# **Release Notes**



IBM<sup>®</sup> Tivoli<sup>®</sup> Identity Manager Oracle e-Business Suite (Oracle eBS) Adapter

### Version 4.6.7

First Edition (November 25, 2009)

This edition applies to version 4.6 of Tivoli Identity Manager and to all subsequent releases and modifications until otherwise indicated in new editions.

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### **Preface**

Welcome to the IBM Tivoli Identity Manager Oracle e-Business Suite Adapter.

These Release Notes contain information for the following products that was not available when the IBM Tivoli Identity Manager manuals were printed:

• IBM Tivoli Identity Manager Oracle e-Business Suite Adapter Installation and Configuration Guide

## **Adapter Features and Purpose**

The Oracle eBS Adapter is designed to create and manage accounts on the Oracle e-Business Suite application. The adapter runs in "agentless" mode and communicates using JDBC to the systems being managed.

IBM recommends the installation of this Adapter (and the prerequisite Tivoli Directory Integrator) on each node of an Identity Manager WebSphere cluster. A single copy of the adapter can handle multiple ITIM Services. The optimum deployment configuration is based, in part, on the topology of your network domain, but the primary factor is the planned structure of your Identity Manager Provisioning Policies and Approval Workflow process. Please refer to the Identity Manager Information Center for a discussion of these topics.

The Identity Manager Adapters are powerful tools that require administrator level authority. Adapters operate much like a human system administrator, creating accounts, permissions and home directories. Operations requested from the Identity Manager server will fail if the adapter is not given sufficient authority to perform the requested task. IBM recommends that this adapter run with administrative (root) permissions.

## **Contents of this Release**

## Adapter Version

Component	Version
Release Date	November 24, 2009
Adapter Version	4.6.7
Component Versions	Adapter Build: 5.0.1021 AL Version: 5.0.1010 Connector: none (uses TDI JDBC connector) Dispatcher 5.119
Documentation	Directory Integrator- Based Oracle eBS Adapter Installation and Configuration Guide SC23-6156-00

### **New Features**

Enhancement # (FITS)	Description
	Items included in current release
MR0908094757	OracleEBS should support changing eruid.
	Items included in 4.6.4 release
MR0408095034	Oracle EBS: adapter must support securing attributes on responsibilities. Please see the "Configuration" section of this document for additional information.
	Items included in 4.6.3 release
	<ol> <li>Changes in profile for Max Connection Count. A feature of Dispatcher.</li> <li>Changes in profile for AL FileSystem Path. A feature of Dispatcher.</li> </ol>
	Items included in 4.6.2 release
	None
	Items included in 4.6.1 release
N/A	Updated adapter profile to include the new Dispatcher option to Disable AL Caching.

Enhancement # (FITS)	Description
	Items included in 4.6.0 release
MR0912073842	Oracle eBS v12 support
N/A	PASSWORD_DATE attribute in OracleEBS will reflect the system date when the account's password is set or changed.
MR032007687	Enhance the adapter so that it does not require the APPS account.
	Initial release for Tivoli Identity Manager v4.6.0

## Closed Issues

CMVC#	APAR#	PMR# / Description
		Items closed in current version
		None None
		Items closed in 4.6.3 version
		None
		Items closed in 4.6.2 version
	IZ3155	71834,500,000 ADAPTER HAS ISSUE WITH ATTRIBUTE VALUES WITH (single) QUOTES.
	IZ34103	70244,500,000 Oracle eBS Adapter restore operation does not work if password contains quotes.
	IZ37738	73344,500,000 ORACLEEBS LOSES RESPONSIBILITIES Oracle eBS adapter provisions multiple responsibilities on a transaction correctly but does not report success correctly to TIM. Roles are removed on TIM but provisioned correctly on target.
		Items closed in 4.6.1 version
	IZ31941	05412,707,707 Recons duplicate entries for responsibility when multiple languages are active on the Oracle eBS system.
		Items closed in 4.6.0 version
32500		Oracle eBS Adapter Profile cannot be exported.
32524		Oracle eBS Adapter Delete Responsibility Fails.

