

Release Notes



IBM® Tivoli® Identity Manager Oracle PeopleTools Adapter

Version 5.0.5

First Edition (September 30, 2010)

This edition applies to version 5.0 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 PeopleTools 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 PeopleTools Adapter Installation and Configuration Guide

Adapter Features and Purpose

The PeopleTools Adapter is designed to create and manage User Accounts on the PeopleSoft application. The adapter runs in “agentless” mode and communicates using JDBC and the PeopleTools Java API 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 WAS 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	September 30, 2010
Adapter Version	5.0.5
Component Versions	Adapter Build: 5.0.1008 Profile: 5.0.1004 Connector: 5.108 Dispatcher 5.124
Documentation	Directory Integrator-Based PeopleTools Adapter Installation and Configuration Guide SC23-6160-00

New Features

Enhancement # (FITS)	Description
	Items included in current release
MR0701105012	Extending schema with attributes (Peoplesoft) using two component interfaces. See "MR0701105012" in the Configuration section of this document.
MR0414103524	Request for PeopleSoft adapter for latest 9.x version of PeopleSoft
	Items included in 5.0.4 release
	Enable support for new Dispatcher attributes namely,AL FileSystem Path and Max Connection Count.
	Items included in 5.0.3 release
MR0610084842	Added support for PeopleTools 8.49 NOTE: Tools 8.49 is supported only with TDI v6.1.1 FP3
	Items included in 5.0.2 release
	None
	Items included in 5.0.1 release
	Initial release for ITIM v5.0

Closed Issues

CMVC#	APAR#	PMR# / Description
		Items closed in current version
		None
		Items closed in 5.0.3 version
	N/A	N/A Provide support for TDI v6.1.1 FP6 Incorporate changes for workaround by the TDI team for TDI 611 FP6.
34263		N/A IDI PSFT Adapter, Roles with no description not added to TIM.
		Items closed in 5.0.2 version
	IZ36496	16279,7TD,000 PeopleSoft IDI based adapter The test connection from TIM is successful, but the recon request fails with connection error to the database: Exception encountered during recon: java.math.BigDecimal incompatible with java.lang.Integer
		Items closed in 5.0.2 version
	IZ16778	59048,370,000 THIRD LEVEL COLLECTION UPDATE FAILS WITH PEOPLESOFT CONNECTOR
		Items closed in 5.0.1 version
		None

Known Issues

CNVC#	APAR#	PMR# / Description
N/A	N/A	<p>Editing adapter profiles on UNIX or Linux:</p> <p>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.</p> <p>If you are using the vi editor, you can strip out the ^M character as follow:</p> <p>From the vi's command mode:</p> <pre>:%s/^M//g</pre> <p>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.)</p>
N/A	N/A	<p>Uninstalling the Adapter</p> <p>Do not use the "-awt" option with the adapter uninstaller in console mode. Uninstaller can be run with "-console" and "-silent" options.</p>
N/A	N/A	<p>Setting ID Type</p> <p>Once you set only the ID Type from the account form without specifying related attribute and values, the adapter sets the ID Type on the resource without any values and no error is thrown.</p> <p>Note: This is applicable to PeopleTools v8.45 and 8.46 but not with PeopleTools v8.49 and 8.50.</p> <p>Example:</p> <p>If you specify ID Type as "Employee" and didn't specify the attribute name which is emplid in adapter expected format, then the following value for Employee ID Type is sent to the adapter</p> <pre>EMP#</pre> <p>On resource the ID Type employee gets set and it looks like following.</p> <pre>PSOPRALIAS - OPRALIASTYPE EMP - PSOPRALIASFIELD [1] -PSOPRALIASNAME EmplId -PSOPRALIASVALUE -PSOPRALIASDESCR</pre> <p>Where PSOPRALIASNAME is set according to the ID Type by the resource.</p> <p>Note: After reconciliation the IBM Tivoli Identity Manager will show the</p>

