software Release Date: November 2006



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- Commons-collections
- Commons-logging
- Commons-digester
- Commons-httpclient
- Element Construction Set (ecs)
- Jakarta-poi
- Jakarta-regexp
- Logging Services (log4j)

Additional third party software used by Select Identity includes:

- JasperReports developed by SourceForge
- iText (for JasperReports) developed by SourceForge
- BeanShell
- Xalan from the Apache XML Project
- Xerces from the Apache XML Project
- Java API for XML Processing from the Apache XML Project
- SOAP developed by the Apache Software Foundation
- JavaMail from SUN Reference Implementation
- Java Secure Socket Extension (JSSE) from SUN Reference Implementation
- Java Cryptography Extension (JCE) from SUN Reference Implementation
- JavaBeans Activation Framework (JAF) from SUN Reference Implementation

- OpenSPML Toolkit from OpenSPML.org
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- Submit and track progress on support cases
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To register for an HP Passport ID, go to:

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1 Documentation Map

This chapter describes the organization of HP OpenView Select Identity connector documentation and provides necessary information on how to use the documentation set to install and configure the connectors.

[Figure 1](#) illustrates the documentation map for HP OpenView Select Identity connector. For a list of available product documentation, refer to the [Table 1](#).

Figure 1 Documentation Map



Table 1 Connector Documentation

Document Title and Filename	Contents	Location
<i>Release Note</i> JD Edwards Connector v1.0 Release Note.htm	This file contains necessary information on new features of the connector, enhancements, known problems or limitations, and support information.	/Docs/ subdirectory under the connector directory.
<i>Connector Deployment Guide (for Select Identity 4.10)</i> connector_deploy_SI4.1.pd	Connector deployment guides provide detailed information on: <ul style="list-style-type: none"> • Deploying a connector on an application server. • Configuring a connector with Select Identity. Refer to these guides when you need generic information on connector installation.	/Docs/ subdirectory under the connector directory.
<i>Connector Deployment Guide (for Select Identity 4.0/4.01.000)</i> connector_deploy_SI4.pdf		
<i>Connector Installation and Configuration Guide</i> JD Edwards_install.pdf	Connector installation and configuration guide provides installation instructions for a specific connector. It contains resource specific configuration details.	/Docs/ subdirectory under the connector directory.

2 Introduction

This chapter gives an overview of the HP OpenView Select Identity connector for JD Edwards EnterpriseOne. An HP OpenView Select Identity connector for JD Edwards EnterpriseOne enables you to provision users and manage identities on JD Edwards EnterpriseOne. At the end of this chapter, you will be able to know about:

- The benefits of the HP OpenView Select Identity.
- The role of a connector.
- The connector for JD Edwards EnterpriseOne.

About HP OpenView Select Identity

HP OpenView Select Identity provides a new approach to identity management. Select Identity helps you automate the process of provisioning and managing user accounts and access privileges across platforms, applications, and corporate boundaries. Select Identity communicates with the enterprise information system through connectors, and automates the tasks of identity management. The enterprise information system, which is also referred to as **resource**, can be a database, a directory service, or an ERP package, among many others.

About Connectors

You can establish a connection between a resource and Select Identity by using a connector. A connector is resource specific. The combination of Select Identity and connector helps you perform a set of tasks on the resource to manage identity. A connector can be **unidirectional** or **bidirectional**. A unidirectional connector helps you manage identities from Select Identity, but if any change takes place in resource, it cannot communicate that back to Select Identity. On the other hand, a bidirectional connector can reflect the changes made on resource back to Select Identity. This property of bidirectional connectors is known as **reverse synchronization**.

About JD Edwards Connector

The connector for JD Edwards EnterpriseOne — hereafter referred to as JD Edwards connector — enables Select Identity to perform the following tasks in JD Edwards EnterpriseOne server:

- Add, update, and remove users
- Retrieve user attributes

- Enable and disable users
- Verify a user's existence
- Change user passwords
- Reset user passwords
- Expire user passwords
- Retrieve all entitlements
- Grant and revoke entitlements to and from users

The JD Edwards connector is a bidirectional connector. The connector can send changes made on JD Edwards EnterpriseOne server back to Select Identity. The following operations are supported in reverse synchronization:

- Add, update, and remove users
- Enable and disable users
- Grant and revoke entitlements to and from users



This connector can be used with Select Identity 4.10, 4.01.000, and 4.0.

Overview of Installation Tasks

Before you start installing the connector, you must ensure that system requirements and all the installation prerequisites are met. Refer to the [Table 2](#) for an overview of installation tasks.

Table 2 Organization of Tasks

Task Number	Task Name	Reference
1	Install the connector on the Select Identity server.	See Installing the Connector on page 11.
	— Meet the system requirements.	See System Requirements on page 12.
	— Perform the pre-installation task.	See Pre-Installation Tasks on page 12.
	— Extract contents of the Schema file (file that contains the mapping files for the connector) to a location on the Select Identity server.	See Extracting Contents of the Schema File on page 24.
	— Install the Resource Adapter Archive (RAR) of the connector on an application server.	See Installing the Connector RAR on page 25.
2	Configure the connector with the Select Identity server.	See Configuring the Connector with Select Identity on page 27.

3 Installing the Connector

This chapter elaborates the procedure to install JD Edwards connector on Select Identity server. At the end of this chapter, you will know about

- Software requirements to install the JD Edwards connector.
- Prerequisite conditions to install JD Edwards connector.
- Procedure to install JD Edwards connector.

JD Edwards Connector Files

The JD Edwards connector is packaged in the following files, which are located in the JDEdwards folder on the Select Identity Connector CD:

Table 3 JD Edwards Connector Files

Serial Number	File Name	Description
1	JDEConnector.rar	It contains the binaries for the connector.
2	JDEConnectorschema.jar	The schema file of the JD Edwards connector contains the necessary information to map JD Edwards attributes to Select Identity attributes. The schema file consists of the following two files: <ul style="list-style-type: none">• JDEConnectorMapping.xml — This is the mapping file for the connector.• provisioningconfig.properties — This properties file contains the JDE_CONNECTION_TIMEOUT_IN_MILLIS property, which is used by the connector. The default value of the property is 100000.
3	ChangeLogNumberUtil.jar	It contains the utility to generate the ChangeLogNumber needed while configuring the polling for JD Edwards Connector on Select Identity.

System Requirements

The JD Edwards connector is supported in the following environment:

Table 4 Platform Matrix for JD Edwards Connector

Select Identity Version	Application Server and Operating System	Database
4.0/4.01.000/4.10	The JD Edwards connector is supported on all the platform configurations of Select Identity 4.0, 4.01.000, and 4.10.	

The JD Edwards connector is supported on JD Edwards EnterpriseOne version 8.11 with Tools Release 8.94 and Tools Release 8.95, with Oracle RDBMS as JD Edwards back-end database

Pre-Installation Tasks

Perform the following tasks before you start installing the connector:

Task 1: Copy JAR Files

Perform the following steps to copy the necessary JAR files to a location that is available in the application server's CLASSPATH:

- 1 Obtain the following files from JD Edwards EnterpriseOne distribution:

- jdeutil.jar
- kernel.jar
- log4j.jar

These JAR files are present in a ZIP file on the Deployment Server installation of JD Edwards in the following path:

`<deployment_server_installation_folder>\E811\System\classes\PSFT_World_Adapter.zip.`

- 2 If Select Identity is deployed on WebLogic, perform the following steps:

- a Place the JAR files on the Select Identity server.
- b Add the path of the JAR files to the CLASSPATH of either the system environment variables or in Select Identity startup script.