## Known Issues

CMVC#	APAR#	PMR# / Description
N/A	N/A	Editing adapter profiles on UNIX or Linux:
		The adapter profile JAR file may contain ASCII files created using MS-DOS ASCII format (i.e. schema.dsml, CustomLabels.properties, and service.def). If you edit a MS-DOS ASCII file in Unix you will often see the characters ^M at the end of each line. This is the extra character 0x0d that is used to indicate a new line of text in MS-DOS. There are tools, such as dos2unix, that can be used to strip out the ^M character. In addition, there are text editors that will ignore the ^M character.
		If you are using the vi editor, you can strip out the ^M character as follow:
		From the vi's command mode:
		:%s/^M//g
		followed by pressing Enter. The ^M (or Ctrl-M) typed to show it here should actually be entered by pressing ^v^M in sequence. (The ^v preface tells vi to use the next keystroke literally instead of taking it as a command.)
N/A	N/A	Deprovisioning User Accounts:
		Account deprovisioning is not supported natively (no stored procedure) in Oracle e-Business Suite and is therefore not available in the adapter.
N/A	N/A	Changing a Password on a Suspended Account On Oracle eBS 12i if account is suspended (end dated) then password change operation will fail with following error: "ORA-20001: APP-FND-02602: Unabled to change password for user XXXXXXX for this following reason: Your account does not exist or has expired"
		Work Around:  1) You must enable the account first by setting future end date or deleting the end date and then perform password change.  2) Use restore operation and specify new password.
N/A	N/A	Side-effects of Rename Operation This is applicable to Oracle eBS version 11i. Please note that after performing rename operation  1) All previous responsibilities assigned becomes unavailable 2) Only responsibilities assigned to new username will be available. 3) If you revert back to old user name, earlier responsibilities get associated however any responsibility assigned to new username will not remain associated with old name.

### **Installation and Configuration Notes**

See the IBM Tivoli Identity Manager Adapter Installation Guide" for detailed instructions.

#### Corrections to Installation Guide

The following corrections to the Installation Guide apply to this release:

The Oracle eBusiness Suite Users Guide incorrectly states that the following attributes cannot be deleted. You can delete the values for below attributes.

```
erOraEBSPwdLifeSpanDays( Password Lifespan (in days) )
erOraEBSPwdAccesses ( Password Lifespan ( in number of accesses) )
erOraEBSLeftPwdAccess ( Available Password Lifespan ( in number of accesses) )
erOraEBSPerson ( Person )
erOraEBSCust ( Customer )
erOraEBSSupp ( Supplier )
```

### **Configuration Notes**

The following configuration notes apply to this release:

#### Changes to nonAPPS.sql:

A one wrapper procedure is added to which user must have execute privilege. APPS. ITIM\_RENAME\_USER is a wrapper for FND\_USER\_PKG.change\_user\_name

#### Running the Adapter as a Non-APPS User

The account APPS owns the Oracle eBS database and the Oracle eBS Adapter must run as the APPS user unless special configuration steps are followed.

If "APPS" is specified as "Administrator Name" on Oracle EBS service form within ITIM. then no configuration changes are required on Oracle EBS.

If your security standards do not permit the use of APPS as administrator account for Oracle EBS adapter, then you must create a new user and grant required permissions as shown in nonAPPS.sql file shipped with adapter. No change is required in adapter profile to run using non "APPS" account.

NOTE: the Adapter depends on wrapper stored procedures when an account other than APPS is used. Create the wrapper stored procedures specified in nonAPPS.sql file.

#### Securing Attributes on Responsibilities

To Support enhancement for Securing Attributes, the schema is extended and 4 attributes are defined.

Two attributes are added in account class. as given below:

erOraEBSSecAttr OID is 1.3.6.1.4.1.6054.3.144.2.24 type as Directory String erOraEBSSecAttrName OID is 1.3.6.1.4.1.6054.3.144.2.25 type as Directory String

Following are the custom labels for the account class attributes.

eroraebssecattr = Securing Attributes (format: Securing Attribute Name | Application Name | Securing Attribute Value)

eroraebssecattrname = View available list of Securing Attributes (format: Securing Attribute Name | Application Name | Securing Attribute Value)

A new object class is defined (erOraEBSSecAttrList-1.3.6.1.4.1.6054.3.144.1.7) and 2 attributes are added as given below:

erOraEBSNameSecAttr OID is 1.3.6.1.4.1.6054.3.144.2.26 type as Directory String erOraEBSIDSecAttr OID is 1.3.6.1.4.1.6054.3.144.2.27 type as Directory String

Support for Securing Attributes by Oracle EBS Adapter provides two controls for the user.