		<p>following in the values field of the ID Type subform: EmplId\$</p> <p>Possible workaround: No workaround is available. This is a PeopleTools resource API behavior.</p>
N/A	N/A	<p>Setting ID Type – No error on invalid value If you specify a wrong attribute name in the ID Type subform, no error is thrown since the resource already sets the attribute name on getting the ID Type.</p> <p>Note: This is applicable to PeopleTools v8.45 and 8.46 but not with PeopleTools v8.49 and 8.50.</p> <p>Example: If users want to sets “Employee” ID Type with invalid attribute name (for e.g. for Employee ID Type instead of providing EmplId as the attribute name, if a user provides Empl or Attr1) and any value, then the value's format for Employee ID Type which is sent to the adapter is EMP#Attr1\$value1 The resource sets this ID Type with the following structure.</p> <pre> PSOPRALIAS - OPRALIATYPE EMP - PSOPRALIASFIELD [1] -PSOPRALIASNAME EmplId -PSOPRALIASVALUE -PSOPRALIASDESCR </pre> <p>Where PSOPRALIASNAME is set according to the ID Type by the resource.</p> <p>Note: The value sent to adapter is constructed value and there is no provision to inform IBM Tivoli Identity Manager that part of value is failed. After reconciliation or lookup the invalid attribute for an ID type will get cleared. After reconciliation the IBM Tivoli Identity Manager will show the following in the values field of the ID Type subform: EmplId\$</p> <p>Possible workaround: No workaround is available. This is a PeopleTools resource API behavior.</p>
N/A	N/A	<p>Setting Custom ID Type If a custom ID Type defined as “Custom” with 2 attribute say MyCustAttr1 and MyCustAttr2 with MyCustAttr1 as a required attribute and MyCustAttr2 as an optional attribute then two cases arises:</p> <p>a) When an invalid value is provided for the optional attribute, the user is added on the resource. The value format which goes to the adapter is:</p> <p>Custom#MyCustAttr1\$Myvalue1 MyCustAttr2\$Myvalue2 Where Myvalue1 and Myvalue2 are values you want to set and Myvalue2 is an invalid value.</p> <p>The resource sets this ID Type with the following structure.</p> <pre> PSOPRALIAS - OPRALIATYPE Custom </pre>

		<ul style="list-style-type: none"> - PSOPRALIASFIELD [1] <ul style="list-style-type: none"> -PSOPRALIASNAME MyCustAttr1 -PSOPRALIASVALUE Myvalue1 -PSOPRALIASDESCR - PSOPRALIASFIELD [2] <ul style="list-style-type: none"> -PSOPRALIASNAME MyCustAttr2 -PSOPRALIASVALUE -PSOPRALIASDESCR <p>b) When an invalid attribute name is provided in place of the optional attribute, the user is added on the resource. The format which goes to the adapter is:</p> <p>Custom#MyCustAttr1\$Myvalue1 MyCust\$Myvalue2</p> <p>Where instead of providing MyCustAttr2 an invalid attribute name is sent</p> <p>The resource sets this ID Type with the following structure.</p> <pre> PSOPRALIAS - OPRALIASTYPE Custom - PSOPRALIASFIELD [1] -PSOPRALIASNAME MyCustAttr1 -PSOPRALIASVALUE Myvalue1 -PSOPRALIASDESCR </pre> <p>Note: This issue is applicable to all the PeopleTools versions. This is working as designed. The value sent to adapter is constructed value and there is no provision to inform IBM Tivoli Identity Manager that part of value is failed. After reconciliation or lookup the invalid attribute for an ID type will get cleared.</p> <p>In case 'a': after reconciliation the IBM Tivoli Identity Manager will show the following in the values field of the ID Type subform. MyCustAttr1\$Myvalue1 MyCustAttr2\$ Instead of MyCustAttr1\$Myvalue1 MyCustAttr2\$Myvalue2</p> <p>In case 'b': after reconciliation the IBM Tivoli Identity Manager will show the following in the values field of the ID Type subform MyCustAttr1\$Myvalue1 MyCustAttr2\$ Instead of MyCustAttr1\$Myvalue1 MyCust2\$Myvalue2</p> <p>Possible workaround: No workaround is available. This is a PeopleTools resource API behavior.</p>
N/A	N/A	<p>Reconciliation of Disabled ID Type</p> <p>If a user with a set ID Type is reconciled and that ID Type is disabled on the resource then the subform displays the ID Type instead of the ID Type Description.</p> <p>For example : If the ID Type Emp which has the description as Employee is disabled on the resource then the subform will show Emp instead of Employee in the ID Type column of the sub form.</p> <p>Possible workaround: this is expected behavior.</p>

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:

Chapter 2: Planning to install the adapter

The following changes have been made in the values for
Table 3. Prerequisites to install the adapter contents

PeopleSoft Enterprise:8.4/8.5/9.0

PeopleTools Software: Version 8.45, 8.46, 8.49

Chapter 3: Installing the adapter

Under subsection “*what to do next*” in section “*Installing the adapter*” the following content is added.

Deploy the ID Type subform: See “Deploying the ID Type Subform on Websphere and IBM Tivoli Identity Manager Server “.

Chapter 3: Installing the adapter

A section “*Deploying the ID Type Subform on Websphere and IBM Tivoli Identity Manager server*” is added after the section “*Importing the adapter profile in Tivoli Identity Manager Server*” with the following contents.

