# **Release Notes**



# IBM<sup>®</sup> Tivoli<sup>®</sup> Identity Manager TDI-Based Oracle Database Adapter

#### Version 4.6.8

#### Tenth Edition (September 30, 2010)

This edition applies to version 4.6 of this Adapter 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 Database Adapter.

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

Directry Integrator-Based Oracle Database Adapter Installation and Configuration Guide

# **Adapter Features and Purpose**

The Oracle Database Adapter is designed to create and manage Oracle Database accounts. This Adapter does not create or manage Accounts for third-party applications that may store their account information within Oracle. Please use the Tivoli Directory Integrator and the Database Connector for this purpose.

IBM recommends the installation of this Adapter on a Windows 2000, Windows 2003 or XP workstation with connectivity (via appropriate Oracle Client software) to the Oracle Database being managed. Typically, one adapter is installed to manage several Oracle Databases and each Oracle Database is represented by an ITIM Service Form. The optimum deployment configuration is based, in part, on the deployment of your Oracle Databases, but the primary factor is the planned structure of your Identity Manager Provisioning Policies and Approval Workflow process. Please refer to the Identity Manager Policy, Organization & Administration Guide for a discussion of these topics.

The Oracle Database Adapter is a powerful tool that requires Administrator Level authority. The Adapter operates much like a human system administrator, creating accounts, assigning privileges and quotas. 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 permissions.

# **Contents of this Release**

# Adapter Version

Component	Version
Release Date	September 30, 2010
Adapter Version	4.6.8
Comm. Libraries	Adapter Build 5.0.1008 Assembly Lines 5.0.1008 Dispatcher 5.123 (or higher) Connector (N/A. Uses TDI provided Connector)
Documentation	Directory Integrator-Based Oracle Database Adapter Installation and Configuration Guide v4.6.0 (SC32-1582-00)

# **New Features**

Enhancement # (FITS)	Description
	Items included in current release
MR091010394	Oracle database adapter did not handle tablespace quota properly when tablespace is dropped. Added support for "dropped" flag in the adapter.
	See additional notes "MR091010394 – Dropped Tablespace" in the Configuration Notes section of this document.
	Items included in 4.6.7 release
	None
	Name included in 4.00 release
	Items included in 4.6.6 release
	None
	Items included in 4.6.5 release
MR0605095719 MR0605094210	Enhance the Oracle adapter to manage non-default roles.
	Items included in 4.6.4 release
N/A	Changes to Oracle Profile for new Dispatcher features
	Changes in profile for Disabling AL caching.
	A new attribute erOraDisableALCache
	(OID: 1.3.6.1.4.1.6054.3.138.2.20) is defined and added in erOraRMIService class. A new label (eroradisablealcache = Disable AL Caching) is added to CustomLabels.properties file. This attribute helps to configure the AL cache size.

	Changes in profile for AL file system Path.     A new attribute erOraALFileSystemPath
	(OID: 1.3.6.1.4.1.6054.3.138.2.21) is defined and added in erOraRMIService class. A new label (eroraalfilesystempath = AL FileSystem Path) is added to CustomLabels.properties file. This attribute is used to set path of file System, If we want to Load AL from File system instead from ITIM then this property is useful.
	3. Changes in profile for Maximum connection count.
	A new attribute erOraMaxConnectionCnt
	OID: 1.3.6.1.4.1.6054.3.138.2.22) is defined and added in erOraRMIService class. A new label (eroramaxconnectioncnt = Max Connection Count) is added to CustomLabels.properties file. This attribute is used to control maximum Connection to the resource per service.
	From now onwards service form is changed to a tabbed format: The newly added attributes are visible on service form under tab "Dispatcher Attributes". All other attributes are on default tab "Oracle Connection"
	Items included in 4.6.3 release
	None
	Items included in 4.6.2 release
MR0624082821	Enhance adapter query processing to improve temp storage usage. Eliminate "unable to extend the temp segment" errors.
N/A	Improve usability of the LastAccessDate.
	NOTE: Beginning with version the erLastAccessDate will be supported in ITIM date format, that is YYYYMMDDHH24MIz.
	Items included in 4.6.1 release
	None
	Items included in 4.6.0 release
MR0127053832	Need Oracle agent running on AIX platform.
N/A	Adapter updated to support Oracle 10g R2