The erOraEBSSecAttr attribute (Securing Attributes) is an Editable Text box. Here user will enter the value for the securing attribute. The value for the securing attribute is a composition of three parts separated by '|' character, as shown below:

Securing\_Attribute\_Name | Application\_Name | Securing\_Attribute\_Value

The first part is the Name of the securing attribute, second part is Application name associated to the securing attribute, and the third part is Value for the securing attribute. Based on the securing attribute, the value expected may be either Numeric or Alphanumeric or Date.

The Date value entered must be in one of the following formats:

DD-MM-YYYY example: 24-08-2009 DD/MM/YYYY example: 24/08/2009 DD-MON-YYYY example: 24-AUG-2009 DD/MON/YYYY example: 24/AUG/2009 DDMMYYYY example: 24082009

Oracle eBS 12i supports additional datatypes such as DATETIME, BOOLEAN (TRUE or FALSE) and URL.

The DATETIME value entered must be in one of the following formats:

DD-MM-YYYY HH24:MI:SS example: 24-08-2009 21:56:45 DD/MM/YYYY HH24:MI:SS example: 24/08/2009 21:56:45 DD-MON-YYYY HH24:MI:SS example: 24/AUG/2009 21:56:45 DD-MON-YYYY HH24:MI:SS example: 24-AUG-2009 21:56:45

DD-MM-YYYY:HH24:MI:SS example: 24-08-2009:21:56:45 DD/MM/YYYY:HH24:MI:SS example: 24/08/2009:21:56:45 DD-MON-YYYY:HH24:MI:SS example: 24-AUG-2009:21:56:45 DD/MON/YYYY:HH24:MI:SS example: 24/AUG/2009:21:56:45

DD-MM-YYYYHH24:MI:SS example: 24-08-200921:56:45 example: 24/08/200921:56:45 DD/MON/YYYYHH24:MI:SS example: 24/AUG/200921:56:45 DD-MON-YYYYHH24:MI:SS example: 24-AUG-200921:56:45

DDMMYYYY HH24:MI:SS example: 24082009 21:56:45 example: 24082009:21:56:45

DDMMYYYYHH24MISS example: 24082009215645

Note that Oracle eBS adapter does not validate value provided for securing attribute w.r.t to data type defined for securing attributes.

The erOraEBSSecAttrName attribute (View available list of Securing Attributes) uses Search widget, this control is only for user reference. It facilitates getting the securing attribute name and associated application name. It also specifies the data type of securing attribute. When specifying a value, make sure you are providing value of required data type. It is composition of three parts as shown below:

Securing\_Attribute\_Name | Application\_Name | Securing\_Attribute\_Datatype

#### Note:

- 1. For ITIM50 and ITIM51, attribute erOraEBSSecAttrName is made send-only attribute so, ITIM will not save this attribute.
- 2. For ITIM46 if the attribute erOraEBSSecAttrName present in the request, adapter will not process this attribute and ITIM46 will update the value. The status of the operation will not give warning and it is as per the design. Do not send this attribute in any request to adapter.

#### Changes to nonAPPS.sql to support Securing Attributes:

To support Securing Attributes by Oracle EBS Adapter nonAPPS.sql is updated.

Two wrapper procedures are added to the list procedures to which user must have execute privilege.

APPS.ITIM\_ADD\_SEC\_ATTR - Wrapper for ICX USER SEC ATTR PUB.create user sec attr API

APPS.ITIM\_DEL\_SEC\_ATTR - Wrapper for ICX USER SEC ATTR PUB.delete user sec attr API

One table is added to the list of tables to which user must have select privilege. APPS.AK\_WEB\_USER\_SEC\_ATTR\_VALUES

One views is added to the list of views to which user must have select privilege. APPS.AK\_ATTRIBUTES\_VL

#### Correction to User Guide

Under Chapter 3. Oracle eBS Adapter user account management tasks, section Reconciling user accounts.

Add "Securing Attributes" to the list of Reconciling supporting data. Change the section as below:

Supporting data for an Oracle eBS user account includes the following information:

- Person
- Customer
- Supplier
- Responsibilities
- Securing Attributes

Under Chapter 3. Oracle eBS Adapter user account management tasks, section Adding user accounts.

Add "Securing Attributes" to the Attributes for adding user accounts.