For example, if `C:\SI4.01\` is the Select Identity installation directory:

- Place these JAR files in the location `C:\SI4.01\weblogic\sysArchive\`.
- Open the `myStartWL.cmd` file located in `C:\SI4.01\weblogic\scripts` by using a text editor.
- Add the following entry to the CLASSPATH environment variable in the `myStartWL.cmd` file:

```
C:\si4.01.000\weblogic\sysArchive\jdeutil.jar;C:\si4.01.000\weblogic\sysArchive\kernel.jar;C:\si4.01.000\weblogic\sysArchive\log4j.jar;C:\si4.01.000\weblogic\sysArchive\classes12.jar;
```

If Select Identity is deployed on WebSphere, place the JAR files (`jdeutil.jar`, `kernel.jar`, and `log4j.jar`) in the following location:

`<WebSphere_Install>/AppServer/lib/txt`

This path is in WebSphere CLASSPATH by default.

Task 2: Enable the Database Server Communication Mode

The JD Edwards connector needs to communicate with the JD Edwards EnterpriseOne server and JD Edwards database server. The communication with the database server can be achieved by using either a JDBC data source or a JDBC driver.

Enable JDBC Data Source Based Communication

In the application server, create a JDBC connection pool for the JD Edwards database and a corresponding JDBC data source.

While creating a new JDBC data source on WebLogic, you must do the following:

- Cancel the selection Honor Global Transactions.
- Select the option Emulate Two-Phase Commit for non-XA Driver.

While creating a new JDBC data source on WebSphere, you must do the following:

- Create the data source as J2C Authentication Data Entry for the target Oracle database user ID.
- Deploy the JDBC Provider. You must use only XA type driver to connect to the database (a non-XA driver conflicts with the existing JDBC data source of Select Identity).
- Create a data source for the JDBC Provider and provide a suitable JNDI name, which will be used during resource creation on Select Identity.

Enable JDBC Driver Based Communication

Obtain the JDBC driver file — `classes12.jar` — from the JD Edwards installation, copy the file to a location on the Select Identity server, and add the file to the application server's CLASSPATH.



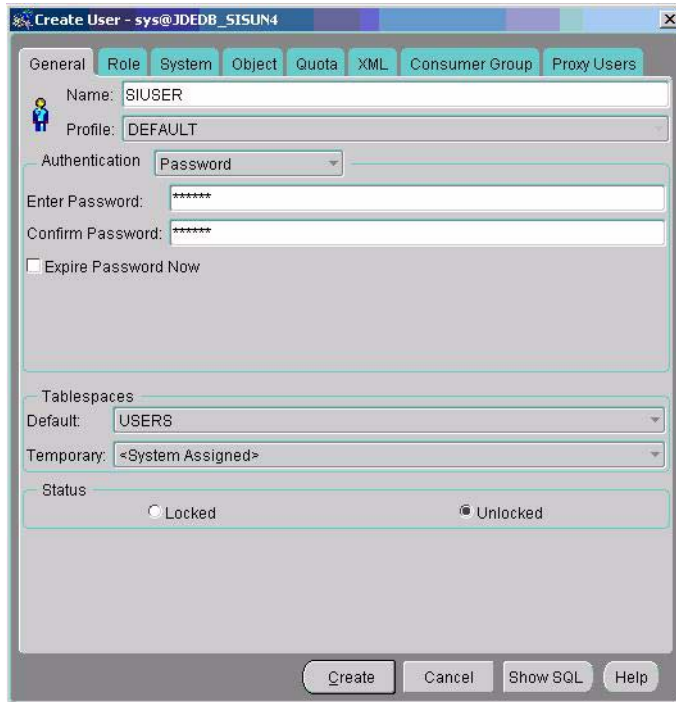
Do not copy the `classes12.jar` file to a location on Select Identity server if Select Identity is deployed on WebSphere. The Oracle JDBC driver file is available in WebSphere's CLASSPATH by default from the Select Identity installation. You can use the appropriate JDBC URL and Driver string of that driver for JD Edwards resource creation.

Task 3: Create JD Edwards EnterpriseOne Users for Connector Operation

To be able to work with the connector, you must create a JD Edwards EnterpriseOne user account that has administrative privileges. Perform the following steps to create a new account:

- 1 Create a user on the JD Edwards Oracle database instance. Perform the following steps to create the user on database instance:
 - a Connect to the JD Edwards Oracle instance by using the Enterprise Console Manager with a user with administrative privileges.
 - b On the left pane, expand **Security** → **User**.

- c Right-click on **User** and select **Create**. The **Create User** dialog box appears.



- d Type in a name for the new user.
- e Select **Authentication** as **Password**, type in the password of the new user, keep the default settings for other options, and then go to the **Role** tab.

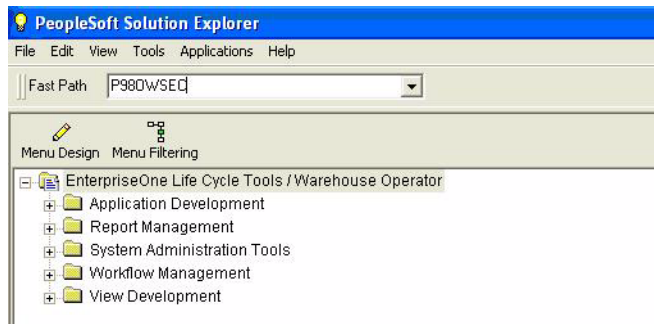
Granted:			
Role	Admin Option	Default	
AQ_ADMINISTRATOR_ROLE	✓	✓	
AQ_USER_ROLE	✓	✓	
AUTHENTICATEDUSER	✓	✓	
CONNECT	✓	✓	
CTXAPP	✓	✓	
DBA	✓	✓	
DELETE_CATALOG_ROLE	✓	✓	
DMUSER_ROLE	✓	✓	
DM_CATALOG_ROLE	✓	✓	
EJBCLIENT	✓	✓	

- f Select all the roles except `GLOBAL_AQ_USER_ROLE`.
 - g Click **Create**.
 - h Repeat the steps [step a](#) to [step g](#) to create an Oracle database user with a different user name. This username will be used during resource creation (for database connectivity).
- 2 Create a JD Edwards system user with the same username as the Oracle user created above. Perform the following steps to create the system user:

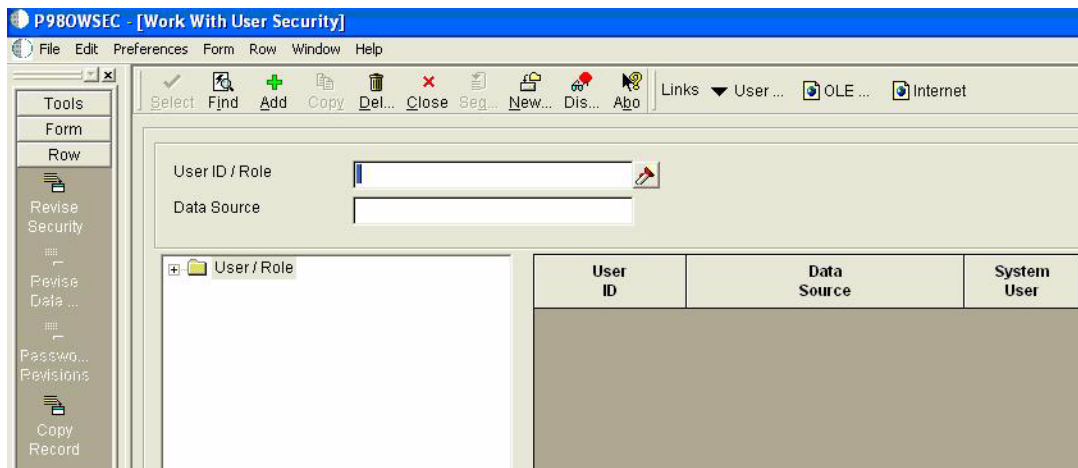
- a Open the FAT Client for JD Edwards EnterpriseOne and log on by using the default administrative user created during JD Edwards installation.