# **Closed Issues**

Internal#	APAR#	PMR# / Description
		Items closed in current version
	IZ81058	63319,668.668
		Oracle TDI Adapter modify tablespace quota not working.
	IZ81480	90554,999,760
		Script error occurs when changing password to Oracle account which authentication
		Items closed in 4.6.7 version
	IZ74714	66853,122,000
		Account under which the Oracle adapter is running must have Create Table and Drop Table permission. (release note update only)
		Items closed in 4.6.6 version
	IZ67181	08436,228,631
		Oracle adapter always returns attribute erOraExpirePwd as failed.
		Items closed in 4.6.5 version
	IZ55533	14373,487,000
		Oracle RMI adapter shows the oracle connection password in clear text in the ibmdi.log file.
		Items closed in 4.6.4 version
		None
		Items closed in 4.6.3 version
	IZ51277	37877,999,624
		Oracle RMI adapter is converting the username to uppercase during provisioning.
		A new configuration option has been added to control this behavior. See the "Configuration Notes" section for more information.

Internal#	APAR#	PMR# / Description
		Items closed in 4.6.2 version
	IZ23733	72043379,000 Error exporting Oracle profile.
	IZ28676	34874,668,668 ITIM Server not processing Oracle Adapter multi-valued attribute correctly after creating an account successfully.
	174 4700	Items closed in 4.6.1 version
	IZ14723	34101,668,668 Problem setting passwords that contain special characters.

# Known Issues

Internal#	APAR#	PMR# / Description
		IMPORTANT NOTE:
		Oracle SYSdba privilege is not managed by this agent.
		You can only run one instance of the Agent on any one machine. However, one Agent can support multiple Oracle databases simultaneously. Use one Service Form within ITIM for each database managed.
		Although the following Oracle System Privileges appear on the IBM Tivoli Identity Manager Account Form, they are only valid on "Trusted Oracle" (a multi-level secure version of Oracle)
		WRITEDOWN DBLOW READUP DBHIGH WRITEUP DBHIGH WRITEDOWN READUP WRITEUP
		Installation on AIX – Installer Cores See PMR 47440,122,000 for more details. This issue is caused by a problem with the native library "libaixppk.so", which is used by the AIX platform pack. The problem was seen on Aix 5.3.
		The fix is given on the ISMP website. ISMP Web Site: <a href="http://kb.acresso.com/selfservice/microsites/search.do?cmd=displayKC&amp;docType=kc&amp;externalld=Q111262&amp;sliceId=" http:="" kb.acresso.com="" microsites="" search.do?cmd='displayKC&amp;docType=kc&amp;externalld=Q111262&amp;sliceId="http://kb.acresso.com/selfservice/microsites/search.do?cmd=displayKC&amp;docType=kc&amp;externalld=Q111262&amp;sliceId="http://kb.acresso.com/selfservice/microsites/search.do?cmd=displayKC&amp;docType=kc&amp;externalld=Q111262&amp;sliceId="http://kb.acresso.com/selfservice/microsites/search.do?cmd=displayKC&amp;docType=kc&amp;externalld=Q111262&amp;sliceId="http://kb.acresso.com/selfservice/microsites/search.do?cmd=displayKC&amp;docType=kc&amp;externalld=Q111262&amp;sliceId="http://kb.acresso.com/selfservice/microsites/search.do?cmd=displayKC&amp;docType=kc&amp;externalld=Q111262&amp;sliceId="http://kb.acresso.com/selfservice/microsites/search.do?cmd=displayKC&amp;docType=kc&amp;externalld=Q111262&amp;sliceId="http://kb.acresso.com/selfservice/microsites/search.do?cmd=displayKC&amp;docType=kc&amp;externalld=Q111262&amp;sliceId="http://kb.acresso.com/selfservice/microsites/search.do?cmd=displayKC&amp;docType=kc&amp;externalld=Q111262&amp;sliceId="http://kb.acresso.com/selfservice/microsites/search.do?cmd=displayKC&amp;docType=kc&amp;externalld=Q111262&amp;sliceId="http://kb.acresso.com/selfservice/microsites/search.do?cmd=displayKC&amp;docType=kc&amp;externalld=Q111262&amp;sliceId="http://kb.acresso.com/selfservice/microsites/search.do?cmd=displayKC&amp;docType=kc&amp;externalld=Q111262&amp;sliceId="http://kb.acresso.com/selfservice/microsites/search.do?cmd=displayKC&amp;docType=kc&amp;externalld=Ref&lt;/th' selfservice=""></a>
		Reference is also found on the IBM Web Site:  http://www- 01.ibm.com/support/docview.wss?rs=2357&context=SS6RTP&dc=DB520&uid
		=swg21247602&loc=en_US&cs=UTF-8⟨=en&rss=ct2357lotus
		Converting between Default and Non-default Roles It is a two step process to make role as non-default role, first we need to assigned it to user by "GRANT" statement and then by using "ALTER USER" sql statement. If "ALTER USER" command fails then that role will become default role on resource. However, it will not reflect on TIM side in any of the role list. You are required to submit the recon operation so it will appear in the default list or you can submit the request again.