In addition to the required attributes, you can also specify the following optional attributes on the Oracle eBS account form:

- Description
- Password Lifespan (in days)
- Password Lifespan (in number of accesses)
- Available Password Lifespan (in number of accesses)
- User Start Date
- User End Date
- Session Number
- Email
- Fax
- Person
- Customer
- Supplier
- Responsibilities
- Securing Attributes

In Chapter 3. Oracle eBS Adapter user account management tasks, Modifying user accounts, Modifiable attributes include "User ID"

Under chapter 3. Oracle eBS Adapter user account management tasks, section Adding user accounts.

Add below section after "Assigning responsibilities to a user account" section.

Assigning Securing Attributes to a user account.

Specify value for the securing attribute using "Securing Attributes" on Oracle eBS users form. The value for the securing attribute is a composition of three parts separated by '|' character. as shown below:

Securing Attribute Name | Application Name | Securing Attribute Value

The first part is the Name of the securing attribute, second part is Application name associated to the securing attribute, and the third part is Value for the securing attribute. Based on the securing attribute, the value expected may be either NUMBER or VARCHAR2 or DATE.

The DATE value entered must be in one of the following formats:

DD-MM-YYYY example: 24-08-2009
DD/MM/YYYY example: 24/08/2009
DD-MON-YYYY example: 24-AUG-2009
DD/MON/YYYY example: 24/AUG/2009
DDMMYYYY example: 24082009

For Oracle eBS 12i additional datatypes are supported such as DATETIME, BOOLEAN (TRUE or FALSE) and URL.

The DATETIME value entered must be in one of the following formats:

DD-MM-YYYY HH24:MI:SS example: 24-08-2009 21:56:45 DD/MM/YYYY HH24:MI:SS example: 24/08/2009 21:56:45 DD-MON-YYYY HH24:MI:SS example: 24-AUG-2009 21:56:45 example: 24-AUG-2009 21:56:45

DD-MM-YYYY:HH24:MI:SS example: 24-08-2009:21:56:45
DD/MM/YYYY:HH24:MI:SS example: 24/08/2009:21:56:45
DD-MON-YYYY:HH24:MI:SS example: 24-AUG-2009:21:56:45
DD/MON/YYYY:HH24:MI:SS example: 24/AUG/2009:21:56:45

DD-MM-YYYYHH24:MI:SS example: 24-08-200921:56:45 example: 24/08/200921:56:45 example: 24/AUG/200921:56:45 DD-MON-YYYYHH24:MI:SS example: 24-AUG-200921:56:45 example: 24-AUG-200921:56:45

DDMMYYYY HH24:MI:SS example: 24082009 21:56:45
DDMMYYYY:HH24:MI:SS example: 24082009:21:56:45
DDMMYYYYHH24MISS example: 24082009215645

Note that Oracle eBS adapter does not validate value provided for securing attribute w.r.t to data type defined for securing attributes".

The second attribute (List Securing Attributes) uses Search widget, this attribute is only for reference, which helps in getting the securing attribute name and associated application name. This also tells data type of securing attribute. While specifying value make sure you are providing value of required data type. It is composition of three parts as shown below:

Securing\_Attribute\_Name | Application\_Name | Securing\_Attribute\_Data\_type

Note: Please note that adapter does not process this attribute and it is only to provide help to user. Do not send this attribute in any request to adapter.

You can add or delete securing attribute. When you add a securing attribute from the Oracle eBS account form, the ICX\_USER\_SEC\_ATTR\_PUB.create\_user\_sec\_attr API assigns the securing attributes to the user.

When you delete a securing attribute from the Oracle eBS account form, the ICX\_USER\_SEC\_ATTR\_PUB.delete\_user\_sec\_attr API removes the securing attribute to the user.

Under Chapter 4 "Troubleshooting the Oracle eBS Adapter errors", Table 4.

Adapter error messages, warnings, and recommended actions add the following lines:

#### 1. Error Message:

CTGIMT008W The account was added, but some attributes failed.

ERROR: java.sql.SQLException: ORA-01861: literal does not match format string

#### Recommended Action:

Ensure that a value specified to this attribute should match the date format of the Securing attribute.

#### 2. Error Message:

CTGIMT008W The account was added, but some attributes failed.

Error: ERROR: java.sql.SQLException: ORA-01843: not a valid month

#### Recommended Action:

Ensure that a value specified to this attribute should match the date format of the Securing attribute.