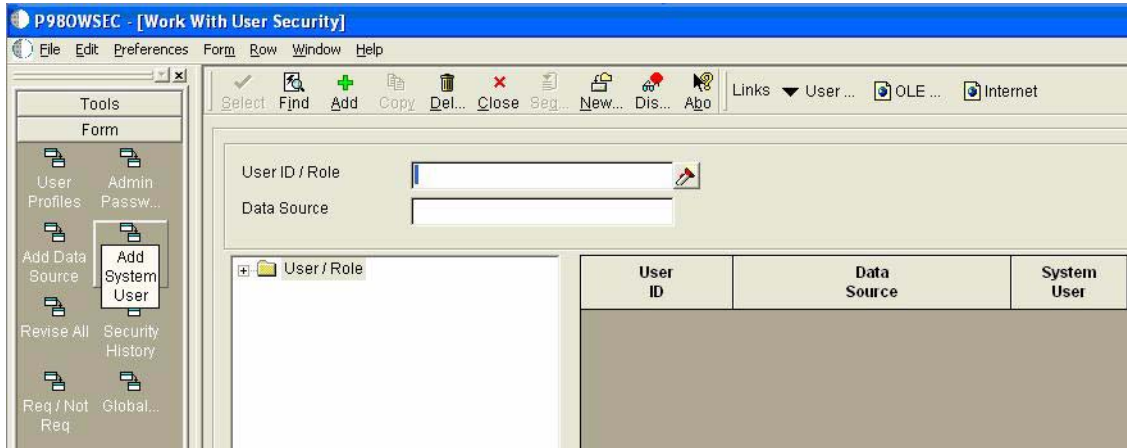
- b In the Fast Path field of the FAT client, type **P980WSEC** to specify the location to create the system user.



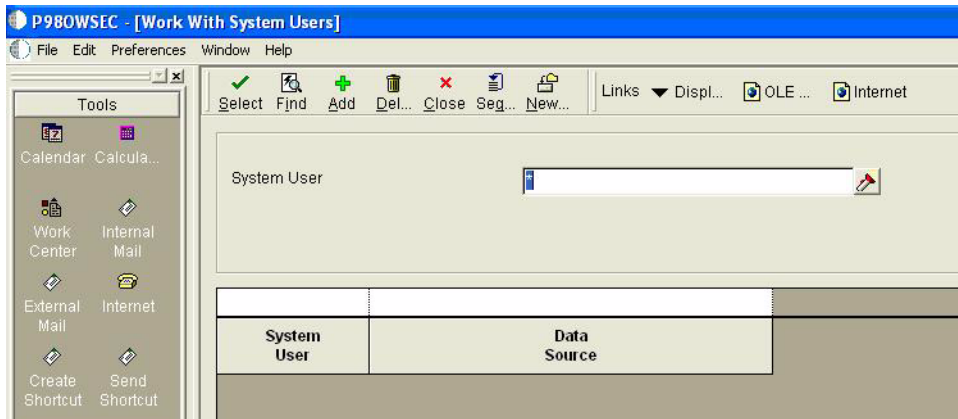
- c Press **ENTER**. The P980WSEC window appears.



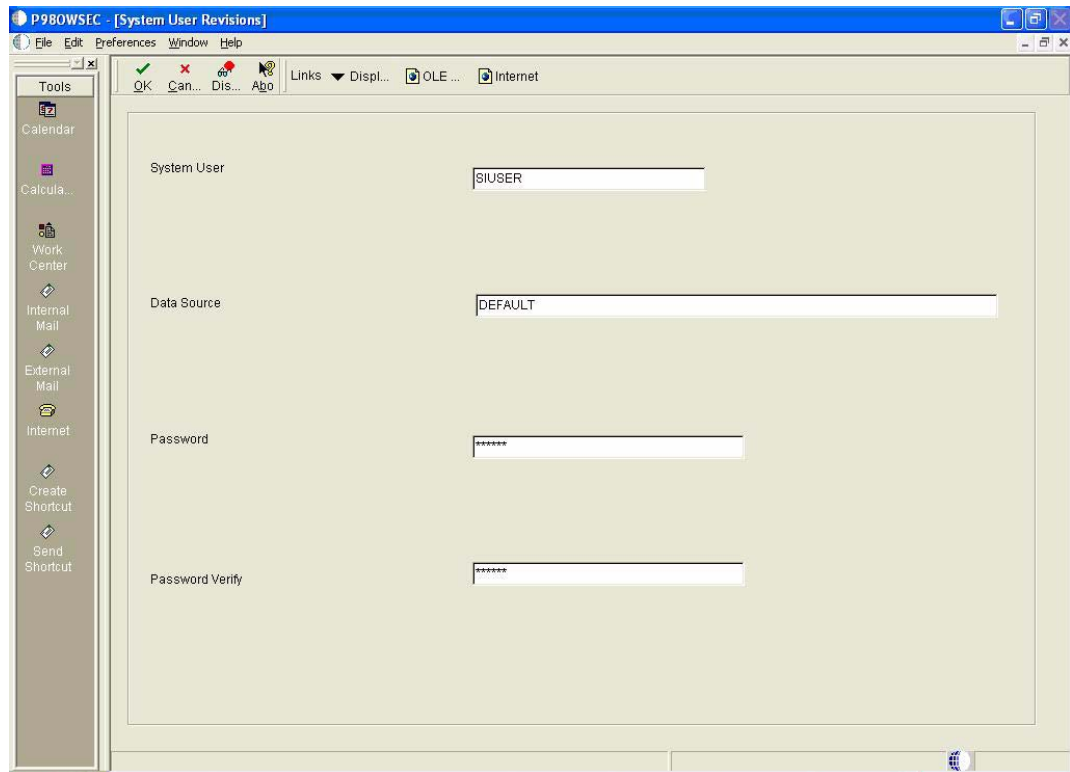
d In left pane, click **Form** → **Add System User**.



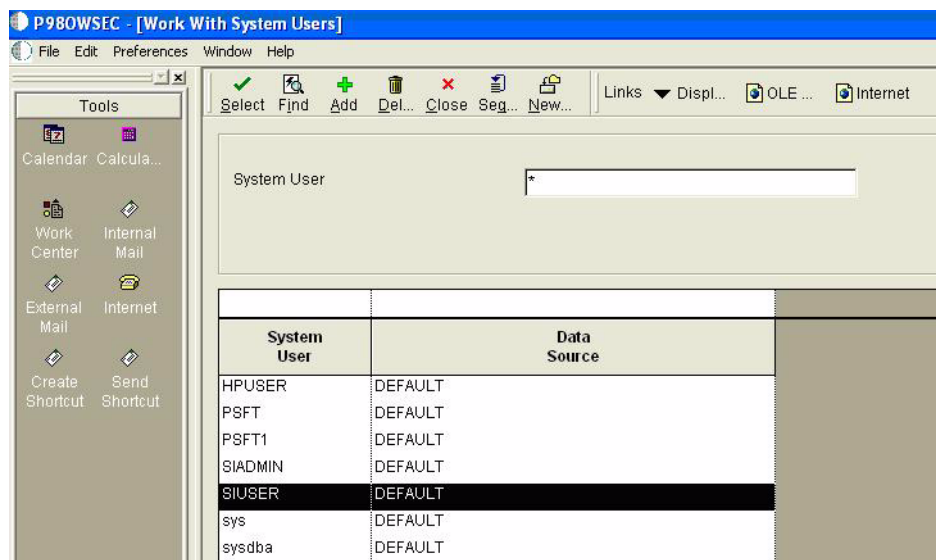
e Click **Add** on top of the right pane.



- f Type a system user name that is identical with the database instance username created above (step d on page 14). For example, if you have created **SIUSER** as the database instance user, you must type **SIUSER** in the System User text box.



- g Click **OK**.
- h Click **Find** to view the list of system users to verify whether the user creation is successful.