Perform the following steps on Websphere and IBM Tivoli Identity Manager:

1. Extract the zip file opraliastype.zip into a temporary folder, for example C:\temp.
2. Copy the following files from temporary folder in the subforms directory present in IBM Tivoli Identity Manager Websphere deployment folder.
For a self service console installation this folder will be
WAS_PROFILE_HOME/installedApps/server/ITIM.ear/itim_self_service.war/subforms,
For an administrative console installation this folder will be:
WAS_PROFILE_HOME/installedApps/server/ITIM.ear/itim_console.war/subforms.
WAS_PROFILE_HOME folder structure for example will be:
C:\Program Files\IBM\WebSphere\AppServer\profiles.
i) opraliastype\JSP Files\opraliastype.jsp,
ii) opraliastype\JSP Files\storeValues.jsp
iii) opraliastype\JSP Files\opraliasstyle.css
3. Copy the following Locale files from temporary folder to ITIM_HOME\data folder
For example: C:\Program Files\IBM\itim\data.
i) opraliastype\Locale Files\psftpsopraliasform.properties
ii) opraliastype\Locale Files\psftpsopraliasform_en_US.properties.

Note: Repeat above on all nodes in cluster setup.

Chapter 5: Configuring the adapter

Under section “Loading the PeopleTools Project for Tivoli Identity Manager” the following content is added.

This version of adapter also ships PT850_COMPONENT.zip for PeopleTools 8.50.

Chapter 5: Configuring the adapter

Under section “*PeopleSoft resource-specific JAR files*” the following contents are added after the step 4 for “*Generating the Complntfc.jar file*”

5. In the JAVA Classes frame check **Build** and select the appropriate Component Interfaces from the drop down menu. You must select the following options from the drop down menu:

- Complntfc.ComplntfcPropertyInfo
- Complntfc.ComplntfcPropertyInfoCollection
- PeopleSoft.* (Select all the Component Interfaces that begin with the prefix PeopleSoft)
- Complntfc.ENROLE_USERS* (Select all the Component Interfaces that begin with the prefix Complntfc.ENROLE_USERS)
- Complntfc.ENROLE_ROLES* (Select all the Component Interfaces that begin with the prefix Complntfc.ENROLE_ROLES)
- Complntfc.ENROLE_PERM* (Select all the Component Interfaces that begin with the prefix Complntfc.ENROLE_PERM)
- Complntfc.ENROLE_LANGS* (Select all the Component Interfaces that begin with the prefix Complntfc.ENROLE_LANGS)
- Complntfc.ENROLE_DELETE* (Select all the Component Interfaces that begin with the prefix Complntfc.ENROLE_DELETE)
- Complntfc.ENROLE_CCODE* (Select all the Component Interfaces that begin with the prefix Complntfc.ENROLE_CCODE)
- Complntfc.ENROLE_OPRALIAS* (Select all the Component Interfaces that begin with the prefix Complntfc.ENROLE_OPRALIAS)

Section “Appendix A. Adapter attributes”

The following attribute is added

Attribute name	Description	Required	PeopleTools attribute
erpt84xopralias type	ID Types and Values	No	ID Types

Corrections to User Guide

Chapter 3, Section “Adding user accounts”

Under section “*Adding user accounts*” in subsection “*Attributes for adding user accounts*” the note is updated as follows

Note: The adapter by default sets the value of **ID Type** to *None* if no ID Type is specified.

Chapter 3, Section Specifying an ID Type

Added under section “*Adding User account*” under **Chapter 3** with the following contents.

To create ID Types for a user, specify the ID Types from the Account Form. The ID Type attribute is a collection of the following attributes:

OPRALIASTYPE or the **ID Type**: Specify an ID Type from the drop down box such as Employee, Vendor, None, etc.

Values: Specify the values for an ID Type. The value's column will accept the pair of applicable attribute name and value separated by a \$. In case of multiple applicable attributes for an ID Type, two “attribute_name\$attribute_value” pair are separated by a |.

So the format which is sent to the adapter is

IDTYPE#Attribute1_name\$value|Attribute2_name\$value|Attribute3_name\$value

Note: The subform displays description of ID type however sends ID type in request to adapter.

For example:

- 1) If users want to add “Employee” ID Type with Empl ID attribute, then the value's format for Employee ID Type which is sent to the adapter is

EMP#Empl ID\$1234

Where EMP is Employee ID and 1234 is employee ID you want to set.