Internal#	APAR#	PMR# / Description
N/A	N/A	Running the Adapter with Tivoli Directory Integrator v6.1
		1) With TDI 6.1, the service does not start on windows. One has to manually start the dispatcher service using command "ibmdisrv.bat -c ITIM_RMI.xml -d"
		2) With ITDI 6.1, the \$dn attribute does not reach the Oracle Adapter and hence the operation that needs this attribute fails.
		3) If you are running the ITIM Adapter as service, the dispatcher doesn't identify the system's classpath environment variable. As a result of this the Oracle Adapter will not be able to locate JDBC driver and will fail to connect. The workaround for this problem is to copy the JDBC driver files (classes12.jar or similar) to IBM Tivoli Directory Integrator jar folder.
N/A	N/A	NOTE: when using the TDI Application Monitoring Console, the RMI traffic to TDI is rerouted to port 1099. This may affect the operation of the TIM TDI-based adapters. Two options are available:  (1) Change the TIM Service form for the TDI-based adapters to specify port 1099 (instead of the default 16231, or  (2) configure the Application Monitoring Console to listen on port 16231 by
		modifying the api.remote.nameing.port property in the solution.properties file.

# **Installation and Configuration Notes**

See the IBM Tivoli Identity Manager TDI-Based Oracle Database Adapter Installation and Configuration Guide for detailed instructions.

#### Corrections to Installation Guide

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

This release contains an additional installation program not mentioned in the Installation and Configuration Guide. If you are running TDI on platforms other than Linux or Windows, please run the java-based install as directed below. Run this installation program on the server in which Tivoli Directory Integrator is installed.

setup\_other.jar Installation program for other platforms.

NOTE: the Setup\_other.jar is a java-based installer. Please ensure that java is installed and properly configured for your system. Launch the install with the following command.

Java -jar setup\_other.jar

## **Required Account Permissions**

The account under which the adapter runs must have Create Table and Drop Table permission. This information is omitted from the installation guide.

# **Configuration Notes**

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

#### **Filtered Reconciliations**

When using a filtered reconciliation to search on "System Privilege," "Role" or "Consumer Group" use the attribute value WITHOUT the admin option clause. For instance for searching all users having role "CONNECT WITH ADMIN OPTION" specify the filter as "(erorarole=CONNECT)".

When searching users using a filter on Proxy Users, user the proxy user name only in the filter WITHOUT the roles that proxy can activate. For example; to search all users having proxy as 'PROXY1' irrespective of the roles it can activate on behalf of client, For example, specify the filter as "(eroraproxyusers=PROXY1)"

# **Assigning Proxy Users**

The proxy users can be assigned in following three ways;

- Proxy that can activate all roles of client:
   For this type of proxy just give the name of user. For example, "user1"
- Proxy that can activate some of the roles of client:
   For this type of proxy, give the user followed by 'WITH ROLE <role\_list>' clause. For example, "user1 WITH ROLE CONNECT, DBA"

Proxy that can activate all roles of client except some:
 For this type of proxy users, give the user followed by 'WITH ROLE ALL EXCEPT <role\_list>'.
 For example, "user1 WITH ROLE ALL EXCEPT DBA, RESOURCE".