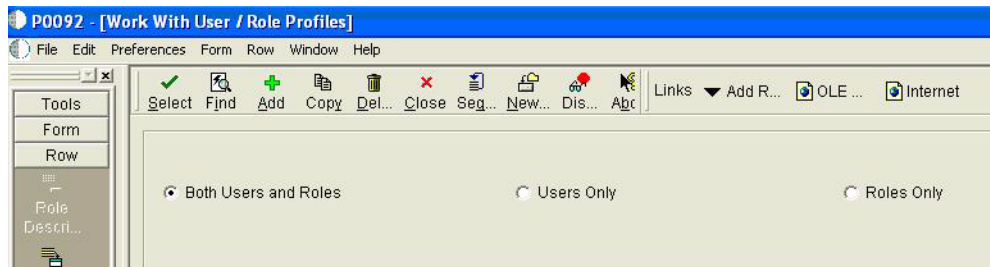


- 3 Create a user profile with the same name as that of the system user created above. Perform the following steps to create a user profile:

- a Type **P0092** in the Fast Path of the FAT client to specify the location to create the user profile.



- b Press **ENTER**. The P0092 window appears.



- c Click **Add** on top of the right pane.
- d In the User ID text box, type a name identical to the system user name that was created before ([step f](#) on page 17).
- e In the Address Number text box, type a valid address book number.
- f In the Menu Identification text box, type G.

- g Click **OK** on top of the right pane.

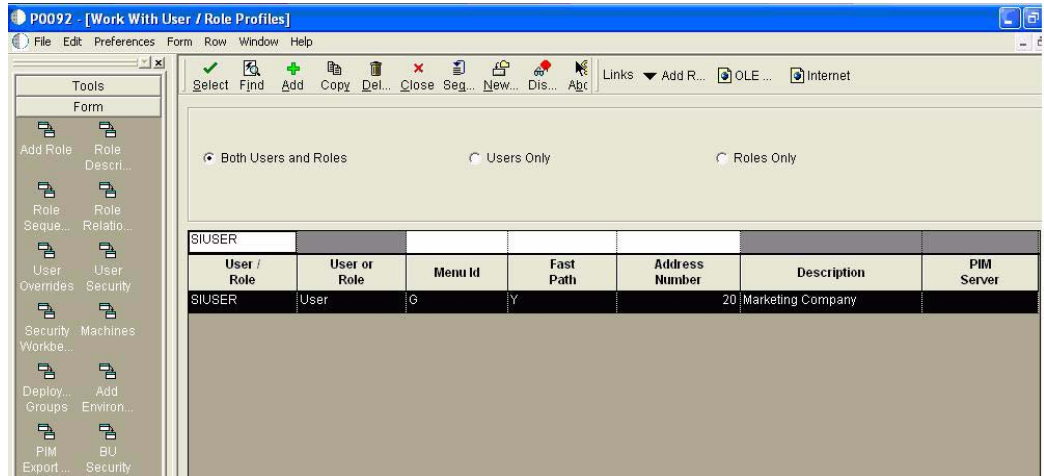
The screenshot shows a software window titled "P0092 - [User Profile Revisions]". The window has a menu bar with "File", "Edit", "Preferences", "Form", "Window", and "Help". Below the menu bar is a toolbar with icons for "OK", "Can...", "Dis...", "Ab...", "Links", "Bus P...", "OLE ...", and "Internet". The main area is divided into two sections. The top section, labeled "Form", contains several input fields: "User ID" with the value "SIUSER", "Address Number" with the value "20", "WhosWhoLineID" (empty), "Menu Identification" with the value "G", and "Default Icon File" (empty). The bottom section, labeled "Display Preferences", contains several rows of settings, each with a text label, an input field, and a description. The settings are: "Language" (input field), "Domestic Language" (input field), "Justification" (radio buttons for "Right To Left" and "Left to Right"), "Visually Impaired" (radio buttons for "Yes" and "No"), "Date Format" (input field), "Use System Value" (input field), "Date Separator Character" (input field), "System value" (input field), "Decimal Format Character" (input field), "System value" (input field), "Localization Country Code" (input field), "No Special Localization Logic" (input field), "Universal Time" (input field), "System Value" (input field), "Time Format" (input field), "System Value" (input field), and "Daylight Savings Rule" (input field).

- h In the user profile page, type the value of newly created user profile under the user/ Role column and click **Find**. The newly created user appears in the list.

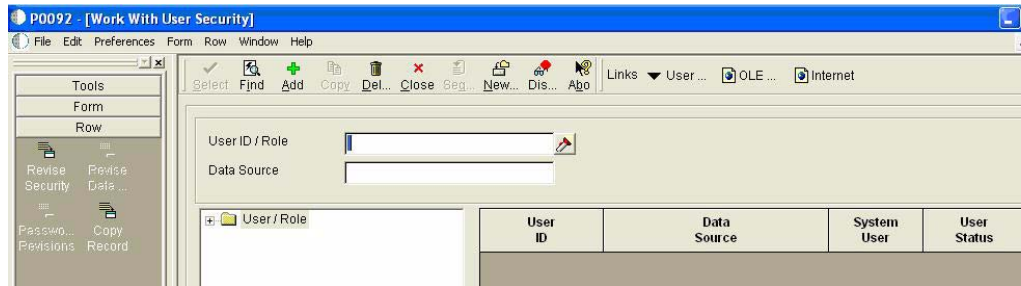
The screenshot shows a software window titled "P0092 - [Work With User / Role Profiles]". The window has a menu bar with "File", "Edit", "Preferences", "Form", "Row", "Window", and "Help". Below the menu bar is a toolbar with icons for "Select", "Find", "Add", "Copy", "Del...", "Close", "Seg...", "New...", "Dis...", "Ab...", "Links", "Add R...", "OLE ...", and "Internet". The main area is divided into two sections. The top section, labeled "Row", contains three radio buttons: "Both Users and Roles" (selected), "Users Only", and "Roles Only". The bottom section is a table with the following data:

User / Role	User or Role	Menu Id	Fast Path	Address Number	Description	PIM Server
SIUSER	User	G	Y	20	Marketing Company	

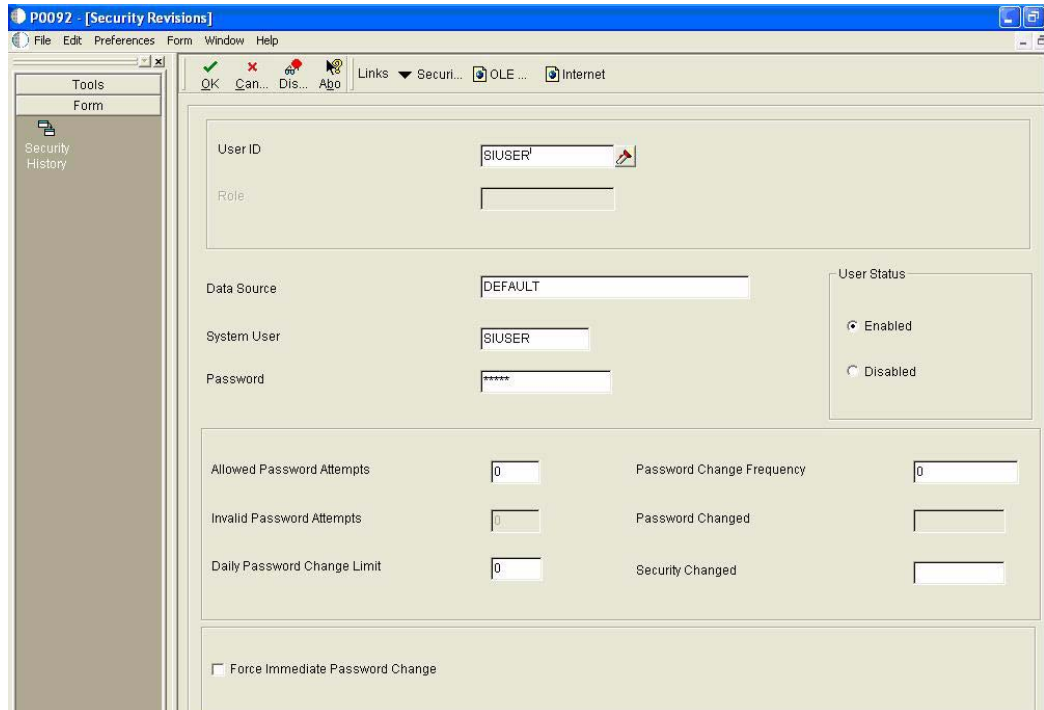
- i In the left pane, click **Form**.