#### 3. Error Message:

CTGIMT008W The account was added, but some attributes failed.

ERROR: java.sql.SQLException: ORA-06550: PLS-00103: Encountered the symbol "x" when expecting one of the following:

```
) , * & | = - + < / > at in is mod not rem => .. 
 <an exponent (**)> <> or != or ~= >= <= <> and or like between ||
```

The symbol "," was substituted for "x" to continue.

#### Recommended Action:

Ensure that a value specified to this attribute should match the datatype of the Securing attribute.

4. CTGIMT008W The account was added, but some attributes failed.

ERROR: java.sql.SQLException: ORA-01858: a non-numeric character was found where a numeric was expected

Recommended Action:

Ensure that a value specified to this attribute should match the data type and/or date format for the Securing attribute.

5. CTGIMT014W: The account was modified, but some attributes failed

The user guide mentions error "CTGIMT014W: The account was modified, but some attributes failed. erUid Error: See Adapter log for detailed error." in "Table 4. Adapter error messages, warnings, and recommended actions".

The recommended action needs to be corrected as follows:

- a) Make sure the user name is not already in use.
- b) Make sure the user name is not exceeding allowed number of characters.
- 6. CTGIMT013E A system error occurred while modifying the account.

Recommended Action:

- a) Make sure the user name is not already in use.
- b) Make sure the user name is not exceeding allowed number of characters.

Under Appendix A. APIs used by the adapter. Table 5. APIs used by the adapter.

Add the following API's to the list.

Oracle eBS API	- Operatiion	
ICX_USER_SEC_ATTR_PUB.create_user_sec_attr ICX_USER_SEC_ATTR_PUB.delete_user_sec_attr	<ul><li>Add Securing attribute</li><li>Delete Securing attribute</li></ul>	
Under Appendix A, Table 5. APIs used by the adapter. FND_USER_PKG.change_user_name	Change user name	

## **Customizing or Extending Adapter Features**

The Identity Manager adapters can be customized and/or extended. The type and method of this customization may vary from adapter to adapter.

### **Getting Started**

Customizing and extending adapters requires a number of additional skills. The developer must be familiar with the following concepts and skills prior to beginning the modifications:

- Tivoli Identity Manager administration
- Tivoli Directory Integrator management
- Tivoli Directory Integrations assemblyline development
- LDAP schema management
- Working knowledge of Java scripting language
- Working knowledge of LDAP object classes and attributes
- Working knowledge of XML document structure

**Note:** If the customization requires a new Tivoli Directory Integrator connector, the developer must also be familiar with Tivoli Directory Integrator connector development and working knowledge of Java programming language.

#### Tivoli Identity Manager Resources:

Check the "Learn" section of the <u>Tivoli Identity Manager Support web site</u> for links to training, publications, and demos.

#### Tivoli Directory Integrator Resources:

Check the "Learn" section of the <u>Tivoli Directory Integrator Support web site</u> for links to training, publications, and demos.

#### Tivoli Identity Manager Adapter Development:

Adapter Development Tool

The Adapter Development Tool, ADT, is a tool used by IBM Tivoli Identity Manager (ITIM) customers and consultants to create custom TIM adapters. It reduces adapter delivery time by about 50% and it helps in the development of custom adapters. The Adapter development tool is available on the IBM Open Process Automation Library (OPAL).

## Support for Customized Adapters

The integration to the Identity Manager server – the adapter framework – is supported. However, IBM does not support the customizations, scripts, or other modifications. If you experience a problem with a customized adapter, IBM Support may require the problem to be demonstrated on the GA version of the adapter before a PMR is opened.

## **Supported Configurations**

### Installation Platform

The IBM Tivoli Identity Manager Adapter was built and tested on the following product versions.

#### Adapter Installation Platform:

This adapter installs into Tivoli Directory Integrator (TDI) and may be installed on any platform supported by the TDI product. IBM recommends installing TDI on each node of the ITIM WAS Cluster and then installing this adapter on each instance of TDI. Supported TDI versions include:

TDI 6.1.1 with Fix Pack 3 or higher

#### Managed Resource:

Oracle e-Business Suite 11i (version 11.5.10)

Oracle e-Business Suite 12.0

IBM Tivoli Identity Manager: Identity Manager v4.6

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