### ConvertUserNameToUpperCase Option

Configuration Attribute "ConvertUserNameToUpperCase" has been added to the Profile. If the customer does not wish to convert the username to uppercase when provisioning accounts on the resource, they can select ConvertUserNameToUpperCase = FALSE.

#### Summary of Changes:

- A new attribute erOraConvertUserNameToUpperCase (OID: 1.3.6.1.4.1.6054.3.138.2.23) is defined and added in erOraRMIService class.
- A new label (eroraconvertusernametouppercase= Convert Username to Uppercase) is added to CustomLabels.properties file.

#### Limitations:

- If the attribute "ConvertUserNameToUpperCase" value is "FALSE", following attributes are not set:
- a) Resource Consumer Group
- b) Default Consumer Group
- c) Workspace related System Privileges

This is due to the fact that the above attributes are set using the Oracle-supplied stored procedures. These stored procedures convert the username to Uppercase.

The TIM server does not support differentiation of usernames based only on case. If there are
multiple users on resource with the same username & different case, then during recon TIM
server generates a warning and only one user out of the multiple users is reconciled.

#### Please refer the link:

http://publib.boulder.ibm.com/infocenter/tivihelp/v2r1/index.jsp?topic=/com.ibm.itim.doc/ims500\_msgsguide18.htm

# **Support for Non-default Roles**

Oracle ITDI Adapter is enhanced to manage Non-Default roles through ITIM adapter for Oracle resource. To support this enhancement profile of Oracle ITDI Adapter is extended.

Following two new String attribute are defined in schema.dsml,

- i) "erOraNonDefRole (OID: 1.3.6.1.4.1.6054.3.138.2.24)" added in "erOraAccount" class.
- ii) "erOraPassRequired (OID: 1.3.6.1.4.1.6054.3.138.2.25)" added in "erOraRoles" class.

A new label (Database Non Default Roles) is added for "erOraNonDefRole" attrbute in CustomLabels.properties file.

This attribute will be visible on account form, and only password protected and external roles will be displayed in the search widget of this attribute. If you want to display the all roles in the non-default list then you will need to modify the search filter on account from as,

#### Exiting filter:

<filter>(&amp;(objectclass&#61;erOraRoles)(!(erOraPassRequired&#61;No)))</filter>

Modify the filter as,

<filter>(objectclass&#61;erOraRoles)</filter>

A role can be converted from a Non-Default role to a Default role in one TIM operation using the following process:

a) First remove the role from Non-default role list and assigned same role as a default role in same operation.

Converting a role from a Default role to Non-default requires two TIM operations using the following process:

- a) First revoke(delete) the role from the default role list from TIM in one operation,
- b) Modify the account and add the role as a non-default role from TIM in second operation.

### MR091010394 - Dropped Tablespace

This version of Oracle Adapter is enhanced in a way that, if the tablespace is dropped from the system table "DBA\_TS\_QUOTAS" then, during reconcile operation, tablespace quota will not be returned to the ITIM.

Please note, This feature will be supported on those versions of oracle on which the column "DROPPED" is available in system table "DBA\_TS\_QUOTAS".

For Example: In oracle version 8i and 10i the column "DROPPED" is not available in system table "DBA\_TS\_QUOTAS", so, this feature(enhancement) will not be supported on these versions and adapter will recon all the tablespace quotas as eariler versions was doing.

# **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.

Tivoli Directory Integrator:

TDI v6.1.1 Fix pack 3

#### Managed Resource:

Oracle Database 8i

Oracle Database 9i

Oracle Database 10g R1

Oracle Database 10g R2

Oracle Database 11g R1

-- with --

Oracle thin JDBC driver software installed

#### IBM Tivoli Identity Manager:

ITIM Enterprise v4.6.0 with FixPack 4.6.0-TIV-TIM-IF0015 or later

#### **IMPORTANT NOTE:**

Please install the Oracle driver version that is compatible with your database version.

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