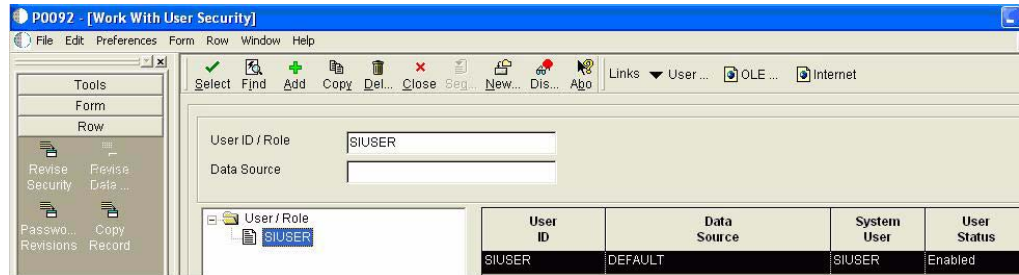
- j Select the newly created user in the right pane and click **User Security** in the left pane. The P0092 - [Work With User Security] window appears.



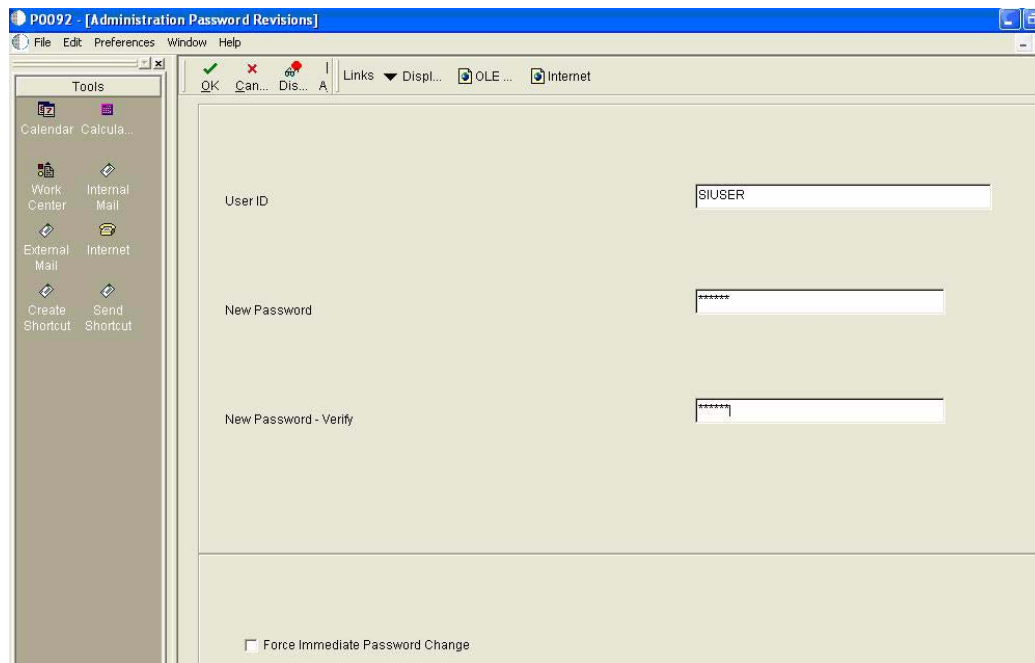
- k Click **Add** on the top of the right pane. The P0092 - [Security Revisions] screen appears.



- l In the User ID text box, type the user profile name created above, in the System User text box, type the system user created in [step 2](#) in the System User text box, type the password for the system user in the Password text box (as created in [step 2](#)), keep all other default settings, and then click **OK** on top of the right pane. The P0092 - [Work With User Security] window appears again.
- m Type the newly created user profile name in the User ID/ Role text box and click **Find**. The security record of the newly created user profile appears.

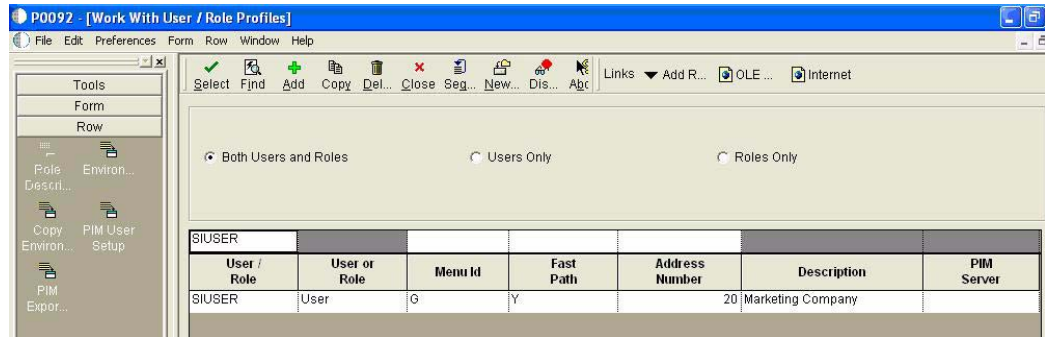


- n In right pane, expand User/Role and select the newly created user profile.
- o In left pane, click **Password Revisions** under the Row menu. The P0092 - [Administration Password Revisions] window appears.

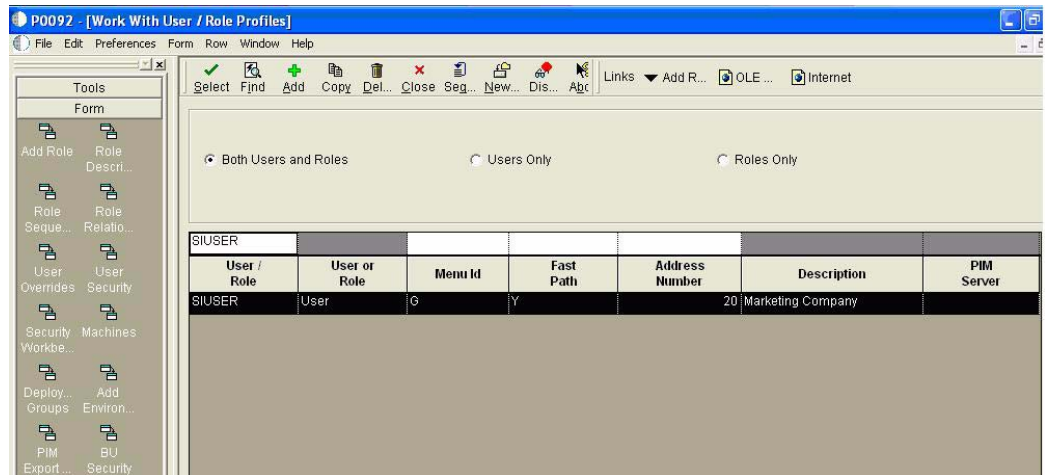


- p Type a value for password, clear the Force Immediate Password Change check box, and then click **OK**.

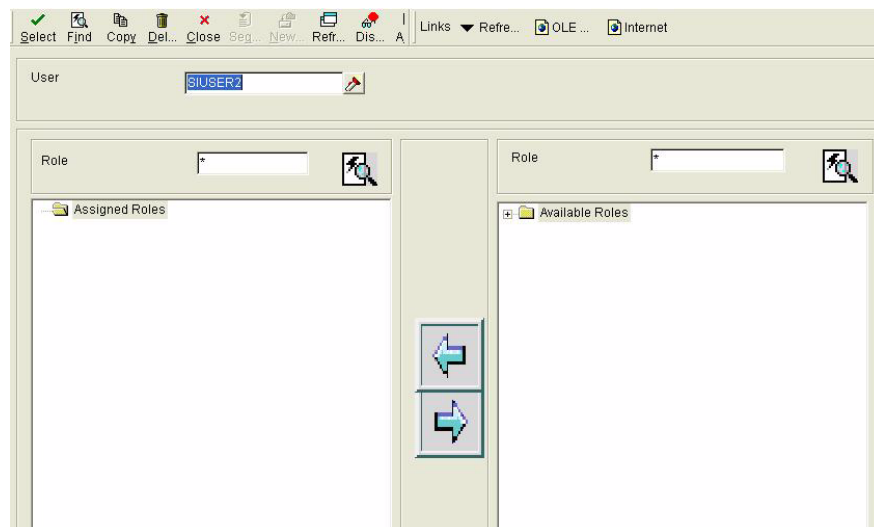
- q In the P0092 - [Work With User/Role Profiles] window, type the name of the newly created user profile under the User/ Role column, and then click **Find**. The details of the newly created user profile appears.