- 2) You have a custom type defined as “Custom” with 2 attribute say MyCustAttr1 and MyCustAttr2 then you can set this type as

Custom#MyCustAttr1\$Myvalue1|MyCustAttr2\$Myvalue2

Where Myvalue1 and Myvalue2 are values you want to set.

Chapter 3 , Under section “Modifying user accounts”

A new attribute “ID Types and Values” is added in the list for section “*You can modify the value of the following attributes on the PeopleTools account form:*”

Chapter 4: Customizing the PeopleTools account form

The Project file PT845_COMPONENT.zip (for PeopleTools 8.45 and PeopleTools 8.46), PT849_COMPONENT.zip (for PeopleTools 8.49) and PT850_COMPONENT.zip (for PeopleTools 8.50) are provided with the Tivoli Identity Manager PeopleTools Adapter software which contains component interfaces.

Chapter 4: Customizing the PeopleTools account form

A new section “Customizing the attribute ID TYPE or PSOPRALIAS” is added with the following content.

To view the ID Type subform in a locale specific language one can create a locale specific file.

To create a locale specific file, a file of the format psftpsopraliasform_xx_YY.properties (where xx is the language code and YY is the country code both of which are two alphabets long) is made and contents to it are added according to the psftpsopraliasform.properties file provided with the release.

For example:
psftpsopraliasform_en_US.properties.

New chapter “Customizing the PeopleTools adapter

Chapter is added with the following content:

You can customize adapter to manage custom attributes.
To support this, changes are required in the adapter AL, adapter profiles and in connector. You might also need to create PeopleSoft component interface.
Refer “Chapter 4. Customizing the PeopleTools account form” for more information.

Here we are talking about a special case where the custom attribute is a collection attribute.

The PeopleSoft has a constraint of setting the values of a collection attribute in a specific sequence. It also populates collection with some attributes with values in collection on setting value for some other attribute in collection.

A collection attribute means the attribute has child attributes which again can be collection attribute.

Refer below example of PSOPRALIAS attribute.

Example:

The structure of PSOPRALIAS is
PSOPRALIAS

- OPRALIASTYPE
- PSOPRALIASFIELD
 - PSOPRALIASNAME
 - PSOPRALIASVALUE
 - PSOPRALIASDESCR

Where OPRALIASTYPE and PSOPRALIASFIELD are child attribute of PSOPRALIAS.
PSOPRALIASFIELD is again a collection of PSOPRALIASNAME, PSOPRALIASVALUE and PSOPRALIASDESCR.

The IBM Tivoli Directory Integrator (ITDI) does not guarantee the sequence in which the value will be passed on to the connector irrespective of the sequence it receives.

So to meet the constraint connector requires an additional attribute for defining the sequence in which attributes in collection will be set.

For PSOPRALIAS this sequence is defined as shown below in the adapter AL.

```
var attributeSequence = new ArrayList();
attributeSequence.add("OPRALIASTYPE");
attributeSequence.add("PSOPRALIASFIELD");
fullOprAliasEntry.setAttribute("sequence",attributeSequence);
```

This **sequence** attribute instructs the connector to first set the OPRALIASTYPE attribute in the collection.

The connector sets the OPRALIASTYPE as per the sequence defined but the collection gets populated with the PSOPRALIASNAME attribute in the child collection PSOPRALIASFIELD. This adds to further complexity for connector. In normal cases connector will insert required attributes and then set value.

However in above case PeopleSoft populates the collection with required attribute and values.

For example you are setting OPRALIATYPE to some custom type say “Custom” which needs 2 attribute say MyCustAttr1 and MyCustAttr2 to be set then the OPRALIAS structure will be as follows.

PSOPRALIAS

- OPRALIATYPE Custom
- PSOPRALIASFIELD [1]
 - PSOPRALIASNAME MyCustAttr1
 - PSOPRALIASVALUE
 - PSOPRALIASDESCR
- PSOPRALIASFIELD [2]
 - PSOPRALIASNAME MyCustAttr2
 - PSOPRALIASVALUE
 - PSOPRALIASDESCR

Hence even though the value of PSOPRALIASNAME i.e. MyCustAttr1 and MyCustAttr2 is passed to the connector it should not be added on the resource otherwise it will give error as it is already set.

The adapter AL is updated as following to overcome the above issue.

psOprAliasedFieldEntry.setAttribute("getItemByAttribute","ATTRNAME") where ATTRNAME is PSOPRALIASNAME

The purpose of **getItemByAttribute** attribute is to instruct the connector not to add the value for PSOPRALIASNAME i.e. MyCustAttr1 but update it. The connector parses the attribute “getItemByAttribute” and gets the value ATTRNAME associated with it. Accordingly it does not set the value for this field which is already set on the resource.