- r In the left pane, click **Form**.

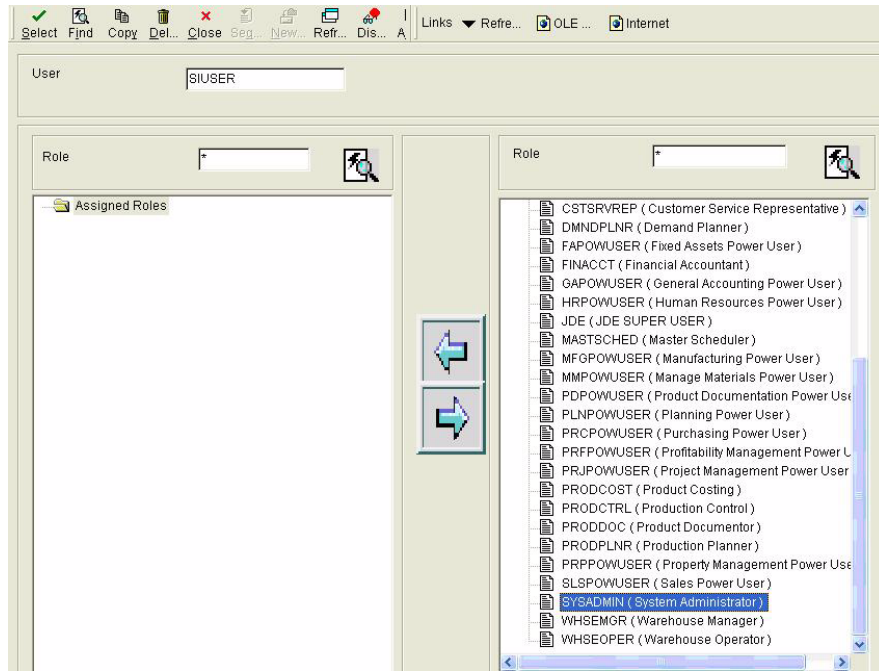


- s Select the listed user from the right pane, and click **Role Relationships** in the right pane. The Role Relationship window appears.
- t In the Role Relationships window, type the newly created user profile name in the User text box and click **Find**.

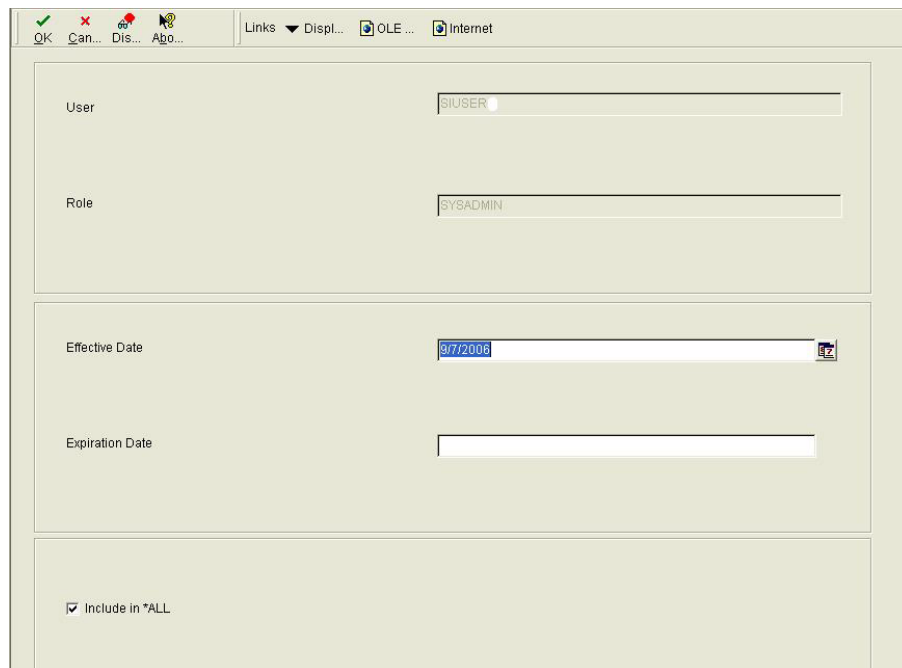


Since this is a newly created user, no roles can be seen under Assigned Roles.

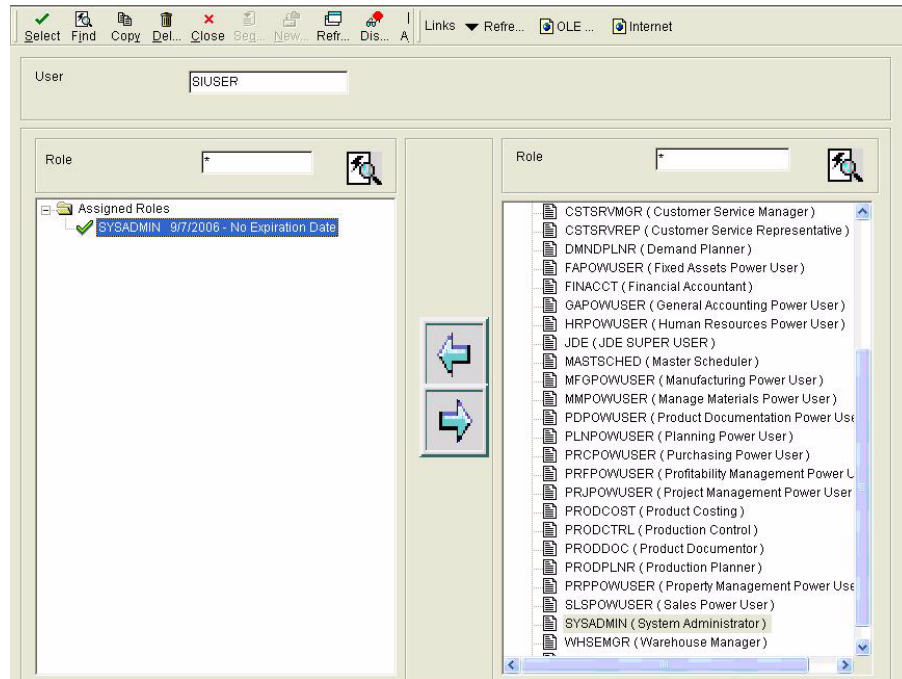
- u Expand the Available Roles tree in the right pane. All the roles are displayed under Available Roles.



- v Select SYSADMIN and click the left arrow in the middle frame. The Role Revisions window appears.



- w Keep all the default settings and click **OK**. The **SYSADMIN** role is assigned to the user and is displayed in the Assigned Role frame.



The user profile created above and the password provided while creating the security record will be used to create a Select Identity resource for JD Edwards resource. Creating a system user as mentioned ensures the users created by the connector will be capable of accessing JD Edwards via FAT client as well as Web login.



You must use this user (the administrative user created above) only to create a Select Identity resource for the JD Edwards connector. If you use this user to perform any operation directly on JD Edwards resource, the change will not be synchronized back to Select Identity

Extracting Contents of the Schema File

The Schema file of the connector contains necessary mapping information to map resource attributes to Select Identity. Extract contents of the `JDEConnectorschema.jar` file to a directory that is in the application server `CLASSPATH`. Refer to the *HP OpenView Select Identity Connector Deployment Guide* for detailed instruction to extract contents of the Schema file.

The `JDEConnectorschema.jar` file contains the following files:

- `JDEConnectorMapping.xml` (packaged with the folder path `com\trulogica\truaccess\connector\schema\spml\`)
- `provisioningconfig.properties` (packaged with the folder path `com\hp\ovsi\connector\jdedwards\properties\external\`)

The `provisioningconfig.properties` file contains the following two properties:

- `JDE_CONNECTION_TIMEOUT_IN_MILLIS` — This is JD Edwards connection time-out duration in milliseconds. This property is used internally by connector while connecting to JD Edwards enterprise server. A typical value is provided to this property by default. You need to change this property if you see connection time-out errors while connecting to JD Edwards server.
- `JDE_SCHEMA_MAP_LOCATION` — You must set this property to the absolute path of the connector schema mapping file (`JDEConnectorMapping.xml`) on the Select Identity installation machine.

For example, if you extract contents of the schema file (`JDEConnectorschema.jar`) to the location `E:\si4.10\weblogic\sysArchive`, you must set the `JDE_SCHEMA_MAP_LOCATION` property to `E:/si4.10/weblogic/sysArchive/com/truologica/truaccess/connector/schema/spml/JDEConnectorMapping.xml`.

► This property must have the folder path with forward slashes (/).

Installing the Connector RAR

To install the RAR file of the connector (`JDEConnector.rar`) on the Select Identity server, you must copy the file to a local subdirectory on the Select Identity server, and then deploy on the application server. Refer to the *HP OpenView Select Identity Connector Deployment Guide* for detailed information on deploying a RAR file on an application server.



While deploying the RAR on WebSphere, enter the JNDI Pool Name as `eis/JDEConnector`.

Generating the Last Change Log Number

The JD Edwards connector performs reverse synchronization operation by using Select Identity polling. The last change log number determines the instant from when the connector must start reconciliation from JD Edwards to Select Identity. If you do not provide the connector with a last change log number, the connector tends to reconcile all changes in JD Edwards that happened in past.

Perform the following steps to generate the last change log number:

- 1 Extract contents of the `ChangeLogNumberUtil.jar` file. The following directories and files are extracted:

File/Directory	Description
<code>lib/</code>	It contains the library files for the utility
<code>META-INF/</code>	The directory created due to unpacking of JAR.
<code>generateChangeLogNumber.bat</code>	The script for Windows.
<code>generateChangeLogNumber.sh</code>	The script for UNIX.

- 2 Run `generateChangeLogNumber.bat` (for Select Identity installed on Windows) or `generateChangeLogNumber.sh` (for Select Identity installed on UNIX) with `-f` option from the extract directory. Type the time stamp in the form of **DD/MM/YYYY hh:mm:ss**.

For example:

```
<extract_directory>\generateChangeLogNumber.bat -f "05/09/2006 06:30:00"  
Change Log Number for 05/09/2006 06:30:00 - 1157418000
```

Make a note of this generated change log number and use it while configuring the connector with Select Identity ([step c](#) on page 31).



To generate a time stamp from an available last change log number, run the script with `-r` option.

For example,

```
<extract_directory>/generateChangeLogNumber.bat -r 1157418000  
Timestamp for 1157418000 - 05/09/2006 06:30:00
```

4 Configuring the Connector with Select Identity

This chapter describes the procedure to configure the JD Edwards connector with Select Identity. At the end of this chapter, you will know the procedure to configure the JD Edwards connector with Select Identity.

Configuration Procedure

After you deploy the connector RAR on application server, you must configure the connector with Select Identity. Perform the following steps to configure the JD Edwards connector with Select Identity.

- 1 Add a New Connector
- 2 Add a New Resource
- 3 Map Attributes

Add a New Connector

Add a new connector in Select Identity by using the user interface. While adding the connector, do the following:

- In the Connector Name text box, specify a name for the connector.
- In the Pool Name text box, enter `eis/JDEConnector`.
- Select **No** for the Mapper Available section.

Refer to the *HP OpenView Select Identity Connector Deployment Guide* for detailed information on adding a new connector in Select Identity.

Add a New Resource

Add a new resource in Select Identity that uses the newly added connector. Refer to the *HP OpenView Select Identity Connector Deployment Guide* for detailed instruction on adding a resource in Select Identity. While adding the resource to Select Identity, you must provide the connection parameters. The connection parameters of JD Edwards connector can be classified in two categories:

- JD Edwards EnterpriseOne connection parameters — these parameters are JD Edwards server related information such as the hostname of the JD Edwards server, the port number for JD Edwards, and so on.

- JD Edwards database connection parameters — The communication between the JD Edwards EnterpriseOne resource and Select Identity can be established either by using JDBC data source or by using JDBC drivers. Database connection parameters provide the information that determine whether the mode of communication is JDBC data source based or JDBC driver based. The database parameters are:

- JDE_DATA_SOURCE
- DBCONNECTIONURL
- DBCONNECTIONCLASS
- DBUSER
- DBUSERPASSWORD

When using data source based communication, you must fill up the JDE_DATA_SOURCE text box and leave rest of the database connection parameters empty.

When using driver based communication, you must leave the JDE_DATA_SOURCE text box empty and fill up rest of the parameters.

Refer to the following table while entering the parameters in the Basic Information and the Access Information pages:

Table 5 Resource Configuration Parameters

Field Name	Sample Values	Description	Comment
Resource Name	JDE_Res	Name given to the resource.	
Resource Description	A JDE Resource	Description of the user is given in this section	
Connector Name	JDEConnector	The newly deployed connector.	
Authoritative Source	Yes	Whether this resource is a system that is considered to be the authoritative source for user data in the current environment. Specify No if the connector is not enabled for reverse synchronization. Specify Yes to add users through reverse synchronization. If the resource is not authoritative, the resource can only modify user entitlements during reverse synchronization	
Single Sign-On	No		
Delete User	Yes	No for Non Authoritative resource and Yes for authoritative resource	
Resource Owner	sis	This field is mandatory if reverse synchronization is enabled.	

Table 5 Resource Configuration Parameters

Field Name	Sample Values	Description	Comment
JDE Server	10.201.36.240/ JDE01	The hostname or IP address of the Enterprise Server of the JD Edwards installation.	
JDE Port	6013	JDE Enterprise Server Listening Port	
JDE User	SIUSER	A JD Edwards user with administrative privileges.	Refer to the topic Create JD Edwards EnterpriseOne Users for Connector Operation on page 13.
JDE User Password	****	Password of the above mentioned user.	
JDE User Environment	PY811	The JD Edwards environment name.	
JDE User Role	*All		
JDE Datasource	JDE/Test	The JDBC data source string to establish connection between the connector and JD Edwards database. Specify the JNDI name of the data source created in the application server (as described in Enable the Database Server Communication Mode on page 13).	Leave this field empty if you want to use JDBC driver based communication.

Table 5 Resource Configuration Parameters

Field Name	Sample Values	Description	Comment
Database Connection Url	jdbc:oracle:thin:@10.201.36.240:1533:py8	<p>The connection URL for the JDBC driver.</p> <p>This string is expressed in the following format:</p> <p><i><JDBC URL>:@<DatabaseServer>:<DatabaseServerPort>:<DatabaseInstanceName></i></p> <ul style="list-style-type: none"> <i><JDBC URL></i> — <p>The connection URL for the database used.</p> <ul style="list-style-type: none"> <i><DatabaseServer></i> — Hostname or IP address of the Oracle database system. <i><DatabaseServerPort></i> — The port on which the Database server is running. Typically for Oracle it is 1521. <i><DatabaseInstanceName></i> — The name of the Oracle instance for JD Edwards installation. 	Leave this field empty if you want to use JDBC data source based communication.
Database Connection Class	oracle.jdbc.driver.OracleDriver	The connection class for the database used.	Leave this field empty if you want to use JDBC data source based communication.
Database User	DBUSER	User name of the JD Edwards Database. Type the user name created in step h on page 14.	Leave this field empty if you want to use JDBC data source based communication.
Database Password	*****	Password for the above mentioned user.	Leave this field empty if you want to use JDBC data source based communication.
Schema mapping file	JDEConnectorMapping.xml	The schema mapping file name.	