Chapter 5: Troubleshooting the PeopleTools Adapter errors

The following troubleshooting messages are added.

Message	Action
.PeopleSoft error occurred while saving the attributes . Please specify all Attribute Values for all ID Types of PSOPRALIAS attribute	Verify that all attribute names for all ID Types and Values specified correctly

Section “Appendix A. People Tools Adapter attributes”

A new attribute entry is added.

Attribute name on the People Tools Account Form	Attribute Name On the Tivoli Directory Server	Attribute Name on the People Soft Server
ID Types and Values	erpt84xopralias type	ID Type

Configuration Notes

The following configuration notes apply to this release:

New Dispatcher Attributes on Service Form

Following Dispatcher Attributes are added to the PeopleSoft adapter service form

Disable AL Caching

Select the check box to disable the assembly line (test/add/modify/delete) caching in the dispatcher for the service.

AL FileSystem Path

Specify the file path from where the dispatcher loads the assembly lines. If you do not specify a file path, the dispatcher loads the assembly lines received from IBM Tivoli Identity Manager. For example, you can specify the following file path to load the assembly lines from the profiles directory of the Windows operating system:

c:\Files\IBM\TDI\V6.1.1\profiles

or you can specify the following file path to load the assembly lines from the profiles directory of the Unix and Linux operating:

system:/opt/IBM/TDI/V6.1.1/profiles

Max Connection Count

Specify the maximum number of assembly lines that the dispatcher can execute simultaneously for a managed resource. For example, enter 10 when you want the dispatcher to execute maximum ten assembly lines simultaneously for a managed resource. If you enter 0 in the Max Connection Count field, the dispatcher does not limit the number of assembly line that are executed simultaneously for a managed resource.

Note: If you specify a non zero value for the Maximum Connection Count, then set the GlobalRunALCount property to a non zero value.

Please refer Release Notes for Dispatcher for more information on GlobalRunALCount property

Configuring Filtering in Dispatcher

To configure dispatcher filtering to case insensitive filtering add CaseInsensitiveFilter property to search operation definition in service.def file present in the adapter profile. This Property determines if dispatcher filtering is case sensitive or case insensitive. The dispatcher filtering will be case sensitive for adapters that do not support this property.

Procedure to add CaseInsensitiveFilter property:

- I) Unzip the Adapter Profile jar.
- II) Take service.def file from this unzip folder.
- III) Open the service.def file

IV) Add following dispatcher parameters in search operation and save the service.def file.

```
<dispatcherParameter name="CaseInsensitiveFilter">  
  <default>true</default>  
</dispatcherParameter>
```

V) Create Adapter Profile jar again with updated Service.def file.

VI) Import this jar in to ITIM. Execute any request from ITIM it will pass the "CaseInsensitiveFilter" property values for Recon request as dispatcher parameter.

Note: Please use Component Interface project PT845_Component.zip for PeopleTools version 8.45 and 8.46 and PT849_COMPONENT.zip for PeopleTools version 8.49

MR0701105012 - Extending schema with attributes using two component interfaces

To support this enhancement adapter schema is extended.

A) Following attribute is added under erpt84xuseraccount Class in schema.

Attribute Name: erpt84xopralias type
OID: 1.3.6.1.4.1.6054.3.145.2.38
Description: Opralias type list
Data Type: String.
Custom label: ID Types and Values

B) A new class is added in schema with following details:

Name: erpt84xopraliaslist
OID: 1.3.6.1.4.1.6054.3.145.1.7

C) Following three attributes are added under the "erpt84xopraliaslist" class in schema.

1) Attribute Name: erpt84xaliasidtype
OID: 1.3.6.1.4.1.6054.3.145.2.
Description: Opralias type
Data Type: String

2) Attribute Name: erpt84xidtypedescription
OID: 1.3.6.1.4.1.6054.3.145.2.39
Description: Description of Opralias type
Data Type: String

3) Attribute Name: erpt84xidenabled
OID: 411.3.6.1.4.1.6054.3.145.2.40
Description: Flag to identify Opralias type is enabled
Data Type: String.

D) The enabled ID Types on PeopleTools resource is visible on the ID Type subform after support data reconciliation.

Customizing or Extending Adapter Features

The Identity Manager adapters may 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 [Tivoli Identity Manager Support web site](#) for links to training, publications, and demos.

Tivoli Directory Integrator Resources:

Check the “Learn” section of the [Tivoli Directory Integrator Support web site](#) 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 FP3

Managed Resource:

PeopleTools 8.45, 8.46, 8.47, 8.49

IBM Tivoli Identity Manager:

Identity Manager v5.0

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End of Release Notes