Configuring Polling for Reverse Synchronization:

After entering the resource access information, User Reconciliation Policy page appears. On this page, do the following.

- a Select the Polling Enable check box. Set the polling interval to the desired value. This is the time interval between successive polling cycles (the frequency at which the connector polls the JD Edwards EnterpriseOne resource for reconciliation related changes).
 - b Under both Add and Modify sections, set Reconciliation Workflow as SI Recon User Enable Disable Workflow by using the drop-down box.
 - c In the Last Change Log Number text box, type the change log number generated by using the change log number utility ([Generating the Last Change Log Number](#) on page 25).
- ▶ Make sure that you have updated the `JDE_SCHEMA_MAP_LOCATION` property in the `provisioningconfig.properties` file with the absolute path of the JDE schema mapping file (`JDEConnectorMapping.xml`). Otherwise, reverse synchronization.

Map Attributes

After successfully adding a resource for the JD Edwards connector, you must map the resource attributes to Select Identity attributes. Refer to the *HP OpenView Select Identity Connector Deployment Guide* for information on mapping and creating attributes.

Do not map the `Password` attribute of JD Edwards to the `Password` attribute of Select Identity. Instead, create a different attribute, for example — `JDEPassword`, in Select Identity and map the `Password` attribute of JD Edwards to this newly created attribute.

While creating this attribute, set the attribute properties as listed in the table below:

Property Name	Value
Attribute Name	JDEPassword (can be user defined)
Attribute Type	Password
Storage Type	TwoWay
Max Length	64

View the selected attribute field properties.

*Required Field **

Attribute Name:*	JDEPassword
Identity Object Type:*	User
Attribute Type:*	Password
Primitive Type:*	String
Storage Type:*	TwoWay
Description:	<input type="text"/>
Default Help Text:	
Multi Value:*	<input checked="" type="radio"/> Yes <input checked="" type="radio"/> No
Min Length:*	1
Max Length:*	64

While mapping attributes, refer to the following table for resource specific mapping information.

Table 6 JD Edwards Mapping Information

Select Identity Attribute	JD Edwards Connector Attribute	Label on JD Edwards User Interface	Description	Optional/Mandatory
User Name	szUserId	User Name	Primary Key for JDE User	Mandatory
JDEPassword	szOWPassword	Password	JD Edwards User's password	Optional
Address Book Number	mnAddressNumber	Address Book Number	Address Book Number	Mandatory
Country	szCountry	Country	Country Code	Optional
Dateformat	szDateformat	Dateformat	The Date Format to be used for the user	Optional
Date Separator	cDateSeparator	Date Separator	The Date Separator to be used for the user.	Optional
Time Format	szTimeFormat	Time Format		Optional
Language Preference	szLanguagePreference	Language Preference		Optional
Decimal Format	cDecimalFormat	Decimal Format		Optional
Universal Time	szUniversalTime	Universal Time		Optional
Daily Password Change Limit	szDailyPasswordChangeLimit	Daily Password Change Limit		Optional
Password Allowed Attempts	mnAllowedAttempts	Password Allowed Attempts		Optional
Password Retry Count	mnRetryCount	Password Retry Count		Optional
Password Change Frequency	mnFrequency	Password Change Frequency		Optional
<JDE-Resource>_Entitlements		Roles	The <JDE-Resource> is the resource name on Select Identity.	Optional



You must map all the connector attributes to Select Identity attributes except the entitlement attribute.

To support user enable/disable operation during reconciliation, perform the following steps:

- 1 Create a new attribute `User Status` on `Select Identity`, and map that to the `User Status` attribute of the connector.
 - ▶ Do not include the `User Status` attribute in the Form of the service as this attribute should not be updated by a user from view.
- 2 Configure the workflow external call for user enable/ disable operation for JD Edwards connector. Refer to the *HP OpenView Select Identity Deployment Guide* for information on configuring user enable/disable workflow external call. While configuring, enter the parameters as given in [Table 7](#) below.

Table 7 User Enable/Disable Parameters for JD Edwards Connector

Serial Number	Parameter Name	Parameter Value	Description
1	AttributeName	User Status	
2	EnableValue	01	
3	DisableValue	02	
4	UserName	sis	Select Identity user name with administrative privilege.
5	Password	passw0rd	Password for the user name mentioned above.
6	Url	http://localhost:7001/lmz/webservice	URL of Select Identity web services.

After configuring the connector with `Select Identity`, you can use the connector to create a service, or you can associate the connector with an existing service. Refer to the *Service Studio* chapter of the *HP OpenView Select Identity Administration Online Help* for information on `Select Identity` services.

5 Uninstalling the Connector

If you want to uninstall the connector, perform the following steps:

- Remove all resource dependencies.
- Delete the connector from the Select Identity.
- Delete the connector from application server.

See *HP OpenView Select Identity Deployment Guide* for more information on deleting the connector from application server and Select Identity.

A Troubleshooting

Connector Installation

- The following error appears during Select Identity resource creation:
Internal error: null. Please contact administrator
Possible Cause: The JD Edwards related JAR files `jdeutil.jar`, `kernel.jar`, and `log4j.jar` are not placed in the application server classpath.
Solution: Perform the [Task 1](#) mentioned in the [Pre-Installation Tasks](#) on page 12.
- The following error appears during Select Identity resource creation:
Internal error: ConnectorTestFailedException, [Unable to connect to resource: DATABASE CONNECTION FAILURE:TAConconnectorException]
Possible Causes:
 - The JDBC data source is not created correctly or not being used correctly.
 - The JDBC Type 4 Driver is not included in the CLASSPATH.
 - The login credentials are incorrect.*Solution:* Perform the [Task 2](#) of the [Pre-Installation Tasks](#) on page 12.
- The following error appears during Select Identity resource creation:
Internal error: ConnectorTestFailedException, [Unable to connect to resource: The environment 'Env name' could not be initialized for user. Check user, password, and environment attribute values.:TAConconnectorException]
Possible Cause: The values for either of `JDE_USER` and `JDE_USER_PASSWORD` are incorrect.
Solution: Provide the correct JDE account information.

Forward Provisioning

- User add is unsuccessful and the following error appears in workflow:
InvalidParameterException, [primary key value is missing]
Possible Cause: The `UserName` connector attribute is not mapped to Select Identity `UserName` attribute.
Solution: Make sure that all connector attributes are mapped.
- User is successfully created on Select Identity and JD Edwards. Login on JD Edwards is successful but user is unable to login to Select Identity.

Possible Cause: The Select Identity Password value is not provided during user creation. This is possible as the JDE Connector password attribute is mapped to a newly created JDEPassword attribute and Select Identity needs a value for the Password for login.

Solution: Include the Password attribute in the Service Form and provide a value for it while user creation.

Reconciliation

- Users are not reconciled even after performing all reconciliation related configurations steps. While polling the resource, logs display the following error message:

Mapping file could not be found

Possible Causes:

- The JDE_SCHEMA_MAP_LOCATION property in the file provisioningconfig.properties is not updated with the correct value for the absolute path of the JD Edwards Schema mapping file.
- The edited property file is not picked up/loaded.

Solutions:

- Provide the absolute path of the connector schema mapping file on the Select Identity installation machine. For example, E:/si4.10/weblogic/sysArchive/com/truologica/truaccess/connector/schema/spml/JDEConnectorMapping.xml.
- Restart the application server to ensure the updated property file is loaded.

- No reconciliation happens despite all correct configurations.

Possible Cause: The changes are made directly on JDE resource by using the User account created exclusively for Select Identity resource creation. This causes cyclic request block.

Solution: Perform the changes on JD Edwards application by using a different account.

- Security record of the user profile (created directly on JD Edwards) is not reconciled to Select Identity even though it is successfully created on JD Edwards.

Possible Cause: The System User value given to the security record is different from the JDE User value being used by connector.

Solution: Use the user name of the user created for the connector on JD Edwards as the System User value while creating